

**Behind the Whistle: Understanding Mental Performance in Elite Ice Hockey
Officiating**

by Christopher J. Coady (Thesis) submitted to the School of Graduate Studies in partial

fulfillment of the requirements for the degree of

Master of Science in Kinesiology/School of Human Kinetics and Recreation

Memorial University of Newfoundland

October 1, 2024

St. John's, Newfoundland and Labrador

Abstract

Officiating elite sport requires focus, confidence, arousal regulation, and decisive decision-making. Thus, mental skills use and training seems imperative for elite sport officials. However, little research has examined mental skills acquisition and use among sport officials. This study explored ice hockey officials' use of mental skills. A pragmatic paradigm guided the study. 10 elite ice hockey officials participated in semi-structured interviews. Data were analyzed using a six-step thematic analysis. Results showed varying levels of mental skill use, with pre-performance routines, self-talk, visualization, and goal setting being the most common. Specific processes behind skill implementation were identified. Few participants received formal training to acquire their mental skills; instead, they learned from past athletic experiences and peers. All respondents acknowledged the critical role of mental skills in elite sport officiating and advocated for organizations to provide formal educational opportunities, especially early in officials' careers. The findings highlight the importance of mental skills for elite sport officials and lack of formal mental skills training. This shortfall could prevent sport officials from reaching their full potential. I have offered recommendations for sport officiating organizations including the implementation of early education programs, formal training opportunities, and recommendations for continued organizational support.

General Summary

Sport officials are responsible for maintaining fair play, upholding the rules of the competition, and ensuring safety. For many sport officials, these responsibilities come with the added pressure of having to make accurate decisions within a fast-paced environment. As such, they must manage anxiety, stay focused, and be confident. Mental skills are critical for enhancing these qualities within individuals and are likely useful for sport officials. Despite this, there is little research examining how sport officials learn and use mental skills. The authors explored how sport officials learn and use mental skills. Through 10 interviews with elite ice hockey officials, it was found that mental skills are widely used with pre-performance routines, self-talk, visualization, and goal setting being the most commonly used. Participants recommended that organizations provide more education and training on mental skills. The recommendations for implementing mental skills training and education programs for officials are further developed herein.

Acknowledgments

The support I have received during my time at Memorial University has been quintessential. Foremost among this support has been my supervisor, Dr. David Hancock. I first met Dr. Hancock in the winter of 2020 when I joined the newly formed Sport Psychology and Officiating Research Team (SPORT) as an undergraduate student. Since then, Dr. Hancock has guided me through an undergraduate honours thesis, a Master's thesis, and multiple additional research projects—accomplishments I once thought impossible. Through Dr. Hancock's unwavering support, extensive guidance, and most of all patience, he has shaped me into the researcher I am today. By fostering my curiosity and inclination to pursue topics I am passionate about, Dr. Hancock has inspired me to continue my academic journey toward a PhD this coming fall. He was instrumental in helping me navigate that process, once again offering his thoughts and guidance during my PhD search. Dave, thank you for everything, not only during this Master's degree but throughout our years of working together. I look forward to the possibility of collaborating again in the future.

I would also like to extend my gratitude to all the faculty and staff at the School of Human Kinetics and Recreation. Their friendliness and support have made my time at Memorial University truly unforgettable.

To my fellow grad students, thank you for your support and friendships, which I will always cherish. A special thank you to Alysha Wira and Ben Nazaroff for being such supportive friends and always being available for a lunchtime break. I would not be where I am today without you.

To the other members of the SPORT lab, thank you for creating a fantastic work environment, holding teamwork and collaboration to the highest standards.

Thank you to the participants who took the time to be part of my research; without them, this work would not have been possible.

I am deeply grateful to my amazing friends and family for supporting me throughout this journey and always offering encouragement. To my parents, John and Christa – thank you for all that you have done for me and all that you continue to do.

Last but certainly not least, thank you to my wonderful partner, Ashleen. Your constant love, support, and belief in me have been instrumental.

Contents

Abstract	ii
General Summary	iii
Acknowledgments.....	iv
List of Appendices	7
List of Figures	8
Chapter One: Introduction	9
Introduction.....	10
Sport Officials	12
References	16
Chapter Two: Literature Review.....	20
Literature Review.....	21
Mental Skills Training.....	21
<i>Goal Setting</i>	22
<i>Imagery</i>	23
<i>Self-talk</i>	25
<i>Focus/Concentration</i>	29
<i>Routines</i>	31
<i>Self-Regulation</i>	32
<i>Communication Skills</i>	35
Sport Officials and Mental Skills	36
References	42
Chapter Three Manuscript	48
Manuscript	49
Abstract	50
Introduction.....	51
Purpose	58
Methods.....	59
Paradigm	59
Participants	60
Data Collection	61
Methodological Quality and Rigour	63
Results and Discussion	65
Theme: Learning Mental Skills.....	66
<i>Process of Acquiring Mental Skills Knowledge</i>	67
<i>Considerations for Future Mental Skills Education</i>	70
<i>Summary of Theme</i>	75
Theme: Mental Skills Use	76
<i>Benefits of Mental Skills Use</i>	76
<i>Implementing Mental Skills</i>	82
Summary of Theme	85
Theme: Insights about Mental Skills in Officiating	86
Summary of Theme	89
Conclusion	90

Limitations and Future Research	92
References	95
Chapter Four: Conclusion	103
Conclusion	104
Principal Researcher Reflection.....	105
Appendix A	107
Appendix B	108
Appendix C	112
Appendix D	113
Appendix E	114
Appendix F.....	143
Appendix G.....	197

List of Appendices

Appendix A: Ethics Approval Letter.....	107
Appendix B: Informed Consent Letter	108
Appendix C: Demographic Survey	112
Appendix D: Interview Guide.....	113
Appendix E: Coded Theme 1	114
Appendix F: Coded Theme 2	143
Appendix G: Coded Theme 3	197

List of Figures

Figure 1: Mental Skills Used by Elite Ice Hockey Officials in Canada	65
--	----

Chapter One: Introduction

Introduction

Attaining excellence in any domain is a complicated process. This is particularly true for sport participants, who must excel in physical, technical, tactical, and mental performance (Durand-Bush & Salmela, 2002). Moreover, as individuals' requirements intensify, they must become more proficient in these aspects of performance to see continued success. Elite athletes must possess physical abilities (e.g., speed, strength, and stamina) to enhance their athletic performance. Compared to non-elite athletes, elite athletes have demonstrated better scores on physical tests such as aerobic capacity, anaerobic capacity, and speed (Vaeyens et al., 2006). These physical abilities are combined with the technical skills (e.g., skills required to perform a specific task) and tactical knowledge (e.g., knowing how to develop and execute a strategy) to enhance sport performance. Technical skills (e.g., skating, shooting, and passing in ice hockey) have been shown to have great implications in predicting and explaining performance outcomes among athletes, thus highlighting the critical role they play in developing sport excellence (Koopmann et al., 2020). Athletes who engage in higher levels of competition have also been shown to have more tactical knowledge (e.g., how to run a zone defence in basketball) of their task demands and have greater capabilities to apply these concepts to their performances (McPherson & MacMahon, 2008).

Not to be overlooked is the influence of mental aspects on performance. When it comes to mental performance, the concept that the body and mind are intricately linked is not a novel idea within the field of psychology (Gee, 2010). In fact, it is widely agreed upon that an individual's physiological responses, behaviours, and effort mobilization towards those behaviours are directly affected by one's attitudes and emotions (Bradley &

Lang, 2000; Leith & Baumeister, 1996). In sport, an athlete's mental state can greatly influence their ability to execute tasks to their full potential (Gee, 2010). Therefore, it is important for sport practitioners to fully understand how to enhance mental qualities (e.g., focus) through various strategies found in sport psychology.

Sport psychology is the scientific study of people and their behaviours in sport and the practical application of that knowledge (Gill & Williams, 2008). While the study and popularity of sport psychology has expanded exponentially in relatively recent times, it has roots that date back much later than the mid-20th century. References to psychology can be traced as far back as the ancient Olympic Games, but in more modern times, Norman Triplett is credited with conducting the first social psychology study in sport (Weinberg & Gould, 2023). Triplett sought to investigate why cyclists sometimes rode faster in groups than when they rode alone (Triplett, 1898). Since the 1960s, sport psychology has rapidly expanded as an academic discipline, witnessing a surge in academic courses, specialized publications, and professional regulatory bodies (Gee, 2010). One of the primary goals of those who study sport psychology is to uncover the effects that psychological factors play on physical performance (Gill & Williams, 2008). Sport psychology has evolved considerably since Triplett's pioneering research, encompassing a variety of topics. These include, but are not limited to, performance enhancement (Brown & Fletcher, 2017), motivation (Hancock et al., 2015), team dynamics (Filho et al., 2015), injury rehabilitation adherence (Goddard et al., 2021), and mental health (Åkesdotter et al., 2020). This thesis will focus on the performance enhancement aspect of sport psychology, particularly exploring the use of mental skills as tools to enhance psychological performance of sport officials.

Mental skills (e.g., concentration and arousal regulation) are needed to keep an individual's mental state at optimal levels, further enhancing their performance. Despite this, mental skills training and the positive effects it can have on performance are chronically undertrained and underdeveloped (Weinberg & Gould, 2023). For individuals attempting to enhance their performances, understanding and partaking in mental skills training is imperative. Through research exploring the effect mental skills have on athletic performance, it is easy to conceptualize how mental skills use can be beneficial to athletes. An example of such work was conducted by Gould et al. (2002) who found that elite athletes demonstrated high levels of concentration, mental preparation, confidence, and reduced anxiety. While sport psychology research most prominently features athletes, another actor in sport (i.e., sport officials) could potentially benefit from mental skills training, as they must also perform complex tasks in a demanding and dynamic environment.

Sport Officials

The term *sport officials* encompasses umpires (e.g., baseball), judges (e.g., gymnastics), and referees (e.g., ice hockey). Sport officials are integral to sport, as without them, sport competition simply becomes play (Livingston et al., 2020). Sport officials face various tasks, which are dependent on the demands of their sport (MacMahon & Plessner, 2013). These variations can be attributed to differences in knowledge and rule application, contextual judgement, personality and management, and physical fitness (Mascarenhas et al., 2005). The complexity of rules and required knowledge to officiate a sport varies from one to the next; moreover, some sports require sport officials to be very physically active while others remain stationary throughout the

competition (MacMahon & Plessner, 2013). A useful classification of sport officials is reactors, monitors, and interactors (MacMahon & Plessner, 2013). This classification system is based on movement requirements, perceptual demands, and interaction with athletes in the competition environment. Monitors (e.g., artistic swimming judges) have little to no interaction with athletes and primarily observe and judge the quality of a performance (MacMahon & Plessner, 2013). This type of sport official has minimal physical requirements but can have high perceptual demands especially if watching more than one athlete at once (MacMahon & Plessner, 2013). Reactors (e.g., tennis line judges) are classified as sport officials who are responsible for only a few cues and have minimal interaction with athletes (MacMahon & Plessner, 2013). Interactors (e.g., ice hockey referees) are sport officials who interact with athletes directly, operate in the competitive environment (rather than on the periphery), and often have several cues to which they must attend (MacMahon & Plessner, 2013). Despite these differences in roles and demands, psychological performance is critical for all sport officials. Without strong psychological performance, the other crucial factors—knowledge and rule application, contextual judgement, personality and management, and physical fitness—would be greatly affected, limiting sport officials from reaching their full potential (Mascarenhas et al., 2005).

The role of a sport official is multi-faceted and complex, prompting researchers to investigate the factors that impact their performances and explore avenues for improvement (Hancock et al., 2021). Such research can be traced back to the 1950s with the work conducted by Hunsicker and Loken (1951) who studied the objectivity of national level gymnastics judges. Sport officiating research has surged considerably since

2000 (Hancock et al., 2021). This growth has seen sport officiating research expand into many areas with some of the most notable being physiology, decision-making, and bias (Hancock et al., 2021). Unfortunately, the exploration into psychological aspects of sport officiating has lagged in comparison to the aforementioned areas of research. In fact, in a comprehensive sample of sport officiating articles collected by Hancock et al. (2021), only 8.3% related to psychology. Moreover, much of the research conducted on the psychology of sport officials has focused on aspects such as stress (Dorsch & Paskevich, 2007), personality (Balch & Scott, 2007), and mental health (Gorzynski & Thelwell, 2022) as opposed to enhancing psychological performance through mental skills training. This shortfall might impede sport officials from reaching their true potential.

Regardless of their designation, sport officials are tasked with enforcing rules, ensuring safety, and maintaining fair play (MacMahon & Plessner, 2013). These tasks lead to high demands being placed on sport officials, particularly when decisions are made in a fast-paced environment. To officiate elite sport, officials must be focused, control their anxiety and arousal, be confident, and make quick and accurate decisions. Thus, mental skills training is imperative for sport officials (Mascarenhas et al., 2005). The focus of this thesis is to explore mental skills acquisition and use among elite ice hockey officials in Canada. This research was conducted with the aim to offer recommendations to organizations to improve the mental performance of ice hockey officials. Chapter Two is an extensive review of relevant literature surrounding the mental skills use in sport (e.g., imagery, goal setting, self-talk) and a summary of the limited research surrounding mental skills use in sport officials. Chapter Three is comprised of a manuscript intended for submission to the *Journal of Applied Sport Psychology*. The

manuscript encompasses an abbreviated literature review as well as details about the methods, results, and discussion. The version found herein is formatted to journal standards; however, the final version might be condensed to comply with its regulations regarding length. Chapter Four provides a summary of the aforementioned chapters, highlighting key findings while also providing sport organizations with recommendations on how this research can be applied to help guide future mental performance practices for officials. The principal researcher has also provided a reflection of his experiences during the research process, as well as his thoughts on future directions for this research. The appendices include ethics documents, the interview guide, and participant quotes (categorized by theme and sub-theme).

References

- Åkesdotter, C., Kenttä, G., Eloranta, S., & Franck, J. (2020). The prevalence of mental health problems in elite athletes. *Journal of Science and Medicine in Sport, 23*(4), 329-335. <https://doi.org/10.1016/j.jsams.2019.10.022>
- Balch, M. J., & Scott, D. (2007). Contrary to popular belief, refs are people too! Personality and perceptions of officials. *Journal of Sport Behavior, 30*(1), 3-20.
- Bradley, M. M., & Lang, P. J. (2000). Measuring emotion: Behavior, feeling and physiology. In R. D. Lane & L. Nadell (Eds.), *Cognitive neuroscience of emotions* (pp. 242-276). Oxford University Press.
<https://doi.org/10.1093/oso/9780195118889.003.0011>.
- Brown, D. J., & Fletcher, D. (2017). Effects of psychological and psychosocial interventions on sport performance: A meta-analysis. *Sports Medicine, 47*(1), 77-99. <https://doi.org/10.1007/s40279-016-0552-7>
- Dorsch, K. D., & Paskevich, D. M. (2007). Stressful experiences among six certification levels of ice hockey officials. *Psychology of Sport and Exercise, 8*(4), 585-593.
<https://doi.org/10.1016/j.psychsport.2006.06.003>
- Durand-Bush, N., & Salmela, J. H. (2002). The development and maintenance of expert athletic performance: Perceptions of world and Olympic champions. *Journal of Applied Sport Psychology, 14*(3), 154-171.
<https://doi.org/10.1080/10413200290103473>
- Filho, E., Tenenbaum, G., & Yang, Y. (2015). Cohesion, team mental models, and collective efficacy: Towards an integrated framework of team dynamics in

sport. *Journal of Sports Sciences*, 33(6), 641-653.

<https://doi.org/10.1080/02640414.2014.957714>

Gee, C. J. (2010). How does sport psychology actually improve athletic performance? A framework to facilitate athletes' and coaches' understanding. *Behavior Modification*, 34(5), 386-402. <https://doi.org/10.1177/0145445510383525>

Gill, D., & Williams, L. (2008). *Psychological dynamics of sport and exercise* (3rd ed.). Human Kinetics.

Goddard, K., Roberts, C. M., Byron-Daniel, J., & Woodford, L. (2021). Psychological factors involved in adherence to sport injury rehabilitation: A systematic review. *International Review of Sport and Exercise Psychology*, 14(1), 51-73. <https://doi.org/10.1080/1750984X.2020.1744179>

Gorczyński, P., & Thelwell, R. (2022). Examining mental health literacy, depressive symptoms, help seeking behaviors, and wellbeing in soccer match officials in the UK. *International Journal of Sport Psychology*, 53(1), 25-30 <https://doi.org/10.7352/IJSP.2022.53.025>

Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology*, 14(3), 172-204. <https://doi.org/10.1080/10413200290103482>

Hancock, D. J., Bennett, S., Roaten, H., Chapman, K., & Stanley, C. (2021). An analysis of literature on sport officiating research. *Research Quarterly for Exercise and Sport*, 92(4), 607-617. <https://doi.org/10.1080/02701367.2020.1756198>

- Hancock, D. J., Dawson, D. J., & Auger, D. (2015). Why ref? Understanding sport officials' motivations to begin, continue, and quit. *Movement & Sport Sciences-Science & Motricité*, 87(1), 31-39. <https://doi.org/10.1051/sm/2014018>
- Hunsicker, P., & Loken, N. (1951). The objectivity of judging at the National Collegiate Athletic Association gymnastic meet. *Research Quarterly*, 22(4), 423-426.
- Koopmann, T., Faber, I., Baker, J., & Schorer, J. (2020). Assessing technical skills in talented youth athletes: A systematic review. *Sports Medicine (Auckland)*, 50(9), 1593-1611. <https://doi.org/10.1007/s40279-020-01299-4>
- Leith, K. P., & Baumeister, R. F. (1996). Why do bad moods increase self-defeating behavior? Emotion, risk-taking, and self-regulation. *Journal of Personality and Social Psychology*, 71(6), 1250-1267. <https://doi.org/10.1037/0022-3514.71.6.1250>
- Livingston, L., Forbes, S. L., Wattie, N., & Cunningham, I. (2020). *Sport officiating: Recruitment, development, and retention*. Routledge.
<https://doi.org/10.4324/9780429465291>
- MacMahon, C., & Plessner, H. (2013). The sport official in research and practice. In J. Baker, D. Farrow, & C. MacMahon (Eds.) *Developing sport expertise* (pp. 194-214). Routledge.
- Mascarenhas, D. R. D., Collins, D., & Mortimer, P. (2005). Elite refereeing performance: Developing a model for sport science support. *The Sport Psychologist*, 19(4), 364-379. <https://doi.org/10.1123/tsp.19.4.364>

- McPherson, S. L., & MacMahon, C. (2008). How baseball players prepare to bat: Tactical knowledge as a mediator of expert performance in baseball. *Journal of Sport & Exercise Psychology*, 30(6), 755-778. <https://doi.org/10.1123/jsep.30.6.755>
- Triplett, N. (1898). The dynamogenic factors in pacemaking and competition. *American Journal of Psychology*, 9(4), 507-553 <https://doi.org/10.2307/1412188>
- Vaeyens, R., Malina, R. M., Janssens, M., Van Renterghem, B., Bourgois, J., Vrijens, J., & Philippaerts, R. M. (2006). A multidisciplinary selection model for youth soccer: The Ghent youth soccer project. *British Journal of Sports Medicine*, 40(11), 928-934. <https://doi.org/10.1136/bjism.2006.029652>
- Weinberg, R., & Gould, D. (2023). *Foundations of sport and exercise psychology* (8th ed.). Human Kinetics.

Chapter Two: Literature Review

Literature Review

While one can start to understand how mental skills use and mental skills training can benefit sport officials, much of the research done in this field has focused on athletes. Therefore, I will begin by outlining how mental skills and mental skills training affects athletic performance and thereafter, connect this to how sport officials could potentially see these same benefits in their performances. Additionally, while this thesis uses qualitative research methods, much of the research outlined was conducted through quantitative methods. This further exemplifies the importance of conducting a qualitative inquiry, which might offer more profound insights into the mental skills of sport officials, but more specifically, the acquisition and use of those skills.

Mental Skills Training

In modern sport psychology, there has been an intense focus on applied sport psychology and the use of mental skills to enhance performance. Individuals can experience several cognitive obstacles that negatively impact their performances (e.g., lack of concentration, performance anxiety, and focusing on mistakes). Mental or psychological skills are techniques that individuals can use to reduce or eliminate these mental roadblocks to enhance psychological performance. Within sport, mental skills training is the systematic practice of mental skills to enhance performance, increase enjoyment, and facilitate satisfaction in sport (Weinberg & Gould, 2023). Some examples of mental skill interventions that appear most salient to sport officials are goal setting, imagery, self-talk, anxiety and arousal control, focus/concentration, routines, self-regulation, and communication skills. These mental skills have already been shown to enhance athletes' performances. Additionally, many of these interventions are related

(e.g., self-talk and imagery can help control anxiety). There is a growing body of research that supports these claims and provides evidence for the effectiveness of mental skills to increase performance (Koehn et al., 2014; Neumann & Hohnke, 2018; Walter et al., 2019).

Goal Setting

Goal setting is the process of identifying targeted objectives that direct individuals' behaviours. There are three primary types of goals: outcome, performance, and process (Weinberg & Gould, 2023). Outcome goals are focused on the result of a competition or task (e.g., winning a championship). Performance goals include one's accomplishments or outputs (e.g., scoring a goal during an ice hockey game). Process goals focus on behaviours (e.g., practicing a slap shot every day). By nature, outcome goals hold the least amount of controllability while process goals hold the most. Kitsantas and Zimmerman (2002) assessed goal setting and performance between 10 expert, 10 non-expert, and 10 novice volleyball players. Results showed that expert volleyball players who placed an emphasis on performance and process goals portrayed lower anxiety and more performance success (Kitsantas & Zimmerman, 2002). Neumann and Hohnke (2018) examined if the use of a performance goal during practice increased performance success. A sample of 30 elite male basketball players was divided evenly into a control and an intervention group, which underwent two free throw sessions. The initial session consisted of two rounds of 120 free throws each. After the first round, the intervention group received the performance goal of increasing their free throw percentage by 15% from their initial test while the control group was told to hit as many as possible. The second session consisted of players being placed in a competition against

each other to see who could hit the most free throws out of 20 attempts. It was found that the intervention group had better results and that practicing performance goals can be an effective strategy in increasing sport performance (Neumann & Hohnke, 2018). As a result, individuals should focus on goals that are more within their control, as this will increase the likelihood of completion and positive outcomes as a result. Further, when goals are self-generated, set at appropriate difficulty levels, and specific it increases self-confidence, motivation, and sport performance (Locke & Latham, 1985; Weinberg & Gould, 2023).

The literature highlights the importance of training this mental skill to become proficient and effective when using it. Goal setting is an effective means of increasing performance, which sport officials might benefit from, just as athletes have. It is possible that sport officials benefit from setting performance goals (e.g., “I will be able to run for an hour straight without stopping”). Similarly, process goals relating to positioning (e.g., “I will regularly adjust my viewing angle to ensure I have the best view of the field of play”) or upholding a rule standard (e.g., “I will make sure I am consistent with my ruling on yellow cards”) might be useful to guide sport officials in their tasks and help facilitate increased levels of performance—which has yet to be explored. Gaining a depth of understanding as it pertains to sport officials’ goal setting could, therefore, be a meaningful inquiry.

Imagery

Imagery is the process of rehearsing or simulating various experiences within the mind (Weinberg & Gould, 2023). Koehn et al. (2014) examined the effectiveness of an imagery intervention for enhancing athletes’ performances and flow states. Flow is a

psychological state where an individual's skills and task demands are equal and they experience high levels of intrinsic motivation (i.e., individual is motivated to engage in an activity purely for the satisfaction or pleasure) and optimal performance (Weinberg & Gould, 2023). Koehn et al. developed an imagery script that four Australian nationally ranked junior tennis players followed for six weeks. First, athletes underwent a 6-week baseline testing period where the Sport Imagery Ability Measure (SIAM) and the Flow State Scale-2 (FSS-2) were administered. The SIAM assesses athletes' imagery ability in sport (Watt et al., 2004), while the FSS-2 examines the intensity of flow state in one specific activity or event (Koehn et al., 2014). After the 6-week baseline phase, athletes entered the 6-week imagery intervention period. Each imagery session lasted approximately 10-15 minutes and consisted of three sections: (a) relaxation techniques, (b) imagery of serves, and (c) imagery of groundstrokes. After the 6-week intervention period, athletes entered a 6-week post-intervention phase where they were instructed to practice imagery prior to competition. The study concluded by interviewing each participant to discuss the perceived efficacy of the intervention on their flow state and performance. Results showed that cognitive (i.e., creating mental images that focus on clear goals or concentration on a task) and motivational imagery (i.e., focus on imagining success in completing a task and telling oneself they have the skill to do so) led to enhanced flow states during sport performance and greater performance outcomes (Koehn et al., 2014). Additionally, during interviews participants emphasized that imagery helped them to feel in control, to have clear goals, and to be able to focus better.

Munroe-Chandler et al. (2008) sought to investigate the relationship between imagery use and confidence among 122 junior soccer players. The Sport Imagery

Questionnaire for Children was used to identify the frequency of participants' imagery use, while confidence was measured using the Competitive State Anxiety Inventory-2 (CSAI-2R) for Children and the Self-efficacy Questionnaire for Soccer. Participants completed the surveys midway through the soccer season. The use of imagery was found to be a significant predictor for increased confidence and self-efficacy for all athletes across all competitive levels within the study (Munroe-Chandler et al., 2008).

In summary, imagery among athletes has been shown to increase task performance through increased flow states, self-confidence, and self-efficacy. Such positive outcomes are all applicable to sport officiating. For instance, sport officials can potentially practice imagery before a game and this might lead to increased quality and quantity of flow states. Flow states for sport officials might then help with the performance of specific officiating tasks (e.g., skating at the pace of game play while watching for penalties in ice hockey). This imagery use could also help improve confidence—high levels of confidence and self-efficacy are likely to facilitate sport officials' decision quality (Guillén & Feltz, 2011). Thus, investigations into sport officials and imagery are warranted.

Self-talk

Self-talk is the dialogue a person has with themselves and can be classified as positive, negative, or instructional (Weinberg & Gould, 2023). Positive self-talk includes statements that increase a positive attitude (e.g., "I got this"). Negative self-talk includes statements that are critical and demeaning (e.g., "I am not good enough"). Instructional self-talk encompasses statements that focus on the execution of tasks (e.g., "I need to keep my head up") (Weinberg & Gould, 2023). Hatzigeorgiadis et al. (2009) examined the

effects of positive self-talk on confidence, anxiety, and task performance among 72 competitive youth tennis players. A design was used where an experimental group underwent self-talk practice after initial baseline testing of forehand drive performance and then were tested again after the self-talk practice sessions. During the initial session, confidence and anxiety were measured using the CSAI-2R. The self-talk practice consisted of an introduction into what self-talk is and how to use it. Participants were then provided instructional (i.e., cues focused on technical aspects of the task) and motivational (i.e., cues focused on increasing confidence) cues to use during the testing. In the final session (post-self-talk intervention sessions), participants in the experimental group were instructed to pick a motivational cue to use during the performance testing. Ultimately, participants who used more frequent positive self-talk experienced increased confidence and reduced anxiety, which led to better performance outcomes (Hatzigeorgiadis et al., 2009).

More recently, Walter et al. (2019) investigated the impact a self-talk intervention had on competitive anxiety for a sample of 117 athletes across nine sports. Athletes were randomly assigned to a short-term intervention group, a long-term intervention group, or a control group. The short-term group received three 60-minute self-talk training sessions within one week and the long-term group received three 20-minute sessions per week for eight weeks. Over the course of the training sessions, participants were introduced to self-talk, ways in which self-talk can help achieve various tasks or states (e.g., regulate emotions), and developed their own self-talk strategies to help achieve these tasks. Anxiety levels were measured three times pre- and post-intervention using the Competitive Anxiety Inventory State and the Competitive Anxiety Inventory Trait scales.

The researchers found that this intervention reduced athletes' anxiety while increasing their confidence and self-efficacy. Additionally, long-term training was found to be more effective (Walter et al., 2019).

Self-talk has shown to be a positive tool for increasing performance in athletes through its ability to help regulate anxiety and increase confidence. Self-talk might also be beneficial to sport officials. Sport officials can develop individualized cues, which they recite to themselves before or during a competition. Cues for sport officials might be instructional, focusing on something like positioning (e.g., positioning, area, and sightline). Cues could also be positive and motivational (e.g., confidence, "I can do this") as a means to facilitate confidence and reduce anxiety associated with officiating sport, ultimately leading to increased performance outcomes. Learning more about specific ways sport officials might develop and implement self-talk would be useful.

Anxiety/Arousal Control

In sport, performance anxiety is a negative emotional state characterized by elevated levels of stress due to the demands placed upon an individual within training or competition, and which exceed what athletes perceive their capabilities to be (Hanrahan & Andersen, 2010; Rowland & van Lankveld, 2019). Performance anxiety can manifest as somatic (i.e., physical symptoms: sweaty palms, increased heartrate, and butterflies in the stomach) or cognitive (i.e., symptoms within the mind: negative self-talk and unable to concentrate). Performance anxiety can have harmful effects on performance and solutions to this issue often include anxiety reduction or relaxation techniques (Rowland & van Lankveld, 2019).

Kudlackova et al. (2013) examined the use of relaxation techniques among 150 athletes who were divided evenly across three skill levels (recreational, collegiate, and professional). Participants completed a deliberate relaxation for sport survey that assessed relaxation using three deliberate practice dimensions (relevancy, concentration, and enjoyment), time spent in different relaxation skills in a recent typical week, and functions of relaxation (Kudlackova et al., 2013). The results showed that professional and collegiate athletes perceived relaxation as more relevant to effective competition than recreational athletes. All athletes used relaxation techniques to manage both competitive and everyday anxieties, preferring physical relaxation (e.g., progressive muscle relaxation) for competitive anxiety and mental relaxation (e.g., meditation) for everyday anxiety. Battaglini et al. (2022) evaluated the effects of a progressive muscle relaxation intervention on psychological (stress levels, anxiety, and mood states) and physiological (blood pressure and heart rate) variables in 59 male basketball players aged 14-19. The intervention group completed 12 relaxation sessions with psychological and physiological variables being measured after each one. Results showed that this progressive muscle relaxation technique was effective in reducing heart rate as well as cognitive anxiety and stress related to sport.

It is important to note that while arousal and anxiety have some overlap, they are distinctly different and are often used interchangeably in the context of regulating them for sport performance (Hanrahan & Andersen, 2010). Arousal is defined as a mixture of physiological and psychological activity from deep sleep to extreme excitation, without being inherently pleasant or unpleasant (Hanrahan & Andersen, 2010). Arousal is linked to physiological processes of the sympathetic and parasympathetic nervous system and

not emotion (Hanrahan & Andersen, 2010). As such, athletes can face situations where arousal levels are too high or too low for optimal performance, even though it might not be inducing anxiety (Hanin, 1997). As such, athletes might need to adjust arousal levels for optimal performance, using strategies like breathing control, progressive muscle relaxation, pre-competition routines, self-talk, and imagery to decrease arousal (Hanrahan & Andersen, 2010; Weinberg & Gould, 2023).

Just as athletes do, sport officials can face heightened anxiety and arousal. Specifically, sport officials can experience increased anxiety and arousal from competition situations (e.g., tie game or championship game), critical decisions (e.g., awarding a last-minute penalty), or others' disagreement with their decisions (e.g., a coach starts yelling at an official due to their decision). Sport officials might also face situations where arousal levels need to be increased (e.g., mentally tired from a strenuous day). Sport officials might benefit from knowing various anxiety and arousal regulation techniques and which ones work best for them in the situations they could face. It is important that sport officials are able to manage possible anxieties and fluctuations in arousal level, but there has been little research investigating how officials do this.

Focus/Concentration

There are four elements that constitute concentration in sport: (a) selective attention, (i.e., focusing on relevant cues within the environment); (b) maintaining attentional focus (i.e., maintaining focus throughout the duration of a competition); (c) situational awareness (i.e., knowledge of what is going on around you); and (d) shifting attentional focus (i.e., being able to change what you are concentrating on) (Weinberg & Gould, 2023). Not surprisingly, athletes must be focused to perform at their best.

As support for this, Orlick and Partington (1988) studied 235 Canadian Olympic athletes, assessing their mental readiness and factors that influenced it. Of the 235 athletes, 75 participated in interviews while the other 160 filled out a questionnaire. The interview guide was designed to explore athletes' mental, physical, and technical readiness. The survey was developed based on the responses of the 75 interviewed athletes with the same goal of investigating their mental readiness for the Olympic Games and factors related to mental readiness. Results revealed that attentional focus and control of performance imagery were the most important mental skills related to elite performance at the Olympic Games. Further, it was found that an inability to refocus in the face of distractions was a major performance block. Neumann et al. (2022) examined the effects of switching concentration between internal and external cues when rowing. Twenty-seven novice rowers completed three 2000-meter rows on a rowing ergometer, where they were instructed to focus on internal cues only, external cues only, or switch between both internal and external cues. For internal focus, participants were asked to focus on exerting power through their arms/legs. For external focus, participants were asked to focus on exerting power through the handles/seat. Results of the experimental indicated that performance was highest (as measured by time and power output) when participants alternated between internal and external cues, rather than focusing only on one cue.

When we think of applied sport psychology for athletes, concentration is considered critical aspect of sport performance. Similarly, this concept should be thought to be as critical for sport officials. Sport officials must complete a variety of demands that require high levels of focus over the entire duration of a competition. In the context of ice

hockey, officials must focus on relevant cues (e.g., linesperson focusing on the blue line and not an aggressive body check that just occurred), have situational awareness (e.g., watching the puck while also being aware of other players' positions to ensure the official does not interfere), be able to shift focus (e.g., switch from focusing in front of the net to the corner), and maintain this focus throughout the entirety of the competition. Sport officials are entrusted with enforcing the rules and maintaining fair play within demanding environments, all the while ensuring safety for the participants. These demands require high amounts of focus, but as of yet, the development and implementation of such skills among sport officials are understudied.

Routines

Refining, improving one's understanding, and progressing the preparation for performance is widely accepted as a way to increase an individual's performance (Cotterill, 2010). Moreover, pre-competition routines lead to consistently higher levels of performance (Cotterill, 2010; Rupperecht et al., 2024). Drawing on Orlick and Partington's (1988) study again, the authors unveiled that the top athletes at the 1988 Olympics all had well developed, refined, and well practiced processes that allowed them to compete to their fullest potential. Within these procedures were pre-competition plans and post-competition evaluation plans. Pre-competition plans consisted of mental imagery, physical warm-up, positive thoughts, and reminders to focus on previous successes. Post-competition evaluation plans consisted of critical review of a competition experience where athletes extracted lessons which they would then carry with them into future competitions. Keating and Hogg (1995) conducted interviews with 15 National Hockey League players to examine their pre-competition routines. Players' routines were

comprised of five phases which were defined by time: arrival, dressing, on-ice warm-up, off-ice adjustments, and the team ritual. During these sequential time periods, players carried out various processes to achieve three different types of preparation: “getting the body ready” (physiological preparations), “getting the feel,” (psychophysiological preparations) and “getting the mind ready” (psychological preparations).

Much like athletes, sport officials might benefit greatly from the establishment of pre- and post-competition routines. Within the context of ice hockey, officials are on the ice for the full 60 minutes of game play where they must skate at an intensity that allows them to keep up with the pace of play, all the while having to make split-second and accurate decisions under large amounts of pressure. Therefore, it is logical to assume that ice hockey officials must prepare for games in a similar fashion to athletes. Establishing pre- and post-game routines might lead to more consistent and elevated performances of sport officials through increasing emotional control, confidence, arousal control, and familiarity surrounding performance preparation. Given the potential benefits of routines for sport officials, further investigation into the specific processes on how officials prepare for competition is needed.

Self-Regulation

Self-regulation refers to an individual’s ability to plan and adapt thoughts, feelings, and behaviours to achieve personal goals (Zimmerman, 2000). Zimmerman’s (2000) self-regulated learning model is commonly used in literature exploring self-regulation. The model delineates self-regulation into three phases: forethought, performance, and self-reflection. The forethought phase involves processes and beliefs that precede learning such as goal setting and planning. Motivation, effort, and self-

efficacy are additional elements that have been deemed critical as they influence an individual's willingness to learn and be confident in their abilities (Zimmerman, 2000, 2002). The performance phase refers to the actual learning process where skills such as self-control and self-observation are prominent. Finally, the self-reflection stage occurs after learning and involves the formation of beliefs and processes, with self-judgment and self-reaction being key sub-processes (Zimmerman, 2000, 2002).

This model was applied to a sport context by Cleary and Zimmerman (2001) who investigated differences in self-regulatory forethought and self-reflection processes between basketball experts, non-experts, and novices during free-throw shooting. The participants were 43 male high-school students and were divided into the three aforementioned groups based on free throw percentage that season (i.e., expert group = 15 varsity basketball players with a free-throw percentage >70%, non-expert group = 13 varsity basketball players with a free-throw percentage <55%, novice group = 15 students who had never played organized basketball). Participants were asked to complete a series of free throws while the researchers asked them various questions pertaining to goals, strategies for achieving goals, attributions for failure, attributions for success, strategy for making the next shot, and self-efficacy throughout their free-throw shooting task. Results indicated that experts set more specific goals, selected more technique-oriented strategies, made more strategy attributions, and displayed higher levels of self-efficacy than non-experts and novices. Additionally, experts' self-reflection tended to highlight faulty techniques, which helped inform future performances.

Reflection is considered a crucial element in expert learning and refers to how well individuals can evaluate the knowledge they have acquired and incorporate it into

future actions in order to improve performance (Jonker et al., 2012). Jonker et al. (2012) had 52 elite youth athletes from the Netherlands complete the reflection subscale of the Self-Regulated Learning – Self-Report Scale during either the 2006-2007 or 2007-2008 seasons. The competitive levels of athletes were determined during the 2010-2011 season and 26 athletes were found to have made it to senior international status and remained in the study. These 26 athletes were paired with 26 non-international athletes based on the following variables: age, age of entry in their sports, years of sport experience, and number of training hours per week (all at the time of the initial survey). Furthermore, four sub-groups were also created based on junior competitive level (i.e., junior international or junior national) and eventual senior competitive level (i.e., senior international or senior national) to control for differences in junior competitive level. The analysis revealed that athletes who reached senior international competitive level had notably higher reflection scores during their junior years compared to those who did not achieve international status. Notably, they surpassed their peers in thinking about actions to improve. It was also found that junior national/senior international subgroup scored significantly higher in reflection than the junior national/senior national sub-group and had similar scores to those who had already achieved international status as juniors. Additionally, athletes in the junior international/senior national subgroup had similar scores to athletes who were in the junior national/senior national subgroup.

Self-regulation practices based on Zimmerman's (2000) model could be valuable mental processes for sport officials. Sport officials can use self-regulation to help enhance their preparations through planning and goal setting. Additionally, they can cultivate motivation, effort, and self-efficacy ensuring they approach each competition with

enthusiasm, a dedication to do their best, and confidence, which can further enhance performance. After competitions, sport officials can reflect on their performances in a deliberate manner through assessing their decisions and paying particular attention to strengths and weaknesses that can be used to inform future performances. Ultimately, these practices could lead to better performance. Despite the potential benefits, research has yet to delve into if and how sport officials utilize self-regulatory strategies. Therefore, exploring the self-regulatory strategies and implementation of such strategies by sport officials is necessary.

Communication Skills

Communication is a dynamic process by which a sender transmits a message through a medium to a receiver (Sullivan et al., 2014). Lausic et al. (2009) explored communication within six NCAA Division I female tennis doubles teams. Video and audio recordings were used to collect the verbal and non-verbal communication between partners during matches. Results showed that over half of the total communications were emotional while another quarter of them were action statements. Furthermore, winning teams communicated more frequently and displayed a more homogeneous model of communication (i.e., had a shared understanding of how they communicate). McLaren and Spink (2018) investigated the relationship between information exchange and task cohesion of athletes on team sports through an online survey. The sample included 180 athletes who competed in a variety of sports, but the three most prominent were soccer (22%), ice hockey (17%), and volleyball (16%). Results showed that team member communication in the form of information exchange positively predicted perceived task cohesion. This result remained true when controlling for other factors such as the social

aspects of communication and team performance. Essentially, effective communication of information can increase a group's ability to work together towards a common goal.

Communication for performance goes beyond sport specific processes (e.g., discussing the last play in a tennis match or working together towards a common task) and another aspect that can influence sport performance is handling conflicts. One way to reduce the potential negative effects of interpersonal conflict is via communication (Jowett & Shanmugam, 2016). Resolving conflict through effective communication is critical for sport, as it has been shown that interpersonal conflict has a negative relationship with performance and satisfaction (De Dreu & Weingart, 2003).

Communication a valuable skill for athletes, but it has also been identified as a critical piece of effective sport officiating performance (Cunningham et al., 2014; Hancock et al., 2018). This is especially important with regards to ice hockey, as officiating groups are often transient (frequently performing with different officials; Hancock et al., 2018), meaning they need to quickly establish effective intra-team communication. Increased levels of effective communication between sport officials might lead to increased levels of cohesion, which have been shown to be positively linked to performance and satisfaction among sport officials (Hancock et al., 2022). In light of these potential benefits, a deeper understanding of how sport officials establish effective communication with one another is needed.

Sport Officials and Mental Skills

While it is evident that mental skills use and mental skills training are imperative for peak performance, the research discussed thus far exclusively focused on mental skills for enhancing athletes' performances. Athletes are not the only individuals tasked with

performing to their maximum potential. Like athletes, sport officials operate in the sport environment and aim to perform their duties to the best of their abilities. Further, sport officials are integral to sport since—through their decisions—they enforce rules, ensure safety, and maintain fair play. These tasks lead to high demands being placed on sport officials, particularly when decisions are made in a fast-paced environment.

Mascarenhas et al. (2005) identified four cornerstones for sport officiating performance: (a) physical fitness, positioning, and mechanics; (b) knowledge and application of the law; (c) personality and game management skills; and (d) contextual judgement (i.e., ability of the official to adapt their style to the particular competition they are officiating). Overarching these cornerstones are the psychological characteristics of excellence, which includes commitment, goal setting, imagery, planning, distraction control, responses to pressure situations, and realistic performance evaluations.

Mascarenhas et al. (2005) explained that psychological excellence is imperative for sport officials' performances. Absence of such characteristics would greatly impede a sport official's ability to perform optimally. Thus, mental skills training is imperative for sport officials (Mascarenhas et al., 2005).

Using a case study of an elite European soccer referee, Mathers and Brodie (2011) explored levels of stress and the impact it had on refereeing performance. The researchers then outlined a mental skills training program to be delivered to the referee who was working within the Scottish professional soccer leagues. The training program was designed to encourage behaviour changes throughout five stages including education (i.e., learning about mental skills training and the potential benefits), assessment/profiling (i.e., outlining performance demands for elite officiating), mental skill learning (i.e., learning

and practicing mental skills), application of mental skills in context (i.e., applying mental skills during competition fixtures), and evaluation (i.e., evaluation of the program's efficacy). The assessment of the mental skills program involved (a) a comparison of the number and level of refereeing appointments the participant had been awarded before, during, and after the mental skills training, (b) analysis of an interview that explored the referee's perceptions of the training program, and (c) the Sport Psychology Consultant Evaluation Form. Results showed a link between imagery, positive self-statements, relaxation, pre-match routine, and level of self-confidence, which led to increased performance (i.e., advancement in level and number of refereeing appointments) (Mathers & Brodie, 2011). Moreover, the referee expressed that he felt the training program had made a noticeable and positive impact on his self-confidence and performance (Mathers & Brodie, 2011). While the work done by Mathers and Brodie (2011) is an excellent start for showcasing the positive outcomes mental skills training can have on sport officials' performances, it is limited due to the fact the intervention was applied to only one individual and that the results highlight only the outcome of the intervention without providing insight into the processes engaged in by the referee.

Samuel (2015) investigated the effect of a comprehensive framework of psychological preparation on eight elite soccer referees over three full seasons. The framework consisted of five stages (allocation of match, evaluation of match demands, motivational decisions, planning, and mental stimulation) with the aim of bringing the referees to an optimal pre-performance state while also providing them with the mental skills required to effectively cope with the demands of refereeing competition. Prior to the start of a season, referees' foundation, performance, and personal development skills were

evaluated using three steps. The first consisted of referees completing the Athletic Coping Skills Inventory-28, the Task and Ego Orientation in Sport Questionnaire, the CSAI-2R, the Revised Athletic Identity Measurement Scale, and the Referee Passion Scale. Second was a semi-structured interview assessing referees' career development, motivations, and stressors. Finally, a comprehensive evaluation of each referee was made at the conclusion of the previous season. This evaluation included the referees' goal setting programs and performance profiles, which entailed performance accomplishments, mental skills use, and the referee union assessments. At the end of the three seasons, all referees showed objective progress, evidenced by promotion to higher divisions or refereeing more games in their current division (Samuel, 2015). Additionally, subjective evaluation combined with the referees' statements in the media showed support for the use of this framework. Just like the work done by Mathers and Brodie (2011), Samuel (2015) showed that within a group of individuals faced with the same task demands (i.e., refereeing soccer), mental skills training can prove beneficial for all of them. These studies show that the implementation of a mental skills training program can be valuable for sport officials, but it fails to uncover in detail what mental skills are currently being used by sport officials and by what mechanisms they positively influence performances.

Nazarudin et al. (2014) sought to examine the psychological skills used by 132 elite rugby sevens referees. The Psychological Skills Inventory for Sports questionnaire was modified to be applicable to rugby referees. The questionnaire was distributed to participants and consisted of 37 questions spread across six skills: motivation, confidence, control, anxiety, mental preparation, and concentration. The IRB Referee Sevens Performance Evaluation Form was also used to evaluate referees' control,

communication, application of the law, and positioning. The results revealed that better performance was underpinned by the use of coping skills, high confidence, appropriate goal selection, the ability to regulate anxiety, and imagery use (Nazarudin et al., 2014). Additionally, more experienced referees demonstrated higher levels of mental skills (Nazarudin et al., 2014). While Nazarudin et al. begin to highlight the specific mental skills rugby referees use to elevate their performance, it still fails to uncover the specific processes through which these officials apply these mental skills. Moreover, these findings may not be applicable to officials in other sports, such as ice hockey, where the demands and contexts of officiating may differ significantly.

A similar study conducted by Giske et al. (2016) compared elite and sub-elite soccer referees' practice routines and preparation. Ninety-eight elite soccer referees from the two highest soccer divisions in Norway participated in the study. Referees were divided into two groups (top division and second division) and underwent a series of assessments. Referees were asked to provide information about their current officiating preparation practices, and mental skills training frequency was assessed using a single item ("Are you doing any mental training?") with four response categories (0 - never; 1 - less than once a week; 2 - once a week; 3 - twice a week or more) (Giske et al., 2016). Referees were also asked open-ended questions centred on describing what mental skills training they were using. Results showed that 69% of the referees participated in mental skills training. The open-ended questions reported that visualization, concentration strategies, and self-talk practices were the most common mental skills used and that elite referees exhibited higher use of these mental skills and mental skills training than their sub-elite counterparts (i.e., 13% of elite referees reported they never practice mental skills

compared to 42% in the second division group) (Giske et al., 2016). Just as Nazarudin et al. (2014), Giske et al. have highlighted the specific mental skills used by sport officials with more experienced and elite officials showcasing higher volumes of use. Once again, these findings do not shed light on how sport officials learn, implement, and refine these skills.

Collectively, these studies offer some insight into the possible benefits mental skills training has on sport officiating performance and current practices of sport officials with regards to mental skills training. Notably, the studies demonstrate a consistent pattern whereby engaging in mental skills seems to improve performance, but mental skills training is frequently overlooked. More specifically, these studies do not offer any insights into how officials acquire or implement the mental skills they use. Further, the studies are limited in collective scope, as they focus on field-based sport officials from Europe and Asia. These shortfalls leave gaps in our depth of understanding about the specific processes of mental skill acquisition and use among sport officials. Thus, in-depth investigations into sport officials' mental skills training within other sports and regions could prove beneficial.

References

- Battaglini, M. P., Pessôa Filho, D. M., Calais, S. L., Miyazaki, M. C. O. S., Neiva, C. M., Espada, M. C., de Moraes, M. G., & Verardi, C. E. L. (2022). Analysis of progressive muscle relaxation on psychophysiological variables in basketball athletes. *International Journal of Environmental Research and Public Health*, *19*(24), 17065. <https://doi.org/10.3390/ijerph192417065>
- Cleary, T. J., & Zimmerman, B. J. (2001). Self-regulation differences during athletic practice by experts, non-experts, and novices. *Journal of Applied Sport Psychology*, *13*(2), 185-206. <https://doi.org/10.1080/104132001753149883>
- Cotterill, S. (2010). Pre-performance routines in sport: Current understanding and future directions. *International Review of Sport and Exercise Psychology*, *3*(2), 132-153. <https://doi.org/10.1080/1750984X.2010.488269>
- Cunningham, I., Simmons, P., Mascarenhas, D., & Redhead, S. (2014). Skilled interaction: Concepts of communication and player management in the development of sport officials. *International Journal of Sport Communication*, *7*(2), 166-187. <https://doi.org/10.1123/IJSC.2013-0098>
- De Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, *88*(4), 741-749. <https://doi.org/10.1037/0021-9010.88.4.741>
- Giske R., Johansen B. T., & Haugen T., (2016) Training, mental preparation and unmediated practice among soccer referees: An analysis of elite and sub-elite referees' reported practice. *International Journal of Applied Sports Sciences*, *28*(1), 31-41. <https://doi.org/10.24985/ijass.2016.28.1.31>

- Guillén, F., & Feltz, D. L. (2011). A conceptual model of referee efficacy. *Frontiers in Psychology, 2*(25). <https://doi.org/10.3389/fpsyg.2011.00025>
- Hancock, D. J., Martin, L. J., Evans, M. B., & Paradis, K. F. (2018). Exploring perceptions of group processes in ice hockey officiating. *Journal of Applied Sport Psychology, 30*(2), 222-240. <https://doi.org/10.1080/10413200.2017.1349208>
- Hancock, D. J., Paradis, K. F., Martin, L. J., & Evans, M. B. (2022). Investigating perceptions of cohesion, performance, and satisfaction in sport officiating groups. *Managing Sport and Leisure*. Advance online publication. <https://doi.org/10.1080/23750472.2022.2092536>
- Hanin, Y. (1997). Emotions and athletic performance: Individual zones of optimal functioning. *European Yearbook of Sport Psychology 1*, 29-72.
- Hanrahan, S. J., & Andersen, M. B. (2010). *Routledge handbook of applied sport psychology: A comprehensive guide for students and practitioners*. Routledge.
- Hatzigeorgiadis, A., Zourbanos, N., Mpoumpaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk–performance relationship: The effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and Exercise, 10*(1), 186-192. <https://doi.org/10.1016/j.psychsport.2008.07.009>
- Jonker, L., Elferink-Gemser, M. T., de Roos, I. M., & Visscher, C. (2012). The role of reflection in sport expertise. *The Sport Psychologist, 26*(2), 224-242. <https://doi.org/10.1123/tsp.26.2.224>
- Jowett, S., & Shanmugam, V. (2016). Relational coaching in sport: Its psychological underpinnings and practical effectiveness. In R. J. Schinke, K. R. McGannon, &

- B. Smith (Eds.), *Routledge international handbook of sport psychology* (pp. 471-484). Routledge/Taylor & Francis Group.
- Keating, J., & Hogg, J. (1995). Pre-competitive preparations in professional hockey. *Journal of Sport Behavior, 18*(4), 270-286.
- Kitsantas, A., & Zimmerman, B. J. (2002). Comparing self-regulatory processes among novice, non-expert, and expert volleyball players: A microanalytic study. *Journal of Applied Sport Psychology, 14*(2), 91-105.
<https://doi.org/10.1080/10413200252907761>
- Koehn, S., Morris, T., & Watt, A. P. (2014). Imagery intervention to increase flow state and performance in competition. *The Sport Psychologist, 28*(1), 48-59.
<https://doi.org/10.1123/tsp.2012-0106>
- Kudlackova, K., Eccles, D. W., & Dieffenbach, K. (2013). Use of relaxation skills in differentially skilled athletes. *Psychology of Sport and Exercise, 14*(4), 468-475.
<https://doi.org/10.1016/j.psychsport.2013.01.007>
- Lausic, D., Tennebaum, G., Eccles, D., Jeong, A., & Johnson, T. (2009). Intra-team communication and performance in doubles tennis. *Research Quarterly for Exercise and Sport, 80*(2), 281-290.
<https://doi.org/10.1080/02701367.2009.10599563>
- Locke, E. A., & Latham, G. P. (1985). The application of goal setting to sports. *Journal of Sport Psychology, 7*(3), 205-222. <https://doi.org/10.1123/jsp.7.3.205>
- Mascarenhas, D. R. D., Collins, D., & Mortimer, P. (2005). Elite refereeing performance: Developing a model for sport science support. *The Sport Psychologist, 19*(4), 364-379. <https://doi.org/10.1123/tsp.19.4.364>

- Mathers, J. F., & Brodie, K. (2011). Elite refereeing in professional soccer: A case study of mental skills support. *Journal of Sport Psychology in Action*, 2(3), 171-182.
<https://doi.org/10.1080/21520704.2011.609018>
- McLaren, C. D., & Spink, K. S. (2018). Examining communication as information exchange as a predictor of task cohesion in sport teams. *International Journal of Sport Communication*, 11(2), 149-162. <https://doi.org/10.1123/ijsc.2018-0004>
- Munroe-Chandler, K., Hall, C., & Fishburne, G. (2008). Playing with confidence: The relationship between imagery use and self-confidence and self-efficacy in youth soccer players. *Journal of Sports Sciences*, 26(14), 1539-1546.
<https://doi.org/10.1080/02640410802315419>
- Nazarudin, M. N., Noordin, H., Suppiah, P. K., Abdullah, M. R., Omar Fauzee, M. S., & Abdullah, N. M. (2014). Psychological skills assessment and referee rugby sevens performance. *Jurnal Pemikir Pendidikan (Journal for Educational Thinkers)*, 5, 165-184.
- Neumann, D. L., & Hohnke, E. (2018). Practice using performance goals enhances basketball free throw accuracy when tested under competition in elite players. *Journal of Human Sport and Exercise*, 13(2), 296-304.
<https://doi.org/10.14198/jhse.2018.132.05>
- Neumann, D. L., Olive, A., Moffitt, R. L., & Piatkowski, T. (2022). Switching attentional focus across internal and external cues improves performance in a rowing task in novices. *Psychology of Sport and Exercise*, 61, 102195.
<https://doi.org/10.1016/j.psychsport.2022.102195>

- Orlick, T., & Partington, J. (1988). Mental links to excellence. *The Sport Psychologist*, 2(2), 105-130. <https://doi.org/10.1123/tsp.2.2.105>
- Rowland, D. L., & van Lankveld, J. J. D. (2019). Anxiety and performance in sex, sport, and stage: Identifying common ground. *Frontiers in Psychology*, 10(01615). <https://doi.org/10.3389/fpsyg.2019.01615>
- Rupprecht, A. G., Tran, U. S., & Gröpel, P. (2024). The effectiveness of pre-performance routines in sports: A meta-analysis. *International Review of Sport and Exercise Psychology*, 17(1), 39-64. <https://doi.org/10.1080/1750984X.2021.1944271>
- Samuel, R. D. (2015). A psychological preparation framework for elite soccer referees: A practitioner's perspective. *Journal of Sport Psychology in Action*, 6(3), 170-187. <https://doi.org/10.1080/21520704.2015.1065938>
- Sullivan, P., Jowett, S., & Rhind, D. (2014). Communication in sport teams. In A. Papaioannou & D. Hackfort (Eds.) *Routledge companion to sport and exercise psychology: Global perspectives and fundamental concepts* (pp. 559-570). Routledge. <https://doi.org/10.4324/9781315880198>
- Walter, N., Nikoleizig, L., & Alfermann, D. (2019). Effects of self-talk training on competitive anxiety, self-efficacy, volitional skills, and performance: An intervention study with junior sub-elite athletes. *Sports (Basel)*, 7(6), 148. <https://doi.org/10.3390/sports7060148>
- Watt, A. P., Morris, T., & Andersen, M. B. (2004). Issues in the development of a measure of imagery ability in sport. *Journal of Mental Imagery*, 28(3-4), 149-180.
- Weinberg, R., & Gould, D. (2023). *Foundations of sport and exercise psychology* (8th ed.). Human Kinetics.

Zimmerman, B. J. (2000). Attaining self-regulation. A social cognitive perspective. In M. Boekarts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). Academic Press.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 41*(2), 64-70. https://doi.org/10.1207/s15430421tip4102_2

Chapter Three Manuscript

Manuscript

**Behind the Whistle: Understanding Mental Performance in Elite Ice Hockey
Officiating**

Christopher J. Coady & David J. Hancock

Memorial University of Newfoundland

Submitted to: *Journal of Applied Sport Psychology*

Abstract

Officiating elite sport requires focus, confidence, arousal regulation, and decisive decision-making, to name a few. Thus, mental skills use and training seems imperative for elite sport officials. Unfortunately, little research has focused on mental skills and sport officials. The purpose of this study was to explore ice hockey officials' use of mental skills. A pragmatic paradigm guided the study. Participants were 10 elite ice hockey officials (7 female, 3 male; $X_{\text{age}} = 30.3$ years; $X_{\text{experience}} = 15.1$ years). Data were collected via semi-structured interviews, which were analyzed using a six-step thematic analysis. Results revealed varying levels of mental skills use, with pre-performance routines, self-talk, visualization, and goal setting being the most commonly used skills. Additionally, specific processes behind the implementation of mental skills by participants were revealed. Few participants underwent specific training to acquire their mental skills. Instead, participants predominantly learned mental skills through past experiences as athletes and their peers. Nevertheless, all respondents acknowledged the critical role mental skills played in elite sport officiating. Further, participants advocated for their organizations to create formal educational opportunities whereby officials could learn mental skills, especially earlier in their officiating careers. These findings emphasize the importance of mental skills for elite sport officials, but also the lack of formal mental skills training. Potentially, this shortfall prevents sport officials from reaching their full potential. We offer actionable steps for sport officiating organizations including the implementation of early education programs, formal training opportunities, and recommendations for continued organizational support.

Key Words: Mental Skills, Psychological Skills, Sport Official, Pragmatism

Introduction

Attaining excellence in any domain is a complicated process, especially for sport participants, who must excel in physical, technical, tactical, and mental performance (Durand-Bush & Salmela, 2002). In sport, an athlete's mental state can greatly influence their ability to execute tasks to their full potential (Gee, 2010). Therefore, it is important for sport practitioners to fully understand how to enhance mental qualities (e.g., focus) through various sport psychology strategies. Individuals can experience several cognitive obstacles that negatively impact their performances (e.g., lack of concentration, performance anxiety, and focusing on mistakes). Mental or psychological skills are techniques that individuals can use to reduce or eliminate these mental roadblocks to enhance psychological performance. Despite this, mental skills remain undertrained and underdeveloped (Weinberg & Gould, 2023). Understanding and partaking in mental skills training is imperative for individuals attempting to enhance their performances. There is a well-established body of literature that supports the claim that mental skills can enhance athletes' performances and that many interventions are interrelated (e.g., self-talk and imagery can help control anxiety; Hatzigeorgiadis et al., 2009; Munroe-Chandler et al., 2008; Walter et al., 2019). Although less frequently studied than athletes, sport officials likely benefit from mental skills training, as they must also perform complex tasks in demanding and dynamic environments.

