

Perceptions and Eyewitness Memory of Shoplifting

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Table of Contents

Approval Page.....	ii
Acknowledgements.....	iii
Table of Contents.....	iv
List of Figures	vi
List of Tables.....	vii
Abstract.....	viii
Introduction.....	1
Eyewitness Memory	2
Schema and Schema Theories.....	3
Gender Stereotypes and Crime.....	5
Motivations.....	7
Present Study.....	8
Method.....	13
Participants.....	13
Materials.....	13
Procedure.....	14
Coding.....	15
Results.....	17
Eyewitness Memory.....	17
Motivations and Perceptions of Perpetrator Behaviour.....	20
Perceptions of Repeated Shoplifting.....	23
Punishment.....	24

Discussion.....	25
Eyewitness Memory Completeness.....	25
Eyewitness Memory Accuracy.....	27
Specific Memory Details.....	28
Perceptions of the Perpetrator.....	29
Perceptions of Repeated Shoplifting.....	32
Implications.....	33
Limitations.....	35
Conclusion.....	36
References.....	38
Figures and Tables.....	41
Appendix A.....	46
Appendix B.....	48
Appendix C.....	49
Appendix D.....	59

List of Figures

Figure 1	Frequencies of participant responses when asked which item may have been stolen from the scene.....	41
Figure 2	Frequencies of yes versus no responses to the question “Do you think that this person would shoplift repeatedly?”	42
Figure 3	Participant responses on a 1-7 scale to statements addressing why one would shoplift repeatedly.....	43

List of Tables

Table 1	Descriptive Statistics for Perceived Motivations for Shoplifting across Genders.....	44
Table 2	Frequencies of Participants Responding with Each Recommended Punishment.....	45

Abstract

Previous research suggests the stereotype of seeing men as violent may explain why men receive harsher sentences than women for committing the same type of serious crime (e.g., murder) (Beaulieu & Messner, 1999). This makes it important to understand what, if any, common perceptions exist for other types of crime and the impact such perceptions can have. The current study focused on whether perceptions of a shoplifter differ according to the perpetrator's gender and the store setting, as well as whether perceptions impact recommended punishments. A convenience sample of 276 participants, 39 men ($M_{\text{age}} = 26.72$, $SD = 12.17$) and 228 women ($M_{\text{age}} = 27.21$, $SD = 11.00$), completed an online questionnaire where they were randomly assigned to see a picture of a shoplifter in one of three settings. The picture was described as being a picture of either a man or a woman, when in fact, all pictures were of the same individual. Results showed that there were differences in the number of inaccurate details recalled as a function of the whether participants were told the perpetrator was a man or a woman. Perceived motivations were similar across the gender provided, however, differences that did arise aligned with gender stereotypes. These differences did not impact recommended punishments. No differences in perceptions were found across the different store settings. Findings suggest eyewitnesses may perceive motivations of shoplifters differently based on their gender, but, these perceptions do not necessarily impact recommended punishments as they appear to do with violent crimes.

Perceptions and Eyewitness Memory of Shoplifting

It is generally accepted that memory can be changed by minor external influences (Bartlett & Burt, 1933; Loftus & Palmer, 1996). Given that eyewitness memory is an important aspect of trials, research has been conducted to assess how aspects of a crime may influence eyewitness memory. Yet, to date, no research has focused on how the perceptions of a perpetrator can impact eyewitness memory. It is reasonable to think for example, that gender, one of the most stereotyped constructs that exists within Western society, can change how one remembers an offender as well as the crime itself. Perhaps supporting this, it is known that the majority of violent crimes are committed by men (Vaillancourt, 2010) and this leads to a common perception that male criminals are violent, when in reality, most men who commit crimes, do not engage in violent acts (Dean, 2008). The impact that such a perception could have on a witness has not been assessed. However, this stereotype does seem to explain why men receive harsher sentences than women for the same crime (Curry, Lee, & Rodriguez, 2004).