The term "sport officials" encompasses umpires (e.g., baseball), judges (e.g., gymnastics), and referees (e.g., ice hockey). Sport officials are integral to sport since—through their decisions—they enforce rules, ensure safety, and maintain fair play; without them, competition becomes play (Livingston et al., 2020). These tasks lead to high

demands being placed on sport officials, particularly when decisions are made in a fast-paced environment. Sport officials face various tasks, which are dependent on the demands of their sports (e.g., movement requirements, perceptual demands, and interaction with athletes in the competition environment) (MacMahon & Plessner, 2013). Based on these task demands, MacMahon and Plessner (2013) created a beneficial three-category classification system for sport officials: monitors, reactors, or interactors. Monitors (e.g., figure skating judges) have minimal interaction with athletes and primarily evaluate the quality of a performance (MacMahon & Plessner, 2013). These sport officials face little to no physical requirements but can experience high perceptual demands especially when observing multiple athletes at once (MacMahon & Plessner, 2013). Reactors (e.g., assistant referees in soccer) are classified as sport officials who are responsible for a limited number of cues and have very little interaction with athletes (MacMahon & Plessner, 2013). Interactors (e.g., ice hockey referees) are sport officials who directly engage with athletes, operate in the competitive environment (rather than on the periphery), and must attend to several cues simultaneously (MacMahon & Plessner, 2013). The task demands of interactors are relatively higher than those of monitors or reactors. This is due to their high levels of interaction, numerous cues to which they must attend, and elevated physical requirements (e.g., running/skating to maintain ideal position). Given that the demands of interactors are more challenging, mental skills training might be most beneficial to this type of sport official.

Mascarenhas et al. (2005) identified four cornerstones for referee performance, which appear generalizable to interactors: (a) physical fitness, positioning, and mechanics; (b) knowledge and application of the law; (c) personality and game

management skills; and (d) contextual judgement (i.e., ability of a referee to adapt their style to the particular competition they are refereeing). Overarching these cornerstones are the psychological characteristics of excellence, which include commitment, goal setting, imagery, planning, distraction control, responses to pressure situations, and realistic performance evaluations. Psychological excellence is critical for sport officials' performances as the absence of such characteristics would significantly hinder a sport official's ability to perform at their true potential (Mascarenhas et al., 2005). Despite mental skills training being essential for sport officials (Mascarenhas et al., 2005), the literature on sport officials' mental skills is relatively limited.

In one of the earliest studies on sport officials' mental skills, Mathers and Brodie (2011) used a case study of an elite European soccer referee to examine the impact of a mental skills training program on refereeing performance. The authors found that using imagery, positive self-statements, relaxation, and pre-match routines increased the referee's self-confidence and performance, resulting in more frequent and higher-level refereeing appointments. Additionally, the referee reported a noticeable improvement in self-confidence and performance, which he attributed to the training program. While the work done by Mathers and Brodie (2011) is an excellent start for showcasing the positive outcomes mental skills training can have on sport officials' performances, the single-subject design limits applicability to other officials. Additionally, this research leaves gaps in understanding the underlying processes of mental skills acquisition and use among sport officials.

Blumenstein and Orbach (2014) sought to develop a psychological preparation program for soccer referees and examine its effects on the pre-competition routines of

those who participated. The psychological preparation program consisted of three parts: Educational (i.e., lectures and self-evaluation), Acquisition (i.e., individual meetings and development of pre-performance routines), and Evaluation (i.e., self-evaluation and assessment of referees' activities during matches). Referees who participated in the program witnessed increased self-confidence (which might or might not improve decision accuracy) and the ability to cope with competitive stress. In a similar study, Samuel (2015) investigated the effect of a comprehensive framework of psychological preparation on eight elite soccer referees over three full seasons. This framework consisted of five stages—allocation of match, evaluation of match demands, motivational decisions, planning, and mental stimulation—and aimed to optimize pre-performance states and equip referees with the mental skills needed to handle competition demands. At the end of the three seasons, all referees showed objective progress, evidenced by promotion to higher divisions or officiating more games in their current division (Samuel, 2015). Moreover, referees offered their own evaluation of the framework and overwhelmingly supported its use.

Other researchers have also implemented intervention-based mental skills programs for sport officials. One such intervention was conducted by Slack et al. (2015), who evaluated the effectiveness a Mental Toughness Education and Training Program had on three English Premier League soccer referees. The training program consisted of four workshops with various themes (e.g., mental toughness attributes and situations demanding mental toughness) and exercises included in each workshop (e.g., video footage review, on-field role-play, and educational sessions). Their results revealed that referees' in-game performance, mental toughness, and confidence improved due to the

intervention. Meanwhile, Mudian et al. (2021) implemented a training intervention for 48 soccer referees, which focused on teaching relaxation and imagery techniques.

Performance was assessed pre- and post-intervention using an assessment model from FIFA's assessment standards which evaluated dimensions of officiating performance such as, courage, character, and concentration, accuracy of decision making, and official position and mechanisms. The intervention had a significant and positive influence on the performance of soccer referees when compared to their pre-intervention performance.

Referees experienced higher levels of emotional control and self-control in decision making (Mudian et al., 2021). Moving beyond traditional mental training skills, Maxwell-Keys et al. (2022) considered the effects of rational emotive behaviour therapy (i.e., psychotherapy aimed at challenging and reframing irrational beliefs) sessions on irrational beliefs, anxiety, decision rumination and reinvestment, and match officiating performance among two elite rugby union match officials. The intervention was shown to have significant, immediate, and sustained (based on a 12-week follow-up) effects on reducing anxiety and decision-making reinvestment. However, only one of the two participants experienced increased match officiating performance. Additionally, Piffaretti and Carr (2022) conducted a case study that recounted the first author's experiences of developing and delivering a mindfulness-based intervention to indoor volleyball and beach volleyball referees leading up to the 2016 Summer Olympic Games, as well as the effects that this intervention had on referee performance. Results from pre- and post-intervention survey results along with qualitative data analysis, showed that the intervention positively influenced referees' concentration skills, responses to anxiety, and

experiences through the use of tools like pre-competition routines, refocusing plans, mental imagery, and mindful breathing.

In sum—and building from the work done by Mathers and Brodie (2011)—Blumenstein and Orbach (2014), Samuel (2015), Slack et al. (2015), and Mudian et al. (2021) showed that mental skills training can prove beneficial within a group of individuals faced with the same task demands (i.e., refereeing soccer). Meanwhile, Maxwell-Keys et al. (2022) and Piffaretti and Carr (2022) showed that mental skills training is of value to officials in other sports outside of soccer. While these studies demonstrate that the implementation of a mental skills training program can be valuable for sport officials, they fail to investigate the existing use of mental skills by sport officials. This not only leaves a gap in understanding what mental skills are currently being utilized by sport officials, but also how sport officials acquire mental skills or how they implement them. While this area has been largely understudied, some researchers have begun exploration into the already existing mental skills use of sport officials.

To begin, Nazarudin et al. (2014) examined the psychological skills used by 132 elite rugby sevens referees and its relationship to referees' performance. The study found that superior performance correlated with effective coping skills, high confidence, appropriate goal selection, anxiety regulation, and imagery use, with more experienced referees demonstrating higher proficiency of these mental skills. Similarly, Giske et al. (2016) compared the existing practice routines and preparation differences between 98 elite and sub-elite soccer referees in Norway. Results showed that 69% of the referees participated in self-directed mental skills training with visualization, concentration strategies, and self-talk being the most commonly utilized techniques. Elite referees

reported higher engagement with these skills compared to sub-elite referees, as only 13% of elite referees never practiced mental skills compared to 42% of referees in the second division. The work done by Nazarudin et al. and Giske et al. highlights that some sport officials, especially elite officials, independently implement mental skills within their officiating practices. Nonetheless, understanding the specific modalities that sport officials use to execute, train, and learn their mental skills is still unclear.

Providing some insight into this was Slack et al. (2014), who interviewed 15 English Premier League soccer referees to gain an understanding of mental toughness in soccer officiating. Referees were asked about their behavioural and cognitive responses to situations that required mental toughness, to which they responded by stating they used all resources available, remained calm and composed, and used effective and clear communication (e.g., clear commands and signals and strong body language). Additionally, referees' cognitions in these same situations were focusing in blocks of five minutes, turning negatives into positives, trusting decisions, and focusing on performance goals. Although these findings are a great initial exploration into some of the processes underlying mental skills use by sport officials, they focus on only one mental skill. Given that sport officials face a multitude of challenges associated with their roles and might use numerous mental skills to help them navigate those challenges, exploring the processes and use of all the mental skills they use would likely prove beneficial for deepening our understanding of these mechanisms. Furthermore, investigation into how sport officials learn and train these mental skills remains largely unstudied.

Purpose

The existing literature—while limited—resoundingly demonstrates that mental skills use is vital for sport officials’ performance. However, a gap in understanding still exists as little is known about how sport officials learn, implement, or train these skills. Since previous studies focus on field-based sport officials, it is useful to study other sport officials as well, as such an approach will provide a more complete picture of sport officials’ mental skills use. Moreover, the existing literature is almost exclusively bound geographically to European sport officials with little insight into the mental skills of sport officials outside of this region—insights that are necessary to advance the field. As such, the focus herein is on ice hockey officials in Canada, who operate in a fast-paced sport with several cues to which they must attend. Importantly, previous attempts to study sport officials’ use of mental skills have focused on a breadth—rather than depth—of understanding. That is, in most of the previous studies, the effectiveness of the interventions or mental skills use was often measured by outcomes, which offers no insights into the *process* of acquiring or using mental skills. As such, qualitatively inquiry affords us an opportunity to gain a deeper understanding of the how and why—that is, how the skills were acquired, how they are used, and why they are effective.

Therefore, the purpose of this study was to engage in interviews with elite ice hockey officials in Canada to explore in detail their acquisition and use of mental skills. Studying ice hockey officials could facilitate a greater understanding of how mental skills are used in this population. Such knowledge might offer a chance to enhance ice hockey officials’ performance, while also providing insights that could be useful to similar

populations (e.g., other elite interactors or grassroots ice hockey officials). As a qualitative inquiry, no hypotheses are offered.

Methods

This study explored current mental skills practices of elite ice hockey officials in Canada. The study was approved by the research ethics board at the senior author's institution (Appendix A). The subsequent sections provide detailed explanations of the methodological considerations used in this study.

Paradigm

This research was guided by a pragmatic paradigm (Dewey, 1931). Pragmatism evaluates research findings based on their practical, social, and moral implications and how those implications influence the human condition (Giacobbi et al., 2005). A pragmatic approach argues that epistemological and ontological views are not concrete, but instead fall along a continuum, which depends on the nature of the research question (Giacobbi et al., 2005). Pragmatism directs little attention to debates about truth/reality and insists that what defines "truth" is whatever is functional for the participants. Pragmatists argue that neither total agreement, complete objectivity, or the search for ultimate truth are useful; rather, the discovery of a practical truth within the community is most useful (James, 1907; Maxcy, 2003). The results of pragmatic studies are, therefore, mostly applicable and used by the individuals (or those similar to them) involved within the practical issues or inquires at hand. In the case of this study, learning about ice hockey officials' mental skills has practical implications for the participants, other ice hockey officials, other similar sport officials (e.g., basketball referees), and sport officiating organizations. This paradigm was also chosen because it ensures that each participant's

experiences pertaining to the acquisition and use of mental skills are considered (O'Reilly et al., 2018). Based on the ideas incorporated within pragmatic research and the purpose of this study, it was deemed the most appropriate choice.

Participants

Utilization-focused sampling—which involves selection of participants who can offer comprehensive and detailed insights about a particular idea (Patton, 2015)—was used to recruit participants. Participants were 10 elite ice hockey officials (7 female, 3 male; 5 referees, 5 linespersons; $X_{\text{age}} = 30.3$ years, range = 25-40 years; $X_{\text{experience}} = 15.1$ years, range 6-22) who gave informed consent (Appendix B) to participate in the study. Nine participants self-identified as Caucasian while one participant identified as First-Nations. All participants were National High-Performance officials within Hockey Canada's officiating pathway (the highest certification level in Hockey Canada) (Hockey Canada, 2022). The Manager of Officiating for Hockey Canada identified a subset of top officials within that pool, from which our participants were drawn. As such, all participants officiated at the Major Junior (e.g., Western Hockey League) and university (e.g., U-Sport) levels or higher (e.g., Olympics). Participants resided and officiated in Ontario ($n = 3$), British Columbia ($n = 3$), Saskatchewan ($n = 2$), Nova Scotia ($n = 1$), or Alberta ($n = 1$) and officiated 85 games a season on average (range = 55-200 games per season). This type of sampling aligns with the pragmatic paradigm as it identifies specific types of potential participants who can then generate salient information to be shared within and outside of the study.

The number of participants was determined by adhering to the principle of “information power” (Malterud et al., 2016). Information power refers to the amount of

relevant information the sample within a study holds (Malterud et al., 2016). The more information power a study has, the lower number of participants is needed. Information power is determined by assessing (a) the aim of the study (i.e., how broad or narrow it is), (b) sample specificity (i.e., how relevant the properties of participants are to the study aim), (c) use of established theory (i.e., if the study is supported by an established theory or not), (d) quality of dialogue (i.e., how clear the communication between the researcher and the participants is, and (e) analysis strategy (i.e., cross-case analysis versus in-depth analysis of narratives from multiple participants). These factors fall along a continuum and upon consideration of each of them, 10 participants was deemed appropriate to ensure substantial information power within the study.

Data Collection

Data were collected through two instruments. The first was a short demographic survey (age, gender, years' experience, etc.; Appendix C) administered via Word document, which participants completed and emailed back to the lead author. The second data collection instrument was an online semi-structured interview. The interview guide was structured to include three types of questions based on Patton's (2015) recommendations. First was background questions, which explored background information of participants (e.g., "Can you tell me what you enjoy about officiating?"). Second was experience/feeling questions, which explored sport officials' knowledge, use, and acquisition of mental skills (e.g., "Have you heard of mental skills and mental skills training? If so, what can you tell me about it?"). Third was summary questions to ensure participants had an opportunity to add any information they had not yet stated (e.g., "Do you have any further comments you would like to contribute?"). By adhering to this

structure, it provided an opportunity for participants to give detail-rich responses, increasing the probability that these responses led to practical and applicable real-life implications. This conforms to the basic principles of the pragmatic approach selected for this study.

The interviews ($M = 55:28$, range = 42:09-1:27:32) were recorded using an audio recording device, from which a verbatim transcript was created. During the interviews, the lead author took field notes to record aspects of the interaction between himself and the participant, as well as other relevant observations (e.g., body language, reactions to questions, and how well questions were delivered). The lead author's feelings, thoughts, ideas, interpretations, and reflections were also noted, which helped with the interpretation of transcripts as well as provided context for the research team during data analysis.

Data Analysis

Thematic analysis is a flexible method of qualitative inquiry that involves identifying, analyzing, and reporting themes (i.e., patterns) within the collected data (Braun et al., 2016). Thematic analysis is a suitable method when the research objective is to explore and comprehend complex phenomena. Moreover, thematic analysis allows for rich and detailed exploration of the data leading to the identification of salient themes. Within the context of this study, results from thematic analysis can be used to guide and inform future decision-making surrounding mental skills training for sport officials, which is consistent with the pragmatic paradigm's emphasis on practicality. Due to the resourcefulness and thoroughness a thematic analysis can provide, it was selected to be the most appropriate choice.

The thematic analysis included six phases (Braun et al., 2016). The first step was familiarization with the data, which involved transcribing the data, reading each transcript twice, and making notes on initial ideas. The second step was to generate initial codes by systematically organizing interesting notes throughout the data set. Coding is the first step in being able to make any conclusions about the data (Mayan, 2009). With little research on this topic, no theoretical framework was chosen to guide the coding process. Instead, inductive coding was used to generate initial codes (Patton, 2015). The third step was searching for themes, which included the process of collecting codes and organizing them into overarching ideas. This was followed by the fourth phase of reviewing themes, which ensured that the extracted codes fit into the designated themes and that the themes aligned with the data set. The fifth phase was defining and naming themes, which involved refining the themes into clear categories which told the overall story. The final step was producing the report, which compiled these themes into a manuscript. As results ought to align with one's paradigm, the results of this study were written in a fashion that produced concrete information for elite ice hockey officials and the governing bodies that manage them.

Methodological Quality and Rigour

Qualitative research is subjective in nature with endless streams of interpretation. Qualitative researchers hold a lot of power as the work produced by academics carries a notable weight in society (Mayan, 2009). The words written by qualitative researchers are considered to be what is "true" of a particular group about a given subject (Mayan, 2009)—a concept that, once again, aligns with the pragmatist paradigm. Given that, it is

vital that the methodological quality of research is of a high standard. Within qualitative research, this thoroughness is known as “rigour” (Mayan, 2009).

Methodological rigour was established through (a) methodological coherence, (b) conducting a pilot interview, (c) reflexive journaling, and (d) the use of a critical friend. Methodological coherence is the idea that there is congruence between one’s paradigm, methodology, research question, data collection/analysis, and other relevant aspects of the study (Mayan, 2009). This project is coherent as the sampling choices, data collection procedures, and data analysis choices all align with the pragmatic paradigm, which underpins this project. In addition, these methodological choices are integrated in a way that supports the research objective. Prior to conducting the interviews, the lead author engaged in an online pilot interview with a local ice hockey referee. The pilot interview provided an opportunity for the lead author to become comfortable with the interview process and develop the interview guide. This pilot interview was recorded and reviewed by the research team, with the senior author offering feedback, suggestions, and direction on how to improve the process and the interview guide. Reflexivity is the critical evaluation and active reflection of decisions made by a researcher at any given stage during the research process (Guillemin & Gillam, 2004; Jones et al., 2014; Mayan, 2009). The lead author kept a journal of his own thoughts and feelings during and after interviews, ensuring that he was reflexive during the research process. A critical friend is a colleague who reads the results of one’s data analysis and provides the researcher with insights through engaged conversation (Mayan, 2009). For this study, the chosen critical friend was a Master’s student in the same unit as the lead author and who had experience in qualitative research along with lived experiences relevant to the study topic. This

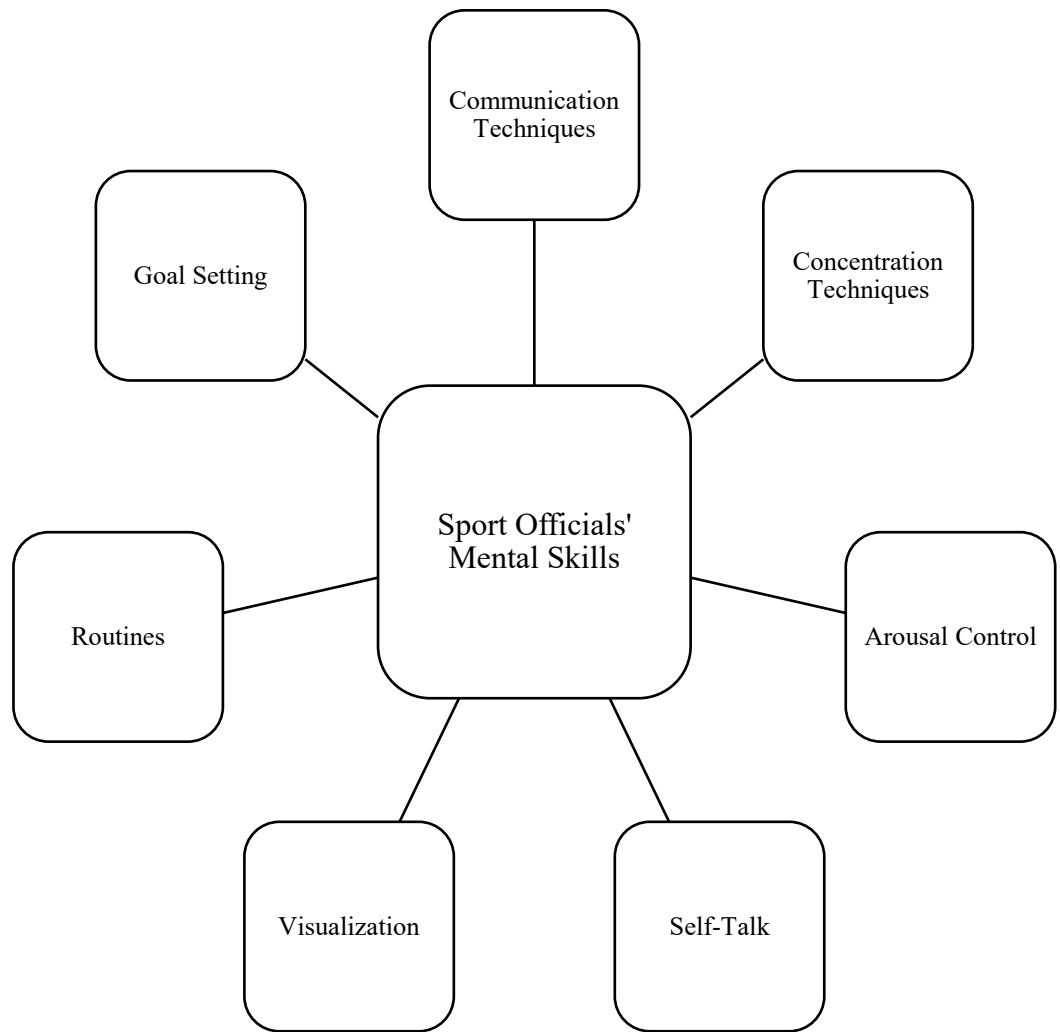
critical friend read 10% of all codes. During this vetting process, the critical friend and lead author engaged in conversations about their thoughts, insights, and addressed any questions about interpretations. This conversation and subsequent questions helped establish a rigorous research process.

Results and Discussion

Through the results of this study, it was revealed that elite ice hockey officials use a variety of mental skills to enhance their performances. The range of mental skills use is portrayed in Figure 1. Three themes were created through the analysis of participant interviews: (a) Learning Mental Skills, (b) Mental Skills Use, and (c) Insights about Mental Skills in Officiating. Where appropriate, sub-themes are explained.

Figure 1

Mental Skills Used by Elite Ice Hockey Officials in Canada



Theme: Learning Mental Skills

The first theme addressed is “Learning Mental Skills”. In this theme, participants offered information pertaining to how they acquired their mental skills knowledge, including when and why they acquired mental skills. Participants also provided valuable insights for enhancing mental skills education for sport officials, such as how officials should be taught mental skills. This theme had two sub-themes: (a) Process of Acquiring Mental Skills Knowledge and (b) Considerations for Future Mental Skills Education.

Process of Acquiring Mental Skills Knowledge

To gain a comprehensive understanding of sport officials' use of mental skills, we must first understand how they are acquired. This sub-theme encompasses participants' reflections on when, how, and why they acquired their mental skills knowledge.

When Mental Skills Were Acquired

Most participants were first exposed to basic mental skills during their teenage years, as explained by Participant 7, "It [mental skills training] started as a player, but I don't know if I would have done much in high school. That's probably where I just got introduced to it was when I was playing in high school". Participant 4 highlighted how their baseline knowledge came from a sport psychology course during their undergraduate degree, "That I use...from, well, a little bit from [post-secondary] schooling. That's kind of like the baseline".

It is largely accepted that mental skills training can have positive effects on sport officials' performances (Blumenstein & Orbach, 2014; Mudian et al., 2021; Samuel, 2015). Our results add to the literature by identifying that sport officials often begin acquiring mental skills during adolescence, before they have even become officials. This initial attainment of knowledge represents the first stage of Skill Acquisition Theory (SAT). SAT offers some context for how individuals evolve from initial attainment of knowledge to mastery of application of knowledge (DeKeyser, 2007). SAT is rooted in the notion that the acquisition of diverse skills shares common principles, resulting in comparable developmental patterns from initial stages of knowledge representation and behaviour change to the eventual presence of highly skilled and effortless performance (DeKeyser, 2007). It is likely that many sport officials acquire some foundational mental

skills knowledge during their athletic careers. As such, sport officiating organizations can focus on transitioning sport officials from initial attainment of knowledge to actively applying it and fostering behaviour changes (stage two of SAT; DeKeyser, 2007). Over time and with repeated practice, sport officials can become proficient in their mental skills use, ultimately helping them reach their fullest potential.

How Mental Skills Were Acquired

Peers and mentors were the most common sources of mental skills learning (e.g., tools and techniques) by participants: “I would say like peers and mentors and then just like people sharing suggestions that they use that worked” (P4). Sport officials also gained valuable insights from their peers’ lived experiences. These shared experiences provided practical examples of how to apply mental skills in real situations. As one participant noted, “Oh yeah, for sure. And like – like this is what they [a fellow official] did in that situation or this is what they did and it didn't work and just stuff like that” (P1). Another source for learning mental skills discussed by participants was through past involvement in sport, “So, through hockey and having played at university, we did a lot of mental skills training” (P9). For Participant 7, independent learning was a major source of mental skills acquisition, “I’ve done a lot independently with whether it's listening to podcasts...I like would sit there and Google different mental performance techniques or different skills or different articles or podcasts”. Another source for learning mental skills was Hockey Canada (the participants’ governing body):

The Hockey Canada officiating program [has] really revamped and changed over the last couple of years...now they're asking us to write down our goals and talk

about it with the officiating coaches like before tournaments and during just make sure you're on the same track...(P1).

Lastly, participants learned mental skills from applied sport psychology practitioners, “I'm quite lucky that I was able to play [hockey] at a time when I had some mental performance coaches...” (P10).

The methods ice hockey officials used to acquire their mental skills knowledge can be classified as non-structured (e.g., peer learning, past involvement in sport, independent learning,) and structured (e.g., organization-led, formal education). For non-structured learning methods, peer-learning was one of the most cited sources for attaining mental skills knowledge. Peer learning is a popular and effective method for acquiring knowledge and skills (Kiradoo, 2018). Peer learning fosters active, cooperative, and enjoyable learning environments which can foster high motivation and productivity (Keerthirathne, 2020). This learning method is also effective in developing communication, inquiry, and self-reflection skills (Keerthirathne, 2020). Clearly, peer learning of mental skills can be particularly effective for sport officials, with many participants already using this technique. To enhance peer learning, sport officiating organizations should ensure officials are well-trained, knowledgeable, and use effective teaching practices such as instructional scaffolding, providing feedback, and positive reinforcement (Keerthirathne, 2020). Independent learning was also a common method of mental skills acquisition by participants. This aligns with Self-Determination Theory (SDT), in that autonomously motivated individuals show greater interest, excitement, confidence, and overall well-being, leading to improved performance and persistence (Ryan & Deci, 2017). Thus, SDT principles (which have been applied by researchers to

help understand sport officials [e.g., Sunde et al., 2023]) can provide a framework for fostering independent learning of mental skills by sport officials, as exemplified by one quote: “After I kind of implemented some of that [mental skills] and seen it work, that's when I started seeking it out more independently on my own” (P7). Future mental skills education programs should foster autonomy to enhance uptake, continuation, and the benefits of these programs. Organization-led mental skills training (either their own programs or outsourcing to a sport psychology practitioner) is effective for sport officials, as evidenced by this study. While Hockey Canada has begun offering such training to their sport officials, expanding these efforts to include a broader range of mental skills is crucial. As noted by Piffaretti and Carr (2022), the International Volleyball Federation's hiring of a sport psychology practitioner to train officials for the 2016 Olympics enhanced officials' performances, showcasing the effectiveness of organization-led, expert-driven mental skills training for officials.

Considerations for Future Mental Skills Education

What Mental Skills Sport Officials Should Learn

Participants utilized various mental skills (see Figure 1), emphasizing the importance of learning diverse mental strategies. This perspective was exemplified by Participant 10:

I think having lots of [psychological] tools in your tool belt is important so you can pick up the one you need and knowing which one works best for us...Sometimes I'll try one and it's not working for me and I have to re-focus on another.

Visualization in particular, was found to be a critical mental skill:

Yes, I think everyone should visualize...everyone that I've talked to about it, they go, "Oh yeah, I've done it" or "I did it as a player" or "I've done it in the past". And I'm like, yeah, you should try it again because it definitely helps...I think visualization is probably the most pertinent in officiating" (P2).

Positive self-talk emerged as another key mental skill, "I think positive self-talk is super key [for sport officials]" (P8). Participant 10 advocated for sport officials using breath control to help manage nerves and anxiety, "Because I believe in [breath control]...I do believe in that for anyone that is a tool that you can use in your toolbox". Meanwhile, Participant 4 highlighted how self-reflection can impact future performance, "I think like self-reflection is something [that is] huge too...like, accept and turn feedback into reflection". Lastly, pre-game routines were considered useful for participants, especially with regards to helping them be prepared for the competition, "I think you have to develop a pre-game routine, just like a hockey player or any athlete. And that gives you your best chance to success in being prepared" (P8).

These results suggest that flexibility and adaptability in using various mental skills are crucial for effective ice hockey officiating—something that is only attained if several mental skills are taught to officials. Given the importance of psychological characteristics like goal setting, imagery, distraction control, and responses to pressure for sport officials (Mascarenhas et al., 2005), future mental skills education programs should provide officials with a foundational knowledge of diverse mental skills to help them navigate their roles' complexities and demands. This aligns with findings by Nazarudin et al. (2014) and Giske et al. (2016), who noted that other elite interactors use similar mental skills, such as visualization, concentration strategies, and self-talk. Therefore, elements of

mental skills education for ice hockey officials could also benefit other sport officials with similar demands.

How Sport Officials Should Learn About Mental Skills

Overwhelmingly, participants believed that organizations should be responsible for delivering mental skills training, “I believe there has to be some initiatives from the [hockey] leagues in order to want to invest into the officials with mental skills...” (P5). Specifically, participants wanted mental skills training to be a formal element of the training camps, “I think that like really it should be introduced to them [ice hockey officials] as part of their officiating training” (P7). Whereas respondents wanted governing bodies to organize mental skills training, the belief was the delivery should come from experts and tailored to sport officiating, “If there's someone there that is knowledgeable and passionate about what they're doing, I find it would be more palatable for people to take on” (P2). Regardless, elite ice hockey officials wanted more mental skills training, “I think that's something [mental skills training] that I've—that I think I've requested or asked for in the past several times—to have more training or skills development with that” (P4). Despite participants wanting organizations to take responsibility for mental skills training delivery, they also emphasized the importance of self-directed learning. Participant 10 noted the wealth of available information and resources out there stating, “You can seek it [information about mental skills] out. There's lots of information. There's lots of books, there's lots of podcasts if that's what interests you.”

Organizations responsible for governing ice hockey officials in Canada should consider expanding mental skills training in their programs, setting a model for other

sport officiating bodies. The goal here should be to enhance sport officials' mental skills by providing evidence-based suggestions—taught by experts—for more effective use. Organization-led training done in this way can lead to sport officials' increased competence when using mental skills (a central tenet in SDT; Ryan & Deci, 2022). Training and developmental supports are not only critical in talent identification and expertise development (Cunningham et al., 2022), but perceived organizational support has also been shown to be one of the largest predictors of turnover intention (Choi & Chiu, 2017). By providing sport officials with mental skills training, the potential is to not only increase their performance, but also increase retention. Sport officials should also take the initiative to learn about mental skills through self-directed learning. Participants' emphasis on self-directed learning aligns with SDT, suggesting these methods be central to training programs. Emphasizing autonomy, social support, and fostering a community where officials share experiences and receive positive reinforcement can enhance motivation and learning. Having a combined approach which incorporates both organizational led and independent training, addresses SDT's three basic psychological needs—autonomy, relatedness, and competence (Ryan & Deci, 2022), which ultimately could lead to effective and sustainable mental skills training.

Other Considerations

Participants offered thorough insights into other aspects of educational programming of mental skills for ice hockey officials. The need for early introduction into mental skills was expressed by participants. Participants emphasized the importance of developing mental skills before reaching elite levels, suggesting that it would be

beneficial to introduce these skills at the provincial/territorial level to better prepare officials for higher performance demands:

And I don't mean like the first ref clinic they [early career ice hockey officials] take. There you know, there's stages to it. So, you know that you start off as like a level 1 or 2, then you work your way to level 3 and then eventually you become an MHP [member high performance]...so a member of your province, you do elite hockey in your province. And I think that's where it becomes key of developing these skills and giving everyone the tools that they can use...When you get to the MHP and NHP [national high performance]...you know how to react on the ice and how you need to in the most intense and pressure situations – you need to perform (P8).

Additionally, participants expressed a desire for continuous mental skills training and not just one-off sessions citing the importance of ongoing practice and refinement of mental skills throughout an official's career, “I think there's always a place to improve on it [mental skills]. I mean we're continually working out and doing off-ice training [year-round], so I don't see why we wouldn't continually do mental training as well” (P7).

Based on these insights, future mental skills education programs for sport officials should consider incorporating two elements. First, mental skills training should be introduced during the early stages of ice hockey officials' training, starting with basic and foundational levels of information which can be built upon as officials advance through their careers. Second, mental skills training should be an ongoing process, woven into regular training schedules to promote continuous development and refinement. Sport officiating organizations can attend to these key elements through incorporating basic

mental skills training at grassroots officiating levels as well as providing more frequent mental skills training, with opportunities for officials to learn and refine their mental skills.

Summary of Theme

Participants provided valuable insights into how and when they acquired mental skills knowledge, an underexplored research area. Mental skills were primarily introduced during their high school and post-secondary years as athletes. Sources of mental skills knowledge were categorized into non-structured (e.g., peer learning) and structured (e.g., organization-led) methods. Participants emphasized the importance of a variety of mental skills, particularly visualization, self-talk, and routines. They advocated for organization-driven, expert-delivered training while recognizing the value of self-directed learning. Regardless of the delivery method, participants called for increased volume in mental skills training, suggesting it be integrated into ice hockey officials' certification and training camps, with earlier exposure to such training.

SAT and SDT offer valuable insights into how ice hockey officials learn mental skills. Since many sport officials begin as athletes in their sports (Livingston & Forbes, 2016), it is likely they have been exposed to some mental skills training during that time. From the perspective of SAT, mental skills training for sport officials should build on this acquired knowledge, helping officials apply these skills and providing opportunities to practice and refine them until they become effortless and efficient. SDT contextualizes how participants acquired their mental skills knowledge through independent learning, peer learning, and organization-led training, addressing the three basic psychological needs: autonomy, relatedness, and competence (Ryan & Deci, 2022). Sport officiating

organizations should incorporate these aspects into their mental skills training practices, revamping education methods to provide earlier and more consistent training throughout officials' careers.

Theme: Mental Skills Use

The second theme was “Mental Skills Use”. In this theme, participants identified benefits of using mental skills and shared detailed accounts of situations where these skills significantly and positively influenced their performances. Participants also provided insights into how they applied mental skills offering a nuanced understanding of how sport officials use mental skills to enhance their performance. This theme had two sub-themes: (a) Benefits of Mental Skills Use and (b) Implementing Mental Skills.

Benefits of Mental Skills Use

Participants reported that using mental skills significantly enhanced their performances by improving focus, arousal and anxiety control, job preparedness, mental toughness, and confidence. Participant 3 illustrated this, “I've seen like, I guess if we're like looking at a graph, like, success over time – it's just exponentially grown since I've implemented those mental skills into my day-to-day performance”. While similar findings exist in sport officiating literature, the following sub-sections are unique in that they detail situations participants encountered and the specific mental skills they used, highlighting the benefits of mental skills use.

Dealing with Adverse Situations

Participants recounted times when their mental skills helped them navigate unforeseen and adverse situations. Participant 3 described an emergency during an

international tournament, explaining how reassuring self-talk and breath control helped her regain focus:

So, my initial reaction was to kind of just take a second for myself and I was – while I was still on the ice, I kind of took that second to like take some deep breaths and just try to like refocus into the game.

Participant 2 highlighted how reflecting on past conflicts with a particular coach led her to feel more prepared for handling those situations going forward,

So, before games that I deal with her [the coach], I think about how I'm going to manage the game with her and if she was to have any kind of abusive behaviour or abusive language. So, I thought about how I would handle it before. And so, it's almost like visualization...but I thought about what if [name removed for anonymity] [is] going to say something to you? How am I going to deal with it?

Sport officials must be well-equipped and prepared to handle unexpected and adverse situations. These results demonstrate the effectiveness of mental skills in helping sport officials navigate these challenges. Overcoming such situations reflects mental toughness and resilience, which research has shown can be enhanced through mental skills training (Butt et al., 2010). Therefore, mental skills training for sport officials should incorporate strategies for managing unexpected events to ensure that they are well-prepared to handle and overcome such challenges.

Coping after Mistakes

Participants described instances where mental skills such as breath control, positive self-talk, and external validation, aided them in coping with mistakes. Participant 2 had a unique approach to letting go of mistakes, adding in a physical cue to their breath

control, “So in those kind of moments [making a mistake] – like those are the moments where I have to take a deep breath and let it go. Like I will physically like – unclench my hands and let it go”. Participant 10 described a time she was uncertain about a decision she had made that led to a goal for the visiting team. She dealt with the anxiety she was experiencing through breath control and seeking validation from her refereeing team, which ultimately allowed her to move forward and refocus on the game:

I'm standing on the goal line, before the puck's even dropped after the penalty call, I did my 6-2-7 [breathing technique], like take a deep breath and re-center [myself]. But then I still noticed it affecting me for the next couple minutes, especially after they [the home team] got scored on. So then, [during] the TV time out, I kind of got that external validation. And then at the end of the period between periods, we [officiating team] talked as a team again.

Participant 7 used similar techniques to handle mistakes, but combined reassuring self-talk, breath control, and external validation:

Then it's more like we need to move past this, and then I'll validate, “Players miss passes all the time. It's not that big of a deal. It didn't affect the game or if it did affect the game that we like – there's nothing we can do about it. We need to move past it. The best you can do is the best you can do going forward”.

Making mistakes is a significant fear among sport officials, particularly those at elite levels (Anshel et al., 2013; Dorsch & Paskevich, 2007). Participants employed many strategies to cope with mistakes including breath control, positive self-talk, and seeking external validation. Similarly, Voight (2009) identified comparable coping mechanisms among elite soccer officials, such as restructuring unproductive thoughts, physiological

relaxation techniques, communication training, and mental skills training methods like imagery, relaxation breathing, and self-talk. These findings suggest that coping strategies utilized by sport officials after making mistakes are vital across sports. Therefore, mental skills training for sport officials should emphasize these mental skills as essential tools for overcoming performance errors.

Managing Anxiety and Arousal

Mental skills were critical in helping participants navigate instances where they experienced high levels of anxiety. Participant 10 articulated how she handled pre- and in-game anxiety:

So, if I'm going into a game where I feel stressed, because the game has a lot of meaning, or if I'm, you know, just a little bit anxious that day, I will use...a slow inhale with a very long exhale. And I'll do that for a couple minutes...If I can sit in a quiet place and do it just to help bring down some of that stress response in my body, bring down that heart rate, bring down some of those hormones that we get – the cortisol and everything that we get when we're stressed. During the game, for breathing of course, you don't have time to do that. So sometimes all it is, is one breath. So maybe I've gotten back to my blue line, my partner's dropping the puck, I'm like, "Man I didn't like that call" or "I feel a little bit anxious right now, and I can't quite put my finger on it". I'm just going to do the same thing, but maybe it's only one breath. So, a deep inhale through my nose, and then a really slow exhale out and I'll focus on something specific on that play, whatever my job is at that point...

Self-talk was another key mental skill in helping participants navigate feelings of anxiety or arousal, as highlighted by Participant 5:

If I'm feeling – like feeling very high energy or high pressure, I definitely – then I'll try to talk like remind myself, “Okay, next face off, take deep breath. Try to relax [and] get back into a normal kind of cadence or rhythm”.

Participants also faced challenges when they felt unenergized or disengaged. Therein, they employed both physical (e.g., physical warm-up and using energizing music) and cognitive strategies to reinvigorate themselves, “If I feel flat like, I will continually tell myself, ‘Okay, gotta get going here need to work harder. Need to work harder’...” (P5).

Sport officials experience higher levels of anxiety and stress than the general population (Carson et al., 2020) due to their job demands (e.g., high-stakes decisions and competitions; Al-Haramlah, 2018; Ritchie et al., 2017). Managing anxiety and arousal is crucial for sport officials’ performances, as officials with high levels of anxiety are more susceptible to external influences like crowd noise (Sors et al., 2019). Conversely, low arousal can lead to boredom or drowsiness, negatively impacting performance (Kerr, 1985). Therefore, mental skills training for sport officials should focus on helping them identify their optimal arousal levels and provide tools to manage and overcome anxiety before and during competitions.

Maintaining Focus and Feeling Prepared

Through the use of mental skills, participants maintained focus throughout their games despite the high-paced and dynamic environment of ice hockey. Participant 9 described how she uses cue words and physical reminders to stay engaged and focused:

We had a game just this past weekend that had a lot of penalties just cancelling and there are four on threes, four and fours, five on fours and like stacked penalties. And in those situations, it's like – as a linesperson, is there icing, is there not icing, is it four on four...right? So definitely just saying, “Players, puck, goalie, clock”, like adding that [into the] mantra and just like the little tap of the boards, it reminded me it's, “Okay, yeah, play’s going on in the zone [offensive zone], what's the time on the clock? Who's coming out [of the penalty box]? What team is coming out?”, and just brings you back into focusing.

Another strategy used by participants to maintain focus in high-paced games was communicating with their partners as highlighted by Participant 9:

And then one of the strategies that we use on the ice as teammates is just verbal cues...looking at your partner like, “Hey, [penalty] box”, like “White's going to be down [white is serving a penalty]” or “Blue's going to be up [blue is on a powerplay]”. Just so that we know we're on the same page of when to call that icing, when not to call that icing, especially with a lot happening in terms of penalties ending, expiring, starting all that.

In instances where participants were struggling to maintain focus, self-talk was utilized to help them rebound, “So, I have to do that a lot, those little mini check-ins. If I'm really struggling, I'll do a lot of self-talk” (P10). Participants also highlighted the importance of going into a game prepared and how preparation sets them up for success in maintain and regaining focus, “I find when I visually and mentally prepare prior to the game, that'll help me rebound on those [losing focus] situations” (P3). This preparedness extended

beyond just their pre-game routines and that having goals helped them maintain their focus, “I think having a goal going into those situations helps keep your focus” (P8).

The ability to maintain and regain focus is critical for sport officials (Mascarenhas et al., 2005). Strategies such as focusing on performance and process goals, using pre-competition routines, employing cue words, and utilizing imagery are all proven methods for sustaining concentration in sports (Hanrahan & Andersen, 2010). Participants utilized these mental skills alongside effective communication and teamwork to stay focused on their tasks. One aspect focus that was not discussed was *what* participants were focusing on at different points in time. This is a critical aspect of concentration training, as knowing what to focus on is as critical as knowing how to control one’s focus (Wilson et al., 2006). Strategies to maintain and regain concentration should be a primary focus in the any mental skills training for sport officials. Moreover, helping sport officials identify what to focus on during various phases of the game or in different situations could prove beneficial in enhancing their focus.

Implementing Mental Skills

Processes of Applying Mental Skills

Participants had well-established pre-game routines that enhanced mental readiness for performance. This included physical warm-up, communication with peers, visualization, reflecting on feedback, reviewing league rules, information gathering, relaxation, and self-talk. Participants emphasized that these routines are adaptable, “But everything like at the rink [everything within their pre-competition routine], if I can be a little bit more adaptable and pliable in that way, then I find I'm a little bit more relaxed on the ice” (P4). Moreover, routines were refined over time and met participants’ individual

needs. Visualization was a key mental skill and participants visualized various situations (e.g., penalties, communication, and gameplay). Participants predominantly implemented visualization during their pre-game routines either finding a quiet place in the arena or positioning themselves in a place where they could see the ice, “I’ll just sit in the stands or just sit in the vicinity of the ice and then just do lots of visualization” (P2). Participant 2 had a very refined process for implementing visualization, explaining that she imagines the teams, their colours, common decisions, and rule interpretations. Self-talk was employed to maintain focus, enhance confidence, and manage stress. For instance, Participant 10 used instructional self-talk during mental checklists, “I have a little checklist of things I need to be mindful of... I go ‘Yep ‘kay, yep ‘kay, think about this. Yeah, okay. Gotta check this. Good’.” Goal setting was used by all participants and typically began at the beginning of a season. Some participants also worked on longer-term goals, “I usually work backwards, so I picked the big one which is – so right now is like Olympics and then move [backward]” (P4). Most participants focused on outcome goals (e.g., refereeing at the Olympics) with few setting performance (e.g., decision accuracy) or process goals (e.g., reviewing the rules before every game). Participants also used cues as reminders for their self-talk and goals such as Participant 10, “I’ll write things on my hands so that way, I can always go back if I’m finding I’m not in the present moment”. Other mental skills participants had procedures for were breath control, (e.g., “...and it’s six breaths in, hold for two, seven counts out and so I call it a 6-2-7 breathing technique and it just seems to work for me” (P7)) and segmenting the game (e.g., “One thing I kind of do in my games is I break each [period] into five-minute quarters... So for me, it’s kind of like a new page [after every five-minute segment]” (P6)).

Participants had well-established processes for applying mental skills. However, some of these processes lack key elements of effective mental skills use, leaving the possibility that participants could get more benefits if they used mental skills more effectively. For example, participants often focused on outcome goals, which individuals have the least amount of control over. Additionally, they occasionally exhibited poor habits, such as using negative self-talk or becoming distracted, which can negatively impact sport officials' performances. Providing enhanced knowledge to sport officials on the application of mental skills could lead to these instances becoming less frequent or provide participants with effective ways to optimize mental performance.

Influences on Mental Skills Use

Participants described how external factors influenced mental skills efficacy and use. Participant 7 described how after good performances, she did not feel the need to debrief and reflect, "Sometimes I can just forget about the game because it went well and I'm happy with it, there's nothing [to] psychoanalyze". The game intensity and quality also influenced participants' mental skills use, such as pre-game routines and preparation, "The way I prepare for a game, definitely... yeah – different for like local level versus like higher levels..." (P1). This notion extended into the overall use of mental skills as explained by Participant 7:

Some games require more [mental skills], some games require less. Like some games all I have to do is a quick reflection or quick little feedback loop with the other officials and that's all the game needed from me. Other times I'm pulling out every stop that I have all game long. Like some games, it's challenging and you

feel like every single call, you're trying to have that self-talk to be like, “No, you were good on that. No, you were good on that”.

When experiencing high stress, some participants felt implementing mental skills was difficult, “Lower-level games that you're maybe not as stressed and it's easier to apply those [mental skills] at like a level where maybe you're not as challenged” (P4). However, participants also felt that in intense games with high stakes, it was easier to maintain focus, “I find high intensity games force you to be focused and you don't have to work for that focus, it's a lot easier” (P8).

The demands and environment of a game influenced participants' mental skills use. It is important for sport officiating organizations and those responsible for the development and delivery of mental skills training to recognize this. Sport officiating organizations should provide officials with ample opportunities to train these strategies through high-fidelity competition simulation—a proven method for training concentration and arousal regulation in sport (Wilson et al., 2006). Training in this way can help sport officials get used to and develop strategies to combat these game demands and establish more consistent mental skills use.

Summary of Theme

By recounting real-life scenarios, participants provided rich, contextual insights into their mental skills application. This nuanced understanding reveals how sport officials actively employ mental skills to enhance their performances. Participants used mental skills to navigate unforeseen situations, cope with mistakes, manage heightened anxiety, and maintain focus during fast-paced games. These mental strategies allowed participants to remain concentrated and calm, ultimately enhancing their performances.

Additionally, participants had well-established methods for applying these skills to various situations. Furthermore, participants identified factors influencing their mental skills use and effectiveness, such as the intensity of the games.

These insights support the notion that mental skills can enhance sport officials' performances and offer new perspectives on their application in diverse situations. However, some participants displayed negative tendencies, such as negative self-talk and setting primarily outcome goals, which could be detrimental to their performances. Given these findings, sport officiating organizations should consider the specific situations their officials encounter and provide mental skills training focused on proven strategies and their effective application. Such training should mimic real-life competition scenarios to ensure sport officials are prepared to handle these situations effectively (Wilson et al., 2006).

Theme: Insights about Mental Skills in Officiating

The final theme derived from the data was "Insights about Mental Skills in Officiating". Participants reflected on mental skills in sport officiating, providing further insights and depth to this study. Specifically, participants stressed the important role mental skills served in their performances, described the mental qualities that were critical to their success, and explained the mental demands associated with refereeing elite ice hockey. Herein, we draw connections to how mental skills can enhance the mental qualities that support participants to meet and excel at their task demands. There were no sub-themes within this theme.

Importance of Mental Skills

Overwhelmingly, participants believed that mental skills were critical in their success, “If you don't have a mental aspect to your game, I don't see how you can make that to the top [level of officiating]. I don't know that it's possible, to be honest” (P10). Despite participants showcasing the importance of mental skills for sport officiating, many believed that this was deprioritized in their environment, “I think it's an under utilized – like I think that should be more prominent than it is” (P4). Participants also described situations where stronger mental skills would have been beneficial, such as managing anxiety: “I was very anxious and where like I was so worried about making a mistake, that I did make a mistake” (P4). The importance of available mental skills strategies might have been best captured by Participant 4, “We have an official in [location removed for anonymity] here that takes anxiety medication only before officiating. He doesn't take it any other time”. Managing adverse and unexpected events necessitates mental skills, reinforcing their importance. An example was when Participant 2's partner got injured, “I was so afraid, and I've never had to deal with that kind of unpredictability...I wish that I had somehow prepared that I may have to do a game alone”. A final insight described by participants was the importance of having available mental skills when concentration waned, such as strategies to focus during low intensity games, “So that's like a perfect example of like not being able to maintain that focus where I should really be, ‘Okay stay involved’ and try to think of tools that I can use to maintain that” (P3).

The findings from this study underscore the critical importance of mental skills in the success of sport officials, which has been documented elsewhere (Mathers & Brodie,

2011; Mudian et al., 2021). Participants unanimously emphasized that reaching elite levels of sport officiating is nearly impossible without strong mental skills. Moreover, many participants felt that sport officials under-utilized mental. Even among elite ice hockey officials with strong mental skills, there were instances where they felt ill-equipped to handle the pressures they faced, experiencing heightened anxiety, feelings of inadequacy, and loss of focus. These findings suggest that mental skills must be continuously developed and trained, even at the highest levels, to ensure that sport officials can effectively manage the various challenges and emotions they encounter.

Qualities Important to and Demands of Ice Hockey Officials

Participants offered details of the mental qualities deemed important for elite ice hockey officiating success, based on their task demands. The ability to focus and remain present was identified by participants as a critical mental quality, “being present in the moment is, I think, is huge for anyone” (P5). This is no surprise given that ice hockey officials are responsible for attending to several cues while in a very fast-paced environment. Participant 10 description details the demanding nature of the job and the importance of certain mental qualities:

You are making split-second decisions where you have to stay focused for full 60 minutes, if not longer. And you have to be able to react and respond to events on the ice appropriately. And then if something – even if it's not a mistake, or an error by the game officials, but if the game is not running smoothly, you still need to stay focused and find ways to navigate and manage those players on the ice. And having the best physical skills in the world is not going to help you navigate those reactions on the ice that take a split second to do; that comes down to your mental

game, and the ability to stay focused and the ability to not only be focused, but also not only react to these events, but proactively see that they're going to occur. Ice hockey officials must be unwavering in their decision making, able to rebound from mistakes quickly, and overcome any abuse they face. As such, mental toughness and resilience were deemed essential mental qualities, “All the best – the top officials – especially in my area are so good at letting things go...” (P8). This sentiment was echoed by Participant 1, “You never want the teams to know how you're really feeling on the inside. 'Cause they'll take advantage of that. If you look nervous or don't know what you're doing, they'll like, eat you alive”.

The participants' insights highlighted the multifaceted nature of ice hockey officiating, emphasizing the critical importance of mental qualities such as focus, composure, and the ability to make split-second decisions in a fast-paced, high-pressure environment. Additionally, mental toughness resilience appear vital to these elite ice hockey officials. Previous researchers have demonstrated that these qualities can be enhanced through mental skills training (Slack et al., 2015), and our study provides further evidence of their essential role. Therefore, sport officiating organizations and sport officials should prioritize tailored mental skills training programs that underpin and support officials' essential mental quality to enhance performances and effectively meet their task demands.

Summary of Theme

Ice hockey officials emphasized the critical importance of mental skills for sport officiating performance, noting that the absence of these key skills greatly diminishes one's chances of reaching elite levels. Additionally, it was evident that even at the elite

levels of sport officiating, mental skills require active work and active practice as participants recalled instances where the demands of the job or situations they faced, proved to be overwhelming and referees were not able to cope effectively. Participants described the mental qualities necessary for elite ice hockey officiating, including intense focus, unwavering decision-making, mental toughness, and emotional control. The importance of these mental qualities was accentuated by the duties ice hockey officials are responsible for, such as attending to multiple cues in a fast-paced environment.

These findings underscore that mental skills training for sport officials is not just beneficial, but rather is essential—particularly those officials operating at or aspiring to elite levels. The absence or ineffective implementation of mental skills can negatively impact performance, as illustrated by participants' experiences. Therefore, mental skills training should be a fundamental component of sport officiating training programs and must be regularly practiced to ensure officials can effectively apply these skills under pressure.

Conclusion

Understanding elite ice hockey officials' mental skills acquisition and use is imperative to improving the development of ice hockey officiating training. 10 elite ice hockey officials participated in semi-structured interviews in this study. Nuanced insights into how ice hockey officials used mental skills to enhance performance and overcome challenges were obtained through detailed accounts of situations participants experienced in their careers. Given the limited prior research in this area, an inductive coding process was employed to analyze the data, which allowed for the emergence of themes directly from the participants' experiences. Specifically, three themes were derived that offered

insights into how mental skills were (a) learned, (b) applied, and (c) pertinent for ice hockey officials and other sport officials like them (i.e., other elite interactors). This culmination of results has provided a deeper understanding of ice hockey officials' mental skills, which can help enhance their training practices.

A key aspect of the pragmatic paradigm is to generate knowledge that can be used by participants and those like them (e.g., other elite interactors and novice ice hockey officials) or those who influence them (e.g., sport officiating organizations). Below is a list of recommendations for sport organizations, based on the study results.

1. Establish mental skills training programs that provide foundational knowledge of various mental skills, coupled with specific training on their implementation. This program should include strategies for managing common challenges faced by sport officials: handling abuse, managing anxiety, coping with mistakes, and maintaining concentration. This education should be introduced early in sport officials' careers, so that officials can establish a strong foundation of mental skills mental skills, enabling officials to progressively develop these skills throughout their careers.
2. Facilitate a systematic transition for officials through stages of knowledge attainment, application of mental skills, and repeated practice. This approach can ensure all sport officials have a solidified process of progression and can help officials who have basic mental skills knowledge learn how to leverage this knowledge into behaviours.
3. Implement year-round mental skills training tailored specifically for sports officials. This training should be delivered by experts in mental performance to

ensure continuous development and practice, fostering resilience and mental toughness. In mental training sessions, offer a variety of delivery methods that include peer learning, teaching, and sharing. These methods should simulate the demands and experiences of sport officiating in fast-paced environments and promote independent learning. This multifaceted approach can enhance skill acquisition and application in real-world settings.

4. National officiating organizations should collaborate with regional organizations to ensure that mental skills training is uniform and accessible to all sport officials. Standardized mental skills training can help maintain consistency in the quality of mental skills use by sport officials and ensure that all officials have the necessary mental skills for optimal performance.

Implementing mental skills training programs with these recommendations can enhance the performance of sport officials while increasing their satisfaction with officiating organizations by fostering a sense of organizational support. This dual impact could lead to greater fulfillment in their sport officiating careers. Improving the performance of sport officials is also beneficial to those who participate in sport because when officials are more effective at their job, they are better able to ensure safety, uphold fairness, and make accurate decisions. Furthermore, these changes are vital for the sport community at large, as they can boost recruitment and retention among sport officials.

Limitations and Future Research

This study focused on the mental skills learning and use of elite ice hockey officials in Canada; thus, the results might not fully encompass the process of mental skills acquisition and implementation of all sport officials. As such, studying sport

officials across geographic regions, sports, and competitive levels is imperative. Including ice hockey officials at various levels of competition could provide deeper insights into the processes of how ice hockey officials progress from initial attainment of mental skills knowledge to the eventual proficient use we see at the elite levels. This approach could also provide details on how mental skills are used at various levels of competition. Future research into the mental skills use and acquisition of sport officials should also expand to include other types of sport officials (i.e., reactors and monitors). Additionally, comparing the use of mental skills of sport officials within the same sport (e.g., center referee versus line-judge in soccer) could prove useful in identifying how mental skills may be tailored to help meet different task demands within the same sport. By expanding the sample used in this research, deeper insights into the mental skills knowledge of sport officials as a whole could be attained.

Another limitation of this study is that it does not provide evidence-based information on how to make mental skills training effective. Future research into the mental skills use of sport officials should also consider intervention-style studies. Investigating the effectiveness of mental skills training for sport officials, learning how officials retain this knowledge, and exploring the best methods of delivering such training programs is critical—and something that is already being investigated in athletes (D'Agostino et al., 2023).

This study did not employ any theoretical framework to guide data collection or analysis, primarily due to the scarcity of relevant theories for this research area. Generic skill acquisition theories do not fully address the nuances of mental skill acquisition amongst sport officials. Therefore, the data analysis conducted was inductive—a method

which can be more subjective in nature. More research is necessary to explore how sport officials learn, use, and train mental skills before larger more comprehensive theories can be developed and applied to this population.

References

- Al-Haramlah, A. A. R. (2018). Psychological stress, burnout and its relationship with decision making among table tennis referees: A case study on the fourth championship of Saudi Universities. *Sport TK*, 7(1), 103-110.
<https://doi.org/10.6018/321951>
- Anshel, M. H., Kang, M., & Jubenville, C. (2013). Sources of acute sport stress scale for sports officials: Rasch calibration. *Psychology of Sport and Exercise*, 14(3), 362-370. <https://doi.org/10.1016/j.psychsport.2012.12.003>
- Blumenstein, B., & Orbach, I. (2014). Development of psychological preparation program for football referees: Pilot study. *Sport Science Review (București)*, 23(3), 113-125. <https://doi.org/10.2478/ssr-2014-0007>
- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise*, (pp. 191-205). Routledge.
- Butt, J., Weinberg, R., & Culp, B. (2010). Exploring mental toughness in NCAA athletes. *Journal of Intercollegiate Sport*, 3(2), 316-332.
<https://doi.org/10.1123/jis.3.2.316>
- Carson, F., Dynon, N., Santoro, J., & Kremer, P. (2020). Examining negative emotional symptoms and psychological wellbeing of Australian sport officials. *International Journal of Environmental Research and Public Health*, 17(21), 8265-.
<https://doi.org/10.3390/ijerph17218265>
- Choi, H., & Chiu, W. (2017). Influence of the perceived organizational support, job satisfaction, and career commitment on football referees' turnover

intention. *Journal of Physical Education and Sport*, 17(3), 955-959.

<https://doi.org/10.7752/jpes.2017.s3146>

Cunningham, I., Mergler, J., & Wattie, N. (2022). Training and development in sport officials: A systematic review. *Scandinavian Journal of Medicine & Science in Sports*, 32(4), 654-671. <https://doi.org/10.1111/sms.14128>

D'Agostino, S., Ely, F., Pare, M., & Munroe-Chandler, K. (2023, June 1-3). A knowledge translation tool? Exploring the effectiveness of an infographic to disseminate information on psychological skills training. *Journal of Sport and Exercise Psychology*, 45(S1), S73-S73.

DeKeyser, R. (2007). Skill acquisition theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition* (pp. 97-112). Erlbaum.

Dewey, J. (1931). The development of pragmatism. In H. S. Thayer (Ed.) *Pragmatism: The classic writings* (pp. 23-40). Hackett.