Could this difference in sentences also be related to a difference in what is remembered when a man versus a woman has committed a crime? Examples like this demonstrate why it is important to understand then whether these differing perceptions could potentially lead witnesses to remember different things about a crime and perhaps as a consequence, how perceptions of offenders can impact how they are treated within the justice system. Although research has assessed perceptions of violent male perpetrators, other gender stereotypes and expectations regarding non-violent crimes have been neglected in the literature. A crime that might allow us to fully compare perceptions of male versus female offenders and subsequent eyewitness memory would be

shoplifting, since it is one of few crimes associated with both women and men (Caputo, 2011; Krasnovsky & Lane, 1998).

Eyewitness Memory

The malleability of eyewitness memory was illustrated by Loftus and Palmer (1974) when they demonstrated that changing people's expectations of a witnessed event influenced their memory of that event. In their study, participants were shown a video of an automobile accident and were then later asked to recall the events in the video. Loftus and Palmer asked participants to estimate the speed of the vehicles involved in the accident but manipulated the wording of the questions. Those who were asked about the cars that bumped into each other reported the accident happening at a lower speed than those who were asked about the cars that smashed into each other. By simply changing the wording of a question, participants' memory of the car accident was altered. This demonstrates how easily one's memory of an event can differ based on the questions which one is asked.

Not only can suggestive questions influence eyewitness memory, but some research has indicated that eyewitness memory of a crime differs based on the circumstances of the crime (Clifford & Hollin, 1981). Clifford and Hollin (1981) compared eyewitness memory by showing participants a violent theft or a non-violent theft and found those who witnessed the non-violent theft gave more accurate memory accounts than those who witnessed the violent theft. Similarly, Kramer, Buckhout, and Eugenio (1990) demonstrated that the specific objects present during a crime can influence how eyewitnesses remember an event. For example, with a phenomenon coined the weapon focus effect, researchers have consistently demonstrated that

eyewitnesses tend to recall less accurate information about a crime when a weapon is visible compared to when a weapon is not visible (Buckhout & Eugenio, 1990).

Interestingly however, if a weapon suits the carrier (e.g., a police officer carrying a gun), the weapon focus effect disappears and there is no influence of the weapon's presence on memory (Pickel, 1999). This suggests that one's specific perceptions of an individual can influence what the witness remembers.

Further supporting this, when Rothbart, Evans, and Fulero (1979) investigated the effects of stereotypes and perceptions of a person on memories of a man's behavior, they found participants were more likely to recall the behaviours that confirmed their expectations of the man (based on a previously provided description) compared to the behaviours that did not match their expectations. This demonstrates how stereotypes or one's expectations of a person can impact the memories that form about that person. It is reasonable to think that these results may generalize to those who witness crimes. For example, a witness may have expectations about a suspect and this could impact what the witness remembers seeing. This pattern of remembering aspects of a situation that are congruent with previous expectations can be explained with schema theories.

Schemas and Schema Theories

A schema is typically defined as a set of rules or guidelines that help organize one's memory (Piaget, 1952). When an event is viewed multiple times by individuals or when individuals have some idea or expectation of an event (e.g., having a birthday party), their memory may be based on these ideas and expectations. This may explain why, in Loftus and Palmer's (1974) study, participants remembered a car accident as happening at a slower rate when asked about bumping as opposed to crashing. A bump

would generally lead one to think of a slow speed accident whereas a crash would lead one to think of a high speed accident.

The script pointer plus tag hypothesis gives a more in-depth explanation of how schemas organize and impact memory in regards to things that align or contradict previous expectations (Graesser, Gordon, & Sawyer, 1979). This theory holds that memory accuracy should be better for aspects of an event that do not align with a typical script (Graesser et al., 1979). For example, if one attends a birthday party and the host serves a chocolate fountain instead of a cake, the guests will be more likely to remember it since a chocolate fountain does not align with a birthday party script. When something conflicts with a typical script, it stands out as unusual. With this theory in mind, it is possible that one who witnesses a theft will better remember the incident if it seems out of the ordinary. Thus, if one views a woman as unlikely to engage in criminal behavior, this may make her seem out of the ordinary if she commits a crime and witnesses may remember more about both her and the crime she committed than if the same crime was committed by a man.

The script pointer plus tag hypothesis also suggests that there should be no specific memory about aspects that closely align with a typical script (Graesser et al., 1979). For example, those who attend a birthday party may be unlikely to remember what the birthday cake looked like if one was present. This is because a birthday cake is very typical and is less likely to draw the attention of party guests. In keeping with the theft example, women would probably stand out, but since men are stereotyped to be deviant, a theft committed by a man may seem more typical. Thus witnesses may have less specific and vivid memories of the incident, instead allowing their memory to

conform with the schema. Research focused on schemas and scripts demonstrates how common perceptions of an event can influence memories of said events (Bartlett & Burt, 1933; Graesser et al., 1979; Loftus & Palmer, 1974).

Gender Stereotypes and Crime

Women are often stereotyped in a positive way when it comes to personality characteristics and behaviours (Luigi, Obertis & Borghi, 2016). Compared to men, women are much more likely to be considered kind, passive, caring, gentle, and understanding (Dean, 2011). Women are also more likely to be associated with maternal giving behaviours and are less likely to be associated with crime (Luigi et al., 2016). Not only are women unassociated with criminal activity, women are often viewed as individuals who can do no harm (likely because of their association with maternal giving behaviours) (Dean, 2011). Conversely, stereotypes directed towards men shows them in a more negative light, portraying them as dominant, aggressive, deviant, and violent when compared to women (Dean, 2011). Similarly, men are stereotyped to be sexually aggressive compared to women, possibly because the majority of sexual crimes are committed by men (Hanson & Bussiere, 1998). Therefore, sometimes men are perceived as being sexually motivated to commit crimes.

According to the gender schema theory, the meanings of others' actions are organized in relation to gender (Johnson, 2009). As individuals age and develop, they learn what characteristics or actions are associated with people of each gender and in subsequent situations, these characteristics or actions may be expected (Bem, 1981). For example, if a man is a stay-at-home dad while his wife is the breadwinner, this may lead to the judgement that this man is weak and incapable of providing for his family

(Johnson, 2009). Because men are more often associated with violence and criminal activity, shoplifting may better fit the masculine stereotype as opposed to the feminine stereotype. Because of this, when one sees a man shoplifting or committing any sort of crime, this may activate the male schema within one's mind. This then could impact a person's later memory of that individual or the crime he/she has committed. According to the script pointer plus tag hypothesis, if the actions of a perpetrator seem out of the ordinary, more attention may be drawn to the perpetrator than if his or her actions were typical. Gender schema theory suggests that the actions of men and women will be remembered and perceived differently based on whether the actions are seen as typical or atypical for the actor's gender. This finding can be particularly important when considering eyewitnesses of crime and the perceptions witnesses may have based on a suspect's gender.

Keeping the script pointer plus tag hypothesis in mind, if one sees a woman shoplifting and the female schema is activated, shoplifting may seem atypical in relation to the female schema. Not only might it seem atypical, but the female schema may affect how one perceives the shoplifter. For example, if a witness sees a female shoplifter, he or she may be more likely to think that the woman is shoplifting for a justified reason (e.g., stealing medicine for sick children) compared to a man who is shoplifting.

Dean (2008) suggests that when assessing shoplifting, it is important to consider the types of items that men and women steal, instead of the frequency with which men and women steal. For example, male theft is stereotypically considered to be more violent (e.g., armed robbery or involving gang violence) and female theft is stereotypically considered to be as a means of calmly stealing single items for immediate

gain (e.g., taking clothing from a store) (Dean, 2008). These perceptions do reflect typical gender stereotypes; however, the actual behaviour of male shoplifters does not reflect this stereotype – violent male thieves make up a very small portion of thefts that occur (Dean, 2008). Instead, male shoplifters are much more likely to steal items for immediate gain, similar to female shoplifters (Dean, 2008). When items stolen are considered, women who shoplift typically steal clothing and men who shoplift generally steal electronics (Retail Research, n.d.)