Dorsch, K. D., & Paskevich, D. M. (2007). Stressful experiences among six certification levels of ice hockey officials. *Psychology of Sport and Exercise*, 8(4), 585-593. <https://doi.org/10.1016/j.psychsport.2006.06.003>

Durand-Bush, N., & Salmela, J. H. (2002). The development and maintenance of expert athletic performance: Perceptions of world and Olympic champions. *Journal of Applied Sport Psychology*, 14(3), 154-171. <https://doi.org/10.1080/10413200290103473>

Gee, C. J. (2010). How does sport psychology actually improve athletic performance? A framework to facilitate athletes' and coaches' understanding. *Behavior Modification*, 34(5), 386-402. <https://doi.org/10.1177/0145445510383525>

- Giacobbi Jr., P. R., Poczwadowski, A., & Hager, P. (2005). A pragmatic research philosophy for applied sport psychology. *The Sport Psychologist*, *19*(1) 18-31. <https://doi.org/10.1123/tsp.19.1.18>
- Giske R., Johansen B. T., & Haugen T., (2016) Training, mental preparation and unmediated practice among soccer referees: An analysis of elite and sub-elite referees' reported practice. *International Journal of Applied Sports Sciences*, *28*(1), 31-41. <https://doi.org/10.24985/ijass.2016.28.1.31>
- Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and “ethically important moments” in research. *Qualitative Inquiry*, *10*(2), 261-280. <https://doi.org/10.1177/1077800403262360>
- Hatzigeorgiadis, A., Zourbanos, N., Mpoupaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk–performance relationship: The effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and Exercise*, *10*(1), 186-192. <https://doi.org/10.1016/j.psychsport.2008.07.009>
- Hanrahan, S. J., & Andersen, M. B. (2010). *Routledge handbook of applied sport psychology: A comprehensive guide for students and practitioners*. Routledge.
- Hockey Canada. (2022). *Hockey Canada officiating pathway*. <https://cdn.hockeycanada.ca/hockey-canada/Hockey-Programs/Officiating/Downloads/hc-officiating-pathway-e.pdf>
- James, W. (1907). *Pragmatism: A new name for some old ways of thinking*. Longmans, Green, and Company.

- Jones, S. R., Torres, V., & Arminio, J. (2014). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues* (2nd ed.). Routledge.
- Keerthirathne, W. K. D. (2020). Peer learning: An overview. *International Journal of Scientific Engineering and Science*, 4(11), 1-6.
- Kerr, J. H. (1985). The experience of arousal: A new basis for studying arousal effects in sport. *Journal of Sports Sciences*, 3(3), 169-179.
<https://doi.org/10.1080/02640418508729749>
- Kiradoo, G. (2018). The effectiveness of peer-to-peer entrepreneurship training: A comparative study of traditional classroom training and peer-to-peer learning. *International Journal of Multidisciplinary*, 3(3), 302-307.
<https://ssrn.com/abstract=4397543>
- Livingston, L. A., & Forbes, S. L. (2016). Factors contributing to the retention of Canadian amateur sport officials: Motivations, perceived organizational support, and resilience. *International Journal of Sports Science & Coaching*, 11(3), 342-355. <https://doi.org/10.1177/1747954116644061>
- Livingston, L., Forbes, S. L., Wattie, N., & Cunningham, I. (2020). *Sport officiating: Recruitment, development, and retention*. Routledge.
<https://doi.org/10.4324/9780429465291>
- MacMahon, C., & Plessner, H. (2013). The sport official in research and practice. In J. Baker, D. Farrow, & C. MacMahon (Eds.) *Developing sport expertise* (pp. 194-214). Routledge. <https://doi.org/10.4324/9780203119914>

- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research, 26*(13), 1753-1760. <https://doi.org/10.1177/1049732315617444>
- Mascarenhas, D. R. D., Collins, D., & Mortimer, P. (2005). Elite refereeing performance: Developing a model for sport science support. *The Sport Psychologist, 19*(4), 364-379. <https://doi.org/10.1123/tsp.19.4.364>
- Mathers, J. F., & Brodie, K. (2011). Elite refereeing in professional soccer: A case study of mental skills support. *Journal of Sport Psychology in Action, 2*(3), 171-182. <https://doi.org/10.1080/21520704.2011.609018>
- Maxcy, S. J. (2003). Pragmatic threads in mixed methods research in the social sciences: The search for multiple modes of inquiry and the end of the philosophy of formalism. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 51-89). Sage.
- Maxwell-Keys, C., Wood, A. G., & Turner, M. J. (2022). Developing decision making in rugby union match officials using rational emotive behavior therapy (REBT). *Psychology of Sport and Exercise, 58*(6). <https://doi.org/10.1016/j.psychsport.2021.102098>
- Mayan, M. J. (2009). *Essentials in qualitative inquiry*. Routledge.
- Mudian, D., Asmawi, M., Rihatno, T., Lanos, M. E. C., Elisyah, V., & Aji, T. (2021). Trend improving soccer professional referees performance in West Java using psychological skill training and physical fitness. *International Journal of Human Movement and Sports Sciences, 9*(3), 595-601. <http://doi.org/10.13189/saj.2021.090328>

- Munroe-Chandler, K., Hall, C., & Fishburne, G. (2008). Playing with confidence: The relationship between imagery use and self-confidence and self-efficacy in youth soccer players. *Journal of Sports Sciences, 26*(14), 1539-1546.
<https://doi.org/10.1080/02640410802315419>
- Nazarudin, M. N., Noordin, H., Suppiah, P. K., Abdullah, M. R., Omar Fauzee, M. S., & Abdullah, N. M. (2014). Psychological skills assessment and referee rugby sevens performance. *Jurnal Pemikir Pendidikan (Journal for Educational Thinkers), 5*, 165-184.
- O'Reilly, K., Peters, K., Wilson, N., & Kwok, C. (2018). Use of pragmatism to explore women's experiences of traumatic brain injury: A kaleidoscopic view of the world. *Nurse Researcher, 25*(4), 21-25. <https://doi.org/10.7748/nr.2018.e1572>
- Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (4th ed.). Sage.
- Piffaretti, M., & Carr, B. (2022). "We react less. We react differently. We react better": A case study of a mindfulness-based intervention for Olympic referee performance. *Case Studies in Sport and Exercise Psychology, 6*(1), 78-93.
<http://dx.doi.org/10.1123/cssep.2022-0002>
- Ritchie, J., Basevitch, I., Rodenberg, R., & Tenenbaum, G. (2017). Situation criticality and basketball officials' stress levels. *Journal of Sports Sciences, 35*(21), 2080-2087. <https://doi.org/10.1080/02640414.2016.1255770>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.

- Ryan, R. M., & Deci, E. L. (2022). Self-determination theory. In F. Maggino (Ed.), *Encyclopedia of quality of life and well-being research* (pp. 1-7). Springer International Publishing.
- Samuel, R. D. (2015). A psychological preparation framework for elite soccer referees: A practitioner's perspective. *Journal of Sport Psychology in Action*, 6(3), 170-187. <https://doi.org/10.1080/21520704.2015.1065938>
- Slack, L. A., Butt, J., Maynard, I. W., & Olusoga, P. (2014). Understanding mental toughness in elite football officiating: Perceptions of English Premier League referees. *Sport & Exercise Psychology Review*, 10(1), 4-24. <https://doi.org/10.53841/bpssepr.2014.10.1.4>
- Slack, L. A., Maynard, I. W., Butt, J., & Olusoga, P. (2015). An evaluation of a mental toughness education and training program for early-career English football league referees. *The Sport Psychologist*, 29(3), 237-257. <https://doi.org/10.1123/tsp.2014-0015>
- Sors, F., Tomé Lourido, D., Parisi, V., Santoro, I., Galmonte, A., Agostini, T., & Murgia, M. (2019). Pressing crowd noise impairs the ability of anxious basketball referees to discriminate fouls. *Frontiers in Psychology*, 10, 2380-2380. <https://doi.org/10.3389/fpsyg.2019.02380>
- Sunde, J. K., Tharle-Oluk, R., Theriault, A. A., & Hancock, D. J. (2023). Exploring basic needs, motivation, and retention among female sport officials. *Women in Sport and Physical Activity Journal*, 1(aop), 1-8. <https://doi.org/10.1123/wspaj.2023-0037>

- Voight, M. (2009). Sources of stress and coping strategies of US soccer officials. *Stress and Health*, 25(1), 91-101. <https://doi.org/10.1002/smi.1231>
- Walter, N., Nikoleizig, L., & Alfermann, D. (2019). Effects of self-talk training on competitive anxiety, self-efficacy, volitional skills, and performance: An intervention study with junior sub-elite athletes. *Sports (Basel)*, 7(6), 148. <https://doi.org/10.3390/sports7060148>
- Wilson, V.E., Peper, E. & Schmid, A. (2006). Training strategies for concentration. In Williams, J.N. (Ed). *Applied sport psychology: Personal growth to peak performance*, (5th ed) (pp. 404-422). McGraw Hill.
- Weinberg, R., & Gould, D. (2023). *Foundations of sport and exercise psychology* (8th ed.). Human Kinetics.

Chapter Four: Conclusion

Conclusion

Sport officials (i.e., referees, judges, and umpires) are critical to sport as they ensure the safety of participants while upholding and enforcing the rules of the competition. In serving such a critical role, it is important that sport officials are able to perform to the best of their ability. An essential part of sport officiating performance is ensuring that officials are psychologically prepared to handle their task demands. Mental skills are vital in enhancing one's mental performance, yet very little is understood about how sport officials learn and use mental skills. This gap in understanding led to the specific purpose of this study, which was to explore elite ice hockey officials' mental skills acquisition and use.

Through individual semi-structured interviews conducted with 10 elite ice hockey officials, three themes emerged: Learning Mental Skills (how mental skills were acquired with considerations for future education); Mental Skills Use (how mental skills benefitted participants in a variety of situations and how they applied those mental skills); and Insights about Mental Skills in Officiating (emphasizing the importance of mental skills for sport officials). Some of the key findings included (a) that ice hockey officials learned their mental skills knowledge through a blend of resources highlighting strengths each source provides, (b) participants utilized a variety of mental skills with the ultimate goal of helping them overcome challenges and feel prepared to meet their task demands, and (c) a call for more mental skills training opportunities initiated and supported by sport officiating organizations.

A key tenet of the pragmatic paradigm is to provide practical solutions to problems based on the knowledge obtained; thus, a key piece of Chapter 3 was to provide

participants and the organizations that govern them with recommendations to strengthen the mental skills training of ice hockey officials, which might also prove beneficial to other sport officials. It is through insights like the ones that the participants of this study have provided that meaningful changes can be made to ultimately improve the training of sport officials. Not only could such changes improve the performance of sport officials, but implementing positive changes such as these can improve the experiences of sport officials, positively impacting recruitment and retention.

Principal Researcher Reflection

Conducting this research and writing this paper has been one of the most rewarding accomplishments I have experienced. During the interviews with participants, it became very evident that these individuals were deeply appreciative of the work the SPORT (Sport Psychology and Officiating Research Team) lab at Memorial University of Newfoundland is doing for sport officials. They echoed the fact that being a sport official can often be a thankless job with many of them being an afterthought in the sport community. They showed deep appreciation and implored that this research continue on as it can have massive positive influence on their experiences. Being able to have such profound impacts on individuals is a very rewarding experience, which I aim to continue in my future work.

I have a much deeper appreciation for the work required during the research process. The time and energy it takes to take a research project from an initial idea to a finished project is commendable and I applaud all those who have come before me and those who will come after me that have taken on this monumental task. I am also appreciative of the passion individuals who work in academia, something that was very

evident when I attended the Canadian Society for Psychomotor Learning and Sport Psychology conference. Overall, this process and my experiences throughout this degree have inspired me to continue down this path of seeking out new knowledge and using it to better the lives of other. I will take the things I have learned over the past two years and continue to build on them during my doctoral degree.

Appendix A



Interdisciplinary Committee on
Ethics in Human Research (ICEHR)

St. John's, NL, Canada A1C 5S7
Tel: 709 864-2561 icehr@mun.ca
www.mun.ca/research/ethics/humans/icehr

ICEHR Number:	20240528-HK
Approval Period:	August 14, 2023 – August 31, 2024
Funding Source:	
Responsible Faculty:	Dr. David Hancock School of Human Kinetics and Recreation
Title of Project:	<i>Exploring Elite Ice Hockey Officials' Acquisition and Use of Mental Skills</i>

August 14, 2023

Mr. Christopher John Coady
School of Human Kinetics and Recreation
Memorial University

Dear Mr. Coady:

Thank you for your correspondence addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) for the above-named research project. ICEHR has re-examined the proposal with the clarifications and revisions submitted, and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance for one year*. ICEHR approval applies to the ethical acceptability of the research, as per Article 6.3 of the *TCPS2*. Researchers are responsible for adherence to any other relevant University policies and/or funded or non-funded agreements that may be associated with the project. If funding is obtained subsequent to ethics approval, you must submit a Funding and/or Partner Change Request to ICEHR so that this ethics clearance can be linked to your award.

The *TCPS2* requires that you strictly adhere to the protocol and documents as last reviewed by ICEHR. If you need to make additions and/or modifications, you must submit an Amendment Request with a description of these changes, for the Committee's review of potential ethical concerns, before they may be implemented. Submit a Personnel Change Form to add or remove project team members and/or research staff. Also, to inform ICEHR of any unanticipated occurrences, an Adverse Event Report must be submitted with an indication of how the unexpected event may affect the continuation of the project.

The *TCPS2* requires that you submit an Annual Update to ICEHR before August 31, 2024. If you plan to continue the project, you need to request renewal of your ethics clearance and include a brief summary on the progress of your research. When the project no longer involves contact with human participants, is completed and/or terminated, you are required to provide an annual update with a brief final summary and your file will be closed. All post-approval ICEHR event forms noted above must be submitted by selecting the *Applications: Post-Review* link on your Researcher Portal homepage. We wish you success with your research.

Yours sincerely,

James Drover, Ph.D.
Vice-Chair, Interdisciplinary Committee on
Ethics in Human Research

JD/bc

cc: Supervisor – Dr. David Hancock, School of Human Kinetics and Recreation

Appendix B



School of Human Kinetics and Recreation

School of Human Kinetics
Physical Education Building, #2023A, St. John's, NL, Canada, A1C 5S7
Tel: 709 864 8129 Fax: 709 864 3979 www.mun.ca

Informed Consent Form

Title: Exploring Elite Ice Hockey Officials' Acquisition and Use of Mental Skills

Researchers: Christopher Coady (Master's Student, Memorial University, cjcoady@mun.ca)
David Hancock (School of Human Kinetics & Recreation, Memorial University, dhancock@mun.ca)

You are invited to take part in a research project entitled "Exploring Elite Ice Hockey Officials' Acquisition and Use of Mental Skills". To participate, you must **(a) effectively communicate in English (b) be 18 years or older (c) have received this letter directly from Hockey Canada's Manager of Officials, Dan Hanoomansingh**. This study is **NOT** an employment or organizational requirement.

This form is part of the informed consent process, explaining what the research is about and what your participation will involve. It also describes your right to withdraw from the study. To decide whether you wish to participate, you should understand enough about its risks and benefits to be able to make an informed decision. Please read this carefully to understand the information given to you. If you have any questions about the study, contact the primary researcher, Christopher Coady. It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Introduction:

My name is Christopher Coady, I am a Master's student at Memorial University. I am leading this study exploring the use and acquisition of mental skills in elite hockey officials the as part of my Master's thesis.

Purpose of Study:

The purpose of this study is to explore the acquisition and use of mental skills of elite hockey officials. Studying hockey officials will facilitate a greater understanding of how mental skills are used in this population. Such knowledge might offer a chance to enhance hockey officials' performance, while also providing insights that could be useful to similar populations (e.g., other elite team sport officials or grassroots hockey officials).

What You Will Do in this Study:

You will be asked to complete a demographic survey. You will also be asked to attend one interview which will be either online or in-person depending on each individual's circumstances. The interview will be video (if online) and audio recorded so that when I analyze the results, I can accurately report your responses. You are permitted to turn your camera off during the

interview if you wish. Demographic questionnaires will be completed and returned via email for online interviews. For in-person interviews, questionnaires will be completed via paper copy.

Length of Time:

The demographic survey should take 5 minutes, and the interview 45-90 minutes.

Withdrawal from the Study:

If you choose to withdraw from the study, simply let the primary researcher know, and you may leave the interview at any time. If you choose to withdraw during the interview, the information you have provided up to that point will be deleted. If you opt to withdraw after the interview, your data cannot be deleted after February 1, 2024, as the project will be in the analysis stage.

Possible Benefits:

Although the immediate benefits of your participation in this study are minimal, it is anticipated that this study will broadly improve our understanding of how elite sport officials use and acquire of mental skills., which could lead to positive changes within your organization.

Possible Risks:

The interview questions might bring up distressful feelings; please note you are free to skip any questions you do not wish to answer, take a break from the interview, or withdraw your participation at any time. Though unlikely, it is possible that a data breach occurs. Every effort will be made to safeguard your data (see next section) and we will assign participant numbers (e.g., P1, P2...) to minimize the risk of identifiable information being discovered.

Confidentiality:

The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data/recordings from unauthorized access, use, or disclosure. Interviews that take place online will be scheduled for a mutually convenient time and conducted in a quiet area. In-person interviews will take place in a meeting room at a Hockey Canada Officiating Selection Camp. Information collected from the interview will contain identifiable information through the use of the audio and video (for online only) recording. These files will be stored on password protected computers owned by the research team. The survey and interview data will not be accessible to anyone outside of the research team. All collected data will be stored on password-protected laptops/computers belonging to the research team. Online interviews will be conducted through the online meeting platform WebEx. A link to their privacy policy can be found below. Prior to the publication of the study, all personally identifiable information will be anonymized/aggregated; thus, confidentiality will be maintained.

WebEx Privacy Statement: <https://www.cisco.com/c/en/us/about/legal/privacy-full.html>

Anonymity:

Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance. The interview process will not be anonymous; however, participation will not be made known to anyone outside the interview or research team. After interviews are complete, the audio/video files will be transferred to a password-protected computer/laptop and deleted from the voice recorder/computer. A verbatim transcript will be created, but it will be password-protected. An anonymous transcript will then be created (with participants being assigned a number (e.g., P1, P2,...), removing any information that could

identify participants (e.g., their names). Analysis will be based on the anonymized transcripts, so no identifiable information is carried forward into that stage.

Use, Access, Ownership, and Storage of Data:

The survey and informed consent will be collected via a Word document or pencil/paper. Hard copies will be stored in the locked filing cabinet in Dr. Hancock's locked office. All electronic data/recordings will be stored on the research team members' computers/laptops, which are all password-protected. Only the research team will have access to the data. Data/recordings will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research. At that time, all files will be permanently deleted from the research team members' computers and laptops.

Reporting of Results:

To ensure the privacy and anonymity of the participants, the results will be reported mostly in aggregate form. This means that data will be presented in a collective manner, without disclosing individual responses or identities. Direct quotes may be used to enhance the authenticity and credibility of findings. However, it is important to note that these quotes will not contain any personal identifiers that could lead to the identification of specific individuals (e.g., dates times, geographic locations, individual names, etc). Participants will not be identified at any point in the writing of results. However, even though these precautionary steps are taken, due to the characteristics of your group (i.e., small elite group) there is still potential for other participants and well-informed readers to discern identities even with the removal of such information.

Sharing of Results with Participants:

Results will be written in the final thesis paper that is added to the QE II Library repository (<https://www.library.mun.ca/cns/>) for open access. David Hancock will also post a one-page infographic to his Twitter account (@profhancockmun) to share results. You do NOT need a Twitter account to access results. Additionally, this infographic will be shared with Hockey Canada and we will request they share it. The paper will also be submitted to a scholarly journal for publication.

Questions:

You can ask questions before, during, or after your participation in this research. For more information about this study, please contact Christopher Coady (cjcoady@mun.ca) or David Hancock (dhancock@mun.ca).

ICEHR Approval Statement:

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Consent:

By completing this form, you agree that:

- You have read the information about the research.
- You have been advised that you may ask questions about this study and receive answers prior to continuing.

- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw participation from the study by leaving the interview at any time, without giving a reason, and that doing so will not affect you now or in the future.
- You understand that your responses can be removed up until February 1, 2024. After this date, we cannot delete your data as we will be in the analysis stage of the research.
- You understand that you can skip questions that you do not wish to answer.
- You understand that the data/recordings contain identifiable information, but will be reported in mostly anonymous/aggregate form with direct quotations.
- You understand that even adjusted quotations which remove all identifiable information can still lead to your personal identification by other participants or well-informed readers.

By consenting to this research study, you do not give up your legal rights and do not release the researchers from their professional responsibilities. Please retain a copy of this consent information for your records.

I have read and understood the informed consent form. I confirm that I (a) can effectively communicate in English (b) am 18 years or older (c) received the study announcement letter directly from Hockey Canada’s Manager of Officials, Dan Hanoomansingh.

Signature of Participant

Date

Researcher’s Signature:

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature of Principal Investigator

Date

Appendix C

Demographic Survey

- 1) Age
- 2) Sex/gender
- 3) Race/ethnicity
- 4) What is your highest level of education achieved?
- 5) How many years have you officiated ice hockey?
- 6) In which province do you currently officiate?
- 7) Have you officiated in other provinces?
- 8) In a typical year, how many games do you officiate?
- 9) In a typical year, what is the highest level of hockey you regularly officiate?
- 10) What is the highest level of ice hockey you have ever officiated?
- 11) Do you consider yourself primarily a referee or linesperson?

Appendix D

Interview Guide

Background Questions

- 1) How did you get into officiating?
- 2) What do you enjoy about officiating?
- 3) What are some highlights from your officiating career?

Experience/Feelings Questions

- 1) What do you know about mental skills or mental skills training?
 - a. (Provide them an operational definition after their response)
- 2) Typically, how do you mentally prepare before a game?
 - a. How does this help or hinder your performance?
 - b. Does this preparation change for playoff or tournament games?
- 3) Can you give specific examples of when you used mental skills as an official?
 - a. Probe for an example of goals, imagery, self-talk, focus, anxiety control
 - b. How did you actually implement the mental skill? (Probe for explanation of the process)
- 4) Can you describe a time when using mental skills influenced your performance?
- 5) Can you describe a time when you wished you had better mental skills?
- 6) How frequently do you use mental skills?
 - a. Probe for details
- 7) Do you think certain mental skills are more relevant for officials than others? Explain.
- 8) How would you respond to the statement, “Mental skills training has a place in elite officiating”?
- 9) How did you learn about the mental skills you use?
 - a. Probe for independent learning, education from Hockey Canada, learning from others.
- 10) How should officials learn about mental skills?

Summary Questions

- 1) Was there anything I haven't asked that I should have?
- 2) Do you have any further comments you would like to contribute?

Appendix E

Learning Mental Skills

Sub-Theme 1: Process of Acquiring Mental Skills Knowledge

Non-Structured Mental Skill Training and Education

- **Arousal Control – Learned from Career**
 - And then I got into policing. And then after a couple years of policing, starting to learn different aspects of managing that physiological and psychological stress response in your body. (P10: Arousal Control – Learned from Career)
- **Arousal Control – Learned from Past Experiences**
 - Yeah, I've actually. This has happened to me again where I was just in a junior A game and my partner got injured, his knee kind of buckled, he wasn't able to continue to skate and so it happened again. And in this case my thought was it's actually – it's a little bit self deprecating. But my thought is like, well, people can't get upset at me because I'm going to just try my best because like, there's only one of us out here and what are they going to expect from me? Like, and I wish I'd thought of that when I was doing the NHL game of like, "Hey, now there's just one of me, so they're going to have to accept whatever happens. And then like, I just – yeah, I just wish I had like something else to tell myself because I had nothing, I had no thoughts in my brain. Thankfully, the end of that story though was that I ended up calling two goals, a goalie interference, and a trip in those five minutes and they're all good calls. My – my supervisor was like you did a great job like and I think I blacked out. I don't remember calling anything of that situation, I was so stressed, but yeah, I wish that I was able to just tell myself, like, they can't get that upset. (P2: Arousal Control – Learned from Past Experiences)
- **Belief That Many Officials Have Developed Their Mental Skill Use on Their Own**
 - But here's the side – part of that I think and you'll probably come across this if you're doing more or if you've done some already, again I don't know. That I think that when you'll see and talk to the elite officials, these are the people that have developed these skills kind of on their own and not formally. (P8: Belief That Many Officials Have Developed Their Mental Skill Use on Their Own)
- **Communicating with Peers About Mental Skills**
 - But it's not because I've talked to other people about it before and there's other people like referees have told me if they find themselves, like – find their mind like wandering during a game, they'll just like yell. (P5: Communicating with Peers About Mental Skills)
 - Yeah, like we [other officials] – we'll talk a little bit about what we use as techniques. (P7: Communicating with Peers About Mental Skills)
- **Elite Officials Develop Mental Skills Despite Lack of Formal Mental Skills Training Opportunities**
 - But I think you'll see that the elite, top officials have developed these mental skills. And in one way or another, you know, whether it's by themselves or, you know, coming across other officials, but we've never had formal really formal training on it. (P8: Elite Officials Develop Mental Skills Despite Lack of Formal Mental Skills Training Opportunities)
 - So, I think once you're at NHP, a lot of these people have developed these skills, but we've never had formal talk about it, if that makes sense. (P8: Elite Officials Develop Mental Skills Despite Lack of Formal Mental Skills Training Opportunities)
- **Goal Setting – Helping Younger Officials Define Goals**
 - And I guess also too in terms of kind of the goal setting as you know, okay, well, you know what are your goals? What's your goal for this season, next season? And just kind of almost get a road map of officials as well too to see, okay, well, you know, where do you want hockey to go? Like I used to assign kind of the younger divisions in [location

removed for anonymity] hockey for 10 years and that's one thing I – we used to do with our officials is, you know, what are your goals for this year, right? (P6: Goal Setting – Helping Younger Officials Define Goals)

- **Goal Setting – Introduced by Mentor**
 - And I think that's something also that was – the first time that I was really introduced to that well, I mean, my mentor mentioning that, hey, you can go to the Olympics as an official. (P9: Goal Setting – Introduced by Mentor)
- **Goal Setting – Mentor Support**
 - Or – and then – so those kind of have their own like basics things, but if they're like in season things, I would say I'd probably have either – like you can review supervisions, which is something I've done in the past. Like I said, ask supervisors for a few other things that maybe before season. That's something that like I try to do, is I try to talk to the supervisors or the like, I guess like the league managers, if you will, if that makes sense, officiating managers for those leagues and just kind of say, “This is what I'm thinking. This is what I like, is this reasonable?”. So, for the provincial thing I was I want to do, it's called Cyclone or whatever – but I want to do Cyclone. He's like “Okay”, he's like, “So you probably shouldn't be reffing, you should be lining like all the time”. He's like, “But you've also told me you want to ref”. I'm like, “Well, I would rather do Cyclone than I would ref”. Okay that's the direction we're going and whatnot. So and then just reviewing those like – more of the – if there's anything consistent in the supervision pulling those. (P4: Goal Setting – Mentor Support)
- **Helping Younger Officials Learn Mental Skills**
 - And I would say just from obviously – help younger officials in the way that I was probably helped in the past by suggesting cue words or suggesting this and whatnot. (P4: Helping Younger Officials Learn Mental Skills)
- **Independent Learning of Mental Skills**
 - I would say like this is probably a silly way of saying it, but like I have Google very useful for some things. Like if I'm curious about things or like I'm trying to think of an example, but I definitely rely on that for I guess independent learning. I did – I did go to university for four years and like, I did a biology degree, so it was heavily focused on like sciences, you know, and all that fun stuff. And I learned – I did a psychology class one time, but I didn't find I could like pinpoint things like all the time because it was just so content heavy and like I don't know – I just you kind of – I don't know. I don't know how to explain it really. But I honestly find if I'm trying to figure out like skills or ways that I can like focus better, I find Google the best. (P3: Independent Learning of Mental Skills)
 - I've done a lot in independently with whether it's listening to podcasts... (P7: Independent Learning of Mental Skills)
 - and I'll use – I call – I don't – I read about it in a book in university... (P7: Independent Learning of Mental Skills)
 - It started as a player, but I don't know if I would have done much in high school. That's probably where I just got introduced to it was when I was playing in high school. But then when I was in college, our coach made us read this one – this one book and it was a lot of geared – geared a lot around the mental side of the game and that's where I learned the breathing technique and then kind of implemented that and exploring different pieces out of those. (P7: Independent Learning of Mental Skills)
 - And I think officials, I think like myself included, I try to like, learn from players or if I see something on like hockey in Canada or SportsNet, where someone's talking or like a like, I mean like – TikTok or like podcast or anything where they're talking about mental skills and stuff, I try to listen to different athletes from different sports talking about different stuff. Just to try to gain an edge or an advantage and just or like – or try to learn a new skill. (P5: Independent Learning of Mental Skills)

- And so, I like would sit there and Google different mental performance techniques or different skills or different articles or podcasts. (P7: Independent Learning of Mental Skills)
- So, some things I've started on my own through the years. (P10: Independent Learning of Mental Skills)
- **Introduced to Mental Skills from College Coach**
 - But, initially was probably just a introduction from other people... (P7: Introduced to Mental Skills From College Coach)
- **Learning Mental Skills from Coaches**
 - And then coaches overtime – officiating coaches, hockey coaches like coaches through work, just helping with those different performance anxiety or nerves and just being able to handle them. And some of those tricks are like the toolbox or some of the visualization stuff that we do. (P9: Learning Mental Skills from Coaches)
- **Learning Mental Skills from Mentor**
 - And usually I'll also – from the same mentor I picked up just like grounding yourself... (P9: Learning Mental Skills from Mentor)
 - And then mentors and coaches that introduced like these mantras on the ice and this is just the mantra of like player, puck, goalies was learned from another official here in [location removed for anonymity] who was a mentor of mine. (P9: Learning Mental Skills from Mentor)
- **Learning Mental Skills from Peers**
 - Oh yeah, for sure. And like – like this is what they did in that situation or this is what they did and it didn't work and just stuff like that. (P1: Learning Mental Skills from Peers)
 - Yeah, totally. So actually, an NHL official. him and I met at the [league removed for anonymity] camp this past June, and he great official. I've watched him for years. I love the way he officiates. I actually skate a lot like him. Like, I just grew up watching him. And I got to meet him this past June, and we – and we had a discussion, 'cause he noticed that I do the same thing he does and where like, I will hunch over and I'll get like super intense and he always used to do that too. And so, I asked him, it was a really good opportunity, I was like, “Hey, like, How do you – how did you start looking more relaxed?” Like, I think it was like – and I told him – I was like, “Yeah, it was like 2015, 2016 is when suddenly your body language changed and you became this like different official”. And now he's actually doing a lot better. He's getting into playoffs and so on and so forth. And he was quite taken aback that I knew this about him, but I was again a huge fan, and I was like, “How do you do it?”. And so, he told me about the physical cue to tell himself to relax. And so that's where I got the like touching my elbow pads, and like fixing my elbow pads, and pushing them up onto my elbows. That's how I kind of started doing that, because when I fix my elbow pads, I have to stand up to do it. So, it makes – forces me to stand up and then I'm already up rather than leaning over. And so, he actually taught me to do that. So just like little things we pick up. (P2: Learning Mental Skills from Peers)
 - I would say like again from refereeing and from my peers. It's cool to be able to go to like different events across Canada and like the world and meet other people that are in the same program that I'm involved in like specifically with hockey, and learning how they – so you kind of just like pick up on what other people do and you're like, “Oh, I like that you're foam rolling before a game, like that's a great thing. I'm going to bring a foam roller next game”. Or like asking and talking with your crew on how they kind of get ready for a game and like taking what you like from there – and again, that was more so when I was like younger. I kind of have my own routine now, as I discussed, but I found I've learned a lot from others (P3: Learning Mental Skills from Peers)
 - And this is where I learned the banner thing was it would be like icing. And I was just told by someone, they're like, “This is like your time when you're doing line change, you can just take as much time as you want. No one needs to know why your arm is still in the

- air. It's like, just read something, just look up there, catch your breath, take a deep breath, and then when you're ready you can go". So that was where I looked – learned to apply that... (P4: Learning Mental Skills from Peers)
- I would say like peers and mentors and then just like people sharing suggestions that they use that worked. (P4: Learning Mental Skills from Peers)
 - Like I said, in my knowledge, I'm pretty sure several of them I was like taught at the rink, right? Sort of like in a in a post game supervision or discussion or sharing a situation with a fellow referee or mentor and being kind of I would have done this or kind of mentored through that. (P4: Learning Mental Skills from Peers)
 - And I think you know with some elite officials like the guys that I've come up with and you know we're all kind of at that same level or some of them are even extending beyond, we've had those conversations. You know, we like, what makes you tick and like what – what helps with you and that's kind of where I learned my aspect of things. (P8: Learning Mental Skills from Peers)
- **Learning Mental Skills from Peers and Making it Your Own**
 - But just skating with others who have had more experience with me and taking bits and pieces for their game that I like and apply it to mine. Parts of their game that I think work for them and then apply it to mine. And then just having like officiated coaches like [name removed for anonymity] – coming and – coach us and supervise us at games and giving us tips to improve our game. (P1: Learning Mental Skills from Peers and Making it Your Own)
 - But then if you maybe take a little piece of, you know, official A, take a little piece of official B and you know, let in into your own, you know, 'cause there's different personalities, things that I like... (P6: Learning Mental Skills from Peers and Making it Your Own)
 - But in terms of kind of new officials yeah, just, you know, take little pieces of what you learn from other different like officiating coaches, supervisors, other officials and just kind of taking little bits like you know, don't copy someone else's game because their personality might be different than yours. So to kind of just take little bits and pieces of information from, you know, other officials you work with and other supervisors that might have little tidbits to help you out. (P6: Learning Mental Skills from Peers and Making it Your Own)
 - ...and kind of – like I mentioned earlier where you know, you want to take a little bits and pieces from other like other officials or other you know other guys that you work with and kind of incorporate that into your own game... (P6: Learning Mental Skills from Peers and Making it Your Own)
 - **Learning Mental Skills from Peers is Effective**
 - I've always – I think that was always an easy way because it's easy to go, “Oh yeah, if I would have done this, would have turned out this way to” – just naturally, that's how people receive criticism, I think. Maybe that's me just sharing my preference, but I feel like that works well and like that's something that like I found like when I've been supervising some of the younger kids, like teaching them the cue words and stuff, they seem actually receptive to trying it immediately basically. Instead of, I feel like sharing it away from the rink for especially after a certain age of youth, like they're like, okay... they're not gonna remember that tomorrow, so that's helpful for them. That's pretty common... (P4: Learning Mental Skills from Peers is Effective)
 - **Learning Mental Skills – Career Helped Development**
 - Fast forward into the world of my job and my career, and my career has taught me a ton. So, being a police officer, self-talk, setting manageable goals, the breathing as managing stress, understanding of physiological responses of your body, because knowing that my body is having this elevated heart rate, even though I'm not doing anything, what's going on, that would be incredibly concerning if you didn't understand that that's normal stress response. But policing has taught me like our bodies do weird things under stress, it's

actually quite normal. So how are you going to manage that? But if that hits you in high performance, when you least expect it and your hearts going and you're sweaty, and you're struggling, like that can be a huge distraction, if you don't recognize that stress has a huge impact, especially acute stress. So, I'm not talking chronic stress, we've all got that as well as a concern, but those acute stress events. And my career has taught me a lot about that and managing those stress events... (P10: Learning Mental Skills – Career Helped Development)

- **Mental Toughness – Developed Through Being Yelled at as a Player**
 - And then like my playing and getting like – you get yelled at a lot as of – either – a player... (P7: Learning Mental Skills – Developed Through Being Yelled at as a Player)
- **Learning Mental Skills – Life Helped Development**
 - I knew this was going to be a question, honest answer and probably not the best answer, is I grew up with pretty hard ass parents. Yeah, and so just dealing with life all of the time, built some of that. (P7: Learning Mental Skills – Life Helped Development)
- **Mental Strength – Life Helped Develop Mental Strength**
 - or we – we farmed growing up. And so the joke is if you can work cattle with your family, you can pretty much do anything. And so I use – I use that all the time is that working on the farm with my family, is probably what gave me the mental strength and the foundations to be able to deal with people yelling at me as a job essentially. (P7: Mental Strength – Life Helped Develop Mental Strength)
 - But then as a as a flip to that, I would say my mental strength improved tenfold after I had kids. Just from the from the perspective that I have so many more opportunities to practice outside of the arena. Like every single day I'm practicing mental strength so much more that whether it's a breathing technique or a reassurance to myself that I'm parenting properly or whatever the case is, I just have so many more reps practicing in everyday life that I feel like once I had kids, I – I really solidified my mental strengths because there was just so many more opportunities to practice and implement it in an everyday setting. (P7: Mental Strength – Life Helped Develop Mental Strength)
- **Parents Taught Them to Be mentally Tough and Handle Highs and Lows**
 - I think also I picked up a lot from my parents, just in the sense of if you're going to compete as an athlete, there's going to be highs and lows and you need to be able to handle both of those differently and treat them on their own because there are different ways to handle the highs versus the lows. But also just realizing that it's going to come up and being able to have the mental strength to push through or handle it appropriately at that time. (P9: Parents Taught Them to Be mentally Tough and Handle Highs and Lows)
 - I definitely have to thank my parents, both of them. Like from a young age, they just, they had us in sports. They taught us like winning and losing and how to handle it or let us handle it or and kind of molded us into a way that they learned. I'm not sure where they got it from. I'm lucky that they got it though, cause that's how we were able to handle it. We were fortunate enough to grow up playing sports and being involved in a lot of sports. Riding horses and ringette slash hockey are obviously two of our biggest ones that I'm very thankful we got to be introduced to. (P9: Parents Taught Them to Be mentally Tough and Handle Highs and Lows)
- **Peer Learning – Guiding Younger Officials Through Goal Setting Process**
 - Yeah, I've talked like especially in the – in the whole goal setting and how I do goal setting and how to like work backwards with it. I've worked with lots of the younger officials who have goals, on how to kind of come through that whole side of things. (P7: Peer Learning – Guiding Younger Officials Through Goal Setting Process)
- **Peer Learning – Sharing Arousal Control Techniques**
 - We talk a little bit about I – I preached like the whole breathing techniques like find the breathing technique that works for you to bring yourself down mid game because I've had so much benefit from that. (P7: Peer Learning – Sharing Arousal Control Techniques)

- Or I've also with officials talked about breathing. Their heart rates, they'll be like – I remember one official heading into our first game at a woman's worlds. I felt calm. I felt good and she's like look at my heart rate, it was in the 180s, sitting in the change and putting on her skates. And I was like, oh, oh no, we need to get that down honey, to get her to focus on her breathing a little bit, and it did help bring it down, but it was still super high. I think she needed more than a couple minutes of breathing, to be able to bring that heart rate down. And she was just genuinely stressed out and anxious about the game. So. (P10: Peer Learning – Sharing Arousal Control Techniques)
- **Peer Learning – Sharing Mental Skill Suggestions**
 - And sharing those tips and tricks and sharing that information, so that we can all be the best that we can be. (P9: Peer Learning – Sharing Mental Skill Suggestions)
 - Have I shared with – yeah, I will share with other officials. Sometimes it's just to give them a little something to focus on. Like I like the what's important now I like the W.I.N. concept. (P10: Peer Learning – Sharing Mental Skill Suggestions)
- **Perspective Change Coping Strategy Learned from Media**
 - And I actually saw a video, I believe it was last – it was like after kind of learning some of these – the techniques. I was just, you know, surfing and saw a video of George Saint Pierre. So, he would get really bad anxiety before his fights. And one of the things that he would do is he would go to the grocery store and just walk around. And he would, like, just go walk around. And this like, he's like – one of the things that, like, weirdly helped him was this like, this little old lady had no idea who he was. And he's like, I could go out – I could go out tonight and go – like go get knocked out in the first round and she will have no idea. He's like, so it's like, at the end of the day it's not like – I mean it's not the end of the world. Like it's okay like you know? It's okay kind of thing. And it's kind of weirdly resonated with me like, this isn't really – this isn't like life or death like you know? It's okay. So I don't know weirdly that's another thing kind of weirdly helped me, something I thought about before the game. (P5: Perspective Change Coping Strategy Learned from Media)
- **Reframing Abuse Experienced by Younger Officials**
 - But and just kind of with our like, I remember with our younger officials too in [location removed for anonymity], like what we used to say is, you know, they're not – if you know, if a player or a coach or parents are yelling, they're not yelling at you personally, just the jersey. It's like no matter who is wearing that jersey, they're going to, you know, be barking or do whatever and that. So to try to get kids to feel comfortable, if there is, you know, something that maybe goes wrong in a game to feel, hey, it's just it's not – don't take it personally, it's not on you. (P6: Reframing Abuse Experienced by Younger Officials)
- **Relaxation Techniques – Learned from Past Involvement in Sport**
 - Yeah, so I started using it while I played in university. Just because I found I would get worked up and then I couldn't bring my heart rate back down, whether like – I wasn't tired, but if I was getting worked up over a situation or if I was getting excited in anticipation of a situation, then like I would get myself elevated and not be able to – and as soon as I get elevated your head doesn't think quite as clearly. So, I started using it then... (P7: Relaxation Techniques – Learned from Past Involvement in Sport)
- **Self-Talk – Learned Mantra from Mentor**
 - Yeah, I usually say – I picked up a good mantra from a mentor of mine here... (P9: Self-Talk – Learned Mantra from Mentor)
- **Peer Learning – Suggestions from Peers**
 - And like that was just someone like – this wasn't – that wasn't something that, that person used that was just something they were like, I think this would work like maybe try it. (P4: Peer Learning – Suggestions from Peers)
- **Support Systems – Calling Mentor for Advice**

- And I was just talking around the rink and honestly just giving her a call and saying like “Hey this is happening, like what do you do?”. (P9: Support Systems – Calling Mentor for Advice)
- **Visualization – Learned from Coach**
 - But yeah, I would say like visualizing is the – the main thing where I kind of just sit there and I look at the ice surface and I kind of just, in my mind it, it seems weird, but it does seem to work for me. And I found I actually picked that up from one of my coaches when I was a kid. He kind of got us all to do that before a game and it's – it's cool how that side of it kind of can transfer to the official side of it as well. (P3: Visualization – Learned from Coach)
- **Mental Skills Learned from Past Involvement in Sport**
 - Well, I think I kind of maybe taking a little bit of that from golf, because that's another half of my life. (P6: Mental Skills Learned from Past Involvement in Sport)
 - So, through hockey and having played at university, we did a lot of mental skills – mental skills training. (P9: Mental Skills Learned from Past Involvement in Sport)
 - One of the other things that I learned from a long time ago, from playing and that stems from ringette is this idea of a toolbox. (P9: Mental Skills Learned from Past Involvement in Sport)

Structured Mental Skill Training and Education

- **Communication Skills Learned from Expert**
 - I remember one speaker we had with one of our [provincial organization removed for anonymity] referee camps we had was we had an active Sergeant from the [location removed for anonymity] Police Department. It was about kind of tactical communication on, you know, once again, kind of how to take a really high hostile, you know, kind of negative environment and getting people to kind of hear what – for us having to hear what they have to say, but also for them to hear what we have to say and make sure that communication is actually, you know, being processed. So just little – there's just kind of those little things in terms of, you know, when to go talk to a player or coach or how to do it, how to approach it and how to kind of make sure we're on the same page. So, the communication side of it's big too, we'll have some different speakers on the communication side of our business as well to be able to kind of relay messages in the – in the correct way, so. (P6: Communication Skills Learned from Expert)
- **Goal Setting – Guided by Organization**
 - Usually what we do have for our female program is there's usually like a Google form and it says what are your in-season goals, what are your future plans, whatever. So that's always like just like a good memory jog and then it obviously gets the wheels turning as well. Nothing fancy. That makes it harder. (P4: Goal Setting – Guided by Organization)
 - Yeah, yeah, that's actually one thing we do with the – with our [league removed for anonymity] League training camp in [date removed for anonymity]... (P6: Goal Setting – Guided by Organization)
 - So those are something we do almost every year at a camp and kind of a little bit of, you know, different ways, but you know, we do kind of those goal settings. (P6: Goal Setting – Guided by Organization)
 - But then at the OPOE with Hockey Canada, we did a full goal setting session and it was just trying to map out what you would like your officiating career – what are your short-term goals, your long-term goals and then those overarching stretch goals or like that ultimate goal I want to call it, that you want to get to. (P9: Goal Setting – Guided by Organization)
- **Goal Setting – Organizational Mandate**
 - ...like the Hockey Canada officiating programs really revamped and changed over the last couple of years and even at the international level. So, both levels are—national and international—now they're asking us to write down our goals and talk about it with the

officiating coaches like before tournaments and, and during just make sure you're on the same track. So, it wasn't something I really did before until now that I'm, I'm told to do it. (P1: Goal Setting – Organizational Mandate)

- **Hockey Canada – Some Training Opportunities Available**

- Ummm...so maybe... and I just... don't know like so like I said like – at the Hockey Canada – the Hockey Canada officiating program... program has really been revamped the last couple years. Especially on the female side. We never really got a lot of attention from Hockey Canada. The – the female officials like – I can't speak on the male side – but I definitely see more like... promote – promotion of like the, the male side than I had in the past and maybe they're – so they've had revamps as well. Like [name removed for anonymity] and others in the Hockey Canada office have done a lot of work on creating these like OPOE's – Officiating Program... Programs of Excellence – like little mini camps in different parts of the country and it gives opportunity for exposure of different officials to be seen by Hockey Canada where they may not get that opportunity otherwise. So, at those things, I've been seeing pictures online like they're doing some like, like fitness testing and in – in class session preparations and stuff. So, I think that's being like talked about now. And I did my first ever like, it was a high-performance camp at Hockey Canada last – in January and like we talked about like mental health and like... basically not being an asshole to your teammates and different stuff like that. So that's the first time I've felt like Hockey Canada has provided any real like training and a group setting for that sort of thing. Like a lot of changes happened with the officiating program like I've – I've said and it's all to the better. Like... mental health was never even like when I was in school and stuff like meant to you never – you never really talked about your mental health and stuff and I think it's like at the forefront of any sports and any office setting, any – anything now. So... you so like you – you have to equip your peoples to be mentally healthy and how to deal with different situations and stuff. So I don't know to the extent what Hockey Canada is doing, but I know they're doing stuff and progress is being made, so. (P1: Hockey Canada – Some Training Opportunities Available)

- **Information Pertaining to Mental Skills Provided from Organizations**

- On an ongoing basis, I think it would just – it depends on like the local associations. We do different trainings and clinics each year. And I think as part of those clinics, there's always a conversation around like, how do you stay into the game? How do you make sure that your mind isn't wandering? Or that – if someone is yelling at you and a parent's upset, like, how are you handling that when it comes to you still have a job to perform on the ice? (P9: Information Pertaining to Mental Skills Provided from Organizations)
- Interestingly, so that the [league removed for anonymity] sends out like monthly emails and some of those emails there's been like – and we do some training through the [provincial organization removed for anonymity], which is our Junior A, B, C hockey in [location removed for anonymity] and the most recent training section they actually talked about positive self-talk, breathing, setting manageable expectations, and mental rehearsal. They actually talked about that. So, I have seen some training come through those leagues, but it's all things that I've been practicing for many years, which is nice to see. (P10: Information Pertaining to Mental Skills Provided from Organizations)

- **Learned How to Navigate Negative Self-Talk and Mental Disorders Through Therapy**

- I don't typically use negative self-talk. I try and get away from it. I've – I've had negative self-talk my whole life. For context, like I have generalized anxiety disorder, I have major depressive disorder. I've been dealing with those things and so dealing with negative self-talk has always been a thing that I deal with and so I use hockey as a way for me to like build myself up and build my self-confidence. And so, I try to push away negative self-talk. Of course, I'll have moments where I'm like – excuse my language – I'll go “What the fuck, [name removed for anonymity], what are you doing?”. And then there's other times where I'm like “kay again” and then I try and catch myself, but that's also years of

like cognitive behavioral therapy. So, that's like – a whole other section of it. (P2: Learned how to Navigate Negative Self-Talk and Mental Disorders Through Therapy)

- **Mental Skills Training from Expert**
 - I definitely – I did see that at, I forget what camp it was, but [name of expert removed for anonymity] was doing mental skills stuff. I saw – I did see that and I was like, “Good!” like, “Good!”. I was like, that's good like those people are going to benefit from it. (P5: Mental Skills Training from Expert)
- **Organized Mental Skills Training During Past Involvement in Sport**
 - I did have the chance to do some mental skills training as a university athlete and going into university. So definitely thankful for that work was intro to skills. (P9: Organized Mental Skills Training During Past Involvement in Sport)
 - ...so I'm quite lucky that I was able to play at a time when I had some mental performance coaches, but then many years, nothing. (P10: Organized Mental Skills Training During Past Involvement in Sport)
 - And then having the opportunity to be exposed to these different skills through some of the coaching sessions that we had at university on our team... (P9: Organized Mental Skills Training During Past Involvement in Sport)
- **No Independent Learning of Mental Skills**
 - It's been mostly through, yeah, structured learning. It's not something that I go and seek. It's mostly been – it's mostly been kind of spoon fed to me, which I don't mind at all. So. (P2: No Independent Learning of Mental Skills)
- **No Peer Learning of Mental Skills**
 - INT: Okay. And then I guess the other one I want to ask you about is kind of peer learning. Has there been anything that maybe another official has kind of told you what they do? And you're like, oh, I really liked that. And I want to pick that up or, or vice versa. Have you shared with any younger officials, or less experienced officials? P10: ...I have not. (P10: No Peer Learning of Mental Skills)
 - Have I had anyone share with me different mental... I don't think I have in the officiating world. Not specific to mental performance to performance on the ice yes, but not specific to mental performance. (P10: No Peer Learning of Mental Skills)
- **Non-Memorable Teaching from Expert**
 - Going through university, we also had a mental performance coach, but nothing really sticks out to me in my mind about that mental performance coach. (P10: Non-Memorable Teaching from Expert)
- **Open Communication with Supervisors**
 - And again, like I'm definitely pumping [name removed for anonymity] tires, but that has all been like implemented since his involvement in the last couple of years. So it was very common like prior to the last couple of years like, you go to a game at a – at a national like level and it's kind of a supervisor comes in, you know, like, “Okay, we don't love this - when you do this. This was the wrong call”. Like they kind of just list off their five goods, their five bads of the game and then you kind of just like take it and ask any questions. But now it's more so like, “All right, what are we working on? What is our goal for the game? What do you want to accomplish?”. And then after it's kind of like, “All right, was that met?”, and they still give their input and stuff, but it's a lot more of a two-sided conversation. (P3: Open Communication with Supervisors)
- **Organization Led Mental Skills Training**
 - [pause] Ahhh, well..., I guess, but I wouldn't really think they would need to do that because the like the head supervisor – the head officiating coaches, have all done high level hockey like been to the Olympics or done World Championships or done the highest level in the province or the country. So, they know it's not just like... if you took over [name removed for anonymity] job and started trying to implement the techniques and stuff, you would need to collaborate with other officials. Whereas I don't think [name removed for anonymity] would, like I never had any collaboration. They didn't come to

me to help come up with their materials for that camp that was at in January, right. So, they – they knew because they've been to like the highest levels... like a cup, like, yeah, all the head supervisors on the female side have either been to the Olympics or to a World Women's World championship with the IIHF. So, like they know and they know what hockey's like in the different provinces and that kind of stuff. So, I don't think they really need to come to us to make the material for them that would be distributed to the officials. (P1: Organization Led Mental Skills Training)

- I would say in the last two years, especially with [name removed for anonymity] involvement as the manager of the officiating side for Hockey Canada, I've been forced enough to learn a lot from him. He's put on a couple camps and, you know, seminars where elite officials get together. And we – we've kind of reviewed and discussed it in a more thorough way than I ever did prior. (P3: Organization Led Mental Skills Training)
- Okay, so I found in the last three or four years, again since like my officiating – I guess since [name removed for anonymity] really been involved with it, he's been really good and I'm giving credit to [name removed for anonymity] on this, I guess if that's okay? But I found he was very good at kind of sitting us down and like getting those long-term and those short-term goals down on paper. (P3: Organization Led Mental Skills Training)
- And again I think that's in part because of [name removed for anonymity] ability to allow us to like be aware of the skills that we can use like the positive of self-talk, the visualization, the communication with yourself, but also the other group in your – in your game. (P3: Organization Led Mental Skills Training)
- ...and I've also learned a lot from like the Hockey Canada principles like, [name removed for anonymity] – process goals and long- and short-term goals to kind of allow me to visualize what my focus is. (P3: Organization Led Mental Skills Training)
- Yeah. We typically as like a program, we like actively do them and you have to submit them. I think I've gotten better at just doing them on my own and reflecting on my own. Also, with like working with the younger officials, it makes it easier to do your own because you're constantly asking them to do them, so it's easier to lead by example. (P4: Organization Led Mental Skills Training)
- We did go into like, I wish I had the picture of it, but there was like a mental skills like graph of some sort that I think we had and it was like focus – anxiety and focus. It was like a cube. It was one of those ones where you can be like focused and anxious or not or whatever. And I remember going over this and [name removed for anonymity] specifically being like, “I think you need to work on...” – and then so I was like, well, how do we do that? And he's like, well, he's like, “why would you lose focus in the game?” and then we went over all this again. Almost like the working backwards type thing on what causes loss of focus or what causes anxiety to be sprung on. And then working backwards on identifying that minimizing like a trigger if there was one or developing like that kind of almost not really a coping mechanism, but a strategy to improve that. (P4: Organization Led Mental Skills Training)
- That was definitely – that was definitely like a [location removed for anonymity] [provincial] Hockey resource. (P4: Organization Led Mental Skills Training)
- It depends, so like last year looked very different than this year for me. Like I went to the National High-Performance Seminar or whatever it was, in [location removed for anonymity] and there was mental performance. There was someone that talked about mental performance there. And then I went to another kind of sub-camp thing that we put on – or that Hockey Canada put on just for like the women's National high-performance people. So basically, everyone that had an IIHF license went to this and we had another grouping of mental performance talk there. (P4: Organization Led Mental Skills Training)
- Briefly yeah. When we did our level 6 camp, so that's the national camp, they definitely brought in some – some help with goal setting. You know, help with mental preparation and being at the top of your game. (P8: Organization Led Mental Skills Training)
- ...and that could be for – that's typically from our female high-performance coordinator which was [name removed for anonymity] several years ago and then now it's lady named

[name removed for anonymity]. And then obviously like from [name removed for anonymity] and stuff, I think it's a pretty constant thing that gets put forward is mental skill development... (P4: Organization Led Mental Skills Training)

- **Organizational Support**

- So, like I found for me like comparing myself to four years ago prior to the involvement of [name removed for anonymity], like I never really had that mental pathway of this is like my end goal. I was kind of just going through the motions, accepting assignments when I received them and never really had that full on outlook on what the opportunities were. And ever since [name removed for anonymity] involvement, I've been very like focused physically, mentally and just overall excited for the future because of that. So, I guess that's – yeah. (P3: Organizational Support)

- **Past Education from Expert**

- I mean I had a sports psychologist in high school, just like with the – with the team that I was working with, we had a sports psychologist. So, she would teach us about like, calming techniques, like...and then she – she'd be like – excitement or calming techniques to either like amp us up for a game or to calm us down for a situation. (P2: Past Education from Expert)
- We had her for three years. (P2: Past Education from Expert)
- From the sports psychologist and then also from my own therapist and my own counselor. I mean, I was in therapy from 16 to 22, several different counsellors and therapists throughout that time, just moving from school to school and from undergrad to my professional program. And so, I used a lot and I've kind of picked up what I liked and put down what I didn't. So yeah, sports psychologist and then as well as just other generalized mental health practitioners. (P2: Past Education from Expert)
- Yeah, structured learning from professionals. (P2: Past Education from Expert)
- Just honestly, just what I've been taught in my own performance training. We did have, like a sports psychologist, work with us in U18 hockey and then I'm a kinesiology graduate too, so I've done sports psych and whatnot, but I don't – (P4: Past Education from Expert)
- So, I was – a couple skills being... from like... a couple... working with [expert name removed for anonymity] so he – I kind of learned a lot from speaking to him a couple times. (P5: Past Education from Expert)
- I was – like I went to the national high-performance camp in Calgary last – end of October or November, I think. And there was a, like a mental – mental performance coach there. And it was so interesting learning like just like listening to him speak about different things and his experience with the Canadian – with his different like teams that he's worked with and stuff. (P5: Past Education from Expert)
- We've had some – we've had some like guest speakers at different – various different like camps, in the [league removed for anonymity] League and we'll have some different, you know, speakers come in and talk about, you know, different things. (P6: Past Education from Expert)
- Or for me, you know, that's where I kind of broke it down. Okay, well, let's break it down into 5-minute quarters because then it's like, okay, well, you know, it's a fresh page. Let's start like – let's control this next 5-minutes. Let's do a good job here and then we can, you know, the next quarter so to speak. So, I'm tryna remember the guy's name, but yeah. Just like little things like that I found helped me. (P6: Past Education from Expert)
- ...or working like where we've had a psychologist – a sports psychologist come in and speak to us. (P7: Past Education from Expert)
- I think there's some pass down for sure. I was lucky, you know, playing hockey and stuff, there was that – there's definitely some of that involved in hockey. Not that it was elite, it was Junior B and Senior, but I did have a psychology coach. (P8: Past Education from Expert)

- I moved out to [location removed for anonymity] to play [sentence paraphrased to protect anonymity] elite hockey. And that team had a mental performance coach. So that mental performance coach talked to us about breathing and mental rehearsal. That's how I was first introduced to those concepts, which stuck with me for a long time. (P10: Past Education from Expert)
- **Past Education from Organization**
 - So, I've obviously been told that in the past and then we did a lot of analysis at one point. (P4: Past Education from Organization)
 - I would definitely say like Hockey Canada, the OPOE's, we had like different sessions on goal setting, competing as teammates, and like and different conversations around that. So, lots there. Same thing at the events, there's usually like an introduction meeting and session. (P9: Past Education from Organization)
- **Reframing Thoughts – Example from Expert**
 - I remember, I'm trying to remember his name – this was with [provincial organization removed for anonymity] Hockey. This was probably 10-plus years ago and I'm trying to remember what his name was. But so for him, like he kind of – because he was working with a – I can't remember if it was like a badminton player, like a racquetball, or squash player or something like that. And for him, like the player was really – pretty like a pretty high, you know, highly ranked athlete at the time. But when stuff was going wrong then he would get so negative in terms of his kind of his, I guess, internal thoughts towards himself and what he's doing wrong rather than focus on what he can do right. And so, he called it smear effect, where basically he just kind of like okay, if you're feeling negative, you know, go smack your hand on the wall and just wipe it off and get rid of it. And that's kind of for him, he's kind of got mental or kind of internal reset button. (P6: Reframing Thoughts – Example from Expert)
- **Satisfaction with Organization Led Mental Skills Training**
 - But I also think Hockey Canada has done a great – and I'm very fortunate as a female to be involved in that and I totally recognize that... (P3: Satisfaction with Organization Led Mental Skills Training)

Mixed Methods

- **Learning Mental Skills from Multiple Resources**
 - Different camps, seminars, different speakers. Like I think I've learned through social media like I mean, Tik Tok videos, like different speakers on there. Podcasts, TV, like I've just try to just be a sponge when it comes to that sort of thing. (P5: Learning Mental Skills from Multiple Resources)
 - So, for me just kind of once again just kind of taking little bits and pieces from little things we've had. (P6: Learning Mental Skills from Multiple Resources)
 - It's kind of like a mix. (P4: Learning Mental Skills from Multiple Resources)

When and Why Officials Learned Mental Skills

- **Learning Mental Skills – Driven by Experiencing the Benefits**
 - That's – after I kind of implemented some of that and seen it work, that's when I started seeking it out more independently on my own. (P7: Learning Mental Skills – Driven by Experiencing the Benefits)
 - ...and then seeing the actual benefit of them. (P7: Learning Mental Skills – Driven by Experiencing the Benefits)
- **Learning Mental Skills – Driven by Personal Interest**
 - Yeah, I would say I've always had an interest in it, just in any way to elevate my game. (P7: Learning Mental Skills – Driven by Personal Interest)
- **Learning Mental Skills – To Deal with Abuse**
 - and felt like I needed some of those tools a little bit more just to deal with the crap that we take, I sought a lot of them out. (P7: Learning Mental Skills – To Deal with Abuse)