Motivations

Motivations for theft have been investigated and there are many different reasons an offender may steal (Brookman, 2007; Cox, Cox & Moschis, 1990). Brookman (2007) conducted a study in which thieves were asked about their motivations for their past crimes. The most commonly reported motivation for theft was the monetary gain of reselling stolen goods, primarily for drugs. Another commonly reported reason for stealing was to feel the thrill or rush of stealing. Many shoplifters reported feeling a high and may not have even had any interest in the item they were stealing. In some cases, this thrill may contribute to an addiction to stealing known as kleptomania (American Psychiatric Association, 2013). Other common motivations for stealing include trying to gain a status among peers, trying to prove one's masculinity, and stealing to provide for family. In relation to the common perceptions of shoplifter motivations, Cox et al. demonstrated that the most commonly perceived motivation of a shoplifter was to feel the thrill of shoplifting and because of peer pressure.

The perceived differences between women's and men's motivations for shoplifting have not been investigated. These findings would be important since the

gender schema theory predicts that eyewitnesses may have different perceptions of a male shoplifter versus a female shoplifter. For example, if an eyewitness felt that a woman was stealing to support her family, perhaps the witness may not even alert a store clerk or cashier. This perceived motivation may be more common for a woman stealing as opposed to a man stealing since women are more commonly associated with caring, giving behaviours (Luigi et al., 2016). However, if an eyewitness perceived a man as stealing to resell an item for drug money, he or she might be more likely to alert the store clerk or cashier.

Present Study

Time and time again, memory has been shown to be easily influenced and easily changed (Bartlett & Burt, 1933; Loftus & Palmer, 1996). Although we know that the setting and circumstances of a crime can impact eyewitness memory (Clifford & Hollin, 1981), we do not know whether stereotypes of the offender impact eyewitness memory. The script pointer plus tag hypothesis and the gender schema theory, along with research supporting these theories (Graesser et al., 1979; Johnson, 2009), suggests that perceptions and expectations influence memory. These theories also suggest that gender is a structure salient enough to influence the way others perceive and remember the behaviours of men and women (Johnson, 2009). It is important to understand how these perceptions and memory differences based on gender operate within the justice system. Since there is an understanding of how the violent male stereotype operates in relation to jury decisions about violent crime (Curry et al., 2004), the present study focused on a non-violent crime so that other gender stereotypes can be analyzed.

The present study was designed to assess the possible differences that exist between gender stereotypes and both jury decision making and eyewitness memory. Participants were shown a theft in one of three settings. These settings were chosen to fit with typical shoplifting carried out by women versus men: women who commit theft typically steal clothing and men who commit theft generally steal electronics (Retail Research, n.d.). The following hypotheses were developed for the purposes of this study:

1. The script pointer plus tag hypothesis would predict that atypical events are better remembered than typical events (Graesser et al., 1979). As such, it was hypothesized that participants would have more complete memory recall for the perpetrator when exposed to the female shoplifter (as females are not associated with crime and may appear as atypical) compared to the male shoplifter.
2. Since a female shoplifter may seem atypical, it is possible that participants' attention would be drawn to *her* instead of the setting. Consistent with previous research demonstrating that the atypical aspect of a weapon can draw attention and impact memory completeness (Buckhout & Eugenio, 1990; Pickell, 1999), it was hypothesized that memory completeness would be lower for the setting when exposed to the female shoplifter compared to the male shoplifter.
3. When considering what types of items men and women steal, the norm for male shoplifters is to steal electronics and the norm for female shoplifters is to steal clothing (Retail Research, n.d.). Because of this, seeing a woman stealing in an electronics store may seem atypical and seeing a man stealing in a clothing store may seem atypical. Consistent with the script pointer plus tag hypothesis, it is possible that this unusualness may cause participants to focus on the setting more than they would compared with

gender setting congruencies. It was hypothesized that incongruent matches of perpetrator with store setting (e.g., woman in the electronics store) would yield higher memory completeness for the setting.

4. In regards to memory accuracy, the focus drawn to the female shoplifter might increase the accuracy of the perpetrator description. It was hypothesized that memory recall for descriptions about the perpetrator would be more accurate for the female shoplifter compared to the male shoplifter.

5. Similarly, it was hypothesized that the accuracy might be lower for the setting descriptions when exposed to the female shoplifter due to the expectation that the focus would be drawn to her.

6. Similar to hypothesis 3, it was hypothesized that memory accuracy for the setting would be higher when participants were exposed to an incongruent match of perpetrator gender and store setting (e.g., man in the clothing store).

7. The gender schema theory holds that the actions of others are organized based on their gender and as such, the memory of others may be organized by gender stereotypes as well (Johnson, 2009). It was hypothesized that participants would better remember seeing items at the crime scene that aligned with the gender of the perpetrator (e.g., remember seeing jewelry at the crime scene when the perpetrator was a female) than items that did not align with the perpetrator's gender.

8. Previous research has demonstrated that commonly perceived motivations for shoplifting include to feel a high and because of peer pressure (Cox et al., 1990).

Therefore, it was hypothesized that overall, participants would be most likely to think that the perpetrator was stealing to feel the thrill and due to peer influences.

9. No previous research has demonstrated common perceptions of why men may steal versus why women may steal. However, since perceptions of men and women may be organized by schemas relating to gender stereotypes, it was hypothesized that perceived motivations would differ based on the gender of the perpetrator. Specifically, due to women's kind, nurturing, and can do no wrong stereotype (Dean, 2011), it was hypothesized that perceived motivations for the female shoplifter would include stealing for a friend, stealing for a family member, and being forced to steal by her boyfriend.
10. In contrast to hypothesis 9, it was hypothesized that the violent, dominant, sexually aggressive male stereotype (Dean, 2011) would lead participants to perceive the male shoplifter's motivations as: attempting to prove masculinity to peers, stealing to feel a sexual thrill, and stealing to obtain an item that would give the shoplifter sexual gratification.
11. Because of the violent stereotype attributed to men (especially men who commit crimes), gender schema theory (Bem, 1981) would predict that expectations of the male shoplifter's behaviour would be more violent compared to expectations of the female shoplifter. More specifically, in keeping with this theory, it was hypothesized that participants would be more likely to think that the male shoplifter would be carrying a weapon, and would be more likely to assault the cashier and witness.
12. Since such little research exists about common perceptions of shoplifting, participants were asked to indicate whether or not they thought the perpetrator would shoplift repeatedly (yes/no). Because the majority of crimes are committed by men (Vaillancourt, 2010), it was hypothesized that participants would be more likely to think that the male shoplifter would shoplift repeatedly than the female shoplifter.

13. In reality, the most commonly reported reason for repeated shoplifting in the literature is to resell the stolen items for money to support a drug habit (Brookman, 2007). Therefore, when asked about reasons for repeated shoplifting, it was hypothesized that participants would be most likely to think that the shoplifter was attempting to support a drug habit (instead of having kleptomania or being a professional shoplifter).

14. With violent crimes, men seem to receive harsher punishments than do women (Curry et al., 2004). Therefore, it was hypothesized that similar to sentences for violent crime, participants would recommend harsher punishments for the male shoplifter compared to the female shoplifter.

Method

Participants

A convenience sample of 276 participants completed an online questionnaire through Survey Monkey. The sample included 39 men ($M_{\text{age}} = 26.72$, $SD = 12.17$) and 228 women ($M_{\text{age}} = 27.21$, $SD = 11.00$). Ages of the participants ranged from 16 to 75 years. The majority of the participants were recruited through Facebook. Other social media platforms such as Twitter, Instagram, and Reddit were also used. Participants read an informed consent form before completing the survey.

Materials

Photos. Three photos were used: photos of an electronics store, a women's clothing store, and a men's clothing store (See Appendix A). These three settings were chosen because past research shows women tend to steal clothing and men tend to steal electronics (Retail Research, n.d.). Photos of both a men's and a women's clothing store were used to try and ensure differences seen were due to the type of store itself and not a match or mismatch between the gender of the perpetrator and what was seen in the stores. A picture of a gender ambiguous individual stood back on in front of a green screen was photoshopped into each of the three settings to ensure that the only thing that changed across the three pictures was the setting.