- ...because I think that's the like – ultimately that's the rule that requires the most out of us is people yelling at us. (P7: Learning Mental Skills – To Deal with Abuse)
- **Learning Mental Skills – To Help Reach Performance Goals**
 - And so after that, and especially as I got some goals around officiating... (P7: Learning Mental Skills – To Help Reach Performance Goals)
- **Unsure of When Mental Skill Use Started**
 - But that's something that I've – I don't even know when it really started to be to be honest. (P6: Unsure of When Mental Skill Use Started)
- **Introduced to Mental Skills in High School**
 - It started as a player, but I don't know if I would have done much in high school. That's probably where I just got introduced to it was when I was playing in high school. (P7: Introduced to Mental Skills in High School)
- **Past Education in Post-Secondary**
 - That I use... from, well, a little bit from schooling. That's kind of like the baseline. (P4: Past Education in Post-Secondary)
 - Yeah, it started when I was 18. (P10: Past Education in Post-Secondary)
 - I was introduced to different breathing techniques, and mental rehearsal when I was 18 and I played hockey out in Calgary for a season. (P10: Past Education in Post-Secondary)
- **Introduced to Mental Skills Early**
 - So, I was introduced to that very young. (P10: Introduced to Mental Skills Early)

Sub-Theme 2: Considerations for Future Mental Skill Education

Mix Methods

- **Best Ways for Sport Officials to Learn Mental Skills**
 - But I would say those are my two top ways [peers and organizational led training] of learning and gaining that knowledge of how to be mentally prepped for a game and overall using mental skills. (P3: Best Ways for Sport Officials to Learn Mental Skills)

Self-Directed Learning

- **Learning Mental Skills – Lots of Resources to Facilitate Independent Learning**
 - I kind of brought this up earlier. You can seek it out. There's lots of information. There's lots of books, there's lots of podcasts if that's what interests you. (P10: Learning Mental Skills – Lots of Resources to Facilitate Independent Learning)
- **Officials Should Seek Mental Skills Training**
 - And they're –and I think officials almost – it has to be a little bit like independent. Like you have to you know, go out and look for information. I mean, sometimes it just like comes to you on TikTok, but like like a podcast, like different stuff on podcast. But you might just be listening to a podcast about – you can be listening to like on any sort of podcast, I don't know. Like I listen like I mean – I'll use the New Heights podcast with like Travis and Jason Kelsey, for example. I've been listening to that recently and I just find it find it fascinating. Like listening – they'll talk about different stuff and they'll talk about like – and I try to like pick up anything from them to see if – like they're elite athletes. And hockey and like hockey – different podcasts like try to, you know, I think for this sport especially like hockey – interviews, like guys like doing interviews, talking about different things, people stumble up on it. I'm starting to go off on a tangent and that like basically to answer your question. Like, yeah, I think unfortunately, I think a lot of officials are going to have to like go and look for stuff on their own and maybe to use different avenues or different sports. Like I think soccer is another one that hasn't really been like tapped into yet for like mental performance and stuff, but yeah. (P5: Officials Should Seek Mental Skills Training)
- **Suggestions from Peers – Seeking Out Mental Skill Resources**

- ...and to be completely honest, I – I feel like I have a really good foundation. So for seeking it out from other people, more along the lines of, “Hey, do you have any good podcasts recommendations?” or like I'll seek out the learning from them, but maybe not the implementation. (P7: Suggestions from Peers – Seeking Out Mental Skill Resources)
- So go and get yourself a mental performance coach, find a social worker, psychotherapist, psychologist that specializes in an area that you are interested in and they are your mental performance coach. So I'll tell people to do that. (P10: Suggestions from Peers – Seeking Out Mental Skill Resources)
- I often ask people, hey do you have benefits with your job. Yes. How much do you have for psychological? Like, I'm not really sure. I'm like, go find out and go get yourself a good mental performance coach and pay for it. Because your benefits cover it. So if you have that ability, I try to push people into action. Like you're not getting – like I'll say I have a social worker, it's from my own mental well-being it's not to do with sport, it's just for my own general well-being. (P10: Suggestions from Peers – Seeking Out Mental Skill Resources)
- **Peers Are a Good Resource for Learning Mental Skills**
 - I would say... like peers is a great way like – because I always put like senior officials with younger officials especially if it's like – perfect example would be if it's like your very first junior in game. They're not going to put another young official on that game. So you'll learn a lot and like that's just my experience. Like I found when I did get to those like – the next level of hockey, that I was now allowed to be involved with, I always kind of use my peers to relate and like learn from them and like what their ways. (P3: Peers Are a Good Resource for Learning Mental Skills)
 - I've tried to just be like a sponge. I've tried to – I've asked other officials, fellow officials, like you guys have worked with, guys that work in the NHL, tried to ask them like different questions, like different situations, scenarios. Do they get you know – how do they deal with anxiety. Stuff like that. Do they ever get anxiety? (P5: Peers Are a Good Resource for Learning Mental Skills)

Guided Learning

- **Call for Mental Skills Training Designed Specific for Officials**
 - I think somebody who's focused on officiating mental skills would come across as genuine and a little different than what we've seen cause a lot of time it's a lot of general things, you know, if you can provide specific examples like in the game and how to deal with things. You know, involve coach mindsets and I think – I think that would go a long way. We've never really had anything catered for us in that sense, like that type of mental skill training. (P8: Call for Mental Skills Training Designed Specific for Officials)
- **Call for More Consistent Mental Skills Training**
 - What am I going to say? Oh, I was just going to say I think, like, not that you forget what you've been told and whatever, but it's the same thing with like going to the gym. You can't really get big arms if you go and lift biceps for like a month straight and then don't go again, right? So, I think the mental skill thing is the same. So, when you're not actively sometimes presented with or searching for mental skills like training or resources, not that you necessarily lose it, but you forget like, oh yeah, like I actually should try something else or a new strain of something maybe doesn't come along as often. Because I think some of the higher-level coaches also – they just trust that you have some of these skills. Whereas maybe when we were a bit younger, they were presented a bit more often and I'm that's where I'm at a bit of a tie – a cross. I'm like, do they – did they present stuff when we were younger and I just like used it all and don't remember it? But then I have girls that are 20 in our program and they're like, I've never been told this before. I'm like, oh, so I don't know – I don't know where this information came from. (P4: Call for More Consistent Mental Skills Training)

- But in terms, and I'm not sure like we at the provincial level, we try to have like a every two months have like a bit of a webinar type thing and it goes over kind of as many topics as we can cover for the most part. Usually like I would say, like rules and clips and then there's a separate subtopic that gets covered. So, it's on one of those - it should probably be on more of those, I guess. So, I'm trying to think maybe like a couple, like a handful of times per season presented. But again, I think sometimes where that loss is the offseason, we don't receive really anything. (P4: Call for More Consistent Mental Skills Training)
- I just, I think a lot of people focus on the physical training right in the offseason, and maybe you can – if you can – if you have a good on, off switch and whatnot. But usually everyone has a little bit more time to divulge when they're not skating every weekend, so. (P4: Call for More Consistent Mental Skills Training)
- I know that in the past for the teams that I've worked with, we've done weekly or bi-weekly or monthly sessions just on mental strength training skills or like just setting aside that time for reflection can also be done and kind of like check-ins with a coach. I know at work we do like a weekly one-on-one and not that it's geared towards like mental strengths specifically, but it does come up. It's like okay, how are you handling these presentations or you had this presentation and you said this, could you have said it differently? So, it is talking about sort of that the reflection piece and in terms of the training, I think it makes sense for – (P9: Call for More Consistent Mental Skills Training)
- ...but in different sessions, whether it's a monthly session or maybe it's like two sessions a month if you're on some sort of high-performance roster pathway and it's like, okay, here's maybe more training and awareness of a specific mental skill. And then like here's a reflective session on like, how did it go? Have you used it? What did you find in kind of that discussion? (P9: Call for More Consistent Mental Skills Training)
- **Calls for Training from Organizations**
 - I think that again they should be brought into our certification camp. So, what we do every year is that I have to sit in on – It's typically, because of my level, it's about 3 to 4 hour clinics that they put on. We go over rule changes, we go over standard play, we do fitness testing, and they basically tell us to go home. In a situation like that, I think it should be touched on. (P2: Calls for Training from Organizations)
 - INT: So would it – would it be safe to say then that you do think there is room for kind of some more formal forms of education along with the peer learning? P3: 100%, yeah. Or should I say 110%? Yeah, no I'm joking. Yeah no totally. (P3: Calls for Training from Organizations)
 - I think that's something that I've – that I think I've requested or asked for in the past several times to have more training or skills development with that. (P4: Calls for Training from Organizations)
 - Yeah. So whenever, whenever it comes up, usually it's like we're going to have a seminar or a video call and we always go over – we always go over standard of play and clips and whatever. But the bonus material that I always want is mental skills or tips... (P4: Calls for Training from Organizations)
 - I think they – as being part of the national high-performance program, they have a role in terms of delivering those officials materials to get better. So, some of the players that go to the World Junior or the World Junior camp, they'll have different, you know, seminars and coaches and all this stuff. But for like the national high-performance officials, it's kind of like it's a little bit different. We don't see that. It would be cool if we had like – got information, got articles, got information like you know have a, oh, do you want to be – hey, we're going to have – we're going to have this person on to talk about mental skills. Here's a link. Join in, it's free. You know? (P5: Calls for Training from Organizations)
 - Yeah, like I think that's something that from a Hockey Canada perspective, we could probably incorporate into our like – into our clinics and stuff that we do with the start of each season when officials have to go in and get re-certified for the upcoming season. (P6: Calls for Training from Organizations)

- So yeah, I think it's something that's probably something – it should come from – in more of like a top-down Hockey Canada type level. But there's also some regional stuff within either from each like provincial association that they can maybe do – maybe what they see best fit if there's maybe, you know, certain – (P6: Calls for Training from Organizations)
 - I think that like really it should be introduced to them as part of their officiating training... (P7: Calls for Training from Organizations)
- **Organization Led Training Would Enhance Consistency Among Officials**
 - But that shouldn't like – I can't like... I might think like I know how to do things best, but like maybe that's not how Hockey Canada wants me to deal with the situation, so like how do you guys want me to deal with it and I'll do it, you tell me or maybe they'll – they'll bring to light different ideas and techniques I can use. (P1: Organization Led Training Would Enhance Consistency Among Officials)
- **Organizations Should Be Responsible for Mental Skills Training**
 - I think they should learn about it from their like mentors or like the officiating body who they officiate for. So, I'm in [Association name removed for anonymity]; either the [Association name removed for anonymity] or Hockey Canada—there should be training that everyone gets, so everyone gets the same type of training, so everyone's on the same page [sentence paraphrased to protect anonymity]. Like all officials are dealing with the situation as similar as possible so then teams are getting consistent messages or consistent officiating and consistent results (P1: Organizations Should Be Responsible for Mental Skills Training)
 - So just like having some help and guidance from, from the mentors and the, the governing body, that's who, who should come from. (P1: Organizations Should Be Responsible for Mental Skills Training)
- **Organizations Should Invest More into Mental Skills Training**
 - I believe there has to be some initiatives from the leagues in order to want to invest into the officials with mental skills. Because at the end of the day, like they're, you know – unless someone volunteers then, but it's still like – they're going to have to invest into it. (P5: Organizations Should Invest More into Mental Skills Training)
 - So, I think like the role of Hockey Canada has I think it's just kind of like investing the top like – investing I guess the money into the national high-performance officials. Or if there's officials that are going to you know a tournament – I don't know, that's – it's above my pay grade. (P5: Organizations Should Invest More into Mental Skills Training)
- **Technology Can Be Used to Deliver Mental Skills Training**
 - Something that just actually flew off the top of my head here when you're asking about how it should be delivered, considering the time and age we were in with phones and electronics and even the rule book for Hockey Canada being on being accessible on the phone. And I know people use calm and other meditation apps – I just – throwing it out there that maybe some kind of mental skills app would be actually a better utilized tool than a presentation. Like I said, like I mean there's – I don't necessarily want to feel like you're doing a test every time, but maybe there is ways to identify certain skills on an app or log goals or whatever on an app of some sort. That would – that would make it as, I mean, as soon as everything's on their phone people are like, yeah, I have it. So, just in terms of instead of having to open up a document or anything like that, it's just a splintering thought that I came up with. (P4: Technology Can Be Used to Deliver Mental Skills Training)
- **Training Comes from Experts**
 - I think we should have a mental health professional come in and talk about it because it's easy for, you know – so my boss's name's [name removed for anonymity]. It's easy for this random dude [name removed for anonymity] to walk in and go, oh this is mental skills and click through a presentation and we all go whatever. But if there's someone

there that is knowledgeable and passionate about what they're doing, I find it would be more palatable for people to take on. (P2: Training Comes from Experts)

- Through somebody – hockey people, for one thing. I think you need to know the game a little bit. You don't need to be a ref, but I think sometimes people come in and they're it – it does help hearing different sport, like different sport aspects, you know? But I think being in hockey and being on both sides of that communication and on both sides of the ice and it helps kind of drive your points across and you know. (P8: Training Comes from Experts)

Mental Skills Most Pertinent to Officiating

- **All Mental Skills Equally Important for Officials**
 - Yeah, I think they're all, I think they're all pretty you know, pretty equally important. (P6: All Mental Skills Equally Important for Officials)
- **Being Able to Reflect on Feedback and Move Past Mistakes**
 - I think like self-reflection is something huge too. I don't know if that is on your list of stuff, but people that are better able to like, accept and turn feedback into reflection versus being – which is just coachability I guess is how someone would define that. But just being able to accept the feedback and reflect that, oh, I maybe wasn't right or whatever – is another thing I would say because there's lots of times where you don't see something the way you thought you saw it at full speed and it's pretty hard to go over and say that you were right sometimes, right? It's a lot easier to go over there and say screwed up, please forgive me. (P4: Being Able to Accept Feedback and Move Past Mistakes)
- **Breath Control is a Valuable Tool for Officials**
 - Because I believe in the breath I know – and I know the sciences behind breathing and how it impacts our autonomic nervous system. I do believe in that for anyone that is a tool that you can use in your toolbox. (P10: Breath Control is a Valuable Tool for Officials)
- **Communication Skills are Critical for Officials**
 - Officials being on the ice sometimes at a high-performance level, not necessarily, but sometimes you hear comments from like players, coaches or you have to handle like an upset coach during a game. That might be one thing that definitely involves mental skills to be able to go over and kind of de-escalate the situation with someone who's upset. How do you handle that conversation? Make sure they're heard, but also make sure that you're getting your perspective. And then how do you find in a very short period of time in a high-pressure situation, how do you find a solution so that you both can move forward knowing that you might not agree? That would kind of be one thing that does come up and that officials do have to navigate. (P9: Communication Skills are Critical for Officials)
- **Diverse Mental Skills Vital for Officiating Demands**
 - So yeah, you're always like – NHL or any type of hockey, like... there's always weird stuff that comes up where people are going crazy on you, so just having that mental toughness and different techniques and tools in your toolbox or what to do in those situations is good. Especially you might have a situation that might arise and then again in the next game, but you might deal with it a different way based on... maybe like who the players or coaches are. Like... I might interact with the players differently, even though it's the exact same situation as the game before with two different teams, because maybe I have a better rapport with them or they have better listening ears. Like so, yeah. (P1: Diverse Mental Skills Vital for Officiating Demands)
- **Effective Communication Important to Manage Game**
 - I mean it – things happen during a game where people get very emotional and things get heated. And you kind of have to be able, especially at the higher levels, be able to communicate with those – with the coaches and the players in those situations in a way that doesn't escalate it yourself. I mean there is a point where if they are being

- disrespectful, you do have to address it, but we have tools to address it. (P8: Effective Communication Important to Manage Game)
- And the way that I was going to deal with it, that game was, I was going to just be nice, like kill her with kindness kind of thing, rather than getting amped up with her because it's just going to progress aggression on her team. And so, she called me over and she told me that one of the players on the other team was a piece of shit – I was like, there – bang, there it is. Like there's our abusive language that I was looking for. And so, I just told her that using that kind of language, with a big smile on my face, is not acceptable and if she's going to continue to use that language, then she will be exiting the arena. And I just smiled and I left and I thought about it after. I was like, that's exactly what I thought I was going to do. And I did it and it actually ended up calming the game down because she was like, what's she going to do about that? And so, I've actually used that technique a couple more times with other coaches in other – when it gets really, really heated, I'll go to a coach and say, “Hey coach, I apologize that I didn't see what you wanted me to see, but we can't change the call now”, and a smile and it's hard for them to really get upset about it. So that's like is a very weird game management situation. But that was definitely a time where I was like, how am I going to deal with this? And I dealt it with it that way and it worked, so yeah. (P2: Effective Communication Important to Manage Game)
 - And lots of coaches will just be like – some of them will hate you for it, but a lot of the times they'll be like, yeah, at least they said they knew they were wrong, like better than trying to prove someone the other way. (P4: Effective Communication Important to Manage Game)
 - And we'll just say hey, like you know and that's where once again, kind of go back that information shared with officials as well too, like sometimes they're like, hey, you know I – on the last stoppage or two, you know, two face offs to go – I just kind of slipped by and told the coach, hey, you know, watch you know, 14 or whatever, he's getting pretty close to the goalie. Just, you know, make sure that you know – let him know. So, if there is a penalty being called, then there's a then you know – the coach is aware of it, but so is the player. (P6: Effective Communication Important to Manage Game)
 - But it also comes to like the external side of it where you're kind of communicating with the guys and being able to like form those like positive relationships with the male hockey players that are you know – and I use humor often to deal with those situations especially those super intense – instead of escalating up to the intensity that the boys have when they're playing, it's kind of using humor to bring them down and that kind of helps me also handle the situation. (P3: Effective Communication Important to Manage Game)
 - **Focus is Critical for Officiating Performance**
 - Because if you're not focusing, just like if you're a player, you're not going to officiate well and you're not going to play well and then you're not going to be in a – in a different game that you may want to be in, whether that's a medal game, a semi-game or just another game period at these tournaments. (P9: Focus is Critical for Officiating Performance)
 - **Goal Setting – Importance in Officiating and Life**
 - So, I still think goal setting is important for sure, whether it's, you know, personal life or officiating. (P6: Goal Setting – Importance in Officiating and Life)
 - **Goal Setting – Important for All Levels of Officiating**
 - You know like you said, you know kind of goal setting as well too. Like that's something where you know – and I guess it comes on you know, depending on the on the officials as well, too like there are you know there's some officials where you know maybe they, you know if they're working you know U18 or U15 hockey, you know some of those guys, they just want to stay, you know, local. They don't want to travel. They don't want to work up and that's totally fine. But you can still have some goals as whether it's maybe you want to work your local tournament final or working provincials or something along those lines where then some officials like, hey their goal is to get to the National Hockey

League which is, you know, that's awesome. You want to have, you know, but there's different goals like not everyone wants to work the National Hockey League. Not everyone wants to work the [league removed for anonymity] League. (P6: Goals Setting – Important for All Levels of Officiating)

- **Importance of Positive Self-Talk**
 - ...but I think the especially I think, at least for officials, is you know, kind of, you know, more positive self-talk definitely helps because I mean you know, you can beat yourself up, you can over analyze plays. “Oh, I missed this”, and a lot of it's just positioning. (P6: Importance of Positive Self-Talk)
 - ...and I think we lose it sometimes in the season. We lose it quite a bit actually. We are ground down and you know you watch an NHL game and all anyone talks about is how crappy the officiating is or how crappy the refs are and then it leaks down. You're doing a junior A game and it's like ah man, you suck. And it's like in a lot of like – so much of the interactions we have are negative and I think negative in nature. I'm not saying they're being – they're negative people, but I think the communication tends to be. And we have to be able to help ourselves remember that this is this is an intense emotional physical sport that they play and a lot of this isn't – isn't really about you. It's about – it's almost never about you I'd say. So, I think having that positive self-talk of knowing that you're – if you know, you're doing a good job... (P8: Importance of Positive Self-Talk)
- **Importance of Pre-Game Routines**
 - I think, you know, you have to develop a pre-game routine, just like a hockey player or any athlete. And that gives you your best chance to success in being prepared. (P8: Importance of Pre-Game Routines)
- **Mental and Physical Preparation is Critical for Elite Officials**
 - So just being able to prepare for it, whether it's like I said, you know, knowing the rule book, knowing certain situations, but also be prepared in terms of like physical standpoint as well too. (P6: Mental and Physical Preparation is Critical for Elite Officials)
- **Mental Skills Relevant to Officials**
 - Yeah – trying to think of like, I guess like 5 different mental skills and like does it – I guess like the self-talk, the visualization, like mentally preparing just generally for like what's to come and also like, reviewing the rules and stuff. I would say they all contribute in some way, shape or form. (P3: Mental Skills Relevant to Officials)
 - I know a lot of people that do use a lot of meditation and visualization stuff. (P4: Mental Skills Relevant to Officials)
 - I think self-talk is always going to be a primary one, more so just because you – people use that daily and just talking to themselves. I know not everyone has a voice in their head, but I definitely do so. So, in terms of that like I think you just like you naturally can use that. It's just about rewiring into that right mindset. (P4: Mental Skills Relevant to Officials)
 - Obviously goal setting is important. That one would be at the top of my list too, just because if you're not really, you're just kind of chilling, you're not really doing that competitive side of it – and maybe some people can get away with being happy with where they are. But I think season to season, you wouldn't come back if you didn't have some kind of background goal in your mind. (P4: Mental Skills Relevant to Officials)
- **Mental Skills Based on Individual**
 - I would think certain mental skills would be more important for different officials. Depends what level of hockey you're officiating. Is it a tournament? Is it playoffs? Are you a referee? Are you a linesperson? So different, yeah mental skills and stuff would be needed for – for each person's role. (P1: Mental Skills Based on Individual)
- **Positive Self-Talk is Critical for Officials**
 - Yeah. Okay, well there's – there's two things, I think. I think positive self-talk is super key... (P8: Positive Self-Talk is Critical for Officials)
- **Self-Talk – Critical for Elite Officiating**

- So I think, you know internal talk is like – internal talk is one that we've you know spoken about and I think that is fundamentally huge for I think officials and players coaches like anyone. (P5: Self-Talk – Critical for Elite Officiating)
- **Unsure if Certain Mental Skills are More Pertinent to Officiating**
 - I don't know, I think that's a that's a really good question. (P5: Unsure if Certain Mental Skills are More Pertinent to Officiating)
 - That's a – I don't know if I can say that there's any better like more important to officials than I don't know. (P5: Unsure if Certain Mental Skills are More Pertinent to Officiating)
 - I would say I don't know because I don't want to put a blanket statement on it. (P9: Unsure if Certain Mental Skills are More Pertinent to Officiating)
- **Variety of Mental Skills Important for Officials**
 - But like I said I think all that stuff is so important to be able to kind of intertwine... (P6: Variety of Mental Skills Important for Officials)
 - So it's, you know, it's definitely very important to have goal setting, visualization, mental prep, all that stuff to make sure that you're – you're ready for when that puck gets dropped each game. (P6: Variety of Mental Skills Important for Officials)
 - Sometimes I'll try one and it's not working for me and I have to re-focus on another. (P10: Variety of Mental Skills Important for Officials)
 - I think having lots of tools in your tool belt is important. So you can pick up the one you need and knowing which one works best for us. (P10: Variety of Mental Skills Important for Officials)
- **Visualization – Important for Officials**
 - And then I think you know, I think pre-game visualization is huge and I and I think – I don't know how many people you've interviewed so far, but I think there'll be some crossover and cross section with all of this for sure. (P8: Visualization – Important for Officials)
- **Visualization – Pertinent to Elite Officiating**
 - Yes, I think everyone should visualize. I think like that's something that is so like – everyone has an imagination. Everyone can do it. I know some people just don't – don't have any thoughts when they're officiating and they simply are reacting to the play. So, I get like maybe mantras and like self-talk is not something that's usable. But I do think that visualization – I think everyone should do it. I'm extremely biased, but everyone that I've talked to about it, they go, “Oh yeah, I've done it” or, “I did it as a player” or “I've done it in the past”. And I'm like, yeah, you should try it again because it definitely helps. I'm a big proponent, and I mean again, I coached elite hockey, I coached high performance, and I got all of my players to do it. They all did a really good job with it. So yeah, I think visualization is probably the most pertinent in officiating. (P2: Visualization – Pertinent to Elite Officiating)

Other Aspects of Mental Skill Education for Sport Officials

- **Mental Skills Use – Acknowledging Room for Improvement**
 - And then that 5% which I kind of discussed earlier, those the 5% of the time that I haven't used those skills, I do recognize maybe it takes me a couple plays to get back into that focus versus like immediately acknowledging moving forward and staying present in that game. So that's kind of where I'm at with it. (P3: Acknowledging Room for Improvement)
- **Mental Skills Use – Seeking Alternatives for Effective Coping**
 - ...Yes. More recently, I actually talked to my counselor about this, because sometimes, sometimes even with the mental skills are not working. So, I know all these things and I was working through an injury and all I could think about was the injury. I couldn't think about – so I was going down that dark road of the what if the injury does this, what if this causes this. Things that really aren't in my control, and I really just – and so I said to her, I need a way to, like I have my mental tools that aren't working. I need a way to re-focused,

at least just somebody to talk to me. (P10: Mental Skills Use – Seeking Alternatives for Effective Coping)

- **Arousal Control – Individualized**
 - In terms of kind of, I guess kind of like anxiety control. You know, that's something that I guess once again depending on – on the, on the official, you know, some players like, you know – I know some officials like they're wired. You know, they're very, very energetic because I know it's kind of okay like just, you know, just settle down a little bit. And there's some officials like they're so even keel, it's almost kind of, hey like do you have a pulse out there because they're just like so almost like – almost too nonchalant to a certain degree. (P6: Arousal Control – Individualized)
 - But I've created that into like something of my own. (P4: Arousal Control – Individualized)
- **Arousal Control – Important for Younger Officials**
 - Like if we're working with you know younger officials that are working you know like novice and pee-wee hockey and atom hockey like kind of under like U11 U13 hockey, well maybe we don't really need to worry so much about like the visualization aspect of it, maybe as much. Or maybe in terms of kind of anxiety levels because it's probably not, maybe not – maybe some kids are pretty anxious because it's, you know, the first year of officiating and we've all been there. But I would, yeah, I would say probably for the younger levels, it's probably, actually probably more for the younger levels – it's probably more of that anxiety aspect in terms of kind of let's, you know, let's kind of control – learn how to control your emotions and control your kind of, you know, internal composure and stuff as well. (P6: Arousal Control – Important for Younger Officials)
- **Background Knowledge Can Guide Mental Skill Use**
 - ...but I do – I have liked having like the whatever that presentation I said was with the – that's where that [name removed for anonymity] shared or whatever showing that there's different versions of kind of, emotional response or where am I? What's the word I'm thinking...arousal. That's the word I'm thinking of. There's different versions of that and having people understand which one they kind of fall into. Also, just like that's like the background information on why you react that way and people with ADD react differently than people that don't have it or wherever you kind of fit on the scale or maybe it's a day when you were stressed at work versus when you're not and you're like, oh, I'm this one mostly. And then this one secondly that usually I think like the background of understanding helps. So, that's where like a PowerPoint or like a presentation where kids, kids – people... It's not just kids – talking about like 20-year-olds – I'm like oh these kids. Where they can like look at it and ask questions or have something to refer to. I think is important because like I said, like certain techniques you don't need to have a – you don't need to have a presentation on cue words, but you maybe you do on understanding how the brain reacts to pressure, how it reacts to anxiety and like being challenged and stuff like that. (P4: Background Knowledge Can Guide Mental Skill Use)
- **Calls for Mental Skill Training Earlier in Career**
 - And that's something that obviously being – being at a higher level, being in that group of elite officiating, now that it's there's been more effort I would say. But at that in between stage, I feel like there also could be some more information presented that would be really helpful for people making a jump. (P4: Calls for Mental Skill Training Earlier in Career)
 - Yeah, yeah. When I was younger, I really wish I had better mental skills. (P8: Calls for Mental Skill Training Earlier in Career)
 - But I, you know, I think I do wish when I was younger that we were taught a little bit more about that sort of thing and about, you know, developing our own techniques of getting prepared for a game. And I think all that goes hand in hand of like being ready when you step on the ice. (P8: Calls for Mental Skill Training Earlier in Career)
- **Challenges Learning Mental Skills**

- But for a lot of people don't have time to go search it out and read about it and who has time to sit down and read a book, maybe you can throw that book on in your car while you're driving. But that still takes a lot of time. And then you have to be able to focus on it. (P10: Challenges Learning Mental Skills)
- **Challenges Using Video in Post-Game Review for Improvement**
 - Video now has made that very hard. I think we get caught – especially now with the quality of video going back and looking and over analyzing things. We don't have that tool on the ice, so it's very hard to let it go. You know it and I think if you use it for the right reasons like using video post game, trying to figure out how you missed something or why you called something or what you could have done better, I think that's okay. But when you're analyzing every single piece of information post-game, I think that can just add to the stressors of the season. (P8: Challenges Using Video in Post-Game Review for Improvement)
- **Considerations for Teaching Mental Skills to Officials**
 - I guess there's a couple different aspects to it for sure. I think it kind of more so depend on what probably what level they're kind of currently working. (P6: Considerations for Teaching Mental Skills to Officials)
 - Where you know, if we tell it to an official at the, you know, [league removed for anonymity] League level, whether it's their first year official or 10 year, they probably already know that, right. So I guess it does kind of maybe, I think it would probably depend more so on kind of their age and kind of where they're at. (P6: Considerations for Teaching Mental Skills to Officials)
 - Where I mean – the younger divisions, your younger officials a lot of it is kind of more so like rule-based stuff. It's like okay well you know here's what we need to look for, for an offside, for an icing, for penalties. With a lot of the officials, you know the, you know they either are currently still playing or played hockey, you know. They kind of have that little bit of that feel for the game to you know to a certain degree. So, I think that would definitely help. But also, be able to like – if it's a like we called it I guess, at the time was the level 2 with our Hockey Canada kind of program where if it's maybe not a, you know a first- or second-year officials course maybe like a third or fourth year and just kind of incorporate a little bit more of like that mental side of stuff. I think that's something that you know some officials might take cause there are some officials that maybe they you know they never experienced that or maybe hockey's only sport they play. And you know if it's more of like a recreational level you know they're probably not going to get into more of like that you know, sports psychology you know – type of conversations in more of that you know recreational environment compared to like the you know, rep or competitive teams where you might have you know – (P6: Considerations for Teaching Mental Skills to Officials)
 - because every province association has you know, a different I guess different levels of hockey and stuff that are available to officials as well too. (P6: Considerations for Teaching Mental Skills to Officials)
 - Like in [location removed for anonymity] like we never had any senior hockey to work out there. We're now in like – especially in [location removed for anonymity] with the [provincial organization removed for anonymity], you know, kind of retracted themselves out of the [league removed for anonymity] under the Hockey Canada umbrella. So now as an official in [location removed for anonymity], like if you have aspirations to ref the [league removed for anonymity] League, now you basically go from working Junior B hockey to the [league removed for anonymity] League, which is a pretty big jump. So then maybe there they might have some maybe – a different you know, different needs to maybe get that official from a Junior B level going straight to the [league removed for anonymity] League where like in [location removed for anonymity], we have like we have so much hockey out here like we I think we have probably more senior leagues then what we probably need because we just don't have enough bodies in [location removed

for anonymity] to cover off all these games. So that's where sometimes you know, especially now in the last couple years with – after COVID we've lost some officials that you know, we don't have a whole you know influx of new officials to fill games. But we're also getting, which I think is – which I think is good, is we're getting some younger, maybe not so experienced officials into some games where maybe it's – maybe a little bit above their head or a little bit more of that sink or swim mentality. But it's nice to get them into those, into those games in those situations because yeah, they're younger than what maybe what I would have been at that – at that point to work at level of hockey. But it's going to make them better, make our program better as we get younger officials slotted into, you know, into higher – high levels of hockey earlier. It's just going to make them better down the road. But also kind of more that like that mental side of things will definitely help them kind of continue on and take it to that next, that next level for sure. (P6: Considerations for Teaching Mental Skills to Officials)

- **Differences in Male and Female Official Training Opportunities**
 - ...especially on the male side of things, it's a lot harder to be involved just because of the amount of people. Like it's hard to get opportunities I guess is what I'm saying. And I've learned a lot from that which is unfortunate that it's it is kind of selective and who is a part of that and specifically on the male side. (P3: Differences in Male and Female Official Training Opportunities)
- **Differences in Youth and Adult Officials When Handling Abuse**
 - ...when you're 12, you really don't know the rule book when you're twelve, you're not reading your rule book. You're still learning the sport yourself, you're a young player. And being an adult female, I'm significantly less intimidated by another human being who disagrees with me. Being a child, it is very intimidating, because culturally, we're taught to respect adults, we're taught to do as they say, and to be obedient. So now these adults are yelling at me and I didn't grow up in a household where my parents yelled at me. Versus when I'm an adult, now I'm like, no, I know your behaviors wrong like, that's not okay. So, I know that's not okay behavior, and I have the tools to deal with it. (P10: Differences in Youth and Adult Officials When Handling Abuse)
- **Experience and Game Knowledge Helps Mitigate Abuse**
 - You just get older and you just don't care so much. I think when you're young like – when you get older, and you start studying the rulebook and learning the game, at a different level, you have the confidence to be like, that person doesn't know what they're talking about, like, that's ridiculous what they're seeing from the bench or the parents or the players. And that gives you a confidence as well... (P10: Experience and Game Knowledge Helps Mitigate Abuse)
 - When you're an adult, whether it be the rulebook, or just your knowledge of how people should behave, it gives you the tools to better deal with those situations. (P10: Experience and Game Knowledge Helps Mitigate Abuse)
 - But a lot of times I didn't make a mistake and no, like, you need to read the rules of the game, not me because that wasn't a mistake. Maturity absolutely maturity, but life experience helps as well. (P10: Experience and Game Knowledge Helps Mitigate Abuse)
- **Experience Helps Develop Confidence**
 - ...but I think I've gotten into a state now where I feel very confident stepping onto the ice every time. Very few things, especially I think experience helps a lot with this, but very few things that happen on the ice kind of surprise me anymore. (P8: Experience Helps Develop Confidence)
- **Familiarity Leads to Less Pressure and More Comfort**
 - Now I don't – now I just work the [league removed for anonymity] League and [league removed for anonymity] games I think I just find it easier because it's like well now it's just like, it's one league for the most part. One set of rules. You know, you see the teams more frequently so it just – it just becomes more, it's kind of more of a norm or kind of a little bit more at ease where you're not going to maybe a new rink for the first time or

working with a crew where you've never met any of the officials before. So there's – little bit of those I guess, a little bit of barriers to a certain degree, but nothing that's really drastic but... (P6: Familiarity Leads to Less Pressure and More Comfort)

- **Focus Comes Easy**
 - I don't know. Honestly, I don't find it difficult to stay focused on the game and I think that that's why officiating fits my personality so well is because I am like the most focused that I am when I'm moving, like when I'm physically active, me personally. (P7: Focus Comes Easy)
- **Focus – Mental Shift During Officiating**
 - So, in order to maintain the focus, I don't know if it's – that we – for me personally, I don't know if it's that I wouldn't lose focus of why we're there, but it's just that the focus shifts. (P9: Focus – Mental Shift During Officiating)
- **Follow Ups to Mental Skills Education**
 - Well, we get like the, we usually get like a copy of whatever was presented and whatnot. It's always available for review. When we went to the national high-performance thing, there was like a post task you had to do your goal setting and send it in that was required to like pass basically. And like I said, like for the at least at our provincial level, sending in the form is required to be part of the high-performance side of it. (P4: Follow Ups to Mental Skills Education)
- **Importance of Continuous Learning and Experience in Officiating**
 - But I know definitely, like the more you know – it's no different like I used to say with, you know, with school and studying for tests like, you can never be over prepared, right. So, the more you know, the more you know – the more information you can – you can get, the more you know, more knowledge you have, the more experience that you have, the more games, whether it's, you know, working a novice game or working a [league removed for anonymity] hockey game – the more games you work like no matter how old you are, then it's just – it's more experience. And then when you see things happen, it just becomes more second nature because you've gone through that same situation before. (P6: Importance of Continuous Learning and Experience in Officiating)
- **Individual Needs Differ**
 - I'm sure there's a few – I think like organization helps a lot of people's brains just to calm down. I think it depends if you have any kind of pre-existing conditions. (P4: Individual Needs Differ)
- **Issues With Organization Led Mental Skills Training at Elite Level**
 - But again, I feel like by that point there is a probably a resistance because a lot of these people have developed their own if you're at that level and kind of identified as national. (P8: Issues With Organization Led Mental Skills Training at Elite Level)
- **Lack of Formal Mental Skills Training Opportunities**
 - ...but they don't really – it's not a lot of like formal mental skills training. Which I like – which kind of sucks in my opinion. (P5: Lack of Formal Mental Skills Training Opportunities)
 - INT: So, just assuming that, that was like a one-time thing each. So maybe two formal training sessions in – so far in your officiating career. P5: Yeah. (P5: Lack of Formal Mental Skills Training Opportunities)
 - But I've never – we've never had formal information given to us about mental skills. (P8: Lack of Formal Education on Mental Skills)
- **Lack of Awareness of Mental Skills Early in Career**
 - Yeah and again, I think it was the awareness of mental skills. So, when I was like grade 9, 10, 11, 12, I wasn't really aware of them. It was kind of just like, all right, go drop the puck, farm the puck, make the calls, get through the game, go home, you know – go hang out with friends. Like it was just kind of like – going through the motions of doing the game. But later on, like, I'm way more aware of, like, ways that allow me to focus and I think you just learn that over time, like, what works for you and what doesn't for me.

Again, I think that visualizing and communicating with the crew prior to the game will help with that. Whereas I never – I never did that when I was, let's say up until high school. I never used anything that it was kind of just like put your gear on, go on the ice and see how the game goes. (P3: Lack of Awareness of Mental Skills Early in Career)

- **Lack of Knowledge Applying Mental Skills**
 - I would say that my limiting factors, like I know about visualization and focus and blah blah blah, but I don't think we ever like learned applicable skills. You learn it by the psychology definition versus the application. I think that's something that never even – in the U18 stuff it was always just presented in like 1 streamlined way and it never like doesn't click with everyone so. (P4: Lack of Knowledge Applying Mental Skills)
- **Lack of Variety in Mental Skills Education from Organizations**
 - And I'm sure – I'm sure it was, I think it was the same presentation maybe. But I think we were presented it again in the female high-performance program because [name removed for anonymity] has that content like she created it and gave it to [name removed for anonymity] sort of thing. So, we've seen it several times. I would, like I said sometimes though the same thing isn't helpful. I think I've grabbed several things from that thing and I'm waiting for a new branch of that if you will. (P4: Lack of Variety in Mental Skills Education from Organizations)
- **Learning Styles Can Influence Mental Skill Use**
 - So for me, visualization works and just like kind of centering and looking at the rink and going through like, “Hey, what are you going to do?”. And bringing those basics into play. But not all people are visual learners, so maybe there's people that listen to like a certain audio track. (P9: Learning Styles Can Influence Mental Skill Use)
- **Limited Conversations About Mental Skills**
 - So I think you know, I think there are like – sometimes there are these conversations that happen, but it's not like, I don't know, we don't – we don't talk about it a lot. It's kinda weird. (P8: Limited Conversations About Mental Skills)
- **Limited Training from Experts and Organization**
 - So, so through [name of expert removed for anonymity], through national high-performance camp in Calgary, and like other than that in terms of formal... like nothing that's coming to my – nothing that's like ringing a bell right now. (P5: Limited Training from Experts and Organization)
 - So, I would say like [name of expert removed for anonymity] and then the national high-performance camp where we had a specific like time slot, like time slots blocked and they specifically said like mental skills or like it was mental performance coach like other than that... nothing. (P5: Limited Training from Experts and Organization)
- **Mental Health Stigma**
 - Because they seem to be – that's a good idea. Like that's a counselor dude, you're going to mental health counseling, but when we reframe it, then people are a little bit more open minded to it. So that will be something that I tell people as well. And I will openly admit that I go talk to somebody and I'm always hoping that maybe that will help someone be like somebody. Yeah, so. (P10: Mental Health Stigma)
 - A lot of people will admit that they're not comfortable seeing well, I go see a counsellor. No no, no, no, we're not there yet. We're getting better society, but we're not there yet. (P10: Mental Health Stigma)
- **Mental Skills Use – Taking Pieces and Individualizing It**
 - But out of all those trainings that I've had access to, I've kind of taken the pieces that work with it or work for me with it out of it, and I've applied them. (P7: Mental Skills Use – Taken Pieces and Individualized It)
 - And then everyone can pick and piece things together that help them make, you know, a process for themselves that helps them succeed. (P8: Mental Skills Use – Taking Pieces and Individualizing It)
- **Mental Skills Should Be Introduced Early but Not Too Early**

- Yeah. And I and I don't mean like the first ref clinic they take. There you know, there's stages to it. So, you know that you start off as like a level 1 or 2, then you work your way to level 3 and then eventually you become an MHP. So, it's like a member high performance, so a member of your province, you do elite hockey in your province. And I think that's where it becomes key of developing these skills and giving everyone the tools that they can use. (P8: Mental Skills Should Be Introduced Early but Not Too Early)
- But I don't – when you're level 1, 2, 3, you're just trying to figure out how to stay out of the way in the puck. You're trying to figure out how to call penalties, like what penalties are to you, things like that. You know, you're just trying to get game play experience. When you get to the MHP and NHP, you distance yourselves from that type of thinking to where you know what a penalty is. You know – you know how to react on the ice and now you need to in the most intense and pressure situations, you need to perform. (P8: Mental Skills Should Be Introduced Early but Not Too Early)
- **Mental Skills Training to Bridge the Gap Between Sub-Elite and Elite Officiating**
 - Yeah, like kids that are deciding to, oh, I want to move in, we – so in [location removed for anonymity] we have just like – you're in minor hockey and you have to kind of graduate, if you will, into the high-performance programming that includes AAA from a certain level and above. And then that branches into the junior stuff and for the female, the USport, etcetera. So maybe not for like the kids in minor hockey, but the ones that've just moved into the HP stuff, there's not really anything to take those HP kids into the national group, if that makes sense? So, we have like lots of good kids provincially and stuff, but they, you know – we have a bunch of that are 17 and are immature and they need to develop a few other skills and it's a lot of like self development for them. I feel like there could be – there's a opportunity for more resources at that level. (P4: Mental Skills Training to Bridge the Gap Between Sub-Elite and Elite Officiating)
- **Mental Skills Training – Important to Continue Refinement of Mental Skills**
 - And once – then once you have those skills, building on them I think is really what takes you to that next level. (P7: Mental Skills Training – Important to Continue Refinement of Mental Skills)
 - I think so, yeah. I think there's always a place to improve on it. I mean we – we're continually working out and doing off ice training, so I – I don't see why we wouldn't continually do like mental training as well. (P7: Mental Skills Training – Important to Continue Refinement of Mental Skills)
- **Challenges of Being a Female Official**
 - When I like – when I was younger, for sure. Like, I would always let people yell at me and I wouldn't do anything about it because I was one – so young and two – a female in a man's world. So, I felt like if I gave like a bench minor penalty or gave misconduct to a player or coach, people would just think that I'm being emotional because I'm a female. So, I tried to act like I had thicker skin, just in terms of like, perceiving that I had thicker skin. I would think that they would have to go, go over the line even more than they would with a male official to show that, okay, now they're deserving of it so that people wouldn't judge me based on my, my gender. (P1: Challenges of Being a Female Official)
- **Mental Training Takes Practice**
 - ...and it's like... doesn't work all the time. It's a still work in progress... (P5: Mental Training Takes Practice)
- **More Mental Skills for Focus Would Have Been Beneficial Early in Career**
 - I started when I was 14, but then I went to university and I played. So, I took a break from officiating for about four years. So early – early on, there's probably lots of mental – mental skills that I could have brought into the game just on the focus part... (P9: More Mental Skills for Focus Would Have Been Beneficial Early in Career)
- **Need Better Communication Skills Earlier in Career for Addressing Problems**
 - But I wish I had those – I wish I had some background on how to communicate better in situations like where you're instead of escalating situations, you're trying to get to the core

of what the problem is. (P8: Need Better Communication Skills Earlier in Career for Addressing Problems)

- **Need for an Array of Mental Skills**
 - That's something – that's just something, like I said, like I only have a very few things on how to control that and like, yes. Taking deep breaths only goes so far, right? (P4: Need for an Array of Mental Skills)
 - I think we just need to use all of the skills in general. (P7: Need for an Array of Mental Skills)
- **Need for Mental Skills Early in Career**
 - Early on in the game for sure, probably would have, yeah. Whether it's like I said, during the anthem, just kind of taking some deep breaths and just, you know, get the heart rate down, just kind of slow everything down a little bit. (P6: Need for Mental Skills Early in Career)
 - So, I think – I think, yes, I strongly agree that mental skills is huge at the national level. But I also think that there's that level before, which is the like provincial level where that could help those officials push into that next level and give us – you know, the more better officials we have, the better for hockey itself, right. (P8: Need for Mental Skills Early in Career)
 - But I do think that there's – if there is a toolbox given to you kind of at a lower level, you're going to take that and run it with it and keep honing it through your career. (P8: Need for Mental Skills Early in Career)
 - So I think it's just when you're a kid, you don't have that same confidence and knowledge that you do as an adult, to recognize – the kid you know that's wrong, but you don't have the tools to deal with it. (P10: Need for Mental Skills Early in Career)
- **Need Mental Skills Training at Young Ages**
 - INT: Yeah, and the follow up for that, so – so you mentioned I guess younger when you were younger would have been a time that you wished you kind of had more access to these things? P1: Yeah, for sure. (P1: Need Mental Skills Training at Young Ages)
- **Need More Training on Application of Mental Skills**
 - ...or like if anyone and like I said at the beginning is, everyone picks and chooses different pieces. So, sometimes if you have the same or if you only have one person talking about mental skills sometimes it gets presented in the same manner. So it's not applicable, so it is a little bit of like trial and error and I guess that's why we always ask for it is because every time someone maybe talks for an hour you maybe pick up a couple things, but I think you always want a couple more. And I think that's one of the things that it's a little bit harder to find direction. It's very easy for a trainer to be like, “Oh you need to develop this and this is how the hockey stride works and so we should do this and add this”, and it's way easier, just go and be like yeah that's fine and then apply that. It's a little bit different, like I said, just due to the uniqueness of everyone that we need more application for the mental side of it. (P4: Need More Training on Application of Mental Skills)
 - But like I said, I never really learned like the application of them. (P4: Need More Training on Application of Mental Skills)
- **Need Resources to be Able to Give Mental Skill Training**
 - ...obviously we need resources to be able to do this and like people to be able to coach and funding for that... (P9: Need Resources to be Able to Give Mental Skill Training)
- **Positive Reinforcement from Organization**
 - Yeah, and it's funny because the supervisor was there as well obviously. And so, we get a game report which is really nice just to have a physical copy of like the ins and outs of the game and like what to focus on what, what was positive, what was negative in the game. And so, there was a big write up on like – really good job, like you know, dealing with the situation and being able to bounce back. So, it was nice to see that and be like, okay,

yeah, we handled that as best as we could, so. Yeah, it's nice. (P3: Positive Reinforcement from Organization)

- **Requisite Mental Skills Differ Among Officials**
 - I would think certain mental skills would be more important for different officials. Depends what level of hockey you're officiating. Is it a tournament? Is it playoffs? Are you a referee? Are you a linesperson? So different, yeah mental skills and stuff would be needed for – for each person's role. (P1: Requisite Mental Skills Differ Among Officials)
 - Some people I've skated with who are linespersons say for some reason think they don't need to pay attention when –when it comes to like penalty calls. Like, oh, I'm just calling icings and offsides... like no, like if there's like – I'm making a penalty call or maybe I didn't make a call and there could have been a major penalty... like you can report that to me and I can call it. So, you need to like pay attention. And so, some people just think they can get the night off if they're not having the bands on – the red arm bands. (P1: Requisite Mental Skills Differ Among Officials)
 - But, but yeah, it's definitely different. But like... I don't line really like we – we lost a lot of officials in this – in [removed for anonymity] because of COVID, so a lot of the hockey's either two-official system or four-official system. So, I'll do 2 official system games like low – like minor hockey. So, I'm reffing and lining at the same time but I mostly just ref. But... yeah, I think... I think different, skills are needed for based on your position in the game. (P1: Requisite Mental Skills Differ Among Officials)
- **Routines are Individualized**
 - When we did do a panel for that rivalry game and everyone said I do this before a game and I do this and I was just like, I just kind of throw all my stuff in the bag and zip it up and I was the only person that said that there's five of us. So I know that's different for everyone. (P4: Routines are Individualized)
 - I think, well, obviously everyone's going to have different mental preparation and mental skills that they need to get themselves prepared... (P8: Routines are Individualized)
- **Self-Talk – Importance of Avoiding Negative Self-Talk**
 - I do self-talk anyways, I do try to keep it – sometimes if I can't feel positive, I'll say to myself, just keep it neutral. Just stay away from the negative self-talk, I feel like the negative self-talk is incredibly damaging. (P10: Self-Talk – Importance of Avoiding Negative Self-Talk)
 - And if I can't be positive, because I've made a mistake, it's – I don't want to beat myself up about it. Like, stupid girl, why did you do that? It's happened, move on, right? You wouldn't say it to your best friend, so don't say it to yourself. That's kind of my motto, right? (P10: Self-Talk – Importance of Avoiding Negative Self-Talk)
- **Suggestions for Teaching Mental Skills to Officials**
 - But then – then I think as like as we go up the levels that – that's the first introduction give those officials like a tiny little brief introduction. I mean the 11-year-olds probably aren't going to take a whole lot out of it. But then as you go up the ladder and you – you go to some more of the more elite camps, I've had where there's been a sports performance consultant come in and talk to us and I find that really beneficial and to continue to introduce a little bit more at every level you go up. (P7: Suggestions for Teaching Mental Skills to Officials)
 - ...or like we do – we do seminars with young officials and it can be even just a tiny little piece of that for the introduction of – maybe we're going through the maltreatment rule. And spin off of that is you're going to have coaches that are upset with you, coaches that are whatever. Here's some tools to deal with that. You have the rule book tools, you have your teammate tools, but you also have these mental training tools as well to go with that... (P7: Suggestions for Teaching Mental Skills to Officials)
- **Tailoring Opportunities to Officiating Aspirations**
 - Some guys, it's like hey, you know, I just want to you know ref a little bit just to make a little bit of money. It's like okay, perfect. And there's some guys like, you know I want to

work as many hockey games as I can and I want to you know try to down the road, I want to work, you know work this level of hockey. Well, now if we kind of see that okay, this, you know this official wants to – has aspirations to work high levels of hockey, well then maybe we'll put them in situations that they can get more experience that's going to help them along their path as well. So kind of get a read on the officials okay well you know, what do you want to do with it? If some you said some officials would want to do it just as a part time job, that's okay, that's totally – that's totally fine. There's nothing wrong with that. And there's some that want to take it maybe a little bit more – not necessarily more seriously, you know, but they have aspirations to continue on their officiating path. And we'll put them into situations, try to get them to succeed or, you know, have like an officiating coach or a supervisor go out and watch their games to, you know, help them with some feedback and say, hey, well, hey, let's try this, let's try that. And, you know, try to help them add more tools to their toolbox so they can become successful down the road. (P6: Tailoring Opportunities to Officiating Aspirations)

- **Various Aspects of Pre-Game Preparation to Consider**
 - So, there's different ways of when you're prepping as an official. (P9: Various Aspects of Pre-Game Preparation to Consider)
- **Visualization – Video Clips Add to Library**
 - And I think too, when you get a video clip like that, it adds to your visualization library where you're thinking, okay, I didn't make a call in this situation, the next game I do. I have a conscious idea of the that clip, like that clip is in my head. And I'm thinking, okay, if that happens, this game, I'm prepared now, you know, things like that. (P8: Visualization – Video Clips Add to Library)
- **Wished for Better Communication Skills Earlier in Career**
 - I wish I had a better understanding of communication at the core of things too. You know, obviously a key piece of my visualization and mental skills is knowing how I'm going to communicate with somebody. (P8: Wished for Better Communication Skills Earlier in Career)
- **Wished They Learned About Controlling the Controllables Earlier**
 - ...but after university and getting back into officiating, I think definitely kind of in that first year, just being able to really focus on the controllable aspect of it. Like in that first year of officiating, you're getting back into it. There's a lot to learn when you start out being an official or come back into being an official. It's different than playing. There's a lot of crossover skills just by nature of being an athlete, still competing, but I think having more of that mental strength or mantras or just skills to say like, “Hey, control what you can control and then everything else outside will fall into place as it should. And if it doesn't or doesn't as fast as you want it to, then that's okay and it's not something that you can control”. (P9: Wished They Learned About Controlling the Controllables Earlier)
- **Visualization – Less Useful for Linesperson**
 - Whereas that doesn't happen as much, like just lining it. I'm not gonna watch the puck go across the line in my head a million times. I don't find that as helpful. (P4: Visualization – Less Useful for Linesperson)
- **Visualization – Limitations**
 - I don't do a ton once the game starts because you can't just sit back and visualize, you're kind of involved in it... (P7: Visualization – Limitations)

Appendix F

Mental Skills Use

Sub-Theme 1: Benefits of Mental Skills Use

Overall Increased Performance

- **Benefits of Pre-Game Physical Preparation**
 - My preparation like before the game would... definitely helps my performance. That's why I do it. Like if I don't warm-up and do stretches—like sometimes if I'm doing like a minor hockey game in town, I might not warm up before the game because you only have to be there like half hour before instead of an hour before for elite hockey. So, if I don't like warm-up and stretch like I can tell I don't have like that jump in my, my step right off the bat when I'm skating and I'm not loose so that can hinder my performance if I don't warm up. But yeah, anytime like a warm-up, it helps 'cause my legs can go like straight back when I'm going for a stride and my skate 'cause I'm loose and limber and yeah. (P1: Benefits of Pre-Game Physical Preparation)
- **Controlling the Controllables**
 - Like it's just me out here and I'm a 5-foot six woman with 6-foot seven men and there's not a whole lot I can do about that, like I can only keep up and see what I can see. So yeah – I think also just being more physically prepared going into that, I was – I was in great shape, there's no doubt about it. But me and my supervisors and coaches did tell me that I needed to be – I need to be bigger. Because I'm only 130 lbs, I want to be about 155, and I wasn't there yet and so I could have just been a little bit more like confident and bigger, but nothing I can really do about that so. (P2: Controlling the Controllables)
 - ...you know, I, no matter how hard I work, like it's kind of –who they hand contracts to or you know, full time jobs to like, it's out of my, it's out of my hands. So, like, one mistake isn't going to ruin my – ruin my – ruin my day, ruin season. (P5: Controlling the Controllables)
 - ...and you know, once that puck drops, it's like, “Okay, we got a job to do” and let's not worry about, you know, kind of some external factors because we can just control what we can control. (P6: Controlling the Controllables)
 - INT: So, controlling the controllables then eh? P6: Yep, exactly. And that – and that all feeds back with like the, you know, pre-game preparation. And if it was a crew, then talking about, like I said, what happened, you know, last time these two teams played or any other situations. And then physical preparation and all that stuff, it's all kind of encompassed into that as well. (P6: Controlling the Controllables)
 - And then yeah, just kind of just once again, control what we can control... (P6: Controlling the Controllables)
 - So being able to once again kind of control what you can control. [With regards to physical fitness] (P6: Controlling the Controllables)
 - Like you can't control the outcome of what games you skate all the time, that's unrealistic because there's so much going on outside of what we see as officials. But it's controlling how you perform on the ice, your effort output, do you take the feedback and putting it into practice. (P9: Controlling the Controllables)
 - Yeah, it's like when you go out on the ice, I can control how hard I skate. I can control to an extent, my positioning in the zone. Sometimes you're going to get pushed out because the players, that's fine. But I, at a baseline, I can control all of those items and I can control my effort and what I'm doing on the ice. Whatever happens outside of that, if I'm happy with everything that I put into the game and how I skated... (P9: Controlling the Controllables)

- But if I controlled everything that I can put into the game and I did my absolute best, then I have to be happy with that. And whatever happens outside of that is okay. But that's stuff that I can't control. (P9: Controlling the Controllables)
- Because that's within my control. (P10: Controlling the Controllables)
- Because the injury wasn't going away, I'm gonna have to work through the injury. So, what am I going to do about that, while I'm in the game, I can't control that, but I can control everything else. (P10: Controlling the Controllables)
- **Goal Setting – Positive Effects**
 - INT: Yeah. So that would be. It'd be safe to say that that had a positive effect on your overall..? P1: That had a positive effect, yes. (P1: Goal Setting – Positive Effects)
- **Mental Skills Can Lead to Better Performance**
 - It's like, well, if you can have all that stuff under control and the puck hits the ice, now you can just focus on doing your job, whether it's referee or linesman, focus on the job you need to do, not worrying about, you know, my skating – am I fast enough and this and that. So, if you're prepared to do it, then the game kind of slows down a little bit for you, and then it's easier to see – easier to see calls as well, or easier to – easy to see plays to make the correct calls. (P6: Mental Skills Can Lead to Better Performance)
- **Mental Skills Influence Performance**
 - INT: Can you describe a time when using mental skills directly influence your performance, whether that be any of the specific ones we've talked about so far or a combination. But I'm looking for something on the long lines of you implement something and you notice direct performance influence. P7: Yeah, so I would like – almost every game. (P7: Mental Skills Influence Performance)
 - So then at that point it was just like, “Okay, put it out of your mind. If the coach wants to talk about it, we can talk about it. But I like, I support my own call. We're good”. Like we're back on track going into the next – excellent. (P7: Mental Skills Influence Performance)
 - I – all the time I would say. Like definitely most recently at the tournament or even in games that I went over on the weekend. (P9: Mental Skills Influence Performance)
- **Mental Skills Use Influences On-Ice Behaviours**
 - And then on the ice, remembering that because now it's just kind of becoming muscle memory almost because you've practiced going through that process in your brain, being able to do that. And then since you have that focus and attention to detail, it's like, okay, wait, am I in the right place inside the line? Am I too close, too far? Like, was that the best view of the spot, or can I adjust in the moment? And being able to use that. (P9: Mental Skills Use Influences On-Ice Behaviours)
- **Not Overthinking Leads to Better Performance**
 - Where we've had a lot of officials too that have kind of been in a similar situation where you know, once they almost kind of maybe – stop trying so hard during the game, that they kind of feel like, okay, now the game it's – everything just seems to kind of slow down. Everything just kind of seems easier to see on the ice and read, react, and communicate and just kind of just the little things like that I think is probably what – probably what is probably the biggest difference now for when I was you know – 6-7 years ago and I was still working the [league removed for anonymity] League. (P6: Not Overthinking Leads to Better Performance)
- **Positive Effects of Mental Skill Usage**
 - And once I started using them, I found that I was able to maintain that focus and that able ability I guess to like rebound from those errors way quicker. (P3: Positive Effects of Mental Skill Usage)
 - Yeah – yeah totally. So, I think again it goes back to like – I like comparing myself, like, the last five years versus the last ten on my overall performance and my awareness of what mental skills are in those last five years specifically. I've seen like, I guess if we're like looking at a graph, like, success over time – it's just exponentially grown since I've

- implemented those mental skills into my day-to-day performance. And so, from there, like that's a perfect example of why mental skills help me. (P3: Positive Effects of Mental Skill Usage)
- Yeah, definitely, definitely, definitely helped, definitely helped. (P5: Positive Effects of Mental Skill Usage)
 - But yeah, no, it, definitely – like, definitely helped. Definitely helped big time. (P5: Positive Effects of Mental Skill Usage)
- **Preparation and Experience Lead to Improved Mental Performance**
 - And that's kind of where your preparation whether it's from number of games you've worked or experienced on the ice or different levels of hockey that you worked, knowing the rule book like I said with my example for the World Championships like you know, being able to kind of know all these things when you see things happen – you know what the correct play or what the correct call or how to handle different situations in terms of on ice and what penalty goes on board and you know all those little things. (P6: Preparation and Experience Lead to Improved Mental Performance)
 - **Remaining Relaxed Helps with Game Management**
 - And I think probably that's one thing I probably hear you know, pretty frequently from supervisors and stuff is that I do kind of keep a pretty even heel from start to finish. Where then if there's times where you need to you know, get a little more excited if you need to you know, bark at a player or whatever, then it kind of has a little more of I guess – more impact from the player's perspective. It's like well like, woah you know, this official is getting a little heated, a little more emotional, then it has a little bit more meaning. But if we're, you know – if we're up here the whole time then it kind of loses its, you know messaging delivery. It definitely, you know, changes that a little bit too. (P6: Remaining Relaxed Helps with Game Management)
 - **Visualization – Primes Good Performance**
 - It helps a lot, like of course I have games where I show up a little bit late, I'm unable to do my visualization or I'm just not feeling that – that day and my performance will – will reflect whether I do my visualization or not. So yeah, I definitely think it helps and it just helps me with picking up those little – little infractions that you wouldn't normally see because I've already seen it before. So those are the kind of things – I guess it just primes me for making certain calls for the game, which is not a bad thing, I mean... I have a loose standard, but those ones are the ones that I typically will try and find so. (P2: Visualization – Primes Good Performance)
 - I find personally, at least if I'm not – if I don't do that [visualization], I'm not as into – when it comes time to being in the actual game. (P3: Visualization – Primes Good Performance)
 - And then from there like I said, I'll kind of go through some visual stuff on the, you know, on the ice during the anthems just kind of get my, you know – once again kind of get my brain thinking about hockey and kind of shutting off all the outside world whether it's you know, work or anything else that's going on. It's just hey, we're here to focus on hockey right now and that's our, you know, that's the job for the next 2 and a half hours is to focus on this game. (P6: Visualization – Primes Good Performance)
 - And it puts me in a in a good spot to know that I'm going out there to do a job and I know it seems simple, but it's just it's one of those things where if I know what a good penalty is, then hopefully that translates to a good call on the ice or a good no call in that sense. (P8: Visualization – Primes Good Performance)
 - INT: So visualization then for you was like that main piece of kind of getting your mindset to where it needs to be before you kind of take the ice eh? P8: Yeah, yep. (P8: Visualization – Primes Good Performance)

Arousal Control

- **Arousal Control – Alone Time to Reset**

- I'm also like an only child so that's always just been like a thing is I can work through a lot of those things just on my own. I don't overly need to be with a bunch of people, but that would probably be my thing is, and like you said, if I'm – if stuff is going really wonky and I feel like I can't control, I usually try to like remove myself from the situation or whether that's like just going to a different bathroom. Just honestly, sitting there or standing there or warming up separately by myself or something like that, I've done both of those things. It just helps you reset, and honestly probably if it's someone – someone particularly you're mad at or upset at, then it avoids any like further conflict or regretting a regrettable action or something like that as well. (P4: Alone Time to Mentally Reset)
- **Arousal Control – Being Prepared Helps Combat Pre-Game Anxiety**
 - INT: So, so do you feel for you then that a big part of kind of combating the anxiety or the arousal is just that preparedness? P8: Yeah. Yep. (P8: Arousal Control – Being Prepared Helps Combat Pre-Game Anxiety)
 - But I think that preparedness, that – that mental calmness, trying to get yourself into a state of a state of calm before you get on the ice, really helps, you know. (P8: Arousal Control – Being Prepared Helps Combat Pre-Game Anxiety)
- **Arousal Control – Better Mental Skills to Decrease Excitement and Increase Patience**
 - And I think something else just more related to being in the game or some of that anxiety creeping in or just jumping at – jumping at a call, there's time at Nationals where I did make the wrong call. It happens. But I was too – I was like caught up in the moment and I was like, oh, I'm going to – I'm going to wave off this icing. And it was like if I had taken that patience and just that extra second and like – to take a second, either breathe or just a little mantra to say like, “Hey, patience, patience”, then I would have made the right call, which would have been to call icing. Or – another situation that happened on the weekend, I waved off at icing and I blew my whistle at the same time. And I was just like, I was so excited, 'cause I waited and I was like, oh my God, I did it. Like I implemented the patience, but then I was like, why did I blow my whistle as I was going to wave off? So again, a little bit of like – we took the puck to center, it was really like, hey, yeah, like liney messed up here. All good, but it would have been nice to like just continuing that those mental skills and bringing them in consistently in those situations too to say, “Okay, you're super excited that this happened, but take a second and calm down so you can finish out the right call”. (P9: Arousal Control – Better Mental Skills to Decrease Excitement and Increase Patience)
- **Arousal Control – Breath Control**
 - But it was really, really tricky to kind of get back in that game. And so instantly, at first of all, I had to, like, reassure myself that personally I'm okay and everyone else is okay because it was like we were all shaking, like we didn't know what to do. So, my initial reaction was to kind of just take a second for myself and I was – while I was still on the ice, I kind of took that second to like take some deep breaths and just try to like refocus into the game. (P3: Arousal Control – Breath Control)
 - Just probably like if it's during like the anthem or whatever, like I said, just taking some deep breaths and just kind of just you know, try to get the – keep the heart rate down. And like I said just you know, trying to maintain – maintain composure. (P6: Arousal Control – Breath Control)
 - So just, yeah, trying to take some deep breaths... (P6: Arousal Control – Breath Control)
 - And then if at any point during the warm-up or on the ice at all when I – when I feel myself getting worked up or maybe even too elevated of a state, I'll use breathing techniques to kind of help bring myself back down. (P7: Arousal Control – Breath Control)
 - Yeah, absolutely. So, if I'm going into a game where I feel stressed, because the game has a lot of meaning, or if I'm, you know, just a little bit anxious that day, I will use – I don't have a set time – I'll do a slow inhale with a very long exhale. And I'll do that for a couple minutes whether I can do it, I'll do it while driving, if I can sit in a quite place and do it

just to help bring down some of that stress response in my body, bring down that heart rate, bring down some of those hormones that we get – the cortisol and everything that we get when we're stressed. So that'll be if I'm going to again, where I'm like, I feel a little stressed out today, for whatever reason, I'm going to focus on that breathing, just knowing it's going to help engage some of that maybe my nervous system and bring it down a little bit, so that would be specific. During the game, for breathing of course, you don't have time to do that. So sometimes all it is, is one breath. So maybe I've gotten back to my blue line, my partner's dropping the puck, I'm like, man I didn't like that call, or I feel a little bit anxious right now, and I can't quite put my finger on it. I'm just going to do the same thing, but maybe it's only one breath. So a deep inhale through my nose, and then a really slow exhale out and I'll focus on something specific on that play, whatever my job is at that point. And I don't do that during play as much, if I do, it's not conscious. But I'll do that consciously just to almost bring myself down. (P10: Arousal Control – Breath Control)

- The more nerves I have, the more breathing I do. (P10: Arousal Control – Breath Control)
- **Arousal Control – Breathing to Reset After Mistake**
 - ...and now I'll use it a lot if I've made a call where I'm getting a lot of flack over it and I just – the self-talk isn't working and I need – I need like a quick reset. That's like my reset button (P7: Arousal Control – Breathing to Reset After Mistake)
- **Arousal Control – Experienced Benefits from Breath Control**
 - I'm a big breathing person. So, I kind of I buy into that I believe in that a lot. (P10: Arousal Control – Experienced Benefits from Breath Control)
- **Arousal Control – Meditation**
 - I meditate. I guess it's like, for me that could be mental skills training – I don't know. But I find that has been a way in the recent, like last two years that I've kind of like – I've always done yoga, but I've just recently, like within the last two years, started focusing on like, meditating more. Which kind of allows you to take a step back and just really focus on like, how you're feeling and like, not letting your minds – I don't know I feel like my mind's always thinking of something and I can't really shut it off. And meditating this one way that I've learned over time that I can, as I practice it, I can go longer and longer in that meditative state. (P3: Arousal Control – Meditation)
- **Arousal Control – Moving Past Nerves**
 - Umm I'll, sometimes like, I might get nervous before a game, even though I've done the level it's just like – like I said, like a Canada – US game, like it's like... I'll be excited and nervous at the same time, but as soon as I step foot on the ice, it's like my whole feelings change and I'm – I'm in the zone. And I know how to – to like put my feelings aside and separate and just do the game. So those feelings will go away. (P1: Arousal Control – Moving Past Nerves)
- **Arousal Control – Multiple Mental Skills to Control Anxiety Level**
 - So, then it's managing those nerves. So for me, managing the nerves is the breathing techniques and positive self-talk. Positive self-talk is a big one for me. (P10: Arousal Control – Multiple Mental Skills to Control Anxiety Level)
 - ...like I – before that, obviously when after the crowd booed, when I'm standing on the goal line, before the pucks even dropped after the penalty call, I did my 6-2-7 like take a deep breath and re-center yourself. But then I still noticed it affecting me for the next couple minutes, especially after they got scored on. So then that was when the TV time out, I kind of got that grab for that external validation. And then at the end of the period between periods, we talked as a team again. (P10: Arousal Control – Multiple Mental Skills to Control Anxiety Level)
- **Arousal Control – Physical Cues**
 - I think for me like it is after I make a call that I just don't agree with. Like sometimes your arm goes in the air and then you immediately go “Why did I do that?” like you know? So in those kind of moments – like those are the moments where I have to take a deep breath

and let it go. Like I will physically like – unclench my hands and let it go – let it go behind me. So that's a big one for me. (P2: Arousal Control – Physical Cues)

- **Arousal Control – Self-Talk**

- I just start going back to like – like talking, like starting internal talk during the game though, I try to kind of like wrap myself up but keep myself centered. Like trying to keep myself upbeat, high-energy, but like try to be like very relaxed. (P5: Arousal Control – Self-Talk)
- INT: So like, do you ever tell yourself certain things if you need to, kind of like – you may be feeling a little flat, like come on let's go. Or do you ever tell yourself maybe you're really high energy like it's okay, like deep breaths like those kinds of things? Like do you ever give yourself self-talk like that? P5: Yeah, definitely. (P5: Arousal Control – Self-Talk)
- But the internal talk definitely – definitely. If I feel flat like, I will continually tell myself, “Okay, gotta get going here need to work harder. Need to work harder”. Or if I'm feeling – like feeling very high energy or high pressure, I definitely – then I'll try to talk like remind myself, “Okay, like next take a deep breath. Next, face off. Like take deep breath. Try to relax get back into a like a normal kind of cadence or rhythm”. Yeah. (P5: Arousal Control – Self-Talk)
- And then I guess how I kind of brought myself you know down to kind of be you know more of a level-headed perspective is just once again kind of self-talk and being like hey you know, you're here for a reason and enjoy it. (P6: Arousal Control – Self-Talk)
- And then at that point... I just like – I really like to have mantras during games. Like, typically for me – it's just another hockey game, I say that a lot. It's just another hockey game. This is not a reflection of you and a safe and fair... like I'll tell myself, “Safe and fair. Safe and fair. Safe and fair”. (P2: Arousal Control – Self-Talk)
- So yeah, a lot of like, safe and fair. Safe and fair. And so, for this game, I distinctly remember just being like... “It will come to you. Like the game will come to you, the game will come to you”. And I just have to let myself – like just the game was going to come to me. I cannot prepare like just let it happen. So, like mantra is very helpful for when I just can't prepare. You just have to let it go. (P2: Arousal Control – Self-Talk)
- I think it's just bringing it back to like the simple things like you know if you're at the event, you're at the event for a reason. If you're skating, a game – big game, or just like a or – whatever type of game it is at that particular event, it's just trusting yourself and trusting that you've made it here. You're part of the group and just knowing that you can – you can be there, you should be there and that you are going to do a good job. And then kind of just bring it back to the simplicity of the game itself. Like there's going to be a hockey game, there's going to be offsides, there's going to be goals, there's going to be penalties, there's going to be icings. And you know how to call all of those and just focus and be in the moment. And kind of just take yourself out of that bigger picture and remind yourself it's just a game of hockey. It's an important game of hockey, but it is a hockey game that you've done 1000 times before. (P9: Arousal Control – Self-Talk)

- **Arousal Control – Taking in the Environment Helped Ease Nerves**

- I mean, one thing that probably helped, I guess, helped a little bit was, day one of games, I was a standby official for the first game of the tournament. So, it was nice to be able to kind of sit in the stands and like be part of, you know, be part of the game but not actually being on the ice. But just to kind of soak everything in and the okay, like, you know, like for me, like sitting there watching like it was Czechia and Slovakia played game one in in Riga and it was like what – a 4:00 game on a Friday or three o'clock game if it wasn't on a Friday. And it's like sold out like 50/50 Czechia fans, the other half a Slovak and like just going nuts and like – I like remember – literally remember saying there like “Holy shit, like this is fucking cool”. So just to kind of soak it all in, but then be like, okay, well let's, you know, bring it back down. You're here. Tournaments actually started. It feels more real now. But just be able to kind of watch the game and kind of get a feel for the speed

and just kind of – just to I guess kind of watch the hockey, you know, not obviously on TV, but kind of watch it, you know, in person. It's way different than watching on TV. So it's nice to be able to get a little bit of the feel for, you know, the arena, the atmosphere, before being on the ice just so everything kind of feels more comfortable and more like a normal game. (P6: Arousal Control – Taking in the Environment Helped Ease Nerves)

- **Arousal Control – Taking Things One Step at a Time**
 - One good quote that always sticks with me when I do feel like I'm getting – when I, like kind of overwhelm myself a little bit, is you can't eat an elephant in one bite, but you can if you take small like small bites. So like, it definitely applies to officiating I believe. In my opinion especially like, I just finished three games and three nights and like I had to travel like 4 1/2 hours yesterday for the game and then drive back and then go to work today. So, it's like when you – I mean, when I think about it on Thursday, I get like a little overwhelmed I'm like, I feel like I need to make sure that I'm prepared physically, prepared mentally. And like it's like, how am I going to be able to like – what happens if, you know, I get dehydrated. Like what if, like – but then if I slow it down, you focus on the game Friday night, you know, get through the, you know, work the first period, 'kay reset. And then so I – that's the big thing that I guess I haven't mentioned yet so far. But trying to break it into smaller increments helps me mentally with – I can kind of be – like anxiety and just like overwhelming kind of factor the pressure that I put on myself. (P5: Arousal Control – Taking Things One Step at a Time)
- **Arousal Control – Talking to Peers as a Distraction**
 - And so, like mentally there, I try to just get comfortable to my surroundings and then if I have any anxiety or nervousness, usually then it's – I found that it helps by kind of just like talking to the other guys, talking to about random stuff. It couldn't even be about the game because some guys don't like to talk, some guys won't really talk about it until closer to. (P5: Arousal Control – Talking to Peers as a Distraction)
- **Learning How to Handle Frustration**
 - And so, definitely like this year I would confidently say I've like, I mean knock on wood because we're only in November, but I've matured from throwing things... (P5: Learning How to Handle Frustration)
- **Mental Skills Use – Mitigating Negative Self-Talk**
 - So, I do sometimes like talk to myself about it and I think about like, “Oh, if I haven't made the [league removed for anonymity] by this time, then I won't make the AHL, and if I don't make the AHL, then I won't make the PW... and then it's, blah blah blah”. So, a lot of that would be like arousal control just for like my generalized mental health... (P2: Mental Skills Can Help Reframe Negative Self-Talk)
- **Mental Skills Helped Deal with Pre-Game Anxiety**
 - Yeah, definitely last like December I was working – I don't know like I – it was end of November beginning December, I got really bad – started getting really bad anxiety and almost like panic attacks like out of nowhere before games and stuff. And using the skills of like the different keys of like reminding myself okay I'm good at XY and Z, I'm like you know – I'm good at like – I'm good at faceoffs like I'm like, I'm good at different things. So like those keys and the kind of focus – really focusing in on the pregame preparation, helped me like kind of – last December like right before Christmas when you know there's so much outside stuff going on, so much stuff going on like you know, with family and like the holiday season and whatnot. I just kind of really like, I put my phone away early. I got to the rink early and I really just tried to focus on, here's the things that I'm good at. I'm going to like, I you know, got into that warm kind of comfort and mindset and I just tried to like, remind myself like just to kind of go back to like the have fun – just have fun. Like, this isn't like a do or die moment for you or anything. (P5: Mental Skills Helped Deal with Pre-Game Anxiety)
- **Mental Skills Helped Navigate Stressful Situation**

- So that was just something that like I learned through there that helped me from probably giving up honestly at some point because like I said, I was the only one and I could realistically, I could make that go away but just blocking off my schedule and not accepting a game. But I was able to kind of like work through that and honestly probably really improved just as an official with mental strength there in that in that year just from doing – just from learning something like this, as simple as that at the time and it's evolved to what I use now. (P4: Mental Skills Helped Navigate Stressful Situation)
- **Mental Skills Used in High Stress Situations**
 - I was like – I would say with the reading stuff like that was just like an example and then now it's – I don't necessarily use the same thing unless I'm feeling like really in – in distress. (P4: Mental Skills Used in High Stress Situations)
- **Reflecting on Past Experiences to Stay Calm**
 - So, I think that was probably one game for me that helped out. I was still a linesman at the time. I was – I guess 12 years ago now. So that was probably one thing to be in you know in – because in kind of my career well now I've, you know it's a big game in front of 5000 people. It's like okay, well you've, you know done a game that's had twice many fans there. So kind of being able to kind of work those opportunities and you know, bigger stages, bigger atmospheres, bigger environments will help you kind of down the road where it's like okay, well I've been here before, I've done that. So it's just kind of, it kind of helps settle some of the nerves in a little bit. (P6: Reflecting on Past Experiences to Stay Calm)
- **Remaining Calm – It's Just Another Game**
 - But then once the puck drops, like I said, it's just, you know, we kind of just need to treat it like it's any other hockey game, right. There's two teams, it's, you know, it's no different than any other – any other game they've worked, it's still hockey. (P6: Remaining Calm – It's Just Another Game)
- **Self-Talk – Cue Words to Ground Yourself**
 - ...it's, “players, puck, goalie”. And that's like just to kind of ground yourself in the game. (P9: Self-Talk – Cue Words to Ground Yourself)
 - ...so I'll like double tap the boards if I'm close to them and just say like players, puck, goalie, like where where's my focus, what am I looking at? Like just kind of grounding yourself and bringing you back into the game. Because sometimes when you're out there, a lot can go on and then you can just find yourself like focusing on way too much on the ice. So, it's like okay, where's where are the players, where's – where's the puck, what the goalies doing? (P9: Self-Talk – Cue Words to Ground Yourself)
- **Self-Talk – Motivational**
 - Then I'm able to just do the internal talk like, “Okay, like I need to get going here because I am not going to be like outworked or kind of be like second to anything I need to get – I need to get going”, (P5: Self-Talk – Motivational)
- **Used Mental Skills to Overcome Anxiety**
 - So, I remember that being the last game that I've – most recent game that I've skated where my nerves are actually almost taking control of me instead of me controlling my nerves. The game went really well, I'm in the league. But, I really remember constantly having to be check on myself, because I was still nervous even in that third period. (P10: Used Mental Skills to Overcome Anxiety)
- **Visualization – Arousal Control**
 - ...but definitely I've used that in the past and it's like been a major help for me in terms of helping any like anxiety that I've had before, nervousness. (P5: Visualization – Arousal Control)

Increased Preparedness

- **Advanced Preparation**

- And yeah... thinking about like, my upcoming assignments that “oh I have these games this weekend. Haven't seen this team, but I've seen this team and you have some assholes on the team, so watch out for them”... and I'm always – I'm always thinking about reffing. (P1: Advanced Preparation)
- I would say like on the day leading up to a game probably. (P4: Advanced Preparation)
- But for example, I'm trying to think... I think it was last weekend I skated Friday and Sunday and – Friday, Sunday, Tuesday. So, Thursday has a little bit of thought. It obviously just cut – it starts naturally just with people asking travel and stuff, but then you start to think about the teams and whatever so that that gets like that ball rolling in terms of reflection, I guess, if you will. And then I usually think about like the partner I'm working with probably that day as well. (P4: Advanced Preparation)
- And then the whole get good sleep, eat good food so that you feel physically good. (P7: Advanced Preparation)
- ...and I'll do that with regular season games where I know it's a rivalry or I know that there's been something in the past game that – that's maybe going to be a more challenging game. Just that – that whole awareness of when the game is going to ask more out of you and you know that going into it. I'll tend to prepare a little bit more, yeah. (P7: Advanced Preparation)
- **Advanced Preparation – Information Gathering**
 - And so then once again, that kind of helps with our mental prep and kind of knowing personnel, but just kind of knowing either certain I guess events or plays that happened in previous games. So we can kind of bring that, not necessarily bring it into our game, but just be mindful of like hey, this might happen with this team or this player. So we're able to kind of react and if we need to, you know, penalize it and stop that – stop that from happening. (P6: Advanced Preparation – Information Gathering)
 - I would say the big, the most – more important games where I truly try and prepare mentally for them would involve some video like some more, I would say – what do you call it? Research of the upcoming game so that I feel prepared knowledge wise of the situation that I'm going into with the teams, with the coaches, with playing history, team history, whatnot. Earlier in the day or the night before. (P7: Advanced Preparation – Information Gathering)
 - I mean, whether it's just kind of watching the box scores, watching and see what the scores are and just trying to get any sort of information from past games that might carry forward into the – into the next playoffs that you know teams play back-to-back or you know, they're playing just one team. So, it's kind of easy to keep tabs on that. (P6: Advanced Preparation – Information Gathering)
- **Communicating with Peers Enhances Performance**
 - Cause for us I guess you know, the more information we share is as officials it's just you know, it's more knowledge for us and it just makes our whole team better. So, I would say probably more of the, you know, definitely more helping side of things would just be just the communication sharing and information sharing. (P6: Communicating with Peers Enhances Performance)
- **Communicating with Peers – Going Over League Specific Rules**
 - ...because there's different leagues that officials work too. So, this is even like a reminder, like if we're working like [league removed for anonymity] games out here, like it's not, you know, probably maybe do one, maybe two games a month. So that's one thing we'll talk about before the game as well, just to make sure that all the rules are, you know, we're up – we're up to speed with the rules. So, if there is any situation that comes up, we've kind of already chatted about it, so we're not kind of sitting thinking, oh, you know, oh shit like what, you know, what do we need to do in this situation? We've already kind of talked about it and kind of get our mind, I guess, kind of adapted for that, for that game or for that league that night. (P6: Communicating with Peers – Going Over League Specific Rules)

- **Communicating with Peers – Information Sharing**
 - You know, for us even just sometimes it's just going through like if just – as a, as a crew just kind of talk in the cage if you had any you know, unique situations come up or any kind of weird things. (P6: Communicating with Peers – Information Sharing)
 - Then we can also give that information to our officials too. (P6: Communicating with Peers – Information Sharing)
 - And then once we get to the rink, you know we'll – even on this past Saturday I was in [location removed for anonymity]. [Teams removed for anonymity] were playing so we did a home and home Friday and Saturday. So, looked at the box score on Friday – wasn't much. Texted one of the referees and said, “Hey you know, anything that’s carried – anything we need to know for the game on Saturday?”. And they said no, it was, you know, pretty, pretty straightforward game, nothing that was going to carry forward into. (P6: Communicating with Peers – Information Sharing)
 - And we all just – and it doesn't need to be too in depth. You know who we've seen lately? Have we seen these teams who to watch for? You know what kind of game we expect? (P8: Communicating with Peers – Information Sharing)
- **Enhanced Performance through Pre-Game Information Sharing**
 - I remember we chatted about a specific pre-game with the – with the four – four officials in the room. We were talking about a certain player you know kind of just – kind of riding that fence on taking penalties for goalie interference and kind of crowding the crease. And like our first call of the game like 2 minutes in was a goalie interference call against that – and it happened to be that player. So once again, just kind of being prepared and just that whole information sharing before games, it just helps us prepare. So, when we see stuff happen, it's like, okay, I know what to do and it just becomes kind of more a second nature. I don't have to, you know, kind of overthink it. (P6: Enhanced Performance through Pre-Game Information Sharing)
- **Learning Ways to Mentally Prepare**
 - So, I would say in the last two years I've been more familiar with like ways of mentally preparing prior to the game or during the game or after the game. (P3: Learning Ways to Mentally Prepare)
- **Pre-Game Preparation Leads to Better Performance**
 - I think well – helping for sure would definitely be just for the preparation on you know, trying to you know – expect the unexpected or prepare for something that might happen. (P6: Pre-Game Preparation Leads to Better Performance)
 - INT: And how do you feel that your kind of mental preparation influences your performance? P7: Oh, it increases at tenfold, yeah. (P7: Pre-Game Preparation Leads to Better Performance)
- **Visualization – Familiarity of Environment**
 - So then when I'm out there, like, I mean – not that it feels like deja vu, but it's like okay, I've like, you know, I've seen this before. I've felt this, I guess. (P5: Visualization – Familiarity of Environment)
- **Visualization – Preparing for All Situations**
 - I kind of move into that direction where, okay, if this happens on the ice, I'm not going to be surprised because I've thought about this right before the game. (P8: Visualization – Preparing for All Situations)
- **Visualization – Preparing for League Differences**
 - I think part of my visualization with that is being prepared for the speed and the difference in communication that you have with some of the players. (P8: Visualization – Preparing for League Differences)

Increased Focus

- **Communicating with Peers – Reminders Help Keep Focus**

- So, in terms of kind of you know, staying focused even sometimes see like we'll do, you know, some reminders whether it's in between periods or even like timeouts. (P6: Communicating with Peers – Reminders Help Keep Focus)
- And even like once we get into the third period if it's a close game, you know it's like we – we know where we're supposed to look. But just as a reminder, we're the down low official, we'll say, “Hey”, you know “you're down low there, you cover front of the net. Cover the crease. That's your focus area. I'll take stuff along the perimeter”. So then at least we kept – we once again, we kind of know where we're looking. So once again, we can cover the whole ice. So even just kind of little, you know, little reminders amongst our crew that we'll talk and be like okay, you know, just to kind of make sure that we're on the right path to, you know, kind of succeed and make sure that we, you know, officiate the game in the right way. (P6: Communicating with Peers – Reminders Help Keep Focus)
- Games where you need to work for it you have to remind yourself that you know – and a lot of this is verbalized too as a team. We do talk a lot about if a game isn't intense or a game seems to be run-of-the-mill or ho-hum. We do talk like “Hey, all it takes is one questionable hit and this game can go sideways”. That's all it takes in a hockey game. So, we do verbalize things like that and I think it helps us as a team snap back into where we need to be alert... (P8: Communicating with Peers – Reminders Help Keep Focus)
- And then one of the strategies that we use on the ice as teammates is just like verbal cues are looking at your partner like, “Hey box”, like “White's going to be down” or “Blue's going to be up”. Just so that we know we're on the same page of when to call that icing, when not to call that icing, especially with a lot happening in terms of penalties ending, expiring, starting all that. (P9: Communicating with Peers – Reminders Help Keep Focus)
- **Focus on the Task at Hand – Removing Distractions and Maintaining Committed to the Game**
 - Especially being able to put aside everything else, all the distractions or anything else that is happening because everyone's busy and everyone has life. So, it's okay to have all of these things come up, but while you're at the rink for the four or five hours, whatever it might be, that's your focus. And that game is going to happen. It's going to end. (P9: Focus on the Task at Hand – Removing Distractions and Maintaining Committed to the Game)
- **Goal Setting – Maintaining Focus in Short Tournament Settings**
 - And yeah, I definitely – goal setting is definitely a major thing. I – it is competition at the end of the day. Like really deep down. I mean a couple – a couple – peel away a couple of layers but it is you know, ends up breaking down into a competition and especially in the tournament settings where it's short, you have short time to make impression. You have short time to do your job, and you know, I think having a goal going into those situations helps keep your focus. (P8: Goal Setting – Maintaining Focus in Short Tournament Settings)
- **Mental Preparation Helps Keep Focus**
 - And probably part of that is that I've done so much mental like, mental build-up or mental warm-up to the game that once the game starts it's not it's not difficult. (P7: Mental Preparation Helps Keep Focus)
- **Mindset Helps Enhance Focus**
 - And while there's lots of games to officiate, there's going to be very few at a certain level, and at some point, it's going to come to an end. Just like my playing career. Like it's going to come to an end. So put everything that you have into those moments and be grateful for them while you're there and it just helps being able to put all that aside or communicate. It helps the focus being in the zone and just being in the moment and in the present. (P9: Mindset Helps Enhance Focus)
- **Pre-Game Mental Preparation Helps Maintain Focus**

- Yeah, for me it would be the focus. Most of the games at the elite level are three 20-minute periods, even if it's a super intense game that you can easily stay engaged in. And when I – when I say that, I mean comparing it to like a Timbits game, that you're just like going through the motions and not – even though it's an intense game, you can lose focus or you can, you know, get sidetracked because of the call that you made that was not the right one and you know that. So I was trying to recuperate from that and the quickest way to stay in that present game, I find when I visually and mentally prepare prior to the game, that'll help me rebound on those situations. So, yeah, I'd say that kind of is my main goal that I keep in my back pocket for that. (P3: Pre-Game Mental Preparation Helps Maintain Focus)
- **Pre-Game Routines – Priming Mindset to Focus on Game**
 - And then from there I just got in the room and you have a have a snack have a coffee and just you know with the guys out there, talk about the – talk about hockey, talk about games, talk about you know, anything just to kind of shut off – for me kind of shutting off work brain. It's like okay, let's not worry about anything else because right now our focus is just – is hockey. So then for me that kind of gets my mind kind of once again, thinking about hockey thinking about the game and getting into that. (P6: Pre-Game Routine – Priming Mindset to Focus on Game)
 - Well, coming into the rink before every game, just making sure that you're in the zone to start the game so that if you get into a situation or a goal scored 10 seconds into the game, like you're already on top of it, you're in the game, you're ready to go. Or if you have to get into the net fast and kind of break up a scum, your mind and everything is focused. (P9: Pre-Game Routines – Priming Mindset to Focus on Game)
- **Pre-Game Routines – Enhance Mental Preparedness and Focus**
 - I think it lets me get in the zone and just have that focus. (P9: Pre-Game Routines – Enhance Mental Preparedness and Focus)
- **Self-Talk – Maintaining Focus**
 - Sometimes, like you'll be doing a game and it's like – even if it's like 2 good teams or a good league and it's just like – could get... it's just like boring, nothing's going on... so you got to talk to yourself to like keep yourself in the game because that falling asleep because the game is sleepy – might make me miss a call because I'm not into it. (P1: Self-Talk – Maintaining Focus)
 - So, the big ones for me. I have a habit of having things that repeat to myself also mentally to help me focus. (P10: Self-Talk – Maintaining Focus)
 - So, I have to do that a lot, those little mini check-ins. If I'm really struggling, I'll do a lot of self-talk. (P10: Self-Talk – Maintaining Focus)
 - So that that way, that's what I'm thinking about. And I'm not thinking about, well, what if I do this? And what if this happens? (P10: Self-Talk – Maintaining Focus)
 - Just self-talk – sometimes I'll even talk about what's going on the ice, and I'll talk to myself on the ice as to what's going on. But that way I can stay focused on it. (P10: Self-Talk – Maintaining Focus)
 - It's self-talk, but it's helped me focus. (P10: Self-Talk – Maintaining Focus)
- **Strategies to Clear Your Mind**
 - So if we can kind of, you know, do some internal stuff to it, there's like control your breathing control your heart rates, then once again, kind of the whole physical prep where, you know, if you're physically ready to go and I don't have to think about, oh, I need to think about skating, I need to think about this. (P6: Strategies to Clear Your Mind)
- **Using Mental Skills to Maintain Focus**
 - For me personally, it comes down to like focus. And so, if I don't do those skills prior to a game, I find it harder to stay focused and maintain that focus throughout the full 60-minutes of a game, and so that's why I do those specific skills is to maintain that. (P3: Using Mental Skills to Maintain Focus)

- It was like, we had a game just this past weekend that had a lot of penalties just cancelling and there are four on threes, four and fours, five on fours and like stacked penalties. And in those situations, it's like – as a linesperson, is there icing, is there not icing, is it four and four is it...right? So definitely just saying like hey players, puck, goalie, clock, like adding that in – that mantra in and just like the little tap of the boards, it reminded me it's like okay, yeah, plays going on in the zone, what's the time on the clock? Who's coming out? What team is coming out? And just brings you back into focusing. (P9: Using Mental Skills to Maintain Focus)

Increased Team Cohesion

- **Communicating with Peers**

- Yeah... I guess like sometimes they'll be like “hey like this coach is being an idiot last game like I need to like nip that in the butt right away”. Like... like go talk to them as soon as they show one sign of... just making a scene or yelling too much. Just go nip that in the butt right away and type thing. (P1: Communicating with Peers)
- I think if I was getting overwhelmed to that point though, finding my own space or just honestly communicating with the crew, like “I just want to be by myself for a few minutes, I need to just like reset”. That usually works best for me. (P4: Communicating with Peers)
- like I said on the ice, I try to – I talk to my partner quite a bit at the TV timeouts, just kind of be like, “Hey, like all good? Yep. Anything that you're seeing? No”. (P5: Communicating with Peers)
- ...spoke to my partner about it, said “Hey, like this is what I'm working on”. (P9: Communicating with Peers)

- **Communicating with Peers – Working with New People**

- I think so too, depending if you haven't worked with certain people, there's a little bit more of a in depth conversation that needs to happen depending how open people are to that as well. But yeah, I think when I work with a person I've worked with all the time, we don't necessarily have like a in depth conversation, I already know that they're going to be here and here and do whatever. But, I have worked with a lot of new people in the last year and it's really important to understand that where they're going to be and just I think more so understanding how you can be a good teammate. Something that like just comes naturally when you work with someone every other week or something, but something that you forget about when you start to work with new people and something that I like, I think I actively need to work on to continue that, so. (P4: Communicating with Peers – Working with New People)
- For myself personally, like once we like – we'll kind of chat if we're working with new officials, we haven't worked before, we'll kind of chat of like, “Okay, hey, if you're, you know, the down low official, you know – where's your main focal point? What are you kind of watching? Just so we're making sure we're covering all the ice”. So that's kind of one thing we can do as a team to kind of be on the same page. (P6: Communicating with Peers – Working with New People)

- **Importance of Group Communication Prior to Game**

- And then so typically after that happens and we're getting dressed, I think a really, really key part when you're working in a four-man system or four-person system is that we talk about the game and talk about, you know, actual things about hockey. I know it's good to talk about, you know, catch up on life and everything, but when we switch to game mode, I feel like that's a very critical part to get the team on the same page. (P8: Importance of Group Communication Prior to Game)
- It almost never goes to plan, but it's good to have some sort of framework before you get on the ice. (P8: Importance of Group Communication Prior to Game)
- ...but being able to have that bold team communication, so everyone's on the same page going on the ice. (P9: Importance of Group Communication Prior to Game)

- **Non-Verbal Communication with Peers**
 - ...and I also communicate with my partners, right. So, one of my dear friends – I met her through officiating and she knows that when I touch my elbow pads, like I'm reminding myself to stand up straight, she also needs to stand up straight. So, I will look at her and touch my all the pads and she's like, "Oh yeah, sorry, like a little like stand up straighter as well". So, we kind of have like almost a little language that I can come to like, communicate with other people on the ice. So, it's kind of cool, but yeah. (P2: Non-Verbal Communication with Peers)
 - But in a game, I think it – as a like a, especially on the lines, maybe this is a – I'm not sure if this will apply to refs as much because I just don't ever find myself reffing in a situation like that. But for like a scrum or something like that, or like you said like a fight beforehand before, like dealing with it like connecting with your partner like just via eye contact and being like this is happening and then before like reacting is like a little bit of analysis. (P4: Non-Verbal Communication with Peers)

Increased Mental Toughness

- **Mental Toughness – Built Through Challenging Yourself and Learning from Mistakes**
 - Yeah, I'll – I'll maybe add one comment just because I think it's – it's relevant with the mental side of things is I'm like a I'm a big proponent of challenging yourself mentally and it's maybe not a skill, but it's challenging yourself mentally to do things that you didn't think that you could do. Whether it's – whether you didn't think you could do it mentally or you didn't think you could do it physically. Because proving to yourself that you can do them or even going through the whole process of failure or whatever it looks like when it's not in an actual performance that matters, gives those skills. (P7: Mental Toughness – Built Through Challenging Yourself and Learning from Mistakes)
- **Mental Toughness – Developed Through Doing Hard Things**
 - Like that's like a practice that I'll use for mentals. So, an example is, I ran a 56-kilometer run for charity just to see if I could do it and I'd never ride further than 23 kilometers in my life. Or like I'll cycle like a hundred 100-kilometer cycle trip just to – because I know that that's going to build my mental strength; physically whatever. But I know that if I can get through that physically that – that mentally I know I can do anything. (P7: Mental Toughness – Developed Through Doing Hard Things)
 - ...but like those are long training sessions so sometimes I'm on the bike for two hours and it's like, it can get boring. It's like okay, how do you – you're on the bike like keep in the workout. So I work with a coach on that side too who helps with like some of the mental training aspect for an endurance sport like that and not the triathlon training and hockey are the exact same, but I like that the crossover one of endurance, just in terms of like fitness as an athlete but also crossover, the endurance of like your mind and being able to last 1.9 K swim, 90K bike, and a half marathon all in one day like that is an exhausting physical activity but also mentally draining. And there's different ways, like when you're on the bike – I know that if I pedal a certain stroke, like that's going to hurt my right knee from an I.T. band thing. Like just things like that you got to think about, so having that mental strength. (P9: Mental Toughness – Developed Through Doing Hard Things)
- **Mental Toughness – Learning How to Handle Failure**
 - Or the other side of it, if I don't get through it, then I get to practice that loop of failure and how I mentally adjust to it. (P7: Mental Toughness – Learning How to Handle Failure)
- **Mental Toughness – Taking Away Positives Out of a Negative Situation**
 - But at the same time, I was so happy I was able to kind of finish off the tournament on a, you know, on a positive note and not have that be my last game and not work anymore on there. (P6: Mental Toughness – Taking Away Positives Out of a Negative Situation)
- **Mental Toughness – Tune out Abuse**

- And then now, I don't know... I just have so much experience now that I'm pretty good in those types of situations. Like, like the odd time I'll do a junior game and then maybe the officiating coach might say you – you could have given like a bench minor or something, 'cause like they're yelling, like using like – bad language. But in those times it's like I – I don't... I don't hear it like I tune people out so I don't – they're watching – they might be reviewing it on video, so the camera's right beside the benches... so it's like, okay, well, obviously you can hear that... I'm on the other side of the ice. I can't hear it. F-bombs being thrown at me and I've trained myself at a young age to like tune people out because I started young and it was a female in a man's world. So, I just – so yeah. Other than that, I don't know. (P1: Mental Toughness – Tune out Abuse)

Increased Confidence

- **Appearing Confident After Making a Mistake**
 - So, in terms of communication, body language is so big. So there's times where you know like I said if we make a call that's maybe kind of like, we probably didn't need that but, being able to kind of show confidence because if we're kind of slouching whatever. So just a lot of it for me, definitely body language and just kind of like you know, make sure that we're keeping level-headed. (P6: Appearing Confident After Making a Mistake)
- **Communicating with Peers – Offering Positive Reinforcement to Peer**
 - And then I don't know that we – I've had many people come ask directly, but indirectly like during a game, if I can see somebody struggling, I'll use some of the techniques that work for me, for them. Like maybe it's a – maybe it's an external validation where if I know that they're struggling with a call they may have made, I'll give them that external validation so that they can – they can have that going forward and see that it maybe helps or doesn't help. (P7: Communicating with Peers – Offering Positive Reinforcement to Peer)
 - Or sometimes, I guess... can that apply to like your partner? So, like, sometimes my partners will make a call and then I have to pass by him or her and I'll be like “oh great call”. Just to especially like if I think they needed a call or they look like they're having some self doubt, I'll like pep talk to them while I'm going by (P1: Communicating with Peers – Offering Positive Reinforcement to Peer)
- **Communicating with Peers – Positive Reinforcement**
 - They agreed with my call. They thought that that the guy clipped him. We were good. (P7: Communicating with Peers – Positive Reinforcement)
- **Communicating with Peers – Seeking Validation**
 - But there's also a relief of getting back into the dressing room after that period and externally being like, “Hey guys, this is kind of where I'm at on this. I didn't like that call. Can I – can I get some opinions on if you thought...?” right? Like just getting that feedback of maybe I guess, it's validation of whether it was or not... (P3: Communicating with Peers – Seeking Validation)
 - ...or when we have stoppages of play then – then I'll lean on my partners and get that external validation. So we'll have like a quick conversation of validating myself externally as well, just to make sure that that I'm not completely out to lunch or to have – if I'm being yelled at by somebody else, it's sometimes nice to be told you're doing a good job by somebody else as well. So, I'll use that. (P7: Communicating with Peers – Seeking Validation)
 - And so at the next – at the next time out when we have an opportunity for a TV time out, I right away, I leaned on my partner for external validation of like, “Did you catch the replay? Did you see if he caught him or did I F- that up?”. And there was a little bit of validation like right then and there. So I felt a little bit better... (P7: Communicating with Peers – Seeking Validation)
 - So, a little more external validation that's like – with my linesman. “What did you guys see? Did – did it – do I have to go and eat my own call and tell the coach that maybe I did

mess that up or did you see the replay? Did you see it at live? What did you think?”. And so then there was that external validation. (P7: Communicating with Peers – Seeking Validation)

- **Confidence – Helps Increase Performance**
 - But yeah, just being confident in, you know, kind of – in yourself and that's what's going to help you kind of succeed if you go, you know, work at a higher level, hockey or tournament or anything like that. (P6: Confidence – Helps Increase Performance)
 - But if you know you're doing a good job I think that helps a lot with your on-ice performance with your next game performance you know and I think it helps with your confidence. I mean they're all – it's all so tied together right. But being able being able to know like hey I – I'm doing a good job you're mad I get it, but I got a job to do here. (P8: Confidence – Helps Increase Performance)
- **Mental Skills Build Confidence**
 - For the first couple years of my officiating career, I was very nervous to go on the ice and now I've – I've worked a lot with just my own personal therapist about dealing with like feelings of inadequacy, feelings like I'm... just feeling unprepared. And now I kind of look at hockey's like it's just hockey – it's not that exciting. And so, I just work on visualization just for safe and fair hockey, it's not really based on my performance. (P2: Mental Skills Build Confidence)
- **Mental Skills Use – Can Help Mitigate Negative Self-Thoughts**
 - You just got to – if you're going to do a study and if you do take this beyond, you got to just keep reminding people that you know they're doing a good job or when they are doing a good job to know when you're doing a good job. And I think we're so hard on ourselves, especially at the higher levels where you've you gain this like self-awareness of where you kind of are – in the officiating world and in the hockey world we're so hard on ourselves and you know we can be a little easier on ourselves, I think. And I think if you if you help people do that through you know mental skills training and I think that'll go a long way, yeah. (P8: Mental Skills Use – Can Help Mitigate Negative Self-Thoughts)
- **Self-Talk – Positive to Build Confidence**
 - But yeah, I try to use, you know, more positive self-talk like example for me, like at the World Championships this past year, you know, I haven't worked pro hockey in six years. So, to basically go from working, you know, [league removed for anonymity] League caliber hockey to, you know, to the World Championships. Yeah, it's – there's bigger guys, it's faster, it's a different environment. And I had to go in there and be like okay you know, I've worked pro hockey, this isn't anything new. Just, you know, stick to, you know – it's just it's another game in a sense. But just know that you're, you know, for any officials, whatever game you're working, you're there for a reason. So if you got to believe in – believe in yourself that you're doing the right thing, just, you know, keep doing what – keep doing what you've done to get to where you are and just kind of build off of that. (P6: Self-Talk – Positive to Build Confidence)

Dealing With Adverse Situations

- **Advanced Preparation – Adverse Situations**
 - I think... actually this was like more of a game management situation. So, this particular coach on this particular team that I do not like – I've had run ins with her before where I've had to send players out of the game, I've had to send her out of the game. So, before games that I deal with her, I think about how I'm going to manage the game with her and if she was to have any kind of abusive behaviour or abusive language. So, I thought about how I would handle it before. And so, it's almost like visualization, but it's almost like – I don't know if it's just overthinking or anxiety, but I thought about what if [name removed for anonymity] going to say something to you? How am I going to deal with it? (P2: Advanced Preparation – Adverse Situations)

- So, I definitely was like reflecting on our past meeting basically and what I would have done differently and everything like that. And I was just, again doing the bouncing off ideas, trying to replay how many different ways the first – our first conversation of the game was going to go and stuff and being prepared for it to go either of those ways. And then obviously on Tuesday, still thinking about it and whatnot... (P4: Advanced Preparation – Adverse Situations)
- **Arousal Control – Dealing with Unexpected Events**
 - So, then I got to the – got to the rink in 10 minutes and I'm like running in and they're like, "where have you been?", and I've been trying to call them and they weren't answering – It was a whole thing. Anyway, so when I got there, I didn't get to do visualization, I didn't get to intellectualize, I didn't get to really do anything. The only thing that I was able to do was just like, calm myself physically, though like deep breaths, putting myself into like almost... like a Zen kind of state where it's just like – I'm just physically calming myself because my heart is racing, like my like cortisol's going – like, I'm just like so amped up. So, I was just trying to calm myself and that's all I could do. (P2: Arousal Control – Dealing with Unexpected Events)
 - But then we got together as the four official system and we kind of just, you know, checked in on everyone and made sure we were all good. So, and I felt that since I already used that internal self-talk and like check in with myself, I was able to contribute positively to the group and kind of just be like, "Hey guys like that was intense, let's address that. But let's just try and like refocus and move forward in this game and like make it as safe and fair as we were doing". So again, using the two sides of like internally refocusing, but then focusing again as a group. (P3: Arousal Control – Dealing with Unexpected Events)
- **Mental Skills Used to Handle Confrontation**
 - There's like I said, I would use more of my pause and analyze or pause and reflect technique if possible, to avoid like that I guess. (P4: Mental Skills Used to Handle Confrontation)
- **Overcoming Obstacles**
 - And it was really cool because I mean that's like a really core memory of that that event and like again, my first ever game as an international lines person slash referee and so being able to like – the game started and like just get right back into it. Considering what went forward, it was, it was – I was proud of myself for that, yeah. (P3: Overcoming Obstacles)
- **Visualization – Being Prepared to Handle Confrontation**
 - So, I think the visualization portion and the thoughts of how I'm going to communicate in those situations are going to help. (P8: Visualization – Being Prepared to Handle Confrontation)
- **Visualization – Helps When Dealing with Adverse Conditions**
 - I would say I probably do cue myself a little bit more to do it like if I am struggling there's times where like the rinks are really small or really big and you have to plan out, okay, this one is way different. I'm going to stand here and I do pick out spots and that's like I said, if I've been in the way a lot or I've been feeling really slow or something, I usually then we'll pick out those spots a little bit more actively and be like, okay, I'm going to be there, I'm going to be there by this time, et cetera, et cetera. But that's when I would rely on it a bit more. (P4: Visualization – Helps When Dealing with Adverse Conditions)

Error Correction/Coping

- **Acknowledging Mistakes**
 - And quite frankly, I have gotten to the point now that I really just don't care. If I make a mistake, and I genuinely believe I make a mistake, I've made a mistake, I'll – I can be accountable for that. (P10: Acknowledging Mistakes)

- **Communicating with Peers After Tight Calls**
 - ...like I said, like I use a little bit more of like self-talk probably and whatnot. So like I said, with the TV timeout things or whatever... Say it's like a missed icing or something that's very tight like a tight call. I'm gonna come and talk to my partner about it and what – and release it. (P4: Communicating with Peers After Tight Calls)
- **Coping Strategies After Making a Mistake**
 - ...but the self-talk and the external communication kind of just helps me move forward. (P3: Coping Strategies After Making a Mistake)
 - So I'll use different breathing techniques or different self-talk techniques to help get myself past that. (P7: Coping Strategies After Making a Mistake)
- **Important to Acknowledging Mistakes and Move on**
 - It is. It's important to know where you've made mistakes. It's very important to know where you've made mistakes because that's what makes you kind of research and analyze and be better in that situation. But if you dwell on that hockey game itself and on your performance of that hockey game, it will affect – it dominoes. It will affect your next one. Well, yeah, if you're dwelling, it will. (P8: Important to Acknowledging Mistakes and Move on)
 - So, when I relate that into now competing as an official to high-level, being an athlete in university, it's just that knowledge of things are – there's going to be highs and lows and you need to ride the roller coaster and you need to celebrate the wins because that's important. You need to reflect on the losses and feel them because that's important. But then you need to get over both of them and be back to neutral because as they come and go, if you're riding that and you're stuck in a place, then you're not going to be able to get unstuck and maybe you have a game the next day. So, if you had a really bad game, you have one in less than 24 hours, how do you get out of that state to focus for that game? (P9: Important to Acknowledging Mistakes and Move on)
- **Learning from Mistakes**
 - But also those times where yeah, you know shit goes wrong and things happen and that's the you know, those are the best – those are the best learning opportunities is making mistakes and – but be able to kind of take that and learn from where if we see the same mistake happening over and over and over, then there's a problem. (P6: Learning from Mistakes)
 - ...and you're going to make mistakes, and mistakes are fine. That's how you learn and that's how you grow. (P9: Learning from Mistakes)
- **Learning from Past Experiences**
 - But I definitely like learning from those experiences. Like really this year I feel like I've kind of just like – got it mentally clued in. (P5: Learning from Past Experiences)
- **Learning to Let Go of Mistakes from Past Experiences**
 - ...and looking back on it like now kind of learn the lesson of well, I need to make sure I'm prepared before the game. But if a mistake happens, like it's, you know, it is okay. It's not the end of the world. People make mistakes all the time and you know, just try to learn from it and just use the mindset of a goldfish and the memory of a goldfish. (P5: Learning to Let Go of Mistakes from Past Experiences)
- **Moving on After Games**
 - And I think that helps because you have to you have to move on, you got to move on fairly quickly. (P8: Moving on After Games)
 - And I think that's – in a long season, you know, and they – they do get long, especially January, February, you got to be able to move on to the next one. (P8: Moving on After Games)
 - ...like and that's not you know, you talk to some non-hockey people and they're like well how could you, you know, you did a crappy job. It's like well, I got another job to do tomorrow night so like, I can't let this – this isn't going to hinder that job I have to do. (P8: Moving on After Games)

- I think those are really important just to have the game stay in the past and not don't bring it home with you because I had a big issue with bringing the games home with me – again with the feeling of inadequacy, like I don't – imposter syndrome, like I don't deserve to be here. I am just a – and I do mostly men's hockey, so I get a lot of comments about my gender. So, it's a lot of like, do I deserve to be taking a spot from a man? Like are these – these kind of feelings. So, for me it's leaving games in the past and leaving calls in the past and those kinds of things... are really important for me. (P2: Moving on After Games)
- ...but able to like – able to kind of release it on the Wednesday morning type thing I guess. (P4: Moving on After Games)
- **Moving Past Mistakes**
 - I think the big thing is trying not to – is not going out there every night and trying to be like I need to do this as a career. Like if I make a mistake, like that's it, it's all over with. And just kind of accepting that... (P5: Moving Past Mistakes)
 - – if you have a call, like we've all done it, where your arm goes up and you're like shit, like that's not a real good penalty. Like it happens. But being able to just kind of get over, you know, kind of get over it and move on, you know. (P6: Moving Past Mistakes)
 - But you know, making mistakes it's part of the game especially for the younger officials, that's what we tell them. Mistakes are going to happen. That's fine, but, you know, take that as a learning opportunity rather than, you know, kind of beat yourself up on it for, you know, doing something wrong because it happens in everyday life. (P6: Moving Past Mistakes)
 - Like I would – I would say in game when I've made a call that I don't necessarily support my own call but we have to, just like players, we have to get past it to continue to serve the game. You can't let one call affect the rest of – the rest of the game. (P7: Moving Past Mistakes)
- **Not Overreacting to Mistakes**
 - And I think not overreacting to that or overcompensating after that, but just knowing that, okay, I'm here to do a job, let's do the job. I think a lot of officials, if they see something like that happen, they feel they have to overcompensate and they either call something marginal or, you know, something they feel like is what people would call a make-up call. (P8: Not Overreacting to Mistakes)
- **Self-Talk – Moving Past Mistakes**
 - Then it's then it's more like we need to move past this, like and then I'll validate, “Players miss passes all the time. It's not that big of a deal. It didn't affect the game or if it did affect the game that we like – there's nothing we can do about it. We need to move past it. The best you can do is the best you can do going forward”. (P7: Self-Talk – Moving Past Mistakes)
 - So, I try to keep it if I can't be positive about it, at least I can be neutral about it. It happened. Move on, it's not something we need right now. (P10: Self-Talk – Moving Past Mistakes)
- **Using Mental Skills to Overcome Mistakes**
 - But I think identifying where you – you're, you know you're not ready and then making the corrections, the necessary corrections through some self-talk, through a little bit of visualization to you on the ice, you know, okay, come on, let's go. You know, we got a job to do here. (P8: Using Mental Skills to Overcome Mistakes)

Sub-Theme 2: Implementing Mental Skills

Processes

- **Arousal Control – Developed Over Time**
 - Yeah, that's like a, that's a long time acquired skill that everyone can always be better at. (P4: Arousal Control – Developed Over Time)

- So sometimes for me preparing mentally, preparing for the game isn't the controlling my nerves or anxiety because I find that much easier now. I don't have as much of that... (P10: Arousal Control – Developed Over Time)
- **Breaking Tasks into Smaller Pieces**
 - ...and then just I think really breaking it up helps. (P5: Breaking Tasks into Smaller Pieces)
- **Breaking Up Time into Smaller Pieces**
 - I like to say when I go on the ice, it's like get through the first five, like get through the first five, focus on that first five. And once that clock runs down to 15 minutes left in the first period, it's like, okay, what does the next five look like? And then you break it up into those small 5-minute chunks that are manageable frames of time. Because the first five, especially when you get to an event that's probably a really nerve wrecking five. So, the first five is like, hey, you visualized all of the basics that you know and the foundations that you've learned as an official. Let's put those into practice, remember how to do them. (P9: Breaking Up Time into Smaller Pieces)
- **Breaking Up Time into Smaller Pieces - Constantly Reflecting and Adjusting During Game**
 - And then what happened in that first five? Was it a really intense first five, were there goals were there scrums? And then how can you adjust for the next five? And then so on and so forth. (P9: Breaking Up Time into Smaller Pieces - Constantly Reflecting and Adjusting During Game)
 - And then again, you go out for the second period and the same thing happens like, I just think about the game in those five-minute chunks and I must have been told to me at some point in time, but it just helps break it down in those manageable chunks. And the reflection is like, at the TV time out or at a faceoff or maybe there's a longer delay or something. It's like, hey, am I controlling everything I can within these five-minute chunks? (P9: Breaking Up Time into Smaller Pieces - Constantly Reflecting and Adjusting During Game)
- **Breaking Up Time into Smaller Pieces to Reset**
 - One thing I kind of do in my games is I break each into four- or five-minute quarters. So, it's like, okay, like, okay, yeah, we got, you know, a minute and a half left before starting a new quarter. So for me, it's kind of like a new – a new page. (P6: Breaking Up Time into Smaller Pieces to Reset)
 - But just kind of – okay to just move on get it and off we go, right. (P6: Breaking Tasks into Smaller Pieces to Reset)
 - And then maybe doing a little reset if I know that I'm not skating as hard into the line and out as I should be? And it's like, hey, let's focus on that for these five. (P9: Breaking Up Time into Smaller Pieces to Reset)
 - And I'll break things down into its pieces. So, if I'm not happy with the play, I'll just break it down to the next whistle and to the next whistle or to the next line call, or is – there's commercial timeouts, I'll break it down into the three segments that's the period and the commercial time outs. Okay, one period is done, moving on. (P10: Breaking Up Time into Smaller Pieces to Reset)
- **Cues for Positive Reinforcement**
 - So, using different keys to – using different keys to – as like a positivity reinforcement of kind of what you – what I know that I'm good at. And keys to reinforcement – I'm using different little not triggers, but like little like markings or like a little like marking or symbol that, I don't really like write stuff down on, but little marking or symbol that I tried to do that kind of gets me in a more positive mindset...[long pause] (P5: Cues for Positive Reinforcement)
- **Focus – Cues Written on Hand**
 - And I'll write things on my hands so that way, I can always go back if I'm finding I'm not in the present moment, almost like some people might call it setting an attention to mantra, but whatever you want to call it. So, I might have a couple of key words that

helped me stay focused. In my job, we have a principle called what's important now and it's the W.I.N. concept because it stands for win. And I love that because I can write win my hand, nobody knows what it means, but for me, it's that reminder of what's important right now. So, it helps me be focused. (P10: Focus – Cues Written on Hand)

- So with her, we made a game plan of what I was going to write on my hand. So I had my – something different I was going to write on my hand and then also thinking about what was important and then we talked about how I was letting the injury control me instead of my controlling the injury [sentence paraphrased for fluidity]. So we just kind of it's – it's a mindset shift that I needed going into my game that night. And I brought it up with her, so she kind of helped me create a different intention for that game. And then talk about a bit of a mindset shift around the injury, and not focusing on that... (P10: Writing Cues on Hand to Redirect Focus)
- **General Pre-Game Preparation**
 - And then I've been off since then. So, I've been off since Tuesday – skating tonight. So I haven't again, haven't overly thought about my game tonight yet. That's on my agenda, but last night when I start talking to a few people about travel and whatnot, then that gets the ball rolling on checking up on things and stuff. So maybe again, like I said, like a little bit of unconscious kind of thoughts travelling about this teams from here they're playing so and so, like just kind of fitting some loose pieces together. (P4: General Pre-Game Preparation)
 - But so there's – I guess just focusing on getting to the rink. I try to like – I usually I wear like, I wear a hoodie. So I wear – I try to get comfortable, like physically comfortable and then I like to just kind of hang out and sit down for a little bit. And that's when we talk about different things like having like a cup of coffee or something. (P5: General Pre-Game Preparation)
 - For me, I have, I just have like a you know, almost like a checklist. Okay, what do we need to do to kind of get ready? (P6: General Pre-Game Preparation)
- **Goal Setting Process**
 - I would say probably typically like beginning of season and then like end of season reflection, I definitely do. (P4: Goal Setting Process)
 - I usually work backwards, so I picked the big one which is – so right now is like Olympics and then move like a like a reverse tree. I don't usually – sometimes I don't write it down in a tree, but I can think it in a tree if that makes sense. (P4: Goal Setting Process)
 - Yeah, I think start of the season, I kind of go through or kind of think about, you know what do I want to accomplish this year. (P5: Goal Setting Process)
 - So – but and then in terms of like the long-term goals, I start out by kind of thinking like where I'm at, you know, what is realistic for me this season. And then kind of once I found out about like the different like – when it's the start of the season – it's close to starting or it just starts and I'm able to find out like about the tournament in Serbia and stuff, it's like okay, well kind of think about how I can goal set for that. And then definitely one of the – how I came to the conclusion about like the preparation is I know that I need to like – my work from September to April 19th, all my work that I do is going to benefit me there. So, I need to make sure that I'm putting in the effort every single game or anytime I exercise because that's going to kind of just give me one 1% better when I when I head over. (P5: Goal Setting Process)
 - ...is, you know, we'll get kind of the goal sheet. It's like you know what's our goal like this year. I think we had four or five, kind of you know, goal sheet or tasks to kind of fill out. One was like, you know, what's our goal for this camp? What's our goal for, you know, for this season? What's your, you know, kind of one to three-year plan and three to five year, you know, goal sheets? (P6: Goal Setting Process)
 - And yeah, it's funny how you write stuff down like he always tells us to, you know, write it down. (P6: Goal Setting Process)