Scenario. Two scenarios were created to describe the shoplifter (See Appendix B). Both scenarios described a witness hearing the perpetrator ask someone to distract the cashier while an item was stolen. The only difference between the two scenarios was the gender of the shoplifter. This was manipulated by changing the name of the shoplifter from 'Robert' to 'Rebecca' and by using the pronouns 'he' versus 'she'.

Questionnaire. A questionnaire was designed for the purposes of this study to assess the motivations and eyewitness memory of a theft (See Appendix C). The first section consisted of questions that addressed the shoplifter's motivation for shoplifting. Statements for why the individual shoplifted were given along with a scale that ranged from 1(*extremely unlikely*) – 7(*extremely likely*). Some of the statements included “the shoplifter was stealing for a friend” or “the shoplifter was stealing because of a dare”. The second section of the questionnaire included eyewitness memory questions that addressed the setting and the shoplifter. The third section included demographic questions about age, gender, and residency. Lastly, the questionnaire contained a debriefing page that explained that the photo of the shoplift was fake and also addressed other concerns that might have arisen during the study.

Procedure

The questionnaire was posted online and shared through social media platforms. A short blurb was posted to advertise it, along with the link to the survey. After participants clicked the link, they were brought to an online consent form. After participants finished reading the form, they were asked to click ‘next’ and consent was assumed. Participants were then brought to the survey. First, participants were given a scenario that described a theft. All participants saw the same scenario but the gender of the perpetrator was manipulated. Approximately half of the participants read the scenario with the name ‘Robert’ used to identify the shoplifter and approximately half of the participants read the scenario with the name ‘Rebecca’ used to identify the shoplifter. With the scenario, the participants were presented with one of the three previously described photos.

Participants then answered questions about motivations for shoplifting and were asked about their memory of the picture. Specifically, they were asked to describe the shoplifter and the setting of the store. After completing the questionnaire, participants were thanked for their participation and debriefed. The debriefing process informed participants why they were not told that they would be asked to remember anything from the picture. The debriefing page also informed participants that the picture of the shoplifting was not a real shoplifting incident.

Coding

To analyze participants' answers to the eyewitness memory questions, the three photos used in this study were viewed by three individuals who each looked at the items present in the pictures. These individuals were asked to record everything they saw in the pictures. The items reported by these individuals were compared and used to make up the coding sheets with which participants' responses would be compared (See Appendix D). Four separate coding sheets were used; one for the perpetrator, one for the electronics section, one for the men's clothing section, and one for the women's clothing section.

The proportions of detail (completeness of memory) the participants reported were computed by adding up the number of details given by the participant and dividing by the number of possible details that were in the photos. For example, if the participant remembered three out of a possible five things about the perpetrator, the participant would receive a completeness score of 3/5.

Along with a completeness score, participants were given an accuracy score. This was calculated by dividing the number of items the participant correctly remembered by

the total number of items the participant remembered. For example, if only one of the three items recalled was correct, the participant would receive an accuracy score of 1/3.

Twenty percent of the data was coded by multiple people to ensure inter-rater reliability. The number of items the coders agreed on was divided by the number of items coded to calculate the percentage agreement. For the descriptions of the perpetrator, there was a 97% agreement rate. For the descriptions of the setting, there was an 88% agreement rate.

Results

This study was conducted to analyze differences in eyewitness memory based on the gender of the perpetrator and the store setting, general perceptions of shoplifters and any differences that exist in perceptions of thieves based on the gender of the shoplifter. The results section is organized to look at these questions separately. First, eyewitness memory results are displayed, showing whether there were differences in completeness and accuracy across conditions (hypotheses 1- 6). Next, results analyzing specific items remembered by the participant are displayed, as well as whether these remembered items are congruent or incongruent with the perpetrator's gender (hypothesis 7). Then, motivations and other perceptions of the perpetrator are displayed showing overall perceived motivations for shoplifting (hypothesis 8), differences in perceived motivations across gender (hypothesis 9 and 10) and differences in perceptions of the perpetrator's behaviour (hypothesis 11). Next, perceptions of the likelihood of this crime being repeated are assessed (hypothesis 12). Possible reasoning for repeated shoplifting is then displayed (hypothesis 13). Finally, recommended punishments are analyzed across gender conditions (hypothesis 14).

Eyewitness Memory

To assess hypotheses 1-3, which involved participants' memory completeness, a 2 (gender: male and female) x 3 (store setting: men's clothing, women's clothing, and electronics) MANOVA was conducted to determine whether there were differences in the completeness of recall about the perpetrator and the setting. Contradicting hypotheses 1 and 2, there were no significant differences in memory completeness (of perpetrator and setting) between the male versus female shoplifter. There were also no interactions

between perpetrator gender and store setting (hypothesis 3). However, results indicated that there was a significant difference in the completeness of recall based on the store seen, $F(4, 320) = 5.16, p < .001$ Wilks' $\Lambda = .88$, partial $\eta^2 = .06$. Follow up between-subjects ANOVAs indicated that there was a difference in recall completeness for the setting, but not the perpetrator, as a function of the store seen, $F(2, 161) = 10.13, p < .001$, partial $\eta^2 = .11$. Participants recalled significantly less about the setting when exposed to the electronics section ($M = 24.56\%$, $SD = 0.14$) than when exposed to the women's clothing section ($M = 35.48\%$, $SD = 0.16$), mean difference = $-0.11, p = .001$, 95% CI $[-0.17, -0.05]$ and to the men's clothing section ($M = 35.63\%$, $SD = 0.15$), mean difference = $-0.10, p < .001$, 95% CI $[-0.15, -0.05]$.

To assess hypotheses 4-6, regarding the accuracy of the participants' recall, a 2 (gender: male and female) x 3 (store setting: men's clothing, women's clothing, and electronics) MANOVA was conducted to determine whether there were differences in the accuracy of recall about the perpetrator and the setting. No main effects or interactions were found. However, because hypothesis 4 was focused on accuracy based on the female perpetrator, the follow-up between-subjects ANOVAs were conducted and results showed that consistent with hypothesis 4, participants' recall accuracy of the perpetrator was higher when exposed to the female perpetrator ($M = 88.08\%$, $SD = 0.19$) than when exposed to the male perpetrator ($M = 79.25\%$, $SD = 0.26$), $F(1, 160) = 4.62, p = .033$, partial $\eta^2 = .03$, 95% CI $[0.01, 0.16]$. As no differences were found in accuracy based on a perpetrator x setting interaction, hypotheses 5 and 6 were not supported. Participants' memories were similar in accuracy for setting descriptions across gender conditions.

In order to assess the possible role of gender schema theory on memory (hypothesis 7), the types of items participants remembered seeing and whether they aligned with gender stereotypes was examined. Participants were asked to give a specific item they thought might be stolen from the scene. A chi square test of independence was conducted to determine whether there were differences in the items participants suggested based on the gender of the shoplifter. In contrast to hypothesis 7, results indicated that there were no significant differences in that participants responded similarly to the stolen item question across the two genders. Responses can be seen in Figure 1.

Because no difference was found in the specific items participants remembered seeing based on gender of the perpetrator, to further assess hypothesis 7, the incorrect details reported by the participants were analyzed. In particular, the number of participants' incorrect memory details were organized into two groups: details that aligned with the perpetrator's gender (congruent), and details that did not align with the perpetrator's gender (incongruent). Between-subjects ANOVAs were conducted to determine whether the number of incorrect details provided differed according to whether they did or did not align with the perpetrator's gender. There were no significant differences in incorrect information provided that was inconsistent with the perpetrator's gender (e.g., describing the male perpetrator as wearing high-heeled shoes). However, participants were more likely to recall inaccurate gender congruent details (e.g., describing the female perpetrator as wearing high-heeled shoes) about the perpetrator when exposed to the male perpetrator than when exposed to the female perpetrator, $F(1, 164) = 8.74, p = .004, \text{partial } \eta^2 = .05, 95 \% \text{ CI } [0.11, 0.58]$. This partially supports

hypothesis 7, demonstrating that participants better remembered seeing items that aligned with the female perpetrator.