- But like historically, I would, I would write out my goals. They'd be on paper. I'd work backwards, like if this is the goal to go to the 2022 Olympics, I need to go to the women's World Championships in 2021. I need to go to this event and go to that event. Here's what I need to do to get to that event. Here's what assignment I need to get at that event to be able to like go on to the next event and I'd have it worked completely backwards to the daily steps that I could kind of take to achieve that. (P7: Goal Setting Process)
- So kind of just do all of these sessions at once and just say like hey, what am I doing this year? What would this year's like –what would a short-term goal be? Maybe it is a year long, maybe it's like couple months long. And then is it an event with officiating? Is it a particular game? Is it a league that I wanted to get into? Is it receiving IIHF licensing? Something like that would be some of the goals that I would consider inside of that session. And then actually being able to lay those out, see if they're short-term, long-term, and then what that ultimate goal is at the end of it. (P9: Goal Setting Process)
- **Debriefing with Peers**
 - So there's always – we're always talking about our games and penalty calls and... like especially if we take the clippings from games like, where could we have been positioned ourselves better to make a better call or – or to help other officials on our crew and stuff like that. So yeah, I'm always – I'm always thinking about reffing all the time. (P1: Debriefing with Peers)
 - Another one is just after the game with it's you know – it ends up with a bench clearing brawl, which has happened before. Getting into the room and actually just decompressing and debriefing with my – with my teammates. (P2: Debriefing with Peers)
 - Sure. So pretty much typically how it goes is that I like to wait for the game sheet to come back in. Just so we have everything in front of us so we can kind of like run through. “Okay, we all agree 18 – 2 minutes and the 10 for roughing ‘kay. We all agree – this person, this person”, if possible, we get the game tape. So sometimes the game is already like concluded and you can go and look at the game tape. So, we'll try and watch the game tape. I have some friends that watch my game so they'll just clip it for me when things are interesting that happens. So, they'll just clip it. My mom does a lot of clipping for me, so something interesting happens, she'll clip it right on the spot. So that's super helpful. And so, being able to watch the clip again and then just making sure that we all agree with the calls that are – have been made I think is a big part of it and then also like if we could do it over again, what would we have done? Knowing what we know now, what would we have done? It's just that's more as a development and learning opportunity rather than as like a recovery opportunity, especially with younger officials. If I'm more senior official in the room then I'll definitely try and be like, “Hey like this is these are the good things we did. These are the things we can improve on. It's just another hockey game, but moving forward, like let's – let's think about those kind of things if this happens again”. So, it's – I mean it definitely helped. Like I've had supervisors come in and tell me, “Hey [name removed for anonymity], you've got to deal with the extra players that are coming in, like you got to hand out 10-minute misconducts, you got to do this, this, and this”. And I've actually had a couple – a couple line brawls this this year. And each time it's getting easier and easier and easier for me to step in between players and say “No, you got to go back to your bench”, like I'm thinking about those things. So, it's definitely a development opportunity as well as like a decompression activity after – kind of – figuring out what happens when we get back to the room. (P2: Debriefing with Peers)
 - Yeah and – yeah, for us, like, I mean – for me, I appreciate the intellectualization of the game. So, I like talking about it and like thinking about it as almost like a as a project rather than something to be like – I was emotionally involved in this game. It was an emotionally involved moment, but you have to, like, almost take yourself away from it and look at it subjectively. I find it's the easiest way for me to for me to, like – understand what happened. (P2: Debriefing with Peers)
 - ...lots of team reflection. So, we'll have a little post-game talk whether or not we have somebody there supervising us, a little post game analysis and tell each other kind of what

- we did good, what we need to work on, feedback to each other. (P7: Debriefing with Peers)
- And I think once that's done kind of move on and we have to remind – we do like verbally remind each other that hey we did a good job or hey you know we could have been a little better here. But then we have a beer or whatever it is and we try to not – we don't talk about that game as much anymore. (P8: Debriefing with Peers)
 - And then honestly just like asking the questions you're afraid to ask sometimes it helps get like an answer. Again, not exactly a mental skill, but allows you to like release the thought or release the error and improve, or at least analyze it from a different perspective if you had a supervisor or coach or someone there. (P4: Debriefing with Peers)
 - **Focus – Challenging Yourself to Stay Focused**
 - ...and when I do that like I'll focus on maybe keeping up with the play better or challenging myself in different ways in the game that help me stay focused. So if it's – if it's a really poor quality game and it's just I'm used to skating higher level hockey and I'm working at a lower level game and it's just too easy that it's hard to stay focused, I'll challenge my skating in that game. I'll challenge myself to follow the play up quicker or keep a tighter gap so that I have to focus on something specific within my game. Not just focus on the game itself. So usually when I'm struggling to stay focused in the game itself, I'll find a certain skill to focus on within the game and then that helps me kind of translate that focus into the game itself. (P7: Focus – Challenging Yourself to Stay Focused)
 - **Goal Setting – Defining Goals**
 - So for example, the skating thing that's pretty like, across the board on a few. So then it's like what is the skating skill, is the skating skill forwards acceleration, backwards acceleration? Obviously if it's at – this is like when I would probably do the skill stuff at the end of the season. But then what is required to get better at those things so like power skating, certain resistance training, etcetera. Working on those so it's usually like a skill and then like a breakdown underneath, like three to five points. (P4: Goal Setting – Defining Goals)
 - **Goal Setting – Focus on Fewer Goals**
 - But then like you said, then there's like those mid-goals and I kind of make more of a nice to have list for the mid-goals. I don't really try to sewer myself into being upset or something like that. It's just like – I'm gonna list like six or seven of these and if one or two of them happen, I can be happy with that. And that's a guess – I guess again, where the little bit of the loose – more loosey goosey mindset comes in because you can't get attached to like 7 things. You can get attached to like one and be upset. So I've done that before too, so I'm trying to branch that out if that makes sense. (P4: Goal Setting – Focus on Fewer Goals)
 - **Goal Setting – Importance of Setting Realistic Expectations**
 - But for during my process of coming up – I think, writing them down and having – I think what helped too is I talked to some senior officials and people who are at the level that I'm at now and kind of getting a realistic expectation of those goals. I know some guys come in and they're like, well, I want to do, you know, this level this quickly. And it's, I mean, sometimes that does happen, but I think having a realistic grasp on kind of how long things take or, you know, you have to be the top of this league in order to get to the next league. It helped a lot. (P8: Goal Setting – Importance of Setting Realistic Expectations)
 - ...then I think there, I mean there are some people who are out to lunch on their own expectations and realities. (P8: Goal Setting – Importance of Setting Realistic Expectations)
 - **Goal Setting – Long-Term Goals**
 - Definitely. So, definitely for like long-term season goals like yes, like definitely. (P5: Goal Setting – Long-Term Goals)

- So that's going to be something – that's the long-term goal for sure. (P6: Goal Setting – Long-Term Goals)
- **Goal Setting – Measuring Progress and Controlling the Controllables**
 - So definitely always having those in mind and then being able to measure your progress along the stages and I think within that it's also controlling the controllables. (P9: Goal Setting – Measuring Progress and Controlling the Controllables)
- **Goal Setting – Room for Improvement**
 - I think it could be better at like shorter-term goals that sometimes where like having the more unconcentrated mindset doesn't work sometimes because you aren't as like dialed per se before a game as some people may be. It's something I could probably just like, work on and could come up more in conversation with saying I'm going to do A, B, C just so – just so you know, like as a, you know – with your teammate or whoever you're working with to potentially be a little bit more sharing those because obviously as soon as you put them out there, they're real, right? If you just say them in your head, sometimes they're not or you forget what you even told yourself. So, I think I can be better with like the shorter-term ones. I think I'm – like have a good track on like long term and like middle length ones, but I think game to game I could be better and use it more often. (P4: Goal Setting – Room for Improvement)
 - But in years past, I've definitely used more short-term, like short-term, maybe goals. This year's a little bit more like season – like a more kind of goals towards the end of the season kind of thing. (P5: Goal Setting – Room for Improvement)
 - Well, I've accomplished like one of the two because I have not watched back every single game that I've worked this season. (P5: Goal Setting – Room for Improvement)
 - Ahh goals, goal setting. The last like 2 years maybe like I've always had goals, but never really wrote them down or thought about them... (P1: Goal Setting – Room for Improvement)
 - I have written them down, yeah, I have written them down. I don't anymore. (P8: Goal Setting – Room for Improvement)
- **Goal Setting – Short-Term Goals Building to Long-Term Goals**
 - Though like I really appreciated that he was able to kind of allow me at this age, to visualize that and get that as like a potential opportunity. Not saying that all that I'm in the running for it, but that's just like the top goal and then from there setting those short-term goals of like what is going to help allow me to reach that goal. So whether it's like starting CrossFit to kind of get my physical fitness going or you know, being – getting that event for USports this year, like getting to specific events that'll pave that pathway to the Olympics. (Goal Setting – Short-Term Goals Building to Long-Term Goals)
- **Goal Setting – Short-term Goals Focused on Individual Performance**
 - I set that – what my expectations are for season. The regular season, what my expectations are for playoffs. I'm going to the World Junior A Challenge next month in [location removed for anonymity] and I guess internally, I have a goal set of what I want to get out of that tournament and where I would feel comfortable with my performance. (P8: Goal Setting – Short-term Goals Focused on Individual Performance)
- **Goal Setting – Still Developing Goals**
 - Right now I'm kind of at a spot where I don't know what my goals are. So it's not maybe quite as structured. I still have goals, they're just not maybe as structured and highlighted as they were historically. (P7: Goal Setting – Still Developing Goals)
 - So but, right now it's – I mean, the daily steps are just worked into my routine so it's not as pronounced. But, I'm just trying to figure out what that next goal is to be able to then work backwards from it. So maintenance – maintenance is my goal right now. (P7: Goal Setting – Still Developing Goals)
- **Goal Setting – Support Systems**
 - This year I kind of... actually, you know what I talked to – start the season, I talked to my wife...(P5: Goal Setting – Support Systems)

- **Goal Setting – Writing Goals Down**
 - Yeah. So, for kind of the overarching goal session, I like writing everything down and then I'm usually typing it up on a Google Doc just to clarify all my scratch notes. And that would look like sort of – I do the same thing in like personal and work life. (P9: Goal Setting – Writing Goals Down)
- **Goals – Reflecting on Previous Goals**
 - We hand it in because – I always take a picture of it and, you know, save it and look back in a year or two or two or three years and see, hey, what did I write down? And you know, what did you know – what did I accomplish on those goal sheets from short-term but also long-term as well? (P6: Goals – Reflecting on Previous Goals)
- **Having Cues Words on Phone Screen to Remind You of Goals and Intentions**
 - ...and then something else that I kind of did off of that is just. There's little widgets on my home screen on my phone that have like little mantras or just like reminders that I like. So, one of the quotes that I picked up from – I have no idea where I even started using this, but it's the notion of there's 86,400 seconds in a day. So, it's like, what are you doing to be intentional with those seconds? Are you intentionally resting because that is a huge component and something that like I'm not great at so I need to keep working on. Are you intentionally at the rink for a reason? What's the purpose of doing this action? And like just making myself aware. So then even going into events, sometimes I change those to have like event specific goals. So, is it being 1% better every game? Was there a piece of feedback that I received from coaching from games at home locally that I need to bring into these events? So, changing some of those and then just being able to kind of repeat them. So, if I'm reading that, I'm usually alone or I'm walking my dogs and it's like, hey, like what's this goal for going into this event? Or like what do I want to do and just having that self-talk constantly? (P9: Having Cues Words on Phone Screen to Remind You of Goals and Intentions)
 - Yeah, I mean like my background on my phone has a couple of key quotes and stuff that I use, different goals for like upcoming stuff within my job. (P9: Having Cues Words on Phone Screen to Remind You of Goals and Intentions)
- **Important to Set Realistic and Controllable Goals**
 - So, it's knowing that yes, you might have the goals and they should be realistic and they're specific, but to an extent. (P9: Important to Set Realistic and Controllable Goals)
- **Mental Skills to Enhance Focus and Remove Distractions**
 - So, I had a coach tell us that, hey, you have this imaginary toolbox and everything that is not related to the rink, everything that doesn't pertain to the game, the practice, the coaching seminar, whatever you are doing related to your sport, everything that doesn't fit in there – so things going on at home, did you walk the dogs? Did they get fed? What are they doing? All of those distractions to that – that pertinent game, seminar, or whatever it is to do with your sport, your athletics, officiating in this case, put all of that stuff in the toolbox. And then you get to sort of virtually and imaginarily lock it and just put the key aside and it just gets to wait there until after you're done. So, that all that you should be focusing on is everything that you didn't put in the toolbox. And the idea being, those things will still be there when you're done your 2 hours but, give the two hours that you have whatever it is, your full time and attention. (P9: Mental Skills to Enhance Focus and Remove Distractions)
- **Music to Start Mental Preparation**
 - Sure. So, for me, I find a place on in the rink that I can see the whole ice, including benches, so typically across the ice from the – from the benches and high enough that I can see the whole ice. And then from there, what I will do is, I will try to listen to the music that's either playing or I'll have music in my own headphones, I like having music and it's the same playlist every time, so it's almost like I'm conditioning myself to like get into that visualization kind of – kind of place in my brain. (P2: Music to Start Mental Preparation)

- Like the way I've got kind of a – basically like I'll change my playlist every season. So I've got kind of like four or five songs and I just – that's what I warm-up to and so kind of once those, once – basically once those songs are over typically now I know I need to pop back in the dressing room and kind of get changed and get ready to go. (P6: Music to start Mental Preparation)
- Yeah. So, I like to just kind of go disappear into my own world to focus. I'm very internally focused, so I'll usually put my headphones in. (P7: Music to start Mental Preparation)
- **Not Mentally Preparing Too Early**
 - I wouldn't say I get into anything like super specific and I definitely don't do anything like in terms of like specific visualization or like intense review if I have like a more than like a two day break between games. (P4: Not Mentally Preparing Too Early)
- **Outcome Goals**
 - So, like for me an example of that, it's like just to kind of get into it like setting out those long-term goals first. So, like for me my outcome and my long-term goal would be to go to the Olympics one day. Like that is the coolest thing that would happen. (P3: Outcome Goals)
 - Yeah. So, last year I knew I got licensed last year, so my goal was just to make sure I got an event, which just means having a good start to your season. I also did the rivalry game, so my kind of mid goal, I had two – I had two of those games, just improve into the second game was kind of the short to mid. And then this year I want to do junior provincial championships, which is like first – pretty big lofty stretch just for honestly being female in a male dominated game. And then I guess my other longer to mid goal is at my IIHF, I – I'm not sure how familiar you are with the rankings, but they either give you like flat or up at the end of your tournament. I'd like to get up. I'd like to move up or be recommended to move up sort of thing. That's my – those are kind of my mid ones. I'm trying to think my long – my long-term goal is Olympics and then shorter term like it's harder when you are at a higher level to work like pick something that you're completely going to tear down and rework. (P4 – Outcome Goals)
 - This year I like – this year my goal is to like – one of my goals is to get back to working the WHL finals. (P5: Outcome Goals)
 - But you know, three, I guess three things that I kind of want to, I guess accomplish before I hang up the skates, you know, at least competitively. I would like to work another World Juniors. Obviously not in the bubble, but actually with some fans there, that'd be, you know, pretty cool experience, so that that was one. Second one would be working a Memorial Cup and then my third goal long term would be working the Olympics. (P6: Outcome Goals)
 - In 2026. So that's kind of where my, I guess kind of – that's my ultimate goal right now. (P6: Outcome Goals)
- **Performance Goals**
 - So just... even if I think about like, going into a game, maybe there's something I didn't like about my – my skating, my end zone positioning... okay the next game like I'm going to focus on this or if an officiating coach told like told me something like, “oh, you should be you're standing here a bunch of times during the game and those situations stand here”, so then I'll focus on those for the next game. I'll always – I'll remind myself before I go on the ice, “okay what was I told to work on from last game and make sure I implement it”. Um yeah. (P1: Performance Goals)
- **Physical Cues as Reminders**
 - I also have physical cues, so I have a really bad habit of like looking super intense, so my shoulders will hunch and I'm when I'm around like the net. So, I have physical cues to look more relaxed, to look more like I'm enjoying myself. So, like I'll fix my elbow pads almost every whistle that goes like, I'll blow the whistle as I'm like – liney is dropping the puck, I'll be fixing my elbow pads just to remind myself, like, “Stand up straight, like,

don't let yourself hunch over, don't let yourself get too far into this. Like, relax, relax, relax". So, they're just like those little things that I can communicate to myself with, but I like – (P2: Physical Cues as Reminders)

- **Physical Warm-Up Primes Mental Preparation**

- Well, physically actually starts with the mental preparation I think. Like if we like – we play like a game beforehand or we sit in the ref room and talk about the game or whatever I guess. But it depends who you're with I guess. But, the physical warm-up actually is like kind of starts the section of preparing for the game mentally just puts me in a bit of a better spot, I find. So, I think if you're focusing that you're going to like go do a job, which is technically what you're doing, it's easier if you're preparing for that. It starts to turn your mindset kind of automatically I find. (P4: Physical Warm-Up Primes Mental Preparation)
- And other like mental stuff is I will like, leading up before the game, I like to do like a warm-up stretch out. I kind of have like unofficial little like routine that I like to do like try to mentally know, like that prepares me physically so that I know mentally like I'm going to be physically fit and ready to go. (P5: Physical Warm-Up Primes Mental Preparation)
- And then really from there on, it's getting into the right mental state with my physical warm-up... (P7: Physical Warm-Up Primes Mental Preparation)
- I – before a hockey game when it gets down to right before I get dressed, I've – I've warmed up I've stretched and now I get into – try to get into as calm of a state I can... (P8: Physical Warm-Up Primes Mental Preparation)

- **Positive Reinforcement from Self**

- ...or if I thought I had a really good game like just pumping myself up a little bit. (P7: Positive Reinforcement from Self)

- **Post-Game Debriefs**

- I'd say just as much. And again, like it's the same in the sense of like the internalization of the mental skills, but also like I find after game it's way more like, externally using like the communication and ability to kind of like reflect on the game and learn from it if there was things that happened. But using your crew to kind of get that input or that feedback or the – not necessarily like validation on a call, but like the other person's opinion on what that call was to kind of learn from that. And then from there you can take their – their views and such into the next game. So, I find that almost one of the most important parts of the game is the – (P3: Post-Game Debriefs)
- So you get a huge pre-game, "What are we focusing on?" – they don't really come in during the game. That's kind of up to you to kind of be able to deal with that side of it. But then after the game, they thoroughly go through, did you kind of complete those goals you set for yourself prior to the game and like, "What do we want to work on?", and it's a lot of like – you get to actually tell the supervisor what you felt before they kind of tell you, which is a new outlook on learning from mistakes and stuff. So I don't – I'm very fortunate for that as well. (P3: Post-Game Debriefs)
- Something that helps, maybe not in the moment, but after is the reflection piece. I'm like a big game tape watcher. I have to watch it before I go to bed, which isn't always good, but that's again, that's a specific thing that I do is, I watch it before bed so that I already know the answer when I go to sleep. Otherwise, if I sit there and I think about it all night, I'd have a terrible sleep. But also, like I have, like reflecting with your crew, yourself, mentor... (P4: Post-Game Debriefs)
- I think after a game we – I think we talk a lot less about that game itself. So, I find after a game we'll touch on a couple of things. If we have a supervisor there, they'll come in, they'll talk about the game and everything. (P8: Post-Game Debriefs)
- So again, post-game a little bit of decompression, we talk – touch on some main points of the game and then we move on to the next one. Hey, where are you going tomorrow

night? Where else are you this weekend? You know, are we going for dinner or that type of thing. (P8: Post-Game Debriefs)

- **Practicing Communication at Lower-Levels**
 - I still try to do some of those games just because I work a little bit with the minor hockey as well, but even some like U18 stuff that's maybe not as high-level but trying to work with those coaches are sometimes unreasonable too. So, trying to work with that kind of stuff at that level... (P4: Practicing Communication at Lower-Levels)
- **Pre-Game Preparation – Finding a Comfortable Spot**
 - – is trying to kind of put yourself in a spot where like you can get a little bit more relaxed and comfortable, so you're not feeling rushed. You can sit down and relax, kind of adjust to the surroundings a little bit and get a little bit comfortable. (P5: Pre-Game Preparation – Finding a Comfortable Spot)
- **Pre-Game Preparation – Using Visualization and Self-Talk**
 - And then just about like – in our warm-up when we're going around the rink, stretching, running, usually I take a couple of minutes just to pause, like look at the ice while the warm-ups going on. And then just visualize myself like, okay, puck's coming in, players are entering the zone like hard in, we want to make sure you're in the right place in the lines and then also hard out and just seeing myself do that and kind of speaking out to myself in my brain. (P9: Pre-Game Preparation – Using Visualization and Self-Talk)
- **Pre-Game Routines – Early Arrival for Important Games**
 - And then closer to game time, I try and get to the arena significant – quite a bit earlier than I would for a regular game. So, I'll go anywhere between one and a half to two hours ahead of game time... (P7: Pre-Game Routines – Early Arrival for Important Games)
- **Pre-Game Routines – Individual Preparation Stays the Same Regardless of Game Context**
 - Yeah, no, that's the same. (P6: Pre-Game Routines – Individual Preparation Stays the Same Regardless of Game Context)
 - So yeah, I think it's kind of preparation that wise for me that – nothing changes from pre-season to, you know, to playoff time. That's the exact same. (P6: Pre-Game Routines – Individual Preparation Stays the Same Regardless of Game Context)
- **Pre-Game Routines – Making Sure You Have Everything**
 - Like I said, for me, like, you know, getting to the rink, you know, I like to – like one thing I guess I do know is kind of as a safety net is when I get to the rink, I like to unpack my whole bag and make sure I have everything. There's times where you might forget this, forget that and if you wait until, you know, after warm-up's done to put on all your stuff or do I have everything? Now we're cutting it late. So just I guess, it's more of a kind of a preparation piece on that regard to just make sure we, you know, we, you know, do we have everything? Because there's times where you know, I forgot my referee pants or I forget my jock or just little things like that. So at least we got some time to either find a back-up or do something that way. (P6: Pre-Game Routine – Making Sure You Have Everything)
- **Pre-Game Routines – Overall Steps**
 - So, I guess that's kind of how I would kind of implement the – it's kind of my steps on how I get prepared both you know, mentally and physically. (P6: Pre-Game Routine – Overall Steps)
- **Pre-Game Routines – Being Adaptable**
 - I – I will say I find that it helps when I do have that moment to kind of take for myself. But I can be adaptable like it's not going to throw me off completely if I don't get that. But there are factors that come into play when it when you're traveling or you're going to different rinks or yeah. (P3: Pre-Game Routines – Being Adaptable)
 - That it's funny because I find like, I find hockey players to be general or like really superstitious where they have to put their tape on this way or they like – even referees are the same, like they have to put this pad on before this one. I'm personally not like that so – so when those situations happen where my pre-game warm-up is not what it always is,

- it's not going to throw me off to a bottom and like ruin for the game. But that might mean that instead of visualizing in the rink, it might be, okay I'm going to go sit in the hallway just to take 5 minutes to kind of just mentally prepare. Maybe it means putting on a song that I really like just to stay focused and get into that – to that mindset. So, that's kind of how I handle it, other people might be completely thrown off and freak out. But I try, and over time, I think I've learned that from those experiences of you know. It's okay, you don't have to do the same thing every time. (P3: Pre-Game Routines – Being Adaptable)
- INT: So, would it be safe to say then that you in your preparation you can be adaptable? P3: Totally. (P3: Pre-Game Routines – Being Adaptable)
 - Another perfect example of that and like this is one that doesn't have to – it's not necessarily mentally preparing in the visualizations side of it, but like let's say you get to a rink and it's like freezing cold out there. Obviously, a warm-up is going to help you kind of get into that – and I do try to do that prior to games, but for me personally, if the rink is really cold, I'm not going to go for a run in the rink. I might go outside if it's nice or I might just do a quick warm up in the room. So again, like that's a perfect example of another factor that would contribute to me shifting my pregame. But again, I can make it where I guess I'm an adaptable person. (P3: Pre-Game Routines – Being Adaptable)
 - Yeah, okay. I think like, I'm, I – like I said, I'm kind of the opposite. When everyone says like they pack their bag a certain way and they put this skate on first and do whatever. Lots of people have that and I would say I've tried to like not get too focused on that type of routine because one, at different arenas that changes. Like for example, you can't play wall ball or you can't do –you can't lie on the ground at certain rinks just due to the floor or how much space you have. So, just being a little bit more adaptable has been better for me. So then I just kind of try to go into that open slate with like how I pack my bag, how I get dressed, how much time I have sort of thing as well, so that I just nothing's like – yes, you can control that, but if I just go in with like an open slate of something can change, I feel like I'm a little bit more adaptable with just not being upset if something goes a certain way. (P4: Pre-Game Routines – Being Adaptable)
 - But everything like at the rink, if I can be a little bit more adaptable and pliable in that way, then I find I'm a little bit more relaxed on the ice versus if I didn't eat at a certain time or I didn't do this or I didn't have time to do A, B, C, then I get a little bit more like frantic kind of prior to the game. (P4: Pre-Game Routines – Being Adaptable)
 - So I have to – I'm not a set person with the have to have this exact routine. That does not work in my world. (P10: Pre-Game Routines – Being Adaptable)
- **Pre-Game Routines – Communicating with Peers**
 - Like before games and after games we always chit chat in the room amongst each other about games that that they had in the past or even if were about to skate the two teams that – one of them that I'm about to officiate with did like last week is we just talk about stuff before and after and just like how is it handled? Is that how the league wanted it handled? And that – that helps us during the games as well. (P1: Pre-Game Routines – Communicating with Peers)
 - If I'm driving to a game with a crew in a car, then you know we'll talk about different things, talk about teams and stuff. (P5: Pre-Game Routines – Communicating with Peers)
 - And then something else that we do as officials regularly is to prepare for the game is just communicate as a team. (P9: Pre-Game Routines – Communicating with Peers)
 - I'd say there's a couple like different ways that I use – one would be like, just independently on my own, mentally preparing, but then also mentally preparing with the group that you're involved with for that particular game if we're talking about refereeing. (P3: Pre-Game Routines – Communicating with Peers)
 - And then once my warm up's done and I've had that independent time, to kind of just get myself into that mindset. I also use that with the officials that I'm working with, whether we've worked 20 games together this season already or if I've never worked with them, having that conversation of like how you actually work as an official. Everyone works a little differently, do you like to switch a lot? Do you, do you like to hold your line? Like

just kind of the ins and outs of that – communicating and being aware of what to expect in this game before heading out on the ice. (P3: Pre-Game Routines – Communicating with Peers)

- And then I do like to always kind of talk to the other guys I'm working with if there's something – anything we need to talk about as a – as a group before we go out there. (P5: Pre-Game Routines – Communicating with Peers)
- ...and then once again we'll talk about some stuff before we hop on the ice. (P6: Pre-Game Routines – Communicating with Peers)
- So one, communicating with the partner that you're going to directly be working with. So in that case, it'd be my lining partner making sure that we're on the same page. We know exactly the strategies that we use in the games and how we want to operate as a team on the lines and then also involving the wider team. The refs and the standby officials, whoever else that might be, that you got to involve – speaking to them and just saying like, “Hey, what are you expecting from this game?”. Maybe it's something that they're working on... (P9: Pre-Game Routines – Communicating with Peers)
- **Pre-Game Routines – Developed over Time**
 - INT: So it sounds like over time, you've kind of refined this process to be a little bit smoother now finding what works for you – is that safe to say? P5: Yeah, definitely. (P5: Pre-Game Routines – Developed over Time)
- **Pre-Game Routines – Established Process to Implement Visualization**
 - And then from there, what I'll do is, I will visualize the two teams on the ice and the colors that they're wearing. So, sometimes I will ask the equipment managers as I'm walking down, “Hey, what color are we wearing tonight, gentlemen?”, like, “Hey, what color are we wearing?”. So, I go “Okay, blue and yellow are playing” and so then I will visualize a player from blue entering into this offensive zone and yellow just laying the lumber across his hands like just huge slash. And then I – and then I visualize myself putting my arm in the air and going through the whole penalty procedure, including reporting, you know, “2 minutes to 6 yellow for slashing”, like I think about all of those things. And then I'll go through that on both sides and then I'll also go through how we would feel to be – and where I'd be standing on the ice. So, for an example for like a goalie interference call, where would I be standing to see the best goalie interference, am I R1 or am I R2? And then I'll go through both of those situations because goalie interference is one of those calls that I struggle with making because there's just so much commotion. So, what I'll do is I'll pretend that I'll be R1 or I'll pretend to be R2 and then just see a very obvious goalie interference and then maybe something a little bit more nuanced. If I'm looking for something more, what I'll do is I'll take on my rule book. I have a paper rule book that I bring when I'm doing my visualization and I'll look up some of the interpretations in the rule book and visualize interpretations for those rules that I'm not completely sure on. Goalie interference – always one of them and parents on the bench. I really struggle with those two rules and when to use them and so those are the two I'll look up the interpretation, and then I will visualize the interpretation with blue and yellow on the ice. And typically, again the players – I know the players. I've been reffing in this league for a couple years and so that way I'll just be – “Oh, it's [names removed for anonymity], like whatever, they're the ones that are in like – that are not getting along today” or whatever. And then that way I actually find in the game that is sometimes like predictions are true and I'm like, “Oh, that's interesting, [names removed for anonymity] are going to the box. That's funny”. And so those are the kind of visualization – that's how I visualize. It's almost always – it's funny. It's almost always slashing, interference, interference from the bench, and sometimes like check from behinds, like those ones that are a little bit nuanced rules. Those are the ones that I that I try and find, so that's how I do it. (P2: Pre-Game Routines – Established Process to Implement Visualization)
- **Pre-Game Routines – General Thoughts Throughout the Day**

- ...but it looks like you know, the more standard game is – when I get to the rink – like, I mean throughout the day you kind of think about it. Think about different things. (P5: Pre-Game Routines – General Thoughts Throughout the Day)
- **Pre-Game Routines – Knowing What Works for You**
 - It's the switching into your under gear and your shorts and your sweater and getting a good stretch on. I do a little bit of music sometimes, but I very rarely – I feel like I like listening to the sounds of the rink and you know if somebody walks by, I want to be able to talk to them or you know if – I don't want to just put my headphones in and block everyone out all the time for that. (P8: Pre-Game Routines – Knowing What Works for You)
 - I personally don't listen to music before game, I like music, but I find that with my work and my day-to-day, I listen to so much music in the background that that's just exactly what it becomes. It becomes background noise. So, I actually prefer to hear like the noise in the rink and it just centers me. (P9: Pre-Game Routines – Knowing What Works for You)
 - And it sounds funny, but mentally preparing what I eat and what I drink during the day really helps me because I know if I eat or drink certain things, I don't have my best performance. So, if I eat or drink those things, mentally, all I'm thinking about is question to have that late cup of coffee in the day. Right? Because then that impacts my plan, so that impacts my mental. (P10: Pre-Game Routines – Knowing What Works for You)
 - But I know okay, well pre-game maybe having a caffeinated cup of coffee is not a good idea. So, I know I don't want to do that because mentally that will distract me. (P10: Pre-Game Routines – Knowing What Works for You)
- **Pre-Game Routines – Mental Warm-Up**
 - ... and then a little bit of a mental warm-up as well prior to game time. (P7: Pre-Game Routines – Mental Warm-Up)
- **Pre-Game Routines – Not Focusing in Too Early**
 - ...and then for myself, like I would say I don't do anything super specific on like a daily basis unless I may be like struggling on the ice or something. But, I try to actually like not get too dialed in and focused because I find then that that's when I get really nervous or shaky and like jumpy sort of thing. (P4: Pre-Game Routines – Not Focusing in Too Early)
- **Pre-Game Routines – Not Superstitious**
 - I guess for hindering I know they're like for me, I don't have any real superstitions. Like I don't have to okay – put my left shin pad on and you know, at 12-minutes on the clock or anything like that because I think that just gets – gets yourself in into basically, get yourself into a situation where you have an excuse to – or if you have a bad game or a bad period or whatever, it just gives you an excuse or has like an out. (P6: Pre-Game Routines – Not Superstitious)
 - But I almost, I guess maybe my superstition is I try not to do the same thing in, like the same order in a certain degree in terms of you know, getting dressed or I need to sit in this part of the room or whatever. That's stuff doesn't, you know, I don't really believe in that stuff. (P6: Pre-Game Routines – Not Superstitious)
- **Pre-Game Routines – Physical Preparation**
 - Ahh, I always start with warming up like – well, once I get to the rink, make sure the crew's there, “Hey, how's it going type thing”, and then usually get changed into my running shoes and like a splash outfit like tracksuit and warm up for the game... (P1: Pre-Game Routines – Physical Preparation)
 - And then for myself, I've got like a kind of a 15-minute little you know, kind of physical warm-up that I do to kind of get to – get myself ready. (P6: Pre-Game Physical Preparation)
 - And then from there, once warm-ups start, I go to my, you know, kind of 15-minute warm-up, we'll call it to get physically ready and then it could then get dressed... (P6: Pre-Game Routines – Physical Preparation)

- **Pre-Game Routines – Reflecting on Feedback and Past Officiating Experiences to Prepare**
 - Usually something that I'll do and try to do on a consistent basis is just review notes or look at my past game and like what was the feedback that I was given from the coaches or how did my partner and I work together? Especially if we're at a short-term event, how did we work together in a previous game if we skated or have we not skated at all? Or did I go and watch their game and like talk to them afterwards about some cool tips and tricks that they did in their game? So just reviewing those notes, anything that I have leading up to it. And the – yeah, that's probably one of the major things to get into those. (P9: Pre-Game Routines – Reflecting on Feedback and Past Officiating Experiences to Prepare)
 - So, going into one of the games in [location removed for anonymity], one of the pieces of feedback that I'd received the previous game was – and as liney like, go into the zone hard and make sure you're beating the puck and the players to the line so that you can make the right call whether it's waving off and offside or you're calling the offside. But then also go hard out of the zone in case something turns over quickly, or you and your partner need to switch, or you need to get back to the far blue line just being ready. And so leading into that game, I kind of reviewed the coaching session from the day before... (P9: Pre-Game Routines – Reflecting on Feedback and Past Officiating Experiences to Prepare)
- **Pre-Game Routines – Relaxation Techniques**
 - And then closer to the game, I like to just kind of, I actually like, put a towel, kind of like around my neck, so it's nice and warm... (P5: Pre-Game Routines – Relaxation Techniques)
 - Trying to get into that like to the warm comfort mindset kind of helps me relax a little bit. (P5: Pre-Game Routines – Relaxation Techniques)
- **Pre-Game Routines – Relaxing in The Dressing Room**
 - And then personally like I've, I mean for me, I kind of just like to just chill out in the – in our dressing room and not really do much, especially if it's a day at work or whatever, just to kind of get a little bit of time to kind of settle down. (P6: Pre-Game Routines – Relaxing in The Dressing Room)
- **Pre-Game Routines – Removing Distractions**
 - And then leading up I try to just kind of – I put my phone away. Almost like instantly getting to the rink, because I don't like – I don't want that distraction of looking at – looking at the phone and getting like whatever messages from group chats or anything. So I try to just get that distraction out of there. (P5: Pre-Game Routines – Removing Distractions)
 - like that's a big one for me that I try to put my phone away and just try to be mentally present with what's going on and give my like kind of undivided attention to like my teammates and the game for two and a half like 3 hours, that's definitely – that's a big one. (P5: Pre-Game Routines – Removing Distractions)
 - The one the first one, I think the big one is the cell phone, for me is the cell phone. (P5: Pre-Game Routines – Removing Distractions)
 - But the big one, yeah, this is a cell phone. (P5: Pre-Game Routines – Removing Distractions)
 - And the example is definitely being like staying off the phone. (P5: Pre-Game Routines – Removing Distractions)
- **Pre-Game Routines – Reviewing Rules**
 - Sunday different league, so that kind of starts the ball over because we have to review a specific supplement for that different league and whatnot. (P4: Pre-Game Routines – Reviewing Rules)
 - And it depends too on the league because now I work multiple leagues with multiple different rule sets. (P10: Pre-Game Routines – Reviewing Rules)
 - ...but maybe it's controlling my anxiety around, oh man what's the rules for this in this league? So, maybe it's just spending 15-20 minutes just skimming through the rulebook or looking at my notes related to that league, that helps me mentally prepare and feel a little

- bit more calm. Oh, yeah, that's right, in this league, they can't do this and I'd make sure I'm keeping an eye out for that. So, I tend to focus more on those things, too. (P10: Pre-Game Routines – Reviewing Rules)
- If I'm – if I have time I'll like pick up the rule book and just read a page and especially like – I have like a couple of high level guys games this weekend, so I'll go over the fighting section of the rule book because I don't get fights in the women's game, so it's just that sort of thing for preparation and “Okay, I know the rule, I'm good”. So I'm confident if weird stuff comes up in terms of the fighting scenario, so yeah. (P1: Pre-Game Routines – Reviewing Rules)
 - ...so that there's time to sit there, sift through the rule book, brush up on any rules that that I might have questions about or just try and refresh myself on things. (P7: Pre-Game Routines – Reviewing Rules)
 - **Pre-Game Routines – Scouting Players**
 - So, I know it's not really like a mental skill, but maybe being like oh that person does the same thing repetitively. So, that's more of like the analysis piece. (P4: Pre-Game Routines – Scouting Players)
 - And then and the one league that I work, we have to watch warm-up, so that's like another mental thing. We start maybe picking out players that are either very good, very troublesome, people that are recently on the roster or taken off, which goalies may be starting, and then picking the brains of my crew as well with those things because everyone sees different teams. The Junior League that I work has 24 teams, so that's a lot. So, we don't see them very often or you see them a lot, one of the two. And then like I said back in the room, like going over maybe like a rule that's unique to the league or something like that. Like again, going over the trouble players or the good players, goaltending, coaches, et cetera. That's like the team atmosphere... (P4: Pre-Game Routines – Scouting Players)
 - **Pre-Game Routines – Self-Talk**
 - ...and try to just – and try to just not keep to myself just – just kind of talk myself through different points, points of emphasis, things I want to work on, things I want to do. Just kind of mentally preparing myself, getting myself ready to go. (P5: Pre-Game Routines – Self-Talk)
 - **Pre-Game Routines – Thinking About Game Situations During Physical Warm-Up**
 - I'll go do a 15-20 minute off ice warm-up and during that time I'm thinking about the different things that are going to go on in the game tonight. (P7: Pre-Game Routines – Thinking About Game Situations During Physical Warm-Up)
 - **Pre-Game Routines – Visualization**
 - I will typically do like visualization techniques, so I go to the location... typically I show up an hour, an hour and a half before my games – my high-performance games, not my minor hockey games. But my high-performance games, I'll go and I'll just sit in the stands or just sit in the vicinity of the ice and then just do lots of visualization. I found that that helped me when I played and it helps me now as an official, like I just pretend to see a trip, or a hook, or a hold or something like that those calls that I struggle calling. So I just kind of visualize those things... I visualize the particular players, the name bars on the back of the players. Yeah – so mostly like visualization for me. (P2: Pre-Game Routines – Visualization)
 - But usually – usually it's on the way to the game or before the game. (P7: Pre-Game Routines – Visualization)
 - ...but it's usually pre-game. (P7: Pre-Game Routines – Visualization)
 - I think a big thing for me is that I do a lot of, not a lot, but I definitely sit down and take a few minutes to – to do some visualization. (P8: Pre-Game Routines – Visualization)
 - Sure. Yeah, I can expand on that a bit. My mostly – I use that mostly prior to a game in the dressing room when it's – I like it quiet. (P8: Pre-Game Routines – Visualization)

- Couple of different ways. One big way would be visualization, just kind of going through everything. (P9: Pre-Game Routines – Visualization)
- **Preparing for Communication with Coaches**
 - Well, and like you said with the coaches too, as this kind of just comes to me, like my thing is I always want, if we're having a discussion as like a group, I'm like, "Hey, what is he going to say when you go over there? What is his rebuttal gonna be when you answer him?". I prepare like the conversation in advance. It's obviously – it can go one of two ways still but it seems to be better than that, like I said, that reaction, and I'm sure you've probably heard the saying in officiating before too – late and correct is better than too soon and wrong. (P4: Preparing for Communication with Coaches)
- **Process Goals**
 - Well... I guess in terms of like... the one time I was focusing on just some skating technique in terms of when I was trying to – when I'm going backwards – skating backwards – when I'm transitioning backwards because the play's coming towards me, sometimes I would like, move my skate away from the play when I'm going backwards, when I should have been moving my skate like towards when I'm pivoting. So, pivoting backwards, basically. So sometimes that would like, 'cause my body to like move away from the play. So, I've been focused on, yeah, changing my – my pivoting foot to make sure it's pivoting the other way and just like, purposely focusing on that and so now I can do that without thinking about it. My body just does it. (P1: Process Goals)
 - But... if there's something I didn't like about my game from the game before then I'll try and focus on that for the next game. Type things like positioning or using my voice. (P1: Process Goals)
 - But over the summer my goal was to like improve my skating and skating strength and that's something that I also worked hard at. So my, my kind of ever evolving goal is to continue with improving skating. (P4: Process Goals)
 - I try to keep goals, you know, goals that are within my control. So, I'm going to a tournament in Serbia in April and my goal – one of my goals this season was I'm going to – I need to prepare myself through like throughout the season to go into it and be in like in good form and good and be ready to go. So I've tried it as kind of throughout the season, keep it really simple. One of my main goals is just being consistent. Being consistent, and I'm stealing the term in good form from soccer – I'm a big soccer fan. So, I'm just, I'm trying to use that like keeping in good form, consistently game in and game out. And it – just because I know it'll benefit me in the long run. (P5: Process Goals)
 - and I was like, my two goals this year are I'm going to watch back every single game that I work. And I'm going to not be so hard on myself in between like intermissions and after games and stuff and I'm just going to have fun and I'm going to look for positives instead of negatives. (P5: Process Goals)
 - And then within those goals it's controlling what you can control, which for me that's, am I prepared, am I working on my fitness outside the rink? What am I doing on the ice? Am I focused? Was I distracted and what kind of affected that game? (P9: Process Goals)
- **Recognize Mistakes and Implement Strategies to Improve**
 - And then for the mistakes that do happen because they will, recognize them. Talk through how you can improve them for next time and then make the change. Don't just be stagnant or plateau like. Try your best to implement the change and if it's not working, ask how you can improve or ask for different strategies or ask for video, something like that on how you can get better. (P9: Recognize Mistakes and Implement Strategies to Improve)
- **Reflecting on Call Decisions Can Guide Future Decisions**
 - The odd time yeah. The odd time when I'm reflecting on, you know, we'll get video clips. And I think I have to use sometimes mental skills to kind of wrap my head around why I made that call or why I didn't make that call. I mean, that doesn't happen often, but you know, once in a while it's like, hey, we need a – we need a call on this. And then you

think you try and put yourself back in the skates of what you saw, why you didn't call it, what you're going to do in the future. (P8: Reflecting on Call Decisions Can Guide Future Decisions)

- **Reflecting on Games**
 - And then the Saturday like I had off but still thinking about the game from the day before potentially. We had – we had suspensions so maybe looking at those more so or watching the clip of the thing. I wasn't attached to that clip, so I watched it later or watching another game in the league type thing. What that – the one team played again so just seeing whatever. (P4: Reflecting on Games)
 - Maybe, I guess maybe sometimes like, and there's sometimes in the game where, you know, you see it play live and it looks so different and how we see it ice level from this angle. But then you might see like the video clip on, like on the broadcast, like after the game or a clip you can go back – and like sometimes we'll go back and watch scenarios and see, okay, well, you know, what really happened here? How did you know, how did this hit happened? How did this player get a sick in the face or whatnot? So, we'll go back and look at it, like we'll go back and watch clips. (P6: Reflecting on Games)
 - Post-game – lots of reflection, lots of just internal reflection immediate – (P7: Reflecting on Games)
 - And then other times there's things that I'll reflect on, whether it's calls that I made that I think I needed to do better on... (P7: Reflecting on Games)
- **Reflecting on Past Officiating Experiences**
 - I think about officiating every single day. I think of games all the time, like... like what I could have maybe done differently, but if I did that, would it be the same outcome? Or like, “oh I made such a great call” and sometimes I'll just find the video clip just to for peace of mind. I think “oh well I want to see this great call I made”. I'm always – I'm always thinking of it and thinking about like, “oh, I have an international event coming up in January”, so I'm just like thinking – thinking about that and... what things I was given to work on from my last event. How I'll just – reminding myself of how I'll work – make sure I focus on that stuff at this next event. (P1: Reflecting on Past Officiating Experiences)
- **Relaxation Techniques**
 - I think actually back then, that's probably when I was introduced to body scans as well. As far as – I'm not a meditator, I'm not really big into meditation, but I will do a body scan, from time to time. (P10: Relaxation Techniques)
 - ...and it's six breaths in, hold for two, seven counts out and so I call it a 6-2-7 breathing technique and it just seems to work for me. It takes my focus on slowing my breathing down and slowing my heart rate down... (P7: Relaxation Techniques)
- **Self-Talk – Acknowledging Mistakes**
 - Yeah, definitely. I think the biggest thing, and I totally use self-talk, and I would say I use self-talk more so during games than before. So I'm definitely – and when I guess like – self-talk internally, but also externally. So during the game if something happens where for me the offside call was wrong or my judgement on the icing was off, it's one of those things that I do use is self-talk to kind of get through that. So that I can move forward and not fixated on that error that was made. Which I have no problem being like, “Hey I messed that up okay”. And so that's kind of the internal side of it where I do use that to kind of like – just if I need to admit it and acknowledge it and move forward, that's my way of doing it on ice internally. (P3: Self-Talk – Acknowledging Mistakes)
 - I had one of those flat starts and I had to self-talk. I had to remind myself that you know, you know you probably missed one there and you have to own up to it and I think that I got into a better rhythm after that to help the game. And it was early, so as you know there's a way to right the ship. (P8: Self-Talk – Acknowledging Mistakes)
- **Self-Talk – Controlling the Controllables**

- ...because there are coaches that I mean – the coaches that are here in [location removed for anonymity], they see me often. They know my progressing style they understand it. We actually have a really good rapport. But then the other team, so for example, [team removed for anonymity] comes their coaches quite... to be completely honest, a narcissist. She's terrifying. She's awful. She's toxic and the way she can affect the officials – and I talked to my – to my teammates who have never met her before and they're like, “Wow, that game seemed really sad. Like, that game did not make me feel happy. That game did not make me feel accomplished”. And I'm like, yeah, because it's a certain individual on the bench. So, in those kinds of situations where I have a participant who is extremely toxic, a lot of the time is that “I cannot control their bench. I cannot control her. I can only control myself and I can control the safety and the fairness of this game”. So, a lot of it comes back to like, the safety and the fairness. (Self-Talk – Controlling the Controllables)
- ...and then also like, I'll tell myself like that's not controllable. I cannot control if someone is going to hire me to the [league removed for anonymity]. Like that is not going to, that is not a me decision, that is a them decision. And all I can do is prepare myself for when I get the call, not if, but when – when I get the call and I try to tell myself those things. (P2: Self-Talk – Controlling the Controllables)
- So I'd focus on three things that were within my control. (P10: Self-Talk – Controlling the Controllables)
- **Self-Talk – Implementing Instructional Self-Talk**
 - That's what I was talking about, like with faceoffs with a checklist. So sometimes, if I'm going into a game, and I'm working on something, I have a little checklist that I mentally commit to my mind so that way I'm like okay, I'm working on how I exit my face off, I'll have a little checklist of things I need to be mindful of on that exit to make it – to reach that goal of what I'm trying to improve upon. So, I will use those checklists on the ice. Mentally I'll be going through that as I'm performing whatever skill I'm performing on the ice. I would consider that a form of self-talk. But it's like a little checklist – I go “Yep ‘kay, yep ‘kay, think about this. Yeah, okay. Gotta check this. Good”. So yeah, I'll do that. (P10: Self-Talk – Implementing Instructional Self-Talk)
- **Self-Talk – Instructional**
 - And then a lot of the times when I'm with like, minor hockey, so U18 AAA, U18 prep, those kind of things, I have to remind myself they're children. “They're just children out there. You cannot yell at them, don't yell at them. They're just children”. So like, those are the kind of things about myself. So, it's just a lot of like reminding myself and almost talking to myself. Like I'm one of my players. I used to coach for years – and just talk to myself like I'm a player like, “‘kay, this is what you did well. You can let that go. This is what we're going to do moving forward”. So, I kind of try to tell myself in between – or like – in between periods or in between plays especially, I like the whistle. I just kind of think to myself. (P2: Self-Talk – Instructional)
 - Yeah, sometimes. Like, I'll tell myself like – like “chest out”. I'll tell myself that a lot. Like if I'm skating a lot during a game, I'll just try to remind myself, like, “efficient strides, efficient strides”, like “knees over toes, knees over toes”, like those kind of things. Again, like I'm talking to one of my players. (P2: Self-Talk – Instructional)
 - But also, in terms of like myself, like I do a lot of like if I feel like I'm slow, I guess, if I feel like I'm slow – I'm like, “You need to pick it up”. I don't really like bash myself. I have a few phrases I'm just like, this is something you need to do. This is this. I think if I like had a mic on, I'd be talking probably a lot of the time to myself. That's like probably my main one. (P4: Self-Talk – Instructional)
 - Like I said, like I'll be at the rink watching warm-up and it just like, I'll be like, oh like I got to – have to stand there. But then that evolves into being like, oh, I'm going to have move there and move there... (P4: Self-Talk – Instructional)

- So now it's I've kind of rewired it to be like “You need to pick it up, you need to do this”. (P4: Self-Talk – Instructional)
- So like, I just kind of quickly like “okay, like take a deep breath”, like kind of, I don't know – remind myself, take a deep breath, you know. “set a good one”. (P5: Self-Talk – Instructional)
- Yeah, yeah. Especially with my end zone positioning, that dialogue happens a lot where you're – you're like “Well you can't see, you got to move”. You know if something – “If they go behind the net right now you're not going to be able to see what happens”. So, I think there is a lot of that you know. “Am I going to see a goal go in from this position? Probably not – move”, you know it's very quick and snappy. (P8: Self-Talk – Instructional)
- And self-talk to like, if I'm having those games, I'm having a hard time focusing, I'll sometimes be like, “Hey, I've got to play a high. I gotta be mindful of them. Get inside your blue line. Okay, gotta play – you're here”. Like, I'll actually talk about what I'm looking at if I'm having a hard time focusing to help. (P10: Self-Talk – Instructional)
- **Self-Talk – Internal**
 - Without my lips moving so people don't know. (Self-Talk – Internal)
 - So like, I think the – like another mental skill I used was like the internal talk. Like lots of the internal talk of using like – to ease reminding myself and just kind of trying to prepare myself as best as possible. And then when I'm on the ice, just trying to kind of positive like – positive reinforcement and being confident and yeah. (P5: Self-Talk – Internal)
 - Yeah, I think once in a while during a game, I definitely use some self-talk, not actually verbalizing it... (P8: Self-Talk – Internal)
- **Self-Talk – Positive**
 - Or sometimes if it's a high intense game and you have – and lots of minutes have gone by and I haven't made a call yet and then I finally get – get a call like, finally like this game needed a penalty, they were all playing on the line but nothing to put my arm up and then when you finally get one you're like I'll be like, well like “F-ing right, great call” – just like or like – even in a game when your partner is making all the calls and there's nothing in your sight lines or in your ends, so it's like they have 5 penalties, you have none and you finally get one for yourself... and it's like “oh thank God” like “keep going” and stuff, so. (P1: Self-Talk - Positive)
 - Yeah, so for me, like my self-talk is depending – depending on the game like for university women's, a lot of myself talk is like, “You are the best official on the ice. You are the best official in Western Canada. You are like – you deserve to be here”. And it's just like reconfirming that I have good standing... (P2: Self-Talk – Positive)
 - INT: So, do you mainly use self-talk then as kind of like a reactive tool or do you ever kind of even before game say I got this, I can do this – like things like that? P3: Yes, I do. (P3: Self-Talk – Positive)
 - And so, using like self-talk to kind of get me into that mode, like, “Okay, I can do this. I'm here for a reason”. Like, “I am meant to be here”. In those intimidating situations, not – not specifically always that, but that's just like I guess an example. But prior to games too – I get nervous, everyone does – I think that's a good thing to feel nervous. And when I do feel that it's – I find self-talk a great way to – and positive self-talk. I really try to refrain from the negative self-talk and that kind of contributes to the overall success. (P3: Self-Talk – Positive)
 - Yeah, I find that there's like the – I guess I'm going back to the same thing where it's like the internal versus the external side of the communication. So, like being able to say – yeah so, “I got this” like, “I'm – I'm awesome. I'm going to do great”. And like the “You can do this” if I am feeling that. (P3: Self-Talk – Positive)
 - Sometimes it's, “You're better than them. Please show that you're better than them”. And just kind of like in your own head... (P4: Self-Talk – Positive)

- – like that's where like I guess to kind of break it down like the in the five minute you know, sections while they're two – like say there's been a play in the corner where I just like keep getting in the way. And sometimes it happens where like you'll move one way, the play follows you, you move back, it follows you around. So sometimes like you try to put yourself in the best spot and sometimes just the players, or broken plays, or missed passes, and it kind of follows you around. And so sometimes like in – after like a whistle like at a face off or like – I'll talk to myself like, “It's okay” like you know, “Minute 10, grind through this and you know this quarter and then we start fresh”. (P6: Self-Talk – Positive)
- Typically, along the lines of like, “Don't worry about it”, like “We need to – we need to focus on the rest of the game”. (P7: Self-Talk – Positive)
- Oh, “You got this girl. Great Call. Don't worry about it”. Right. (P10: Self-Talk – Positive)
- It's very positive yeah. (P10: Self-Talk – Uses Positive Self-Talk)
- **Self-Talk – Process**
 - Like if I wanted to, like, you know, focus on skating and one aspect of my game, I pick on three key words, and just as warming up for the game, I would just repeat those three key words to me to keep my mind from wandering to the what if. So, I would almost just over and over again, say it in my head, almost like to the beat if I was skipping or running, I would focus on those. (P10: Self-Talk – Process)
- **Self-Talk – Short and Intentional**
 - So just – wouldn't say it's a lengthy self-talk, but like little intentional comments that I've picked up along the way. (P9: Self-Talk – Short and Intentional)
- **Self-Talk – Some Positive Internal Talk**
 - Not a lot out loud. Sometimes just like the like “You can do it” or like “You're out here you've got this” or just something like that. Not a lot out loud, sometimes I think it. (P9: Self-Talk – Some Positive Internal Talk)
- **Self-Talk – Triggers that Spark Self-Talk**
 - But I definitely it happens a lot where I have little triggers that cause me to do that self-talk and then I adjust accordingly after that. But yeah, no, that's a – that's a – that happens a lot in the end zone, especially. (P8: Self-Talk – Triggers that Spark Self-Talk)
- **Self-Talk – Pre-Game Check List**
 - But the self-talk I kind of just talked to, kind of, talk to myself. In terms of like before – so before the game, I'll just run through kind of like a quick checklist making sure that like I want to have, I want to have good face offs, I want to have – I want to be like quick and explosive off the blue line going into the scrums. (P5: Self-Talk – Pre-Game Check List)
- **Self-Talk – Refined Over Time**
 - But I don't actively go like okay when I do this, I want to say this to myself it just like I have – I kind of have those in place now and they've worked better. (P4: Self-Talk – Refined Over Time)
 - But I would say – I'm trying to think of just what I've even said to kids in their coaching recently – is trying to have like phrases that you said, like, clear your mind. That's how I started I think, was being able to be like, “It's over, this is done, whatever, you're fine” – my other one, or whatever. And those have evolved into being me, being able to just be like, yeah, I'm reading this instead, that makes me calm down or whatever. (P4: Self-Talk – Refined Over Time)
 - I would say trial and error on what actually worked. Because, I mean it's the same thing with when you're playing hockey or whatever and someone says the same thing every time as the referee, you'd eventually don't hear them anymore. So that's why I found like some of the self-talk like phrases didn't work anymore, but every like ad says something different, right? So, it's always like a bit of like, “Oh, smoothies are \$5.99. Okay, move

on”. Whereas if you just kind of repetitively are saying like move your feet, that doesn't work after the 100th time so. (P4: Self-Talk – Refined Over Time)

- **Steps to Regulate Arousal – Music**
 - Then sometimes I might listen to only like – maybe 2 songs max that like I might put on repeat that are – that recently have been getting me excited or, or hyped up or yeah... so but it's usually like the same routine like warm up and then depends what mood I'm in that day if I listen to a song or two, but it's never more than two songs because I'll put them on repeat and try and memorize the words. (P1: Steps to Regulate Arousal – Music)
 - *Long pause* ummm... well, I guess it – the music would bring my heart rate up, but in a in a different way because – in a positive way... like getting me like all excited, like positive stress, I guess on my body. (P1: Steps to Regulate Arousal – Music)
 - Rather, yeah just like getting me excited, ready to go. Like, I don't want to be falling asleep before the game or anything, so. (P1: Steps to Regulate Arousal – Music)
- **Strengthening Visualization Using Past Game Footage**
 - So, I guess that's one thing that we'll kind of maybe visualize to a certain degree, but also seeing clips and seeing plays that now, okay, now we, you know, we can kind of visualize, oh, hey, this is very similar to this last play, this is very similar to this last clip we just saw. So I guess that I guess kind of burns a little bit more into your brain in a sense on you know, what's the degree of impact but also seeing okay, well how does he fall? Is it similar to this play? Is similar to that play? (P6: Strengthening Visualization Using Past Game Footage)
- **Using Breaks in Game Play to Reset**
 - Yeah, so in a game I've – I've worked with a couple, like really experienced people and something that works for me, at least at the junior level when we get like a media time out in the middle of the game and then for international you get 2 at different times and stuff. But, taking my time, the time out, to either reflect on those say it's 10-minute breaks like slots – the TV timeout is for me to like reflect on those last 10-minutes and then clear them because the first 5- minutes of the game shouldn't affect the last five. So, the easiest way for me to do that is either to like say it out to my partner and be like this was messed up or I've messed this up. So and so is an asshole. Whatever. Anything like that. Clearing that in the time out and then that doesn't get to come back until potentially like an end of game discussion, review, whatever. But that's been the easiest for me because otherwise, the mistakes kind of do start to stack on top of each other, especially if there was like an error or something earlier in the game that you can't fix. Then I found that was the best way to do that. (P4: Using Breaks in Game Play to Reset)
 - Other kind of – this year you know what, especially like in games, if I made a mistake, I've tried to just have the memory of a goldfish and just try to like reset, like reset quickly. So, the majority of the leagues that I work, we have two TV timeouts, so I try to break it up into different segments and just try to work towards the next kind of break. (P5: Using Breaks in Game Play to Reset)
 - And one thing that really helps with that is TV timeouts in situations like that and then obviously the end of periods where you can actually talk. But you know TV timeouts, we do a lot of, you know, assessment of the previous 7-minutes or 6-minutes and kind of where we need to be moving forward after that. (P8: Using Breaks in Game Play to Reset)
- **Using Lower-Level Hockey to Test Mental Preparation**
 - There's some leagues where I like maybe I try to push a little bit on the like – the less like mental preparation and seeing if I can like just kind of like turn it on in a in a go on the ice just to kind of test myself a little bit... (P5: Using Lower-Level Hockey to Test Mental Preparation)
- **Using Physical Cues in the Environment to Refocus**
 - In games that I don't have that, because there are lots as well that don't have a timeout, I try to like look at the clock and be aware of like where it is. And then my other – my other technique during a game is to read an ad or a sign in the background to try to just

- distract myself from – and again, like kind of a bit of like, when I'm done reading this, like I'm done thinking about whatever. It just slows down time a little bit because sometimes that's – it feels like it's going too fast and whatnot and that's been a good tactic for me as well. (P4: Using Physical Cues in the Environment to Refocus)
- Yeah, yeah. And I guess like something I struggled with before was like focus, like in the game, like staying in it for 60-minutes and it was – but I think I was almost like I was over focused trying to do too much or whatever or trying to do so much that you forget the basics type thing. So, this is like a good, like you said, it just kind of like washes everything off and you can't really get too focused if you're reading something about, I don't know, smoothies or something, right. (P4: Using Physical Cues in the Environment to Refocus)
 - **Self-Talk – Reset**
 - Like, “Use this TV timeout as a reset, get some water, take a deep breath and then focus on the next at least 7 minutes”, or however long it could be. Yeah. (P5: Self-Talk – Reset)
 - And then you got to remind yourself that, “Hey, that that wasn't about you”. You know, that was about a situation in the game. And I think that, you know, I, it does happen once in a while in a game where you have to really just put some sense to kind of what happened and you end up having to do it with yourself because you know, either play has moved on and we have a stoppage and you're doing a line change. (P8: Self-Talk – Reset)
 - And if it's a call that doesn't go, well, it's okay reset. “What's important now? Focus on the next play. I can't do anything about it, it's come and gone. Let it go”. It'll be things like that. So, I do try to focus on the positive. (P10: Self-Talk – Reset)
 - **Visualization – Analyzing Situation**
 - So, I would say it's hard because officials are always told they need to like, read and react and anticipate what's going to happen, but if you do that to like prematurely, you can also hurt yourself or hurt others, whatever, or put yourself in a bad spot. So, I think that's something I've gotten better at, is tracking the situation itself and being able to replay it faster in your head. (P4: Visualization – Analyzing Situation)
 - **Visualization – Communication with Others**
 - And then I kind of end off on like, I think about the coaches in the game and I think about how I might communicate with them. (P8: Visualization – Communication with Others)
 - So, I think when I am doing visualization, I'm thinking about ways where I can be the calming focus or the calming portion of that interaction. (P8: Visualization – Communication with Others)
 - But then I think to myself, I think it – where I get back into controlling that is, through my visualization process and knowing that hey, if this comes up with this coach, I know how I'm going to react with this and it's going to be in a manner that like that I'm okay with myself. (P8: Visualization – Communication with Others)
 - **Visualization – Error Correction**
 - I usually use mental rehearsal mostly for error correction. If I made a mistake on the ice and I don't want to repeat that mistake, that's where I find I can mentally – I've gotten to the point where I can mentally rehearse the outcome I want to have. I keep it very short and sweet. (P10: Visualization – Error Correction)
 - Mental rehearsal, I can think of – if I don't like an icing I called, maybe it's hybrid icing and I'm like, man, I didn't like my judgment on that. I want to be able to not do that again in the future. So, I'm going to mentally rehearse like literally that maybe five seconds of that frame of that icing, but with making the decision that's appropriate to the situation on the ice. So, that would be a mental rehearsal example. (P10: Visualization – Error Correction)
 - No, it really is error correction. (P10: Visualization – Error Correction)
 - **Visualization – Imagining Calls**
 - And I like – I guess – I know some people and my husband as well, he does – during like the anthem, he's like, I can picture someone getting slashed on the hands, like repetitively.

- He's like, I see that and then that way and he's like, and then I replay like one where it's not slashing. He's like, then when I see it in a game, my arm just like goes up. He's like, I don't even like – it's just automatic. (P4: Visualization – Imagining Calls)
- ...but during the anthem, you know, I'll just kind of go through like little scenarios in my head of like, you know, high sticking, holding, just kind of kind of seeing like little plays or scrums or whatever, just to kind of get us and kind of get my mind thinking about that... (P6: Visualization – Imagining Calls)
 - Just kind of visualizing – okay there's like a little scrum, a guy comes in like grabs the guy's head and rips around like minor penalty. So just kind of just seeing little situation like that and just kind of almost going through like okay, you know what's a hold, what's a rough, what's a hook like just kind of just visualizing so when you see stuff happen during the game and it's just kind of okay that's – that's what we need to call. (P6: Visualization – Imagining Calls)
 - I'll – things I tend to visualize the most are, seeing the play. Like I'll play out a hypothetical clip in my head or maybe something that I've watched of myself or in a different game and just picture how I'm moving on the ice and how I'm reacting to the play, especially a penalty or a call situation. I can kind of put myself right into that situation and feel like my arm go up or my arm not go up or wave or what I'm – exactly that's going to look like. (P7: Visualization – Imagining Calls)
 - And I think sometimes for me and that part of the visualization is I start off with something really easy. I start off with thinking about, you know what an easy trip would be like, an easy call for me to make or an easy hook for me to make. And then I start thinking about some different things, like what a hard hit looks like, what a clean hit looks like. And now with blind side hits... (P8: Visualization – Imagining Calls)
- **Visualization – Imagining Supervisors**
 - ...or like the other thing that works very well is if there – well, is or isn't a supervisor just pretending there is someone there and what they would be saying if they were there sort of things that – that's I guess my other rewiring of the talking thing. (P4: Visualization – Imagining Supervisors)
 - **Visualization – Imagining Unique Situations**
 - So, for me with game management and with my visualization, sometimes with situations that like, I think about someone – if there's an obvious trip and then I'll add something nuanced to it where I'm like, hey, but there's no consequence. Someone on blue go goes and picks up the puck, so there's no consequence to the play. And it's also an 8-1 hockey game and blue doesn't need another like power play – I'm not calling that penalty. So, you have to try and add like those extra things that people like to look at and be armchair referees and they're like, well, that was a trip. A trip in the first is a trip in the third. That's not always true, so just adding nuances to situations can help me, but yeah, typically, like if you have a shitty performance, if you have good game management, sometimes it's helpful, but typically it's like – it's directly correlated. You have to have good game management to have performance. (P2: Visualization – Imagining Unique Situations)
 - **Visualization – Imagining Your Own Behaviours as well as Player's**
 - I think one of the big things for me is when you are going into a you know exercising that visualization, you're – you're figuring out what you're going to do in the hockey game. And by doing that, you're also trying to visualize what the players are going to do in the hockey game. (P8: Visualization – Imagining Your Own Behaviours as well as Player's)
 - **Visualization – Individual Differences for Implementation**
 - I don't mentally rehearse well, from first person, I'm always in third person, I know what's ideal to be in first person, I just – my brain doesn't seem to care. I'm always looking down on myself [regarding viewing angle]. That's just the way my brain works. (P10: Visualization – Individual Differences for Implementation)
 - **Visualization – League Specific Rules**

- Usually before every game I kind of go for a warm-up and take some time to kind of just visualize the ice. I think visualizing and like mentally preparing what the rules are for that particular league every week has, you know, different rules or random things that we need to be aware of. Especially at the elite level, every league seems to want to just kind of input their own random rules. So, I guess like stepping aside from the group and taking like 5 to 10 minutes depending on how my week's going and how I need to kind of decompress from that week to kind of get into that game, I try and do that. (P3: Visualization – League Specific Rules)
- ...but like one like – one rule difference for us from the [league removed for anonymity], so like a high stick on a follow through on a pass or a shot isn't a penalty. But then in [league removed for anonymity] because it's Hockey Canada umbrella, it's a high stick. So, even just little things like that, so I'll go through like, okay, like, you know, puck shot from the D-zone [audio cuts out], like that's a minor penalty, you know? Follow through on a high stick like, you know, no penalty. (P6: Visualization – League Specific Rules)
- **Visualization – Making the Right Call**
 - Yeah, so definitely like visualizing that success of, you know, making the right calls or being in the right position. And having that in your mind, whether it's visualizing that or just kind of like I guess being mentally prepared for that. (P3: Visualization – Making the Right Call)
 - ...and I try to visualize good penalty calls. You know, like things where it's like, yup, that's a no doubter and I try to visualize what that would look like on the ice. (P8: Visualization – Making the Right Call)
- **Visualization – Officiating Skills**
 - I'm trying to kind of visualize different things that I need to work on. Sometimes if I'm kind of between pieces of my warm-up, I'll just close my eyes and visualize, maybe if I need to work on quick feet in the corners or busting up the ice hard or like sitting back. Then I'll just kind of like picture myself doing that. (P7: Visualization – Officiating Skills)
 - But then I also do – I also do a lot where I'm just such a physically demanding game that I do a lot, where I'm just visualizing myself, busting up the ice hard or transitioning quick in a corner, or transitioning quick for the play to come at me, or like a quick escape route in the corner because I mean that's half the game is just making sure you can keep up with the game. So, I do different visualizations of the speed and the agility side of the game... (P7: Visualization – Officiating Skills)
- **Visualization – Officiating Tasks**
 - Being on the ice. Faceoffs, like face offs – try to visualize like the play going back and forth to try to just kind of see – just seeing it. (P5: Visualization – Officiating Tasks)
 - ...in the Western Hockey League, we go on the ice for warm-ups as like, lines people. So, one thing I do practice quickly in warm-ups is like just dropping the puck. And I'll try to maybe – I'm not sure like how much I really visualize it, 'cause I keep my eyes open. But I'll try to go through like different tempos, different like cadences and then try to like, visualize guys coming in like getting set up and then like I'll do that a couple times and then just to try to – just to get a feel for it, so. (P5: Visualization – Officiating Tasks)
 - Everything in my brain before like – you can't predict how game's going to go, but you know the what tendency is and you know typically like as a linesperson, which I compete as right now, where you need to stand when the puck's entering the zone, what happens in different situations. So, just visualizing the game and making sure that I'm ready to match that. (P9: Visualization – Officiating Tasks)
 - Sometimes I'll think about things I can steps in my head like, hey, like, if so – these are going to be challenging face offs, because I'm on the line so I drop the puck. I'll think through the steps in my head of the things, the checklist. It's almost like a checklist that I need to go through as I'm going up, and I don't mentally rehearse it. (P10: Visualization – Officiating Tasks)

- **Visualization – Positive Outcomes**
 - So just kind of doing the visualization in kind of more –of a positive light as opposed to more like kind of negative space, I feel like that's probably where I incorporate that a little bit. (P6: Visualization – Positive Outcomes)
- **Visualization – Process**
 - I guess, I mean there's a couple different ways. I mean, oh, like I've seen what worked for some officials. What they do is, you know, after as soon as – even between periods is, you know, they put a towel over their head and they just kind of put their head down for like a minute and just kind of like just zone out and like some guys don't even want to be like – talk to you like for a minute, which is totally fine. (P6: Visualization – Process)
 - So, it's like a it's like a three-step process for me. It goes easy calls, violent, controversial calls, and then I end off on communication. (P8: Visualization – Process)
- **Visualization – Past Experiences Guide Imagery**
 - ...but then lots as well of the actual play, playing out and how that feels and where I'm at and like kind of playing on all of the different senses from all the games that I've been in my life. (P7: Visualization – Past Experiences Guide Imagery)

Implicit/Explicit Application

- **Mental Skill Use – Implicit Utilization of Techniques**
 - I don't know if I have a process. I think I just kind of like... do it. I just like... react, I guess? But people don't know I'm reacting. I don't know. I don't – I don't really think about it. I don't think about like, “Oh, I'm feeling this way right now. I need to like do – do this”. (P1: Mental Skill Use – Implicit Utilization of Techniques)
 - Yeah, I guess like for like, except for the – for the process, it would be more – I wouldn't say like kind of second nature now because I've been kind of, been doing it for so long. It's just a lot of things is just for me, kind of seems more kind of second nature in terms of the process. (P6: Mental Skill Use – Implicit Utilization of Techniques)
 - It just kind of happens. I have a routine, so I've never really thought that that's the way it breaks down. (P8: Mental Skill Use – Implicit Utilization of Techniques)
 - I think, because I use them in bits and pieces, and I use them so much in hockey, where I probably use them doesn't have significance in my mind. (P10: Mental Skill Use - Implicit Utilization of Techniques)
 - Absolutely. 100% using mental skills, whether it's in my career at home, hockey, you're using them. Whether you realize it or not. (P10: Mental Skill Use - Implicit Utilization of Techniques)
 - I don't do a lot of external talk... [P5 corrects themselves later and realizes they do use external self-talk, but it is revealed it is negative self-talk] (P5: Mental Skill Use - Implicit Utilization of Techniques)
 - So, it's funny because when I think of hockey, I can't think of a time where I you know, it almost – I just do it. But then with that time it's like a set situation where it's like oh shit, like this isn't good. I need something to reset right now. And that's how I reset. (P10: Mental Skill Use - Implicit Utilization of Techniques)
 - No, I think it's a little bit more automatic or I notice it in the moment. (P4: Mental Skill Use - Implicit Utilization of Techniques)
- **Realization of Mental Skill Use**
 - Actually, like thinking about it... (P5: Realization of Mental Skill Use)
 - I guess now with kind of the visual – visualization part of it. I would say, yeah, that's probably something I guess I, like I said before – before we started, I didn't think I had any, but I guess, yeah, something, you know... (P6: Realization of Mental Skill Use)
 - Like I said from the get go, I didn't think – I didn't think I had any you know, mental skills. [Audio cuts out] game, but you know, it turns out it's kind of a little bit more, you know, more to it than I would have thought. So definitely learned a few things as well today, which is, yeah – which is a good thing. (P6: Realization of Mental Skill Use)

- **Reflecting on Mental Skills Use**
 - No, it's like just I guess... eye opening I guess in terms of... different things I already do or different things I can do in terms of mentally preparing for – for games or reacting in game situations. I'll probably think about it all the time now when I'm on the ice. Which can like help benefit me, I'm sure... because if I'm thinking about it. So maybe I'll find something I do that I don't like and fix it so. (P1: Reflecting on Mental Skills Use)
- **Regularly Returns to Same Mental Skills**
 - And I can't remember what I did, but I can almost guarantee you what I did do, which was focused on my breathing and focus on self-talk. I can almost guarantee that that's what I would have done in that game to stay my keep myself focused on the game. (P10: Regularly Returns to Same Mental Skills)
 - I'm like, I can't remember the last time I was nervous in a third period, generally settle into a game after a couple minutes. So I can't remember what I did, but I can almost guarantee I know that I go back to my breathing, I go back to my self-talk. (P10: Regularly Returns to Same Mental Skills)
- **Self-Talk – Active Work**
 - And then I – it's hard, like, it's not like it's easy, and just something you do, you're constantly having to be focused on it. But that would be situations when that use that. (P10: Self-Talk – Active Work)
- **Self-Talk – Frequent Use**
 - I talk to myself a lot. (P1: Self-Talk – Frequent Use)
 - Every game. Every game I'm talking to myself. People think I'm crazy because I actually say things, because no one's around me, because I'm a ref, I'm not a liney, so I'm not with the players. So, I talk to myself during the game. I commentate the game. If it's boring, I'll commentate. Yeah, I use a set of mental skills probably – probably every game. (P2: Self-Talk – Frequent Use)
 - All the time. Yeah, all the time. Yeah no, I yeah... (P6: Self-Talk – Frequent Use)
- **Unconscious Change of Pre-Game Routine**
 - It probably does I think – I'm thinking probably a little bit more unconsciously than I think I don't – I would have to kind of think about that on a bit more. (P4: Unconscious Change of Pre-Game Routine)
- **Unsure of Why Mental Skill Usage Changed**
 - I think it's – I don't know... I honestly couldn't even tell you the reason why I. I'm not sure why... (P5: Unsure of Why Mental Skill Usage Changed)
- **Uses Goal Setting**
 - INT: Do you use goals at all? Do you ever set goals? P5: Yes. (P5: Uses Goal Setting)
 - Yeah. Yeah. I would say I've historically done a lot of goal setting. (P7: Uses Goal Setting)
 - INT: Is goal setting something that you implement in your practice? P9: Definitely. (P9: Uses Goal Setting)
- **Uses Mental Skills**
 - So those are still two techniques that I use. [Breathing Techniques and Mental Rehearsal] (P10: Uses Mental Skills)
- **Uses Self-Talk**
 - But yeah, I definitely do practice self-talk. (P8: Uses Self-Talk)
 - INT: Okay, so is self-talk something that you use? P9: Yeah, I would say it is definitely something that I use... (P9: Uses Self-Talk)
- **Visualization – Not Consistently Used**
 - And then in terms of like the visualization thing, like I said, it just kind of – that kind of just floats in and out a little bit more with me. (P4: Visualization – Not Consistently Used)
 - Yeah, I used to yeah. Like big time. I used that to prepare – yeah. A couple of years ago I used to like use it big time, like close my eyes and try to like prepare for like – try to

visualize myself on the ice and different things. A little bit, now not as much as like before. (P5: Visualization – Not Consistently Used)

- **Visualization – Not Planned Out**

- I wouldn't say I do like a lot of visualization or anything like that like beforehand. But, if I that's where like if I'm struggling I do take like more time to like separate myself and I think I just – again, like unconsciously kind of visualize stuff. I don't have any kind of mantras or like prompts that I follow, but those are kind of the two things I would say I do fairly often. (P4: Visualization – Not Planned Out)
- It's a little bit more, like I said, going with the flow seems to be a little bit of a better tactic for me. And if it just kind of happens while I'm watching or I like, pick up on a couple basically landmarks on the ice or whatever, then that just kind of happens. I don't ever really like cue myself to do it. (P4: Visualization – Not Planned Out)
- Yeah, for sure. It's – I guess it's not really like a checklist or anything that kind of go in like sequential order... (P6: Visualization – Not Planned Out)
- I just don't know, I don't really know, like any specifics. Like I don't – I don't go, “Okay, I'm going to go over where I'm going to stand for this or this”. (P4: Visualization – Not Planned Out)

When To Implement/When to Use

- **Focus Shifts During Pre-Game Routine**

- So it's like going into the game, okay what's the pregame meal? I know that usually for my body, I like to eat about two hours before I like to have carbs. That's just how my body responds. When you're at the rink, the focus is okay, I need to meet with my team. What are we doing? Then the focus shifts also to kind of like alleviate a little bit of that pressure. And in the warm-up, can we play spike ball or wall ball or do some sort of game just to get going and laughing? Because you're also having fun there, like you're with the team, right? And then when it comes time for the game, it's like, okay, focus. And it's now the focus shifts to implementing everything you've spoken about, you visualized, you've practiced. (P9: Focus Shifts During Pre-Game Routine)

- **Implementing Debriefs**

- I think in terms of maybe the reflection stuff is like I, like I said, I try to do it like during the game, it comes a little bit more natural after. (P4: Implementing Debriefs)

- **Mental Skill Use – Throughout Game**

- INT: Can you give me some specific examples of when you use mental skills? P7: Pre-game, in-game, post-game. (P7: Mental Skill Use – Throughout Game)

- **Peer Communication During Intermission**

- Then the intermission comes and usually the focus shifts to like, hey, how does everyone feel? Was that good? Do we need to talk about any situations? What do we need to improve? Or was everything – (P9: Peer Communication During Intermission)

- **Regularly Uses Mental Skills**

- INT: How frequently do you use mental skills? P2: I'd say every game. (P2: Regularly Uses Mental Skills)
- Yeah, every – I use visualization, like mantras, and then I also debrief and decompress. And then also just get coached almost every game. I have people watch my games, so. (P2: Regularly Uses Mental Skills)
- I would say now like currently – I would say like 95% of the time. And the other 5% is kind of like those factors that contribute to like the difficult times of you know the – the ice rink is too cold or too chaotic for me to be able to like go and do my normal routine. But I would say like 95% of the time. (P3: Regularly Uses Mental Skills)
- Every game for sure there's like some point of it. I wouldn't say like to the point of like constantly, but I would say I do interchange them very frequently per game. So, it's not exactly the play is going on and I'm still talking to myself. But as the play like maybe switches ends, I do say something to myself whether it was positive in between or like a

- like honestly like were of improvement type thing. But I would say like every game for sure if we're talking about officiating specifically... (P4: Regularly Uses Mental Skills)
- ...but I would say like every game. Every period – once a minute? I don't know, something like that. (P4: Regularly Uses Mental Skills)
 - I mean, yeah, every, every – I mean I try to every single game like the pre-game preparation like we talked about. (P5: Regularly Uses Mental Skills)
 - I would say every day. (P5: Regularly Uses Mental Skills)
 - I would say probably like every day. Yeah, every day. (P5: Regularly Uses Mental Skills)
 - I guess probably, I guess almost every game. (P6: Regularly Uses Mental Skills)
 - I guess I would almost every game. (P6: Regularly Uses Mental Skills)
 - In officiating every game. In life, every day. (P7: Regularly Uses Mental Skills)
 - Every game (P8: Regularly Uses Mental Skills)
 - So yeah, the odd time in between games, but prior to every game, it's pretty – pretty solid now. Yeah, usually it's when incidents happen where I'm using the other stuff. (P8: Regularly Uses Mental Skills)
 - INT: How frequently do you use mental skills? P9: I think every day. (P9: Regularly Uses Mental Skills)
 - On the daily, not even – and nothing to do with skating – daily. (P10: Regularly Uses Mental Skills)
 - So I would say daily – multiple times a day? (P10: Regularly Uses Mental Skills)
 - INT: And then within the hockey context, would it be safe to say that, that it's pretty much every game? P10: Yeah, in some shape or form it's every game. Yeah. (P10: Regularly Uses Mental Skills)
- **Relaxation Techniques – Examples of When to Use Breath Control**
 - and I'll use it – top two situations after I've made a call and I'm posted the blue line while my partner's dropping the puck, or if I'm reffing, I'm posted at the goal line after the line change has been done and I just like, [takes deep breathe and slow exhale] okay, reset. And then the second time is I'll use it at like a TV time out if there's been like – if the game's really been elevating and I need to just bring myself down rather than keep going up with the game. So, with the two – and I'll use, I'll use those pretty much always in game, not – I don't typically need them out of game. (P7: Relaxation Techniques – Examples of When to Use Breath Control)
 - I really rely on my breathing, especially to control maybe my physiological reaction to that stress, whether it's leading up to a game or during the game, if I feel myself getting focused on something that maybe I'm not happy with that went or the what ifs, I focus back in on the breathing just to bring myself back to the present moment. (P10: Relaxation Techniques – Examples of When to Use Breath Control)
 - **Self-Talk – Reassurance After Conflict**
 - Or if like a coach is yelling then – or visibly upset with something that you've done, then different like reassurances to myself like internally self-talking... (P7: Self-Talk – Reassurance After Conflict)
 - So, if I think I got it right and I'm happy with my call, then it's just – the self-talk is like, “Don't worry”, it's like “They're worked up. It's an emotional game. They're passionate. You stand your ground, you're good”. (P7: Self-Talk – Reassurance After Conflict)
 - **Visualization – On the Way to A Game**
 - Yeah, so depends. Sometimes it's as we're driving to the rink, if I'm not the driver, obviously. And usually – not usually, if we have a drive like a shuttle driver at different tournaments and events, I'll kind of just close my eyes and for a couple minutes. (P7: Visualization – On the Way to A Game)
 - **Visualization – Post-Game Reflection**
 - I think that's where maybe sometimes we'll go back and I guess and we'll visualize okay well you know, where was I standing, where was I positioning? Is there something that you can kind of maybe tweak or you know change something to kind of you know –

maybe okay well if this similar situation happens again, what can I do to either position myself better or see the play better to be able to see those calls? (P6: Visualization – Post-Game Reflection)

- **Visualization – Typically Doesn't Implement Before Game**
 - Not really, no, I don't generally use it leading up to a game. (P10: Visualization – Typically Doesn't Implement Before Game)
- **Visualization – Used Before Every Game**
 - visualization I'd probably – I guess use almost like I said, basically every game during the – during the anthem or anthems depending on who's playing. (P6: Visualization – Used Before Every Game)

Influences on Mental Skill Use

- **Focus – Varies Based on Game Circumstances**
 - I think it's definitely the tournaments and when it's those short-term events, those are the most obvious ones that like you're focused and you're there for. Then there's your local games and like the ones that are – that are at a higher level, I think – because the expectation and demand is so much more in the officials – and when you go to a university game or a junior game, like the expectation is you're on top of it because those girls are on top of it. When you get to some of the different levels and depending on the time of game and like what happened that day, that's where I find it becomes harder to say like okay, yeah, I had a long day at work, right? Some tough meetings and like, where's my toolbox and put that stuff away and that's where you can find some of that stuff creeping in. I know for me personally, like if I go to the rink really late, let's say I'm reffing a game that's local, that starts at 9 PM, I know that that's going to be a hard game to get my brain into. (P9: Ability to Focus Varies Based on Game Circumstances)
- **Added Expectations Due to the Perceived Importance of Playoffs**
 - But I think with playoffs, it's been drilled into us since, you know, we were kids about just even watching NHL hockey, that, you know, playoffs is different. Make sure it counts. You know, no – make sure it's a good call. And I think you do kind of get caught up in the sense of playoffs is definitely more magnified for teams. So, it's magnified for you. (P8: Added Expectations Due to the Perceived Importance of Playoffs)
 - But I think we do get caught up in the idea that playoffs is, although it is more intense and there's more on the line that we as officials kind of get caught up in the idea that less is more. And I think sometimes that that hurts us. (P8: Added Expectations Due to the Perceived Importance of Playoffs)
- **Easier Games to Officiate**
 - Honestly, I think the, you know, gold medal games and tournaments are the easiest games to work because for the most part the teams are going to play pretty disciplined. They don't want to put their team short handed. So, I mean, those games are pretty easy to work, so those are always the fun ones to have. (P6: Easier Games to Officiate)
- **Easier to Apply Communication Skills When Less Stressed**
 - And then in just in terms of the communication stuff like that work – that works across work and lower-level games that you're maybe not as stressed and it's easier to apply those at like a level where maybe you're not as challenged. (P4: Easier to Apply Communication Skills When Less Stressed)
- **Easier to Maintain Focus in High-Intensity Games**
 - But the big games – the big games, the tight games, the important high-level games, it's never – I don't ever struggle to stay focused on. (P7: Easier to Maintain Focus in High-Intensity Games)
 - Some games – I find high intensity games force you to be focused and you are don't have to work for that focus, it's a lot easier. (P8: Easier to Maintain Focus in High-Intensity Games)
- **Emphasis on Advanced Pre-Game Preparation in Playoffs**

- I would say depending on, I guess depending on – on the – I won't say time of year, but sometimes it starts like the day before the game even starts. Especially once we get into playoffs. (P6: Emphasis on Advanced Pre-Game Preparation in Playoffs)
- **Environment Can Affect Arousal Level**
 - Like an example – I'd say probably one of the probably the best atmospheres to work in would be [location removed for anonymity] like on a Friday or Saturday night. You know, they've got a really – pretty strong fan base there, very passionate fans where you know we come on the ice before the game starts and we get booed, right. It's just part of the – it's just part of what they do. So, so it's fun, but I would say, yeah, you probably maybe get a little bit more hyped up for, you know, for games where there's a bigger crowd or better atmosphere in the arena, you know. Where there's some, you know, some games, if it's a Tuesday night game, in the dead of winter and if it's, you know, snowing out, well there's not many people in the rink, then it's just it's a little bit different, you know, a little bit different environment. (P6: Environment Can Affect Arousal Level)
 - Sometimes, yeah. Like if it's yeah, I would say probably you know, on the arena like there's some rinks that are you know that have really, really passionate fan bases and it makes – it makes it so fun to be to be in those games. (P6: Environment Can Affect Arousal Level)
 - And then the flatness, like I've definitely, I definitely have had games – when you do 80 games a year, you're going to have games where you're flat. You're gonna need an extra kick start. (P8: Environment Can Affect Arousal Level)
- **Focus – Some Games Require Active Work**
 - Sometimes it takes active work. (P8: Focus – Some Games Require Active Work)
- **Game Preparation Differs Based on Level of Hockey**
 - The way I prepare for a game, definitely... yeah – different for like local level versus like higher levels, because I only have to be there like 30 minutes before the game. Whereas if I do high levels, it's minimum an hour before the game so then I have more time to warm-up and stuff. And like local level those like most of it's not like competitive hockey, so I guess I don't as much effort into it, on the ice – on the ice, I give the same effort, but preparation like because it's not like as fast and stuff. So, I feel like I don't need to warm up as much. (P1: Game Preparation Differs Based on Level of Hockey)
 - Thinking of house league hockey like U-15; it's definitely different. (P1 Game Preparation Differs Based on Level of Hockey)
 - Yeah, totally. So, for a regular season game, I typically show up about an hour before – I do the visualization, just during my warmup time. So that's during when the players are all on the ice for the warmup. And again, I just typically go into it – it's just another hockey game, it's really not that exciting. But then when I get into – I did gold medal – the gold medal game at USport nationals this year. That game was different. That game was – I needed to both physically and mentally prepare. So that game, it was actually analyzing which team – like where the teams came from, where their standings were, which ones are hot players, which ones are like – players that I should be looking for, for penalties. I got much more – I intellectualized a lot more of the game rather than just visualizing. So, when the game does mean more, I will kind of put myself further into it and do more intellectual preparation. But most regular season games – just visualization and going back out there, just because I know the guys aren't typically roughing anyway. (P2: Game Preparation Differs Based on Level of Hockey)
 - Before games by...depending... kind of depends on the game... (P5: Game Preparation Differs Based on Level of Hockey)
 - Definitely pre-game preparation in the regular season is right now it's – you kind of – you do still try to like know what's going on, know who the problem players are. Now for every single like – do I do that for every single league? Like no. (P5: Game Preparation Differs Based on Level of Hockey)

- ...but I would definitely like confidently say that it's like it changes from like level to level. Definitely the higher you go the more – or game prep there is and like the lower levels, I – it's a little less. (P5: Game Preparation Differs Based on Level of Hockey)
- I think it would. I don't ref lower levels too, much like I only do Junior A and university at this point. I definitely take a little bit of consideration of the level of hockey. (P8: Game Preparation Differs Based on Level of Hockey)
- I think I try to enter each game the same, but I definitely take into consideration, you know, what the hockey's going to look like. (P8: Game Preparation Differs Based on Level of Hockey)
- I think it can. And of course, it's going to have to officiate or – it's going to have to change depending on the level you're officiating in the game. (P9: Game Preparation Differs Based on Level of Hockey)
- So maybe for a game that's, let's say 60-minutes in length versus something that might be two hours in length, does the time that it takes to prepare, does that shift? Maybe. Maybe there doesn't need to be as much communication before the game. Talk to our partner, we have a couple of things and it's pretty quick. Or for a lengthier game, that's going to be two hours, two hours plus as we're anticipating it, maybe that conversation is longer due to the nature that that's probably a higher-level game. (P9: Game Preparation Differs Based on Level of Hockey)
- I suppose it does. (P10: Game Preparation Differs Based on Level of Hockey)
- **Goal Setting – Circumstances Can Influence Goals**
 - For the American Hockey League, I worked at playoffs last year, it's a little bit different in that because it's strictly based on how well the team does. If the team makes the playoffs, then I have an opportunity to work the playoffs, but if the team doesn't make the playoffs, then I'm kind of –that's the end of my season. So, for in terms of like for Hockey Canada stuff, it once again is a little bit out of my hands. Like there's like the one tournament I would love to work is the USport national tournament. But it's kind of there's so many logistics that go into it in terms of where they – they've only taken guys in years past from the league that's hosted it. So that's something that's out of my control. (P5: Goal Setting – Circumstances Can Influence Goals)
 - Now it's kind of tough because like the only tournament after the finals is the Memorial Cup, so and there's like different logistics and politics about who goes and this year only one lines person goes from the Western hockey league. So, it's kind of tough if you know for – I'm like a younger guy. (P5: Goal Setting – Circumstances Can Influence Goals)
- **Goal Setting – Considerations for Setting Goals**
 - In terms of the [league removed for anonymity] League, I am – I came to the conclusion on that one because I don't want to regress. I want to keep on progressing. (P5: Goal Setting – Considerations for Setting Goals)
 - So, in terms of like the conclusion on that, I just keep want to keep progressing and don't want to regress. So, like my goal is to go back there and work the finals again and keep on – keep on, I guess getting better. (P5: Goal Setting – Considerations for Setting Goals)
- **Goals – Change as Stages of Career Change**
 - For sure. Yeah, like I said, for me, I kind of know I'm on the back end of my career. So, I guess my goal [audio cuts out] are a little short now. (P6: Goals – Change as Stages of Career Change)
 - Usually short-term, I think now my long-term goals have been reached for myself. I you know, unfortunately I've stepped away from the [league removed for anonymity] League this year just due to work. But I think internally I do set goals. (P8: Goals – Change as Stages of Career Change)
- **Good Performance Leads to Easier Decompression After Game**
 - If it's a really hard game and we did it as good a job as we could, I think there's definitely a lot of satisfaction in that and it makes the decompressing a lot easier. (P8: Good Performance Leads to Easier Decompression After Game)

- **Intentions Behind Pre-Game Preparation Remain the Same Regardless of Level**
 - But I think the overall underlying basis of why you're prepping, regardless if it's a lower level or a higher level game, for me at least, you – I still want to give it my all to that particular game. (P9: Intentions Behind Pre-Game Preparation Remain the Same Regardless of Level)
- **League Directives for Officials – Influence Preparation**
 - INT: So are those situations that you just mentioned – would – are those things that you would have visualized and that's kind of why it's kind of on the forefront of your mind in terms of what you're looking for? Or is it strictly these are just things that you know, and in your pre-game mental preparation that you kind of remind yourself of. Like was it both, one or the other? P6: Yeah, I'd say both. (P6: League Directives for Officials – Influence Preparation)
- **League Directives for Officials – Standard of Play**
 - We'll get messages from you know, from the memos from the [league removed for anonymity] League like some of our conference calls will have probably you know three or four times this season on just, hey guys you know, let's make sure we're you know maintaining the focus on you know, checking to the head or slashing in the hands or just little things. So now we're you know it's kind of more of a focal or a front focal point for us. We're not looking just for that, but at least it kind of helps you know re-establish what we need to do for standard of play and just little things like that. (P6: League Directives for Officials – Standard of Play)
- **League Directives for Officials – Video Clips Help Mental Preparation**
 - Because we'll have like clips and stuff that come out too, like whether – even the last couple years too with like slew footing kind of creeping into our game as well now too. So just the more for you know, kind of more examples that we see whether it's through video or if it happens in your games, then the more we – the more you see it then you kind of know how to react and how to call whether it's a double minor, whether it's a match, whether it's a major at least we can kind of you know – the more clips we see we'll get you know, a video memo sent out on even recently that happened with you know within our league in the last week or two. Just to kind of remind like, hey, you know, here's a good example of a, you know, major penalty for slew footing or a double minor for slew footing. And then it kind of helps in a way, it helps us visualize that if we see, you know, this clip and if we see a very similar play that happened in our own game, then we can think, okay, well, this just happened. We just saw a video clip yesterday, you know, boom, easy type thing to react that way. (P6: League Directives for Officials – Video Clips Help Mental Preparation)
- **Mental Skill Use Changes Over Time**
 - Like I said, like I've gone from a phase of using visualization more often and like I said, picking out those spots on a game-to-game basis and now it's stretched out that I'm more confident I've evolved on the ice with my physical skills as well to not need that one as much. (P4: Mental Skill Use Changes Over Time)
 - I don't do this as much. I used to do this a lot more when I was younger. (P10: Mental Skill Use Changes Over Time)
 - I think I do a little bit less of it now as I've gotten older. (P10: Mental Skill Use Changes Over Time)
 - I was taught box breathing at that time, which I do not use at all anymore. However, it got me on to breathing. (P10: Mental Skill Use Changes Over Time)
- **Mental Skill Use Dependant on Game Demands**
 - Some games require more, some games require less. Like some games all I have to do is a quick reflection or quick little feedback loop with the other officials and that's all the game needed from me. Other times I'm pulling out every stop that I have all game long. Like some games, it's challenging and you feel like every single call, you're trying to have

- that self-talk to be like, “No, you were good on that. No, you were good on that”. (P7: Mental Skill Use Dependant on Game Demands)
- And sometimes I'm doing that, like every 20 seconds, some games are really challenging, and other games, you're just in that flow. And things are going really well and it's really hard to replicate that. (P10: Mental Skill Use Dependant on Game Demands)
 - They don't all always work. Sometimes they're really challenging. Sometimes it's super easy. (P10: Mental Skill Use Dependant on Game Demands)
 - So those are some of the mental strategies that I use, and I don't use all of them. And sometimes I only use one of them. And sometimes I finish the game and didn't use any of them. Because I just had a game where I was just focused and I didn't need any of them. (P10: Mental Skill Use Dependant on Game Demands)
- **Mental Skill Use Dependant on Individual**
 - I think everyone's different for one thing. (P4: Mental Skill Use Dependant on Individual)
 - So, everyone is a little bit different in terms of kind of their personality. (P6: Mental Skill Use Dependant on Individual)
 - And like I said, everyone's different in terms of, you know, what – what might work better or doesn't work for each – each individual. (P6: Mental Skill Use Dependant on Individual)
 - I don't know that any like specific skills – because everybody's different in what they get out of the skills. So, I don't think that any of the specific skills we need to use more than anybody else. (P7: Mental Skill Use Dependant on Individual)
 - Not a ton because everybody's so different... (P7: Mental Skill Use Dependant on Individual)
 - We talk a lot about what we do for physical training, but not nearly as much about what we do for the mental training because everybody requires a little bit more or less or different or – (P7: Mental Skill Use Dependant on Individual)
 - I think for me – I just, I feel like I found something for myself and again, like it's going to be different for everyone, what they're going to need to do to get ready. (P8: Mental Skill Use Dependant on Individual)
 - I would say that, what I do know is like, it's going to depend on the person, right? (P9: Mental Skill Use Dependant on Individual)
 - So definitely there's mental skills that officials use that would impact them differently. I don't know if it's a blanket statement as officials, but I think it's per individual athlete. The same as you would look at a as a hockey player or a triathlete, or like an individual athlete prepping themselves for competition. (P9: Mental Skill Use Dependant on Individual)
 - And again, over time I've kind of learned that, that works best for me – not everyone's the same, obviously. But focus would be the main reason for that, because it is very easy to – your mind will shift in the game or you'll get unfocused by a mistake or whatever. And so that kind of – that allows me to acknowledge it and move forward in the best way. Just to stay in that present time. (P3: Mental Skill Use Dependant on Individual)
 - INT: ...do you think maybe it's more so based on the individual and what works for them? Is that something maybe you're trying to – where you're leading at? P5: Yeah, 100%. Because there's like, I'll work – like there's some officials that I work with who are they just they like, put their hard hat on and go to work. They don't need to really like they don't – they don't really need to work or like think about, you know, like the pre-game, mental preparation, like as much as maybe I might need to. There's some guys that just like pick it up and go and they're ready like on a moment's notice. Like, I think everyone is different and definitely I would agree 100% with that. (P5: Mental Skill Use Dependant on Individual)
 - I guess one thing I would say like to like, you know, younger officials – or younger officials or newer officials is, you know what works best for you because we're all, we're all different. We're all – we're all wired different; we have different personalities. So, you know, do – continue doing what's kind of made you successful. (P6: Mental Skill Use Dependant on Individual)

- ...and see you know once again it's more so of you know, what works best for you. And then put – be able to kind of put all those things are important where you know someone might have you know, more emphasis on say goal setting which is totally you know – which is great. Some might have more focus on okay, I really, you know, I really need to work on my breathing or my, you know, visualization on stuff. Maybe someone doesn't you know, maybe someone's a really good official right now but they never even thought about like the visualization aspect of it as well too. So right? So just those little kind of things that you know that each – that works for each person it. (P6: Mental Skill Use Dependant on Individual)
- And I – and if guys need to do that that's really fine. I – whatever you need to do to get ready. (P8: Mental Skill Use Dependant on Individual)
- That's an interesting question, too, because I think it would really depend on the person and what they're working on and what they struggle with because everybody has a different struggle on the ice. (P10: Mental Skill Use Dependant on Individual)
- So, to go back to your question, I think it's a little bit different for everybody. I don't think one set thing is gonna work for everyone. (P10: Mental Skill Use Dependant on Individual)
- ...like the visualization versus maybe an audible mantra I've heard before, like listening to a recording or listening to a quote or watching a video or something like that, that you can test out and see if it works for you. (P9: Mental Skill Use Dependant on Individual)
- Tried meditation, not – not my cup of tea. (P10: Mental Skill Use Dependant on Individual)
- **Mental Skill Use Dependant on Task Demands**
 - So, I know it's definitely important, whether it's visualization, like you look at goalies, right. They're always doing, you know, kind of weird little movements, stuff from the anthems going on because they're visualizing pucks come at them and stuff like that too, right? And it's like, well, you don't really see too many defensemen or forward sending on the blue line in the anthem, you know, working on their slap shot or stuff like that. It's just different. It's a different thing, right? (P6: Mental Skill Use Dependant on Task Demands)
- **Mental Skill Use – Gender Based Differences**
 - I also think about the difference in genders, because working with male officials, they have a very different mindset than female officials. So, I'd say with females, positive self-talk is huge. And I think it's huge with male officials, too. I just don't think they as readily admitted as us ladies do. We are terrible for negative self-talk. We are awful to ourselves. So, I think that's a huge one for female game officials, positive self-talk. I think it's huge for men too. I just – I don't hear the men ever have negative self-talk that they say out loud. I'm sure it happens, but they just don't say it out loud, but the girls will actually say it out loud. I'm like no, no, no, no, no, no, we're not talking about ourselves that way. That's not good. That's not going to help you. So I feel like it can be a little bit gender specific and then person specific depending on what they're working on. (P10: Mental Skill Use – Gender Based Differences)
- **More Mentally Engaged in Higher-Level Hockey**
 - Like if you would have asked me that question a year ago, I probably would have given you a little bit more of a, “well you know, even though it's like a younger game, you know, we still go and like, you know, try hard” like, and that's – but now it's like, yeah will I still go out there and try, yeah. But like I'm more – it's not like I'm not like – mentally I'm more there for a game that is that is a little more serious than some of these younger games. Like, I'm trying to – I'm trying to watch more stuff that's going on and just like, yeah. (P5: More Mentally Engaged in Higher-Level Hockey)
- **More Pre-Game Communication with Supervisor in Playoffs**
 - But maybe we'll see our – like for playoffs that we have a supervisor come or that's at every single game in the playoffs. So, they'll kind of show us past clips of like hey like you know, game one and game two, here's a couple situations that say that you know –

that the home team had – not necessarily complaints, but like, they said that you know this player on the visiting team was maybe getting a little close to maybe taking some, you know, goaltender interference penalties. (P6: More Pre-Game Communication with Supervisor in Playoffs)

- **Moving on After Good Performance**
 - And then after that, depending on how the game went, sometimes I can just forget about the game because it went well and I'm happy with it, there's nothing just like, psychoanalyze. (P7: Moving on After Good Performance)
- **Personalities Influence Contextual Judgement and Mental Skill Use**
 - So it's so different because there are so many different personalities of players on the ice, but also coaches and officials. It's all intertwined for sure. (P6: Personalities Influence Contextual Judgement and Mental Skill Use)
- **Pre-Game Routines Change Based on Circumstances**
 - Every game is different depending on the level of hockey, the intensity of the game that I'm going into, what life looks like leading up to the game. (P7: Pre-Game Routines – Change Based on Circumstances)
 - It is different. I think it just it's a totally different piece. Like I don't if I'm doing my own game with people I've worked with a lot – I think I'm probably looking a little bit more inwardly, like I'm going to do these three things today. But when I work with someone new or someone at like a tournament or maybe in play offs where there's a little bit more heat, I'm probably more looking at us working as a pair and they'd be asking a little bit more about, again, if it's someone new, asking more about their preferences and whatnot. So, so that it doesn't turn around and have you guys working as two individuals, right. (P4: Pre-Game Routines Change Based on Circumstances)
 - Yeah definitely. It definitely varies, like especially playoffs. (P5: Pre-Game Routines Change Based on Circumstances)
 - Like guys aren't making \$100,000 in some games. So, it's kind of like it's a little less serious, which is, I don't think it's a great thing to say, but it's the truth. (P5: Pre-Game Routines Change Based on Circumstances)
 - I would say it changes a little bit, but not too much. Like obviously if it's – if it's a playoff game, we're probably going to have maybe a little bit more you know prep and focus. For me, we're not – maybe you know, joking around in the dressing room as much as a crew before the game, just to make sure we're prepped. (P6: Pre-Game Routines Change Based on Circumstances)
 - ...and there's usually more intensity with those games as well. So the more intensity of the game, the more it demands out of you. So probably the mindset of I need to be more prepared for this game physically and mentally, because it's going to ask more of me than a regular season or a lower-level game. So just that mental – mentality... (P7: Pre-Game Routines Change Based on Circumstances)
 - Yeah, I think there's just more pressure in them. So, you try to be more mentally prepared... (P7: Pre-Game Routines Change Based on Circumstances)
 - I'll spend more, I think most officials will spend more time on pre-game preparation in terms of finding out what happened in the games before in the series, contacting the guys that worked. So just getting as much game intel as possible so that when you go into it, you know – you're as prepared as possible to know what's gonna – what could potentially happen. (P5: Pre-Game Routines Change Based on Circumstances)
 - So I would say, we do a little bit more prep into, you know, especially playoff games or things like that or even you know, tournament finals and stuff. (P6: Pre-Game Routines Change Based on Circumstances)
 - So I would say, yeah, playoffs, there's a little bit more, but I would still say like our kind of overall prep is still pretty similar for the most part. (P6: Pre-Game Routines Change Based on Circumstances)
- **Pre-Game Routines – Environmental Factors**

- Yeah, that's a good question. I try to maintain that consistency, but I find there's a couple factors that contribute to the change. One would be like the venue of the arena. So sometimes the venue's like really big or it's really crowded. I remember one time I was in Ontario doing the professional women's league. This was last year and it was a really small rink and there was kids kind of running around everywhere and it was not the best place to take a moment to kind of, you know, have that 5 minutes to yourself just to kind of maybe I guess – visualize and do a couple stretches and stuff. (P3: Pre-Game Routines – Environmental Factors)
- **Self-Talk – Adjusting Cue Words to Match Circumstances**
 - And that also just changes in different circumstances, like if there's a penalty kill, power play situation like then I'll add like, clock into that and I might remove goalie because there's going to be no icing in that situation for the PK team. Reverse that because the power play team can obviously still ice the puck, but it's just little things like on an icing scenario sometimes – there was one at [location removed for anonymity] where I just like came down and I was like patience, like just wait cause the puck was rimming and it was a hybrid icing and it's like just patience and wait a second 'cause that was a piece of feedback that I'd gotten as well. (P9: Self-Talk – Adjusting Cue Words to Match Circumstances)
- **Self-Talk – Perception of Call Accuracy Influences Type of Self-Talk**
 - Or like if – depends on whether I depends on whether I actually think that I screwed up the call, or whether I think that I got it right and I just need to validate myself because somebody else thinks I got it wrong. (P7: Self-Talk – Perception of Call Accuracy Influences Type of Self-Talk)
- **Self-Talk – Use Depends on Game Demands**
 - Mantras, it depends on the game as to what kind of setting – attention. (P10: Self-Talk – Use Depends on Game Demands)
- **Situation Dependant Mental Skills**
 - I think some of them are definitely like more relevant, just depends on the application. (P4: Situation Dependant Mental Skills)
 - Post every game yeah. Just different tools for different situations. (P7: Situation Dependant Mental Skills)
- **Visualization – Environment Enhances Process**
 - I think I do a better job when I'm at like the rink there because I will look at the boards and like maybe where I should stand or where this would be or where like just – I can picture myself in the facility versus a blank slate, a little bit more. It's a little bit easier like watching warm-up, I can pick it out. (P4: Visualization – Environment Enhances Process)

Appendix G

Insights about Mental Skills in Officiating

Importance of Mental Skills for Elite Officials

- **Abusive Environment in Youth Hockey**
 - Where I mean the, you know, the minor hockey parents are absolutely nuts, especially at those younger levels. Just like they just – I remember going to like watch games in [location removed for anonymity] and it's just like you hear these parents yelling and screaming. It's just like, your kid is 8 years old like relax, you know what I mean? Little Johnny is not getting drafted tomorrow, so let's not worry about that. (P6: Abusive Environment in Youth Hockey)
- **Antecedents to Pre-Game Anxiety**
 - ...and just, just to like bring my heart rate down a bit especially if I'm going into like a big game, like a Canada-US game. Like I might get like a little nervous on the way to the rink cause like it's you know sold out stadium packed crowd, so it's a good way to just like get back to basics by just like warming up and just taking my mind off things... (P1: Antecedents of Pre-Game Anxiety)
 - And then I was off Monday and reffed Tuesday and I have a beef with a kid on the team on Tuesday. So, Monday I was a little bit more heightened with just anxious about what am I going to do about this kid basically. (P4: Antecedents to Pre-Game Anxiety)
- **Anxiety Led to Mistakes**
 - Yes, well, my – I'll reflect on that tournament where I was very anxious and were like I was so worried about making a mistake, that I did make a mistake. (P4: Anxiety Led to Mistakes)
- **Arousal Control – High Arousal Led to Mistake**
 - So, I did have this happen at like a tournament where I just like wanted to do everything all at once sort of thing. I end up making a rule error and blowing my whistle at the time you don't need to. So, I found that just like not caring almost worked better for me because I found when I tried to do too much it was detrimental. (P4: Arousal Control – High Arousal Led to Mistake)
- **Being Prepared for Unexpected Situations**
 - Especially – I can – like you never know when a high intensity situation might come up like you think you're going to just do like... oh it's regular just like 2 games... they see each other all the time like whatever. But then something might happen and then intensity switches on a dime. So, people need to be prepared for – for that. Not just like with your rule book, but mentally and stuff... so you don't look like you don't know what you're doing (P1: Being Prepared for Unexpected Situations)
 - And then first whistle of the game, had a fight 30-seconds in the game so. It's funny how like if there's nothing happened the day before and then it's totally different game. So definitely for us, like we try to chat about stuff and we know that we got to be prepared for the unexpected because we don't know what's going to come to us each night, each game. (P6: Being Prepared for Unexpected Situations)
 - ...and try to be as ready as we can because you know you can – you can over prepare as much as you can, but you never know what the game's going to bring us because there's so, so many things that can – that can go right and go wrong in the hockey game in a split second. (P6: Being Prepared for Unexpected Situations)
- **Being Prepared to Handle Confrontation**
 - And that like I said, that's happened like several times across several different situations where you can just either be more prepared for knowing that someone is going to respond that way in advance or being able to take time to create the appropriate response, so. (P4: Being Prepared to Handle Confrontation)

- **Better Mental Skills Needed to Handle Confrontation**
 - And I would just say like some of the other times is mental skill wise, is like I said is emotionally reacting to like a – to being confronted. (P4: Better Mental Skills Needed to Handle Confrontation)
- **Challenges Learning How to Let Go of Mistakes**
 - That may be one of the hardest things to learn how to do is to just let things go. And that's something that I – it's a challenge no matter how long you've been officiating because we genuinely care. But the outcome on that game, we don't want to impact that game negatively. (P10: Challenges Learning How to Let Go of Mistakes)
- **Developing Effective Communication with Coaches**
 - So, so even that can go with the communicating part as well sometimes, so that's where I've been trying to like, grow a little bit more is again, you can have an emotional response and I sometimes do, and it's bit me in the ass a few times. So, that's my next thing is to try to continue also with that. (P4: Developing Effective Communication with Coaches)
- **Did Not Engage in Mental Skills Training Provided by the Organization**
 - No, I know we did a camp last year, there's some conversation that there was a sports psychologist with Hockey Canada, if you're interested that could help you. I didn't take them up on it. I think as a younger official, that's a very good idea. But I didn't take advantage of it. So, I have not been provided with anything, but I have not sought it out either. (P10: Did Not Engage in Mental Skills Training Provided by the Organization)
- **Did Not Seek Out Mental Skill Resources**
 - INT: ...have you gone out and taken it upon yourself to kind of go out and look for some of this information on your own? Kind of a more – an independent approach. P8: I don't think I have, no. I've never formally looked for it. (P8: Did Not Seek Out Mental Skill Resources)
- **Differences in Mental Skill Usage from Player to Official**
 - Yeah, I don't – and that's the thing is, I don't know if it's due to my maturity like me as an adult – being an adult athlete or being a child athlete and the differences. But regardless, I do way more as an official than I ever did as a player. (P2: Differences in Mental Skill Usage from Player to Official)
- **Difficulty Articulating Internal Thoughts About Mental Skills**
 - And I think that's why there's some hard – for me, it was hard to describe sometimes what things really felt like or meant to me. (P8: Difficulty Articulating Internal Thoughts About Mental Skills)
 - It's and – it's hard to talk about some of this stuff because you've never really vocalized it or even put words to it. So, not that it's hard emotionally or anything, you just – these are conversations that you don't really have outwardly – a lot of internal conversations. (P8: Difficulty Articulating Internal Thoughts About Mental Skills)
- **Disappointed with Performance Outcome**
 - So, after that, after that game, our officiating coaches weren't too happy with it. And especially in a tournament like that where we've got, you know, 16 referees and 16, you know, linesman there that half of us are, you know, half of us get sent home after the quarter finals. And I knew like, okay, well that's pretty well the writing on the wall on the wall for me. You know, it's a short tournament and little things like that where you know, you have to get those situations right to try to separate yourself from the pack and move forward where to get those little situations wrong. So, I think that's probably for me, you know, the time I'm like – like I'm like fuck, like I'm going home early. (P6: Disappointed with Performance Outcome)
- **Distractions Lead to Poor Performance**
 - Oh, definitely just by kind of like, not trial and error, but almost like trial and error like there's been times when I've done games and I'll like – and I've like been on my phone right up to like dropping the puck or in the intermissions and I just like won't – I just

- won't feel mentally present. I just like I'm, you know, too worried about if, I don't know if Josh Allen is going to throw another interception today. Or like you know some like that's a bad example, but or yeah – (P5: Distractions Lead to Poor Performance)
- And then after Christmas, I was like on my phone a bunch before the game and made a made a bad icing call. So I was like, “Oh well, learned my lesson”. (P5: Distractions Lead to Poor Performance)
 - **Distractions – Comments from Players/Coaches**
 - I think something else that could come up throughout the game is if anyone is upset with a call or there's comments being made on bench side, especially as lines people, we're on those lines and we can hear things... (P9: Distractions – Comments from Players/Coaches)
 - **Does Not Practice Mental Skills**
 - So yeah, I guess I would use them in a hockey context. But still this is just me – It's not me practicing per say, it's actually me using. So, I don't think I practice. I think I just more so use them just for my again, personal use and my own anxiety. (P2: Does Not Practice Mental Skills)
 - **Does Not Think About Mental Skills**
 - [Long pause] I don't ever think about these things, so it's hard. (P1: Does Not Think About Mental Skills)
 - And when I say that, I mean, I never really thought about it much. (P3: Does Not Think About Mental Skills)
 - And honestly, Chris, I've never really thought about this. You know, I've never really thought about how that goes every game. (P8: Does Not Think About Mental Skills)
 - **Effective Mental Skills Use Is Differentiating Factor in Top Officials**
 - Like I have a quote and it's one of my favorite quotes and it's I can't do it verbatim. But it's if we're all – if we're all – if we all have the speed and we all have the power and we all have whatever. It's the mind that sets us apart. Where we get to a level where we're all fast, we're all like – you're expected to be at this physical level, but it's in the mind that you can kind of differentiate you. (P7: Effective Mental Skills Use Is Differentiating Factor in Top Officials)
 - **Elite Officiating Requires Good Game Management Skills**
 - Yeah, it's a – it's very weird and like also game managing in female versus male hockey is different. So, it's all like it's a – it's a hockey feel skill. When we talk with a lot of officials, and I'm an officiating coach as well, I'll talk with officials and go, “Hey, like you have solid skating. You have solid skills. You have good standard. You have no hockey IQ, like there's no, like more higher-level thinking when you look at the hockey game”. And you know what if we have – they don't think about, oh, this is actually the first team in the league versus the eighth team in the league. How does that make a difference? It does make a difference, right? I don't need the top scorer in this league getting injured by some goon on 8 like it's – it's those kind of the things that they – a lot of people don't think about and so it's a – it's a hockey field kind of thing it's hard to describe. (P2: Elite Officiating Requires Good Game Management Skills)
 - Yeah, totally. So, like in a nutshell, game management is the determination of like when to call penalties, when not to call penalties, and how to actually manage the personalities in a hockey game. So, in that case, like the way that – for me, if I have a well managed game, my performance is like good. Like that's a good performance, even though even I may not call a whole penalty in the whole game, but my game management was here [hold hand high], that means it's still a good game because I was able to manage the personalities, so we didn't have to deal with any penalties and that's happened before and those are great games, right? When they just play hockey. (P2: Elite Officiating Requires Good Game Management Skills)
 - **Emotions Can Run High During a Game**

- And then sometimes there is no problem and the coach is just or a player is just mad. And you know I was playing men's league Tuesday night and I got hauled down on a breakaway and I was just mad. And I'm – and the refs like, it's okay you're getting a penalty shot. But I'm like, you know F- this and I was like you're – my emotions got the best of me. And I had a moment of like wow, even I can get worked up when during a game, I'm like why is he getting work so worked up and things like that. (P8: Emotions Can Run High During a Game)
- **Experience and Effective Mental Skill Use are Key Factors in Elite Officiating Performance**
 - So, I think those two coupled together the experience plus the mental skills that I use have put me in a good spot to kind of go out there and perform at an elite level. (P8: Experience and Effective Mental Skill Use are Key Factors in Elite Officiating Performance)
- **Experiencing Self-Doubt During Officiating**
 - Like some – just sometimes it's just you're in your own head too. (P7: Experiencing Self-Doubt During Officiating)
- **Extreme Anxiety and Panic in Unexpected and Stressful Situation**
 - Like for me, like... most of the time. There's a lot of times where I'm like, “What am I doing out here?” I think like having extreme pressure situations. So, when I did one of my NHL games, my partner who now refs in the NHL, he got a puck to the teeth and he split his lip from like in his nose all the way underneath and it's like a full split – it was a whole thing. I felt awful and he had to leave the game. There's 5 minutes left in the game so I'd be the only referee on the ice in an NHL game. I am half the size of most of the players out there. I was terrified [emphasised terrified]. At that point all thoughts exited my brain. I had nothing in my brain and I had no idea how to deal with that type of pressure because I knew that I was in a high-pressure situation already doing an NHL game in a packed arena. That was enough pressure for me. I knew I was doing it weeks, days, months before I actually did this game. But I never predicted that I wouldn't have a partner on the ice and a partner that was in the NHL that I could depend on. Like this was a – this was a partner that I knew if I didn't get the call, he was going to get the call and I didn't have him anymore in a 2-1 hockey game in the Vancouver Canucks versus the Oilers. Like there is nothing like – how, like who – what was happening? (P2: Extreme Anxiety and Panic in Unexpected and Stressful Situation)
 - I was so afraid, and I've never had to deal with that kind of unpredictability. Hockey's an unpredictable sport, but that was unpredictable. That is something unprecedented that doesn't happen often. And so, I wish that I had somehow prepared that I may have to do a game alone like and I may have had to do something alone. And also dealing with a partner who was now bleeding, severely injured, and I also have the – actually – so I'm a dental student. I'm going to be a dentist in about 6 months and he had lost some of his teeth. So, I wanted like – and there's that part of me that I was like thinking about his teeth. So, then I was like thinking about like, “Oh my gosh, he's going to need a root canal. He needs to get like this, this, this, and this. I hope they have this for me, like I can do this here...” and like and it was just like – thinking about everything. So, I wish that I'd worked more on like the like arousal control, because that was something like that's probably the most terrified I've ever been in my life and that was like, yeah. That was something that I was not prepared for. There's a great video of me like pointing for them to put the puck down and my hand is like shaking like this [shows hands shaking] because I'm like pointing to try get them to start because I was so nervous. Yeah, and I've never – I've never had that feeling ever again. But I wish I had something to help me there because... I don't know what to do. (P2: Extreme Anxiety and Panic in Unexpected and Stressful Situation)
- **Extreme Coping Mechanism**

- We have an official in [location removed for anonymity] here that takes anxiety medication only before officiating. He doesn't take it any other time. (P4: Extreme Coping Mechanism)
- **Experience and Game Knowledge Helps Mitigate Abuse**
 - You just get older and you just don't care so much. I think when you're young like – when you get older, and you start studying the rulebook and learning the game, at a different level, you have the confidence to be like, that person doesn't know what they're talking about, like, that's ridiculous what they're seeing from the bench or the parents or the players. And that gives you a confidence as well... (P10: Experience and Game Knowledge Helps Mitigate Abuse)
 - When you're an adult, whether it be the rulebook, or just your knowledge of how people should behave, it gives you the tools to better deal with those situations. (P10: Experience and Game Knowledge Helps Mitigate Abuse)
 - But a lot of times I didn't make a mistake and no, like, you need to read the rules of the game, not me because that wasn't a mistake. Maturity absolutely maturity, but life experience helps as well. (P10: Experience and Game Knowledge Helps Mitigate Abuse)
- **Experience Helps Develop Confidence**
 - ...but I think I've gotten into a state now where I feel very confident stepping onto the ice every time. Very few things, especially I think experience helps a lot with this, but very few things that happen on the ice kind of surprise me anymore. (P8: Experience Helps Develop Confidence)
- **Experience Leads to Good Game Management**
 - But that also kind of comes with time because I remember like the first couple games, I ever did three or four years ago, I was just like a wrecking ball going in there trying to break up a fight. I didn't know what I was doing. But over time, it kind of with experience, you kind of just get familiar with you know, who's playing and how to – how to tackle those situations. (P3: Experience Leads to Good Game Management)
 - – I think I'm pretty healed for the most part and there's just there's times where you need to I guess – it kind of comes with you know more games you work on the more experience, but also good kind of knowing, you know, maybe when you could, you know kind of joke around with the with the coach a little bit or you know just kind of finding those spots because it's all, it's all time and place, right? I mean if you know if a – if a team, if you want me if you have to go deliver like a negative message to a coach or something that isn't urgent, well maybe wait until after maybe at the start of like – if they're on a power play or maybe shortly after they just scored a goal because now they're in a better mindset to go deliver message better received. Where if you just put them shorthanded 5 on 3 for two calls that are maybe suspect and try to go explain something to them, they're like oh it's like well, they don't want to listen because they're you know they're pissed off their mad. So just kind of finding those nuances. (P6: Experience Leads to Good Game Management)
- **Familiarity Leads to Less Pressure and More Comfort**
 - Now I don't – now I just work the [league removed for anonymity] League and [league removed for anonymity] games I think I just find it easier because it's like well now it's just like, it's one league for the most part. One set of rules. You know, you see the teams more frequently so it just – it just becomes more, it's kind of more of a norm or kind of a little bit more at ease where you're not going to maybe a new rink for the first time or working with a crew where you've never met any of the officials before. So there's – little bit of those I guess, a little bit of barriers to a certain degree, but nothing that's really drastic but... (P6: Familiarity Leads to Less Pressure and More Comfort)
- **Feeling Anxious Well into the Game**
 - And I can remember being very nervous, because I remember in the third period, still feeling nervous. And that was a weird feeling for me, because I hadn't had that very, very,

very long time – still feeling nervous in the third period. (P10: Feeling Anxious Well into the Game)

- **Focus – Importance of Ignoring External Distractions**
 - If you focus on those kind of negative external factors you can't control, then you're not going to be able to do, you know, the job you need to do at hand and you know in the in the right way. (P6: Focus – Importance of Ignoring External Distractions)
 - ...and it's about okay, that is another distraction that is not going to be helpful for this game. So, that's something you need to put away in that toolbox and it's got a like – you just need to get that out of your brain because it can't affect your judgment or what you're seeing on the ice right away. (P9: Focus – Importance of Ignoring External Distractions)
- **Game Context Can Increase Anxiety Level**
 - But I would say, yeah, there are some games I can be nervous for if it's, you know, playoffs or anything like that, like there's if it's – if it's game six or game five and you know the team, they lose their, you know, their season's over. So there is that little higher, you know, a little higher expectations and but also a little you know, a little bit more on the line for the teams involved as well. (P6: Game Context Can Increase Anxiety Level)
 - The bigger the game, the more nerves I have. (P10: Game Context Can Increase Anxiety Level)
 - So yeah, if the game has what I perceive as more significance, I will feel more of that nerves and anxiety than other games that are just a regular game, where I don't. I'll go to the rink, and I'll feel quite calm. (P10: Game Context Can Increase Anxiety Level)
- **General Need for Better Mental Skills**
 - INT: But can I ask you to describe a time when you wish you had better mental skills?
P2: Totally. Oh my gosh. Most of the time. (P2: General Need for Better Mental Skills)
- **Goals – Little Control**
 - Obviously, there's a few things that have for – a lot of things that need to go you know, go right for that for that to happen. You know first and foremost if the NHL decides to go to the Olympics, then that, you know, pretty well eliminates almost all the North American officials because they'll use the NHL officials as half the staff and their other half will be European officials for the most part. (P6: Goals – Little Control)
- **Greatly Affected by Things Going Wrong**
 - I would consider myself like a pretty emotional person, so when stuff does go wrong, like I'm quite affected by that. For example, getting to the rink late or something like that, that's kind of the last thing that I try to control. (P4: Greatly Affected by Things Going Wrong)
 - Before a game, one cry. So that's like my typical emotional response. Obviously, it's not a very professional response at times, so it really depends like where I am and also who I'm with. I guess like I have – we have a lot of tight knit friends from our officiating stuff, so like a lot of people wouldn't be surprised, but other people maybe. (P4: Greatly Affected by Things Going Wrong)
- **Harder Games to Officiate and Focus**
 - It's – it's sometimes in a – on a Tuesday in the dead of winter, if you're, you know, driving to, you know, [location removed for anonymity], whatever, and a snowstorm, it's just kind of like okay, like, you know, let's get this game over with so we can head back on the road and try to get home at a decent hour as well. (P6: Harder Games to Officiate and Focus)
- **High Stress Environment**
 - Yep. So, I actually lived in a smaller town a few years ago and I got to, I got the opportunity to ref a higher level, so U18 AAA male when the year before I had probably only done like U15 A reffing. So, it was like a big change, a little bit like over my head, but I was in this smaller town that was all we had. I was the best fit so. There's a couple times where you're in hot water or just like honestly just not fit to skate that kind of hockey in the – in house like just how I could skate and everything like that. It was on Olympic ice, that doesn't really make a difference, but it added to my fear and anxiety and

- then that team was very good. So, missing stuff on them, like a more – coach that runs a little bit hotter and stuff would be frustrating, anxiety, whatever. (P4: High Stress Environment)
- ...and like I said, there was several major penalties. People yelling, telling you you're not you're not very good, et cetera. All that builds up and then obviously when you're physically fatigued, the mental strength also goes by the wayside. (P4: High Stress Environment)
 - Yeah, I think... there was – okay, well this is kind of like a funny example, but it kind of just spikes in my mind I guess when I think of – there was a time, it was my very first international game. And so, there's a supervisor there, it's super intense. You're being evaluated heavily on the entire game. (P3: High Stress Environment)
 - **High-Pressure Situation – Handling Doubt and Crowd Reaction**
 - A great example is on Friday night, I was refereeing an [league removed for anonymity] League game and it was only my second of the year and I was in a sold-out arena like 9500 people. It fits 10,000 and I called a penalty on the home team that I wasn't to be honest I wasn't 110% sure on it. It checked all of the boxes, but I only caught it on my peripherals and my partner didn't have it. And so, I called the penalty and right away the player challenged me are you like – “Are you sure you're seeing that your arm went up late?”. And I'm like 100% he caught him with his foot. It was a – it was a goaltender interference penalty, 100%. He caught him with his foot. He's like, “Are you sure?”. And I'm like, “Yes”. And the video replay happens. I don't look at it, but I know it's happening on the big screen and like the whole crowd, probably 9300 people in the crowd boo. So immediately my mind goes, “Oh crap. I probably got it wrong if everybody is booing”, because if it was an obvious penalty they probably wouldn't be booing. (P7: High-Pressure Situation – Handling Doubt and Crowd Reaction)
 - **Importance of Mental Skills for Elite Officials**
 - So, you need to have that mental ability to be able to say, “Hey, I've got some concerns here now. I'm gonna have to watch out for X, Y, and Z because this might happen”. I don't think you can – I think you can be a high performance official and not have a good mental game. I don't think though that you're – it's gonna catch up to you at some point, you're gonna get into that big game with a lot of pressure, a lot of people watching and something's gonna go wrong. And you might not be able to recover from that if you don't have the mental skills to be able to reset on the ice in that moment. And maybe you can get through that game. But what about the next year, the next two years? Next three years? Can you reset after that mistake that occurred on the ice or when the game didn't go well? (P10: Importance of Mental Skills for Elite Officials)
 - So, I don't know – if you want to be high performance and work in the top games, working those gold medals, work in those championship games, if you don't have a mental aspect to your game, I don't see how you can make that to the top. I don't know that it's possible to be honest. (P10: Importance of Mental Skills for Elite Officials)
 - ...Yes and no. It's – I think we get yelled at a lot more than other people in lots of aspects of life, so in that aspect I think we need to use all of the skills more. (P7: Importance of Mental Skills for Elite Officials)
 - **Pressure to Perform Well During Playoffs**
 - So, and then if we obviously as we move through playoffs and there's fewer and fewer officials – or as the rounds [audio cuts out] – fewer officials that are able to work. So you know, we want to be those officials that are continuing to work on as the playoffs go. (P6: Pressure to Perform Well During Playoffs)
 - **Influences on Mental Performance – Life Commitments and Stresses**
 - I wish I could replicate every game and be in the flow, but this isn't my full-time job. It's not what I do all the time, so I have all the other commitments in my life and all the other stresses in my life. And sometimes when I get to the rink, those are still on my mind. (P10: Influences on Mental Performance –Life Commitments and Stresses)

- **International Game Atmosphere**
 - Yeah, you can't hear your whistle. (P8: International Game Atmosphere)
- **Interpersonal Conflict Affecting Performance**
 - And there was different situations that – with different officials where maybe we weren't jiving as teammates and the assignments kept working that – kept happening, that I kept working with one of the officials that I was butting heads with and it – and it was wearing on me mentally off the ice. To a point where that I felt like it was affecting us on the ice... (P7: Interpersonal Conflict Affecting Performance)
 - ...and I would say that that's where I struggle with the tools is when it's – when it's internal team issues, not dealing with things that happen on the ice or with coaches or with players, it's when there's difficulties and rubs within our own team as officials. (P7: Interpersonal Conflict Affecting Performance)
- **Lack of Feedback in Home Province**
 - ...and then not often unfortunately, I find in [location removed for anonymity] like we don't get supervised that much like working locally unfortunately we don't. But working for Hockey Canada and like traveling for like actual, like, nationals or like – different events affiliate with Hockey Canada there's always a supervisor. (P3: Lack of Feedback in Home Province)
- **Lack of Focus Led to Mistake**
 - And then wasn't really a lot of internal talk kind of just which led to maybe – led to me not being mentally fully present and I made a mistake. (P5: Lack of Focus Led to Mistake)
- **Losing Focus Can Lead to Missed Calls and Poor Game Management**
 - But yeah, you just have to go out there and you just do it like you just have to you know focus for 60-minutes and even like little things too. Like there's times where there could be nothing going on in the game. It's a really boring game and in the third period like, hey let's get this game over with. And then that's where maybe if you're not watching, you know line changes play or you know two teams at the benches really, really close together. You know that one time you don't look at the team is changing and then maybe that someone gets a sick in the face or slashes a guy. And then everything – all that emotion builds up in the game again. Now you've made your, you know, made your night a lot longer because now both teams are pissed off that this is, you know, this is going on, you know, we're not doing our job. (P6: Losing Focus Can Lead to Missed Calls and Poor Game Management)
- **Losing Focus During Low Intensity Games**
 - Totally for sure. I find like when you are doing that high level hockey it's easier to maintain focus and maintain that, you know, intensely because of the game, you can kind of stay involved in it. But I still like support the minor hockey and obviously do games of all levels which involve like high school female hockey or competitive male hockey, competitive female hockey. But there's going to be those games that are really, really hard to stay focused in because the score is skewed or it's just not that great of a game and staying focused or like, maintaining the – the procedure of like where your positioning is or you know you're how straight your arms are when you're making a call. Like the really random things that no one really notices. I can definitely, like, think of times where the game wasn't that intense and I didn't really maintain my integrity of, you know, staying focused in the game. (P3: Losing Focus During Low Intensity Games)
 - Yeah, I was also thinking like a perfect – I guess like this was just the other day. I was lining a high school boys hockey game and it wasn't that great of a game. There wasn't much flow to the game, the team couldn't break out and you were kind of just like stuck on the line watching the game. It wasn't that entertaining and there was – it was like a multi purpose center like so I was obviously in the rink, but then up above they were doing karate and I made a joke in the in the room in between periods where I was like yeah the game so slow like half the time, I find myself watching them do karate. So that's

- like a perfect example of like not being able to maintain that focus where I should really be – okay stay involved like and try to think of tools that I can use to maintain that. (P3: Losing Focus During Low Intensity Games)
- So the hardest games to stay focused are the ones that are crappy games. Right where it's like a big spread in the points or absolutely nothing is going on and then that's where you – I need to make more of an effort to stay focused... (P7: Losing Focus During Low Intensity Games)
 - ...and I think sometimes you do get complacent in games that aren't the highest quality. (P8: Losing Focus During Low Intensity Games)
 - And I'm not perfect at it and I'm not like a machine that can just be like, I'm focused all the time. There's definitely times where I'm on the ice and like, hey, my mind's wandering, like, bring it back to hockey. Especially if you're not doing something that's like so intense and fully demanding. And maybe it is a level that you have the ability to just like your mind's wandering, you're like, oh, now the puck's here. (P9: Losing Focus During Low Intensity Games)
- **Major Game Led to Over Arousal**
 - I guess, well maybe one game that comes to mind was the gold medal game of the [year removed for anonymity] Canada Winter Games. That was my first time in front of like 10,000 fans in a game like games on TSN and I remember being like, so I guess maybe energized not the best word, but just kind of so like amped up for the game that you know was kind of over overdoing things. Like over skating to the blue line, over skating just little things like that were just kind of like okay you know, just settle down and then let the game come to you. (P6: Major Game Led to Over Arousal)
 - But that's definitely, I remember – one game for sure that was – one game where I was very probably over, you know, probably over animated to start a game, just kind of like okay let the puck hit the ice and you know, it's another hockey game. (P6: Major Game Led to Over Arousal)
 - **Mental Skills are Important for All Performers**
 - So it doesn't matter if it's an official or if it's a player or if any sport, but being able to kind of, you know, focus on what you need to focus on. (P6: Mental Skills are Important for All Performers)
 - And absolutely any – anytime want to be high performance in anything in life, whether it's your job, being a parent, sports, I don't know, you're on the debate team. I don't care what it is. If you want to be high performance in anything you do, you need to have mental performance skills to go along with it. (P10: Mental Skills are Important for All Performers)
 - **Mental Skills are Important for Elite Officials**
 - [Long pause] How would I respond to that? I would agree with – with what you said, especially basically on the information you provided on what that is... definitely. (P1: Mental Skills are Important for Elite Officials)
 - INT: How would you respond to the statement, mental skills training has a place in elite officiating? P2: 100 percent. 100 percent. I think mental skills training should be a part of the curriculum for elite and high-performance officials. Dan, I think sent all of these – this invitation to all of our national high-performance officials. That's us at our highest level, we are peaking in our careers, but I think it should be introduced at their member high performance. So, these are the people that are working at national levels, they're at nationals, they're doing those kind of things. I think that's a high enough performance and even lower that they should be using mental skills and there should actually be mental skills training as part of our certifications. (P2: Mental Skills are Important for Elite Officials)
 - They think that just because they can bench press on 225 lbs and they can skate really fast, they're a good official. But that's not always the case. (P2: Mental Skills are Important for Elite Officials)

- INT: How would you respond to the statement, mental skills training has a place in elite officiating? P3: I would say 110% agree. (P3: Mental Skills are Important for Elite Officials)
- INT: ...how would you respond to the statement Mental skills training has a place in elite officiating? P5: Oh yeah, 100%, 100%. (P5: Mental Skills are Important for Elite Officials)
- And I 1000% believe that there is a place for it in elite officiating and it can make every single official better. Now I will say like it will make – if you have like 3 different officials, it might make one guy like 10% better, might make one guy like 50% better and it might make one guy like 1% better because some guys just like, you know, they might be more advanced than another official. But I definitely agree. (P5: Mental Skills are Important for Elite Officials)
- INT: How would you respond to the statement, mental skills training has a place in elite officiating? P6: 100%. Yeah absolutely. (P6: Mental Skills are Important for Elite Officials)
- INT: So then I want to ask you another kind of opinion question in terms of how would you respond to the statement, mental skills training has a place in elite officiating? P8: Strongly agree. (P8: Mental Skills are Important for Elite Officials)
- So yeah, I do agree strongly. (P8: Mental Skills are Important for Elite Officials)
- INT: How would you respond to the statement, mental skills training has a place in elite officiating? P10: 120% it absolutely does. (P10: Mental Skills are Important for Elite Officials)
- In my opinion, I think that like... all like – a lot of mental skills or like all mental skills, can be equally as important to officials as they are to a coach – a player like anyone. Because they – their role is like, their job is just – is different. (P5: Mental Skills are Important for Elite Officials)
- 10 out of 10 like I would 100% agree with that. (P7: Mental Skills are Important for Elite Officials)
- I just, I mean, I think that we are challenged in so many ways as officials that with without mental skills or mental training or mental skills training, you just don't have the coping mechanisms to deal with it. (P7: Mental Skills are Important for Elite Officials)
- ...and I don't think that you can get to the elite level without having those skills or at least a foundation of those skills. (P7: Mental Skills are Important for Elite Officials)
- I would say absolutely, because there's many different types of mental skills, and to know about them, to use them and to put them into practice is definitely helpful when you're competing. When you're officiating those high-level games, just like the players would when they're competing at those high-level games. (P9: Mental Skills Critical for Elite Officiating)
- **Mental Skills Important for Handling Negative Emotions Related to Elite Officiating**
 - We do see an uptick of mental illness in officials. I've lost very close friends and hockey officials due to mental illness, and I think – I do – I can't say obviously if it's due to hockey or so on and so forth, but a lot of us deal with those feelings of inadequacy. We deal with feelings with rejection. We feel like social outcasts because everyone hates hockey refs. Like we'll be honest. So, I think that those are those are such important things that can be introduced, especially with high performance officials. So yes, I completely agree. (P2: Mental Skills Important for Handling Negative Emotions Related to Elite Officiating)
- **Mental Skills Use – More Prominent as an Official**
 - Yeah, no, that's – it's been, yeah – a couple years of high performance doing this. And honestly, I think I've done more like – like mental skills, mental skills training for officiating than I ever did as a player. Like as a player, I did not care. (P2: Mental Skills Use – More Prominent as an Official)
- **Mental Skills Training Gains Importance as You Advance in Level**

- To me it's, I think – I certainly think it's crazy to see all these like, like, you know, atom and pee-wee teams that have like their like dryland coaches and strength coaches and stuff. It's just like, kids 12 years old. Like, you know what I mean? It's just seems to me – it seems like it's a bit overkill with hockey. But in terms of like once you move up into hockey and whatnot, then there's yeah, most, you know, there's always – look at golf. And how many of these guys have, you know, sports psychologists and, you know, therapists and all that stuff to kind of be able to kind of talk to, you know, work themselves through, you know when stuff goes wrong or stuff isn't going right. It's like okay, what can you do to, you know get back to, you know – get back to center and then you know continue on from there. (P6: Mental Skills Training Gains Importance as You Advance in Level)
- **Mental Skills Training Missing in Hockey**
 - Because prior to that, I've never seen that in a lot of my hockey. (P10: Mental Skills Training Missing in Hockey)
- **Mental Skills Underutilized by Officials**
 - I would agree. I think it's an under utilized – like I think that should be more prominent than it is, I guess. (P4: Mental Skills Underutilized by Officials)
 - I think it's great. I think it's such an important aspect of the game that a lot of people don't even realize exists... (P10: Mental Skills Underutilized by Officials)
- **More Anxiety Officiating Higher Level Hockey**
 - So maybe in that situation, going into the World Championships, having not refereed pro-hockey in six years, were you a little extra nervous maybe than you would have been for say, a Western Hockey League game or –. P6: 100% (P6: More Anxiety Officiating Higher Level Hockey)
 - Yeah, no definitely it was – I was nervous, you know, going there for sure. (P6: More Anxiety Officiating Higher Level Hockey)
 - So that was probably the last time I felt, you know, kind of nervous for, you know, for a game was probably that, that first game. (P6: More Anxiety Officiating Higher Level Hockey)
- **More Mental Preparation on League Specific Rules**
 - Yeah, probably my fifth game of the World Championships in terms of rule book knowledge. So, there was, yeah, there was two – it was USA and Denmark. There's two situations that happened in our game. One, I was the high official, there was a goaltender interference call where my partner was looking right at it and he had a good look and I kind of flinched as the high guy is like and my arm didn't go up. I'm like something doesn't seem right. So, we chatted with the other officials down low and I said, hey, like what do you see there? He said, well, I've got the skates coming outside the crease, defending player knocked the attacking player into the goalie, so that's why there's no penalty. Perfect. You saw that clear as day. Our officiating coach afterwards maybe disagreed with what we had come to conclude on the ice. And then there was a second scenario in the same game where plays coming – I'm the down the low official, plays coming towards me. There's a hit in neutral ice where USA player lost his helmet. So in IIHF rules, as soon as your helmet comes off you have to leave the ice. Where if it happens in a different league, you can put your helmet back on as long as the chin straps done up and done properly you can still participate. So it's like a two on one now coming at me. So I wasn't focused on the player that lost his helmet. I'm looking at the two players coming in like a two on one and then as the play kind of broke up and then turned back up ice. I didn't know if the player changed, like I didn't know – I couldn't remember which number was. And so, it should have been a penalty for the USA player for basically for legal equipment or an ineligible player for not having to leave the ice at his helmet came off. So, I think if I had a little bit more, probably if I prepped a little bit more in terms of kind of reading the rule book a little bit tighter... (P6: More Mental Preparation on League Specific Rules)

- But that's where I guess in terms of kind of the, you know, mental preparation or I think I probably could have prepped a little bit better on the way there, but also while I was there too. (P6: More Mental Preparation on League Specific Rules)
- But yeah, I would say probably just in terms of like next time for me, I need a little more mental prep would probably be for just rule book knowledge on that. So that's the one thing I kind of kicked myself in the ass for a little bit. (P6: More Mental Preparation on League Specific Rules)
- So that probably be the last time I probably needed some a little more mental – mental prep or something like that. (P6: More Mental Preparation on League Specific Rules)
- **Need for Mental Skills to Deal with Interpersonal Conflict**
 - ...and I didn't feel like I had the mental tools – well actually what I – what I in my own head thought it was, was they thought – I had built it up that I thought they thought that maybe I was the most mentally qualified to deal with this official and that's why I kept getting the assignments with them. But by the end of it, I didn't feel like I had the mental ability to deal with that over and over... (P7: Need for Mental Skills to Deal with Interpersonal Conflict)
- **Need for Mental Skills to Help with Focus**
 - Yeah, I... think there's like – I guess I can use that game after Christmas last December. I – it was, you know first game back. I kind of I – there's lots of stuff going on outside, like lots of not distractions, but lots of stuff going on outside of, you know, the hockey rink. There was like, there's like – the holidays were still going on and I wish I used the mental skills of kind of being present in the moment. And I wasn't. I was on my, you know, I was on my phone. I was worried about what's going like, what we're doing, you know, tomorrow. Like I was trying to plan stuff for a couple days from now when and I wasn't – I was more focusing on that than using the like kind of mental skills of just – I think the big one like not really mental skill, but like focus maybe present in the moment. (P5: Need for Mental Skills to Help with Focus)
 - Yeah, definitely. Like times where you just kind of – I don't know if I remember specific games, but I remember specific moments where some of those distractions creep in and you kind of just zoned out and you're like, what happened? Like, I waved something off or I'm just skating down the ice and it's like, wait, where did the last four minutes of this game go? Like, what was I thinking about? Because I definitely don't remember looking at the clock from 15 minutes to 10 minutes. And it's like what happened in there and like re-zone yourself. (P9: Need for Mental Skills to Help with Focus)
- **Normal to be Nervous Before a Game**
 - INT: And that feeds into a little bit anxiety and arousal control as well. So do you ever get nervous before a game? P9: Yeah, definitely. I think that's normal. (P9: Normal to be Nervous Before a Game)
- **Not Being Able to Control Anxiety Led to Missed Opportunity**
 - Basically, so much – wanting to do everything and go above and beyond that I called a hand pass in the defensive zone. So that game basically took away the final from me. So that's one of them. (P4: Not Being Able to Control Anxiety Led to Missed Opportunity)
- **Not Feeling Prepared to Officiate More Elite League**
 - You know what, first thing, I didn't think I was quite ready yet to work, you know, to work that league. I thought I maybe needed a few more years or another year or two in the [league removed for anonymity] League before I had the opportunity. Obviously it's a great opportunity, so you're not going to say no... (P6: Not Feeling Prepared to Officiate More Elite League)
- **Not Having Tools to Handle Frustration**
 - I mean, I can like, I mean – I've like definitely yelled at myself. Like I've definitely yelled and like going into the like – going into the ref room or something. Like I have like yelled like I need to wake, like I need to explicitly like, wake up. I've like thrown like a water

bottle or like my helmet before just to like, let out maybe a little bit of like frustration or if I feel like I'm not doing as well. (P5: Not Having Tools to Handle Frustration)

- **Noticeable Difference when Not as Mentally Prepared**
 - The games where I don't mentally prepare or spend as much time in preparation, I always regret not... Yeah. You know, always seem to be aware that it pulls through, whether it's like you just your eyes aren't as sharp or you can't focus on the things that you need to focus on as well. But you know, I always notice it come through it. (P7: Noticeable Difference when Not as Mentally Prepared)
- **Officials Are Competitive**
 - I'm sure most officials that are competitive, they kind of want to get to that you know get to that level. (P6: Officials Are Competitive)
- **Officials Need to Train to Get Better**
 - So thank you for doing research into this. I – when [name removed for anonymity] sent it out I thought it was awesome because like, not that officials are always forgotten, but it's definitely a part of the game that isn't like – players need to train but then it's like wait, but officials need to do it as well. (P9: Officials Need to Train to Get Better)
- **On Edge During Playoffs**
 - Another thing that I've tried to – I used to be, I mean, I say I used to be really bad at, but like when playoff – playoffs come around, I just kind of – I get very intense and focused and I mean it definitely carries over to like at home where I'm like on edge a little bit more. (P5: On Edge During Playoffs)
- **Overthinking Can Lead to Poor Performance**
 - But I would say, yeah I guess in terms of hindering, it's kind of overthinking would probably be the – probably one thing that's it's bad for us. (P6: Overthinking Can Lead to Poor Performance)
- **Overthinking Can Make Officiating More Difficult**
 - Because maybe it's like I said, you know, hockey – hockey's a very fast game and we can make it faster if we're overthinking over analyzing. (P6: Overthinking Can Make Officiating More Difficult)
- **Overthinking During Officiating**
 - INT: Do you ever find yourself kind of overthinking? Is that something that you've experienced? P6: In the past, for sure. Yeah yeah no, definitely. I'd say probably my first year working the American Hockey League. (P6: Overthinking During Officiating)
- **Poor Pre-Game Preparation Can Lead to Missed Calls and Poor Game Management**
 - But there are gonna be games where you're not and it can be – it can cause problems if you're not ready for that first big hit. Then you're chasing the 8 ball the rest of the game, right? Like you're you know, you miss the one big violent – this happens like once every 10 games. I mean that's anecdotal, but we're right off the draw. Guy dumps it in and he gets finished and you're like, what just happened? You know? I don't have a good look at that. And that's a preparation thing, I think. (P8: Poor Pre-Game Preparation Can Lead to Missed Calls and Poor Game Management)
- **Pressures to Prove Yourself**
 - ...but I think I felt when I was coming back to the [league removed for anonymity] League, I almost felt like I had to prove myself or I need to – I have to, you know, I got to catch every call I got to be on there. So I think there's maybe too much internal pressure to make sure you know, you're kind of obviously – observing the game in the right way. So, that'd probably be my big example or like (P6: Pressures to Prove Yourself)
 - Yeah, I think, I mean at the time, I think it was like 20 – I think I was like 25 when I started working the [league removed for anonymity] League. So maybe it was a little bit not young, but like I said, I kind of just kind of put too much pressure on myself to try to – like I said, when I came back to the to the [league removed for anonymity] League – working games in the [league removed for anonymity] League, I felt like I almost like I

had to kind of, you know, prove that I was, I guess, capable of working pro hockey the time. (P6: Pressures to Prove Yourself)

- **Previous Negative Interactions Can Increase Anxiety**
 - Yeah, I think sometimes there is a little bit of an anxiety factor for some games and I think that a lot of, for me it stems from previous interactions with the team or players or games that I've handled with them. And it definitely creeps in and you know, let's say 2 weeks ago I had a game where I had to make a controversial call. To them it was controversial, obviously. It always is. And you know, the communication and the rapport wasn't there. And I always think, well, how are they going to handle this? (P8: Previous Negative Interactions Can Increase Anxiety)
- **Ruminating on Mistake**
 - And I was – I was like beating myself up over it a little bit... (P5: Ruminating on Mistake)
- **Self-Doubt After Call**
 - So immediately I'm in my own head about potentially making an error on the penalty call, then they get scored on. So now it's now it's directly influenced the game, beyond just the penalty, it's influenced the score of the game. And so then I'm even more in my head. (P7: Self-Doubt After Call)
- **Self-Talk – External and Negative**
 - But then... actually no. Thinking about it now and I do, I think I external talk. Like in a couple I have – I definitely do a little bit. Like if I have like a weird faceoff, I just like kind of like, “Ouuuh”, like I'll give myself like a groan. Or like I do these weird like sound effects if I like don't – if I drop a puck weird. I might do like a weird sound effect or like something. (P5: Self-Talk – External and Negative)
- **Self-Talk – Misconceptions**
 - So, like a self-talk thing – and I mean, I was going to like jokingly ask if that is – if that makes me crazy or insane. (P5: Self-Talk – Misconceptions)
- **Self-Talk – More Difficult After Making a Mistake**
 - If I don't agree with my own call and that's when it starts to get a little bit harder. (P7: Self-Talk – More Difficult After Making a Mistake)
- **Self-Talk – Negative**
 - And then yeah, if there's – it's like a really intense game and... and you're calling penalty after penalty, there's so much stuff going on sometimes, I'll just say – and keep looking at the clock – and be like, “get me the hell out of here”, like “I want to get out of here now” like “hurry the hell up” and then I'll just be like looking at the clock. Because sometimes just like parents and players can get pretty – pretty over the line and – and yell – yell and scream and – and not that... that like really bothers me, but like when it's just non-stop and it's just like “oh my God” like “I don't get paid enough for this, get me out of here”. (P1: Self-Talk – Negative)
 - So, the only thing I was telling myself is, “Where did I mess up, that got me into the situation?”. (Self-Talk – Negative)
 - I think I used to be a little bit more like negative and like hard on myself. So, it would be like, “Oh, you're not there in time” or whatever. (P4: Self-Talk – Negative)
 - ...to this internal talk of “Okay, like that wasn't good enough”. Or if I'm on the ice like, “That stretch, just like – was not good enough”. (P5: Self-Talk – Negative)
 - I talk to myself a lot where sometimes it'll you know, mutter swears to myself if it's like I said, if it's a bad call or something. Or yeah just you know, kind of reacting... (P6: Self-Talk – Negative)
 - ...but there's definitely that second voice that comes in where you're – you know, something happens and sometimes you're like, “Hey, what the fuck was that all about?”. (P8: Self-Talk – Negative)
- **Self-Talk – Yelling at Yourself**

- They'll just yell at themselves – they'll just yell. And I've never done that. I've never done that on the ice. So, I can confidently say that. [P5 later reveals they sometimes yell at themselves] (P5: Self-Talk – Yelling at Yourself)
- **Should Use Positive Self-Talk More**
 - I honestly, I should probably bring it [positive self-talk] more into officiating... (P9: Should Use Positive Self-Talk More)
 - On the ice, at the rink, not a lot out loud, which I know I've been taught that saying it out loud is better, 'cause then it reinforces it and you're saying it. Sometimes in my brain, but definitely could bring it into the rink more often. (P9: Should Use Positive Self-Talk More)
- **Stigma Surrounding Mental Skills**
 - Because obviously, I work in a very male dominated field where a lot of men aren't willing to talk about their mental health, they aren't willing to move on to mental skills, and they aren't willing to have these soft skills, right? (P2: Stigma Surrounding Mental Skills)
 - And then as dumb as it sounds... (P6: Stigma Surrounding Mental Skills)
- **Stress Inducing Environment**
 - Yeah... I'll use actually an example in [location removed for anonymity] at the Olympics. So that in itself was a whole mental marathon. Because of all of the preparation going up to it with all of the COVID restrictions like getting there, I felt like was – I was on the verge of a mental breakdown, just getting there because of all the changes, all of the restrictions, all of the COVID tests getting thrown in that we had to do last second. Getting to the Olympics was this, like everybody – we were all on a verge of a mental breakdown and then when we got there, we were in a bubble. So, there was that aspect of it with being in tight knit quarters with the same group of women for 20 days. (P7: Stress Inducing Environment)
- **The Mental Side of Officiating Differentiates the Top Officials**
 - Being the best skater being physically fit is not enough. That's not what separates the good officials from the great officials. (P10: The Mental Side of Officiating Differentiates the Top Officials)
- **Unexpected Events**
 - And so, it was Mexico City against Iceland – yeah. And so, in the second period, it was like a pretty easy-going game, but in the second period, the alarms went off in the arena. And there was an earthquake warning. And so instantly we went from like this great hockey game to just like, a full stadium of chaos. And it was like my first ever game. I was in Mexico City refereeing, and it was just a very, like intense, odd situation that I never experienced. And it also was like, “Oh my goodness, there's an earthquake happening”, like I had no idea of like what was going on. Turns out that like the moral of the story, is like, there was a warning that after 5 minutes they were able to determine that there was no threat to like property or people, so we were able to continue the game. (P3: Unexpected Events)
- **Shortfalls of Peer Learning**
 - Or I've also with officials talked about breathing. Their heart rates, they'll be like – I remember one official heading into our first game at a woman's worlds. I felt calm. I felt good and she's like look at my heart rate, it was in the 180s, sitting in the change and putting on her skates. And I was like, oh, oh no, we need to get that down honey, to get her to focus on her breathing a little bit, and it did help bring it down, but it was still super high. I think she needed more than a couple minutes of breathing, to be able to bring that heart rate down. And she was just genuinely stressed out and anxious about the game. So. (P10: Shortfalls of Peer Learning)

Job Demands

- **Just Reacting to What You See Is Important**

- Like you know, we just need to see a play and react. You know, we can't be looking for penalties, we can't be looking, okay this guy, you know, he has to get a penalty next or this team. It's just – we just got to watch the game and you know and react accordingly. (P6: Just Reacting to What You See Is Important)
- **Desired Officiating Skills**
 - So, like I mean going back to like face offs – I pride myself on having like good tempo, rhythm and cadence. (P5: Desired Officiating Skills)
 - The skating and the face – like skating and the faceoffs, I want to like, be quick right away. Blue line work, I want to try to be one – try to anticipate the play and be one step ahead when I'm out on the ice. I try to like, try to make sure I have like a good first faceoff... (P5: Desired Officiating Skills)
- **Desired Performance**
 - Like... I've like... just from what I've seen watching other guys before, like the guys that have – that make it look super easy, that's what I try to pride myself on, making it look really easy. (P5: Desired Performance)
 - ...because I like truly pride myself on like being hard working and not like – never being outworked. So those are like a couple of the main things that I really try to pride myself on. (P5: Desired Performance)
- **Differences in Gaze Behaviour Between Referee and Linesperson**
 - So you – you do kind of change your focal point of kind of what you're watching because it's weird as official, like as a referee, I never watch – I almost never watch the puck where for linesmen think their focal point is more on puck because if we're watching the puck as an official well we're going to miss a high stick to someone's face because we're looking down at the ice and at skates. So, you do kind of kind of want to change where you're looking to be able to see certain place. (P6: Differences in Gaze Behaviour Between Referee and Linesperson)
- **Job of Official Remains the Same Regardless of External Factors**
 - With university you're mostly dealing with major junior players that played at a high level and with junior A, obviously that's a little bit of a step down in terms of skill and expectation, but your job remains the same, so. (P8: Job of Official Remains the Same Regardless of External Factors)
 - But you can still just go out there and do your job and most of the time it's going to be you know, if you do your job, you're going to do good by the game. (P8: Job of Official Remains the Same Regardless of External Factors)
- **Nuances of Decision Making on Penalty Calls**
 - Yeah, I guess it depends on the, I guess it depends on the type of call. Like if – especially for things like slew footing, like there's a few components that go in into the slew footing penalty because like if you're standing still and I come through with my skate and kind of stick out my leg and trip you in the back or like, the back of the leg, well that's more – that's just a tripping minor. If it's maybe a little bit higher impact we can go slew foot. But with slew footing, like you got to have your leg behind the player but also have your hand and pull back on the guy, pull back on the player to fall down. And for us, so for us, our differentiating factor for like a double minor to a 5-minute major penalty is, how does a player fall in the ice, right? Does a player fall, you know, kind of more on the on the side? Are they falling kind of dangerously on the upper back or closer to the head or the neck area? So that's one thing where if we see a player kind of, you know, falling backwards, we got a look, okay well how does a player fall? What's the degree of speed or degree of impact or violence on the play? (P6: Nuances of Decision Making on Penalty Calls)
- **Nuances Specific to Female Officials**
 - And I find it's more on the male side of things. Like I, in the last three years, I started lining the Junior A league, which is pretty intense as a female official. And I'm not trying to genderize things, but I'm the only female in [location removed for anonymity], that lines it. There are referees, but I'm the only one who lines it. And so like, there's times

where I'm breaking up a fight or you know, involved in things that the men are not necessarily used to, like a female linesperson breaking up a fight. (P3: Nuances Specific to Female Officials)

- **Officials Considered Team**
 - Anytime I notice that my partner and I are like off kilter, if we – if there's something that needs to be addressed or like I always try to address it as like “we” instead of like, “Hey you” or – I like “we” because like “we” both need to work together. If one of us isn't working well then we both – it kind of effects both of us. (P5: Officials Considered Team)
 - At the end of the day, we're we are a team when we step on the ice and we need to do a good job for the hockey game. (P8: Officials Considered Team)
- **Officials Must Perform Regardless of Personal Circumstances**
 - And then I honestly, I think a lot of it is like, there's times where we're working games where you know, maybe we're sick or we're not feeling very well and or you know, battling through like if it's a, you know, an injury or something as well too. And one thing I can't remember who – I've heard this a long time ago, but I can't remember who it was from. But one thing that the – kind of our supervisor kind of told me at the time was, you know, people with stands, they don't give a shit, right? They don't care. They don't know. They don't know that you've got an injury. They don't know you've – you're sick. They don't care that you've, you know, driven 5-6 hours to get to this game. They don't know that and they don't care. They're there – they're watching that game for, like you said, the 60-minutes. So, I think we do get a bit of an at least I think I do – I definitely get an adrenaline rush from that. Because there's times where I woke up with strep throat and had to fly to [location removed for anonymity] and then drive down to [location removed for anonymity] to work a game. And you know, you're sicker than a dog, but you got to go out there and you got to – you got to work. So I think in terms of... trying to think here. Yeah, like you just – you just have to I don't know – you just kind of – you just do it. (P6: Officials Must Perform Regardless of Personal Circumstances)
- **Officiating is a Difficult Job**
 - It's you know it's not an easy job. It's a lot of – it's a lot of hours. It's a lot of early mornings. It's a lot of late nights... (P6: Officiating is a Difficult Job)
- **Officiating Is a Mental Game**
 - Yeah, well, like I said, just you know, for us because officiating is such a mental – it is such a mental game... (P6: Officiating Is a Mental Game)
- **Performance Judged as a Team**
 - Because even for us like as officials like if you know, if we go out there and have a bad game as a crew whether it's our linesman or referees like it reflects on all of us. (P6: Performance Judged as a Team)
- **Psychological Demands of Officiating**
 - You are making split second decisions where you have to stay focused for full 60 minutes if not longer. And you have to be able to react and respond to events on the ice appropriately. And then if something – even if it's not a mistake, or an error by the game officials, but if the game is not running smoothly, you still need to stay focused and find ways to navigate and manage those players on the ice. And having the best physical skills in the world is not going to help you navigate those reactions on the ice that take a split second to do that comes down to your mental game, and the ability to stay focused and the ability to not only be focused, but also not only react to these events, but proactively see that they're going to occur. (P10: Psychological Demands of Officiating)
- **Rules Differ on League**
 - Obviously the, you know, rule book and stuff's a little bit different. So just little, just so many little kind of nuances with interpretations and like that. (P6: Rules Differ on League)
- **Still Adjusting to Speed of Play**

- ...but also once again because you know, I've only done at that point, that was only my third international tournament, first men's worlds. So, it's something that happens really quick. (P6: Still Adjusting to Speed of Play)
- **Task Demands of Officiating**
 - Yeah, because you're going to like, stop at the blue line to see if it's going to be... if it's a close play, but they're going so fast and they're going to go in for a goal, so then you got to like, bust it, makes sure your kids not offside and then bust it to the net. Yeah, I'm not – I'm not good at the two-official system. I don't like lining. It's boring to me. And so, then I have to do that and ref at the same time, it's like... hey, half of my game's going to suck because my interpretation of like... icing an offside like, isn't as good as someone who does it all the time. I just want to focus on the reffing part of the game. I don't care like – you guys go offside if you want. No, I don't... I call offside if I see it – but like... yeah, I – I find it challenging to do 2 official system when like 99% of the time I'm only reffing. (P1: Task Demands of Officiating)
- **Understanding and Applying Various League Rules**
 - Because there's, you know, the rule book's so different than what we have here with our Hockey Canada rule book. We have our [league removed for anonymity] rule book, we have our [league removed for anonymity] rule book and there are just so many little differences with within there. So you got to know, you know, know the league that you're working to really understand the rule book. (P6: Understanding and Applying Various League Rules)

Mental Skills Outside of Officiating Context

- **Arousal Control – Example of Effective Anxiety Control from Work**
 - So, I'm a police officer and my unit, we have to shoot a test when we do a use the force qualification course, at the [location removed for anonymity]. And the shooting test is harder than the shooting that we do back home. You get sent to the course you get two tries at this test, if you don't pass, if sent back home. You don't do the course you don't get a certification. It's a three-week course. In our world, this is a big deal. So I went down, I get what's called pre-qualification anxiety. So, when I'm shooting, I get anxiety under testing, when you take me out of the testing, the anxiety goes away. Very common. With police officers, they shoot great until we put them into their shooting test. And then the shooting goes to pop because of the stress of the testing environment. I go down to [location removed for anonymity], nobody in my unit has ever failed this test, I don't want to be the first person sent back and doesn't complete that course. Because it's not much I can do my unit without this course I need to have this course. And on my first time through from distance I missed one round, when you miss one round, you've failed at this point. Leading up to that test, my heart rate was high like in the 150s, 140s-150s. And they let you go sit down for half an hour, they make you wait and then you'd re-shoot the test. And I can remember that half an hour, I was like, you need to get control of your heart rate. And you need to get control of your stress right now because you're going to go in and fail this test again, if you don't. And I sat there for half an hour and it was focusing – I don't remember if I did mental rehearsal or if I just focused on where I wanted all the rounds to go on target, positive self-talk, and breathing. I had to get my heart rate down and I was able to get my heart rate down below 100 by the time I went back into the test. I went back in and I shot a perfect is a really great target. (P10: Arousal Control – Example of Effective Anxiety Control from Work)
- **Communication Skills Applied to Everyday Life**
 - ...and then working with it like personally and professionally like at my job and whatever you find out what works and it's not as heated a situation. So, then you can actually apply it when the emotion or when the anxiety and stuff does come up, it's a little bit easier because you've already built – habit building basically. (P4: Communication Skills Applied to Everyday Life)

- I mean in terms of, yeah, I guess more from a communication standpoint, especially with me working in in sales. You know, sometimes there's things that go wrong whether it's, you know, the club showed up in the wrong, wrong way or in a wrong hand because I entered it in incorrectly. So in terms of communication standpoint, it definitely helps in terms of kind of people that kind of mitigate you know negative situation or negative scenario and you know try to turn it into a case of a bit of positives like hey, we'll get it corrected, we'll do whatever. (P6: Communication Skills Applied to Everyday Life)
- **Focus on the Task at Hand – Example from Sport**
 - Is just kind of visualizing okay well, you know – once again kind of, you know – you look at some of the best golfers in the world, like they're, you know, Tiger Woods. Like in terms of kind of what his dad used to do when they were hitting balls in the range and how he would, you know, jingle old, you know, coins in his pocket and keys and stuff on his, you know, on his downswing. So he could, you know, kind of tune all that negative or – tune all the external factors out and just focus on your job at hand. And that's – I kind of see that the same as officiating where you know, if you're worried about, you know, some jack-ass up in the stands, you know, yelling at you and saying you suck or whatever, it's like well, you're focused on that. Like then it's just kind of like, okay, it's just it's part of the game. It is what it is. (P6: Focus on the Task at Hand – Example from Sport)
- **Importance of Not Holding onto Mistakes**
 - Like I remember as a junior, like I was a little bit of a – little bit of a hot head where if things weren't going right, I'd get pretty frustrated and then obviously as you get negative, then it – things snowball. To be able to kind of let things go, it's like, you know, even with golf it's like, once you hit your shot, you can't change that. You can't go back and re-hit your shot – well unless it's like out of bounds or something, but you can't go back. And you know, you can't go back and then replay that putt – you can't do your putt over again. So be able to just kind of let things go and start fresh... (P6: Importance of Not Holding onto Mistakes)
- **Mental Skills Improve Performance**
 - ...and no different with the players as well too. Like looking at Nate McKinnon, it was I think like five or six years ago after he had, you know, kind of like an off year or two. He went and hired a sports psychologist to try to rewire, you know, his thought process. And ever since that, like his game has gone like next level. (P6: Mental Skills Improve Performance)
- **Mental Skills Use – Carry Over from Sport to Officiating**
 - ...and that's kind of where I kind of look at the, you know, like those five-minute intervals at the end of each period. Well, now it's a new hole. That's a new starting point. So it's kind of like, okay, well, let's it's not worry about this past hole, let's worry about this hole. Kind of one, you know, one sequence at a time. It's kind of probably one thing that I've incorporated into it. But also in terms of kind of, you know – an example for a tee shot, well, if you're focused on the water that's left and if you're, oh, you see your golf ball going, “Oh I'm going to hit in the water”, more often than not the golf balls in – going well, in the water. So if you kind of focus on, okay, well, where do I want this golf ball to be or you know, in terms of on the ice where I want – where do I want to be positioned to give myself the best spot? (P6: Mental Skills Use – Carry Over from Sport to Officiating)
 - ...but definitely – that definitely leaked into officiating for sure. (P8: Mental Skills Use – Carry Over from Sport to Officiating)
- **Mental Skills Use – Overlap Between Career and Officiating**
 - And in policing when you're dealing with life or death situations, hockey is not life or death, but it absolutely translates over back into sport as well. (P10: Mental Skills Use – Overlap Between Career and Officiating)

- That's a policing one. So, what's important now while, I don't want to get killed, so I need to focus on the present moment. So that's where that comes from. Sounds dramatic, but it's part of the reality of that world but it translates well into sport. (P10: Mental Skills Use – Overlap Between Career and Officiating)
- I think...I have a really good example from work. But that has nothing to do with refereeing. (P10: Mental Skills Use – Overlap Between Career and Officiating)
- **Mental Skills Use – Overlap Between Life and Officiating**
 - ...sometimes I tell young officials, I'm like go, if you have the benefits to get a psychologist or social worker, a psychotherapist and call it your mental performance coach, because they may help you through the tough times in life, but then they also might help you with your mental performance on the ice. (P10: Mental Skills Use – Overlap Between Life and Officiating)
- **Mental Skills Used in Everyday Contexts**
 - but obviously outside of that like daily as well, I would say personally. (P4: Mental Skills Used in Everyday Contexts)
 - Like outside of officiating, like if I was like at work or whatever, still using something applicable... (P4: Mental Skills Used in Everyday Contexts)
 - I think – I think... I think people use them every day. And if people don't use them every day, then I want to know what they're doing. But I think, I think people use them every day and I use them every day. (P5: Mental Skills Used in Everyday Contexts)
 - I guess maybe a little bit with I guess with work and stuff. (P6: Mental Skills Used in Everyday Contexts)
 - Sometimes – sometimes with life, I lock myself in my bedroom for two minutes so my kids can't get me and just take a deep breath and then I can come out. (P7: Mental Skills Used in Everyday Contexts)
- **Overlap Between Mental Skills Used by Players and Officials**
 - So, and I'm sure if you if like you know, spoke to maybe 10 or 20 different players like they'll tell you like oh they might do this differently. They think this is important where I get – like the same thing with officials. Like a lot of people are going to use the same sort of thing. (P5: Overlap Between Mental Skills Used by Players and Officials)
- **Regularly Uses Mental Skills in Various Aspect of Life**
 - Definitely all the time I'm – I speak to clients, I run presentations, sometimes with large groups, sometimes with small groups, sometimes in person, sometimes remote. So, there's lots of nerves that can come with that, just by the nature of it. So using mental skills, visualization, prep, practicing the script for whatever I'm going to do, then officiating – not that I'm on the ice all the time, but a lot of the time I am and just being able to be there, focus, work on those things, work on the feedback. (P9: Regularly Uses Mental Skills in Various Aspect of Life)
- **Self-Talk – Everyday Use**
 - Like I think the internal talk maybe is a bigger – is a big one. Like depending on – it could be anything like trying to – if I'm at work and I'm like, “Okay”, like, “Okay I need to you know – get off my phone and actually like – actually do some work”. Or could be like driving home or it could be anything like the internal talk like kind of just like, you know, kind of do that, like quick check in with yourself and be like, “Okay, well, you know, this isn't worth getting mad in traffic over” like anything. I think people using that every day. (P5: Self-Talk – Everyday Use)
- **Self-Talk – Uses Positive Self-Talk in Professional Life**
 - And I use – also my mental skills during, like, my professional life. When I'm seeing patients, I'll talk to myself and I won't say it out loud because my patients will think I'm crazy. But when I am, like doing work, I'm doing a root canal or I'm doing surgery, I'll tell myself, like, “You can do this. It's just teeth. You're okay. There's always a solution. It's always fixable. Worst comes to worst, a tooth comes out and it's an implant. It's all good”. And I just tell myself that and it's a lot of like, “You can do this. You deserve to be

here. You are well respected”, and like when things get a little bit hairy, which isn't often, but when it does, I'll talk to myself. So, it – it kind of has spilled over into other parts of my life, which isn't a bad thing. I think it's actually made me a more resilient practitioner and athlete and human so. (P2: Self-Talk – Uses Positive Self-Talk in Professional Life)

- **Similarities Between Sport and Officiating**
 - But yeah, like golf – with golf, it's, you know, golf is such a mental sport. I think that's where – I think with officiating, they kind of almost intertwined into a certain degree. (P6: Similarities Between Sport and Officiating)
- **Uses Positive Self-Talk in Career**
 - ...and I use it a lot in work, like going into a client presentation or something. 'Cause like, sometimes you get nervous. You want to do – you want to do well, you want to do your best, and things are going to come up that you can't predict. So, before that presentation, I'll just say, like, “Hey, you've got this. You know what you're doing”. Or like another one, just like, yeah – just little things like that. (P9: Uses Positive Self-Talk in Career)

Qualities Important for Elite Officials

- **Ability to Remain Present is Critical for Elite Officiating**
 - Another one that I kind of you know – being present in the moment is I think is huge for anyone. (P5: Ability to Remain Present is Critical for Elite Officiating)
- **Important to be Calm but Not Too Relaxed**
 - There is a difference between calm and relaxed. I find sometimes you're a little too relaxed, but if you're calm, that that means you're, I don't know. Sometimes to me it means you're a little more focused on the game but – prepared for it. (P8: Important to be Calm but Not Too Relaxed)
- **Acknowledging That You Can't Be Perfect**
 - I mean you'll never be, you know, at that point it's not a perfect hockey game anymore. It never, it never really is. (P8: Acknowledging That You Can't Be Perfect)
- **Does Not Hold onto Negatives**
 - Yeah, trying to think, I guess we don't focus on the negatives too much which it's a good thing. (P6: Does Not Hold onto Negatives)
- **Elite Officials Are Good at Letting Things Go**
 - All the best – the top officials, especially in my area are so good at letting things go... (P8: Elite Officials Are Good at Letting Things Go)
- **Elite Officials Must be Able to Make Quick and Accurate Decisions**
 - Yeah definitely. With mental skills like, you got to be able to process a situation or play and meet like – and you have to you have to react. (P6: Elite Officials Must be Able to Make Quick and Accurate Decisions)
- **Elite Officiating Requires Practice and Fast Critical Thinking**
 - We're actually just talking about this with – maybe not a stressful situation, but in the NHL there's a lot of like sticks that are floating on face off draws and to be able to like hit the window of dropping the puck when everyone's ready. But also catching that the stick isn't on the ice is like an acquired skill. And the one referee the other day, he's from [location removed for anonymity], so we've watched him a lot and we were just like, I don't know how he, like, did that so quickly, like he's here's putting the puck down by blowing the whistle at the same time. But you have to be able to read and react that quicker, it obviously depends on which level you're doing, but it's just something that I think it's one, it's repetition, but two, just the analysis before and like during the play is like a huge – it maybe isn't like a mental skill directly, but being able to analyze stuff at a quicker pace is what makes it good official for in terms of like anticipation and what not. (P4: Elite Officiating Requires Practice and Fast Critical Thinking)
- **Importance of Appearing Calm**
 - Ahhh like, I guess sometimes if there's like—if I'm doing a junior game, for example, and the guys can hit really hard and then someone gets hurt and then like a team's going crazy on you...but then, you sometimes could question yourself because maybe you weren't

looking at it completely. And then...and then—now the play's stopped, the arena's silent because there's an injured kid and then the one team's going crazy like, “How was that not a major penalty?”. And then you don't even have a penalty on the play. So, it's just sometimes that awkward silence, I guess, for a few minutes while you talk to your team like, “Oh shit, like am I blind? That happened right in front of me”. Just making sure, keeping, keeping your cool. You never want the teams to know that—how you're really feeling on the inside. 'Cause they'll take advantage of that. Like if you...if you look nervous or, or don't know what you're doing, they'll like, eat you alive type thing. So, yeah, just keeping...just keeping calm and focus and just don't—don't really think about what's going on and just trust yourself. (P1: Importance of Appearing Calm)

- – and then you might not know what you're doing but like you need to create the image that people think you know what you're doing. So, like your feet are going hard underwater like the like the duck analogy – their feet are always going hard under the water, you don't see that, you just see them going gracefully and they look calm and stuff. So, you always want to have calm demeanor in those types of situations. (P1: Importance of Appearing Calm)
- **Personality Traits Important to Officials**
 - So that, I mean that turns into an actual characteristic of being humble and having humility and stuff, but obviously the more you practice those skills, the more those traits kind of come out right? (P4: Personality Traits Important to Officials)

Knowledge in and Value of Mental Skills

- **Mental Skill Knowledge – Explicit**
 - I you know, I'm aware that you have to – there's a way to – when you're officiating for me, when you're talking about mental skills, it's getting yourself into a good spot for the game and then working after the game and reassessing where you could have done better. (P8: Mental Skill Knowledge – Explicit)
 - INT: Are you familiar with the term self-talk? P9: Yeah. (P9: Mental Skill Knowledge – Explicit)
- **Mental Skills Knowledge – Implicit**
 - Like I didn't know things I was doing before until you, Chris started telling me like, “Oh yeah, you've been doing this kind of stuff”. “Oh yeah”. (P1: Mental Skills Knowledge – Implicit)
 - So, I have lots of the tools. How well I could reiterate what those tools are back to anybody, I don't know. (P7: Mental Skills Knowledge – Implicit)
 - And now I've just been using them for so long, I forget maybe what they even formally are. (P7: Mental Skills Knowledge – Implicit)
 - And whether you like – we're all using mental skills in some capacity. It's just that whether or not we think that we're using them... (P7: Mental Skills Knowledge – Implicit)
 - ...and probably it's every like – the mental side of it is hard to quantify maybe so much. (P7: Mental Skills Knowledge – Implicit)
 - ...or they're doing it in some form or capacity and they don't realize that they can actually do it with more intention to have greater benefit to themselves. (P10: Mental Skills Knowledge – Implicit)
- **Lack of Explicit Knowledge on Mental Skills**
 - Well, we did – I – formally I don't know if I know a whole lot. (P7: Lack of Explicit Knowledge on Mental Skills)
 - I'd have to say very little in terms of anything formal. (P8: Lack of Explicit Knowledge on Mental Skills)
 - Nothing!... at all. Not going to lie. Like, I know there's – I know some different like techniques like deep breathing and stuff. If – if you're getting anxious like I learn on Daniel Tiger when my kids are watching. Count to 4 and deep breaths, that's about it. (P1: Lack of Explicit Knowledge on Mental Skills)

- Probably nothing, to be completely be honest. Yeah, I guess, I guess if you want to expand on that a little bit, maybe I can see if I have any little bit of knowledge, but off the top of my head, nothing that really kind of jumps to, you know, jumps to mind right now. (P6: Lack of Explicit Knowledge on Mental Skills)
- But I don't know like – I that's why I'm like, I don't know – it's just a little bit of what I know. (P5: Lack of Explicit Knowledge on Mental Skills)
- **Lack of Value in Mental Skills**
 - And so, like augmenting and showing that in these clinics because we have to do them, almost like forcing people to – to look into it because if it became an option, people wouldn't take the option. I know the men that I work with, I know the women that I work with, and a lot of people won't take the option because what they're doing right now is good enough for them. And so, I think showing and introducing people in these clinics and then maybe having supplemental after, would be a good way to do it. (P2: Lack of Value in Mental Skills)
 - So that's, you know, something where he just kind of just kind of learn these just kind of little nuances and, you know, kind of like I said, some players – some officials might take that and be like, oh, that's stupid. You know, I don't need that. (P6: Lack of Value in Mental Skills)
- **Misconceptions About Mental Skills**
 - I had a coach who is a psychologist in Junior B and he... we did some ridiculous things pre-game, you know. But you know, to me it was ridiculous at the time when you're an 18-year-old kid... (P8: Misconceptions About Mental Skills)
- **Need Mental Preparation to Feel Ready**
 - But at the rink I try to – if I don't spend that 5 minutes kind of like going through – going through [going through mental preparation], then I just don't feel like I'm like kind of fully ready to go. (P5: Need Mental Preparation to Feel Ready)
- **Not Thinking About Mental Performance**
 - I've never thought what's going to make me better mentally. (P8: Not Thinking About Mental Performance)
- **Realization of Mental Skills Knowledge**
 - I know that, I know that – look at me how mental healthy I am. *chuckles* (P1: Realization of Mental Skills Knowledge)
 - Oh perfect, I guess I know a little more than I thought. (P6: Realization of Mental Skills Knowledge)
- **Uncertain of Mental Skill Knowledge**
 - But otherwise like not a whole ton. I mean, I'm a healthcare worker, so like, I know what I need to know for like my healthcare stuff, but not in like an athletic realm, I guess. (Uncertain of Mental Skill Knowledge)
 - Maybe I was using some of those mental skills and techniques to help with my game, but I wasn't aware of it. (P3: Uncertain of Mental Skill Knowledge)
 - Ahh...a little like, I think a little bit, not a lot. You know, it's something that I tried to work on and get better at, but – a little like, a little bit from camps or reading stuff like stuff like that. (P5: Uncertain of Mental Skill Knowledge)
 - And then I guess another different thing, I guess, I don't know how much it deals with like mental (P5: Uncertain of Mental Skill Knowledge)
- **Value of Mental Skills**
 - Because if it can make – if it can make my job easier and make me better, then like yeah, I'm all, I'm all for it. (P5: Value of Mental Skills)