Motivations and Perceptions of Perpetrator Behaviour

To assess hypotheses 8-10, a 2 (gender: male versus female) x 3 (setting: women's clothing store, men's clothing store, and electronics store) x 11 (reasons given for shoplifting: see Table 1) mixed ANOVA was conducted to determine whether there were differences in participants' ratings of the motivation with which they thought the perpetrator might decide to shoplift. The between subjects variables were the gender of the perpetrator and the store setting. The within subjects variable was the motivations for shoplifting. In assessing differences in the motivations for shoplifting, Mauchly's test of sphericity was violated and Greenhouse-Geisser was used to correct degrees of freedom, $\chi^2(54) = 348.59, p < .001, \epsilon = .71$.

There was a significant difference in participants' ratings of perceived motivations for shoplifting amongst the 11 different reasons as to why one would shoplift, $F(7.07, 1131.64) = 80.06, p < .001, \text{partial } \eta^2 = .33$. Table 1 shows the means and standard deviations for the ratings (1(*extremely unlikely*) – 7(*extremely likely*)) of perceived likelihood for each of the 11 reasons. As seen in Table 1, and similar to hypothesis 8 predicting that peer influences would be one of the most commonly perceived motivation for shoplifting, participants rated the perpetrator stealing to try and fit in with his/her friends who also shoplift as the most common motivation. The reason rated as being least likely was that the perpetrator would feel sexual gratification from having the stolen item. With the exception of differences noted in the table, ratings assigned to all perceived motivations were significantly different from each other.

To assess hypotheses 9 and 10, as well as hypothesis 11, a 2 (gender: male versus female) x 3 (setting: women's clothing store, men's clothing store, and electronics store) MANOVA was conducted to determine whether there were differences in participants' perceived motivations for shoplifting, as well as differences in perceived behaviours of the shoplifter (i.e., likelihood that the perpetrator has kleptomania, likelihood that the perpetrator has a drug addiction, likelihood that the perpetrator was carrying a weapon, and the likelihood that the perpetrator would assault the cashier or witness). The MANOVA indicated a significant difference in perceptions of the perpetrator based on the perpetrator's gender, $F(19, 140) = 2.97, p < .001$, Wilks' $\Lambda = .713$, partial $\eta^2 = .29$.

Follow-up between-subjects ANOVAs were used to determine where the differences in perceptions existed. It was found that there was a significant difference in perceived motivations based on the female versus male shoplifter, $F(1, 158) = 4.29, p = .040$, partial $\eta^2 = .03$, 95% CI [0.02, 0.99]. Consistent with hypothesis 9, participants were more likely to think that the female shoplifter was stealing for a friend compared to the male shoplifter, $F(1, 158) = 4.06, p = .046$, partial $\eta^2 = .03$, 95% CI [-0.91, -0.01]. Pairwise comparisons for the male perpetrator supported hypothesis 10, showing a significant difference in ratings of whether the perpetrator was attempting to prove masculinity (for male perpetrator) or attempting to prove that not only men can be bad (for female perpetrator), $F(1, 158) = 31.50, p < .001$, partial $\eta^2 = .17$. Participants were more likely to think that the male perpetrator was attempting to prove masculinity than that the female perpetrator was attempting to prove not only men can be bad, mean difference = 1.43, $p < .001$, 95% CI [0.92, 1.94]. Participants were also more likely to think that the male perpetrator felt a sexual thrill from shoplifting, $F(1, 158) = 4.22, p =$

.042, partial $\eta^2 = .03$, 95% CI [0.02, 0.93]; that the male perpetrator would assault the cashier, $F(1, 158) = 4.88$, $p = .029$, partial $\eta^2 = .03$, CI [0.06, 1.07], and that the male perpetrator would assault the witness when compared to the female perpetrator (hypothesis 11 addressing violent male stereotypes). No other significant differences were found in the perceptions of the perpetrator based on the perpetrator's gender. Inconsistent with hypothesis 11, participants were equally likely to think that the male shoplifter versus the female shoplifter was carrying a weapon. There were also no differences in perceptions across settings or any interaction between perpetrator gender and setting.

Because there was no main effect of store setting on perceptions of the shoplifter, the two clothing settings were collapsed and compared with the electronics setting.¹ An additional 2 (gender: male versus female) x 2 (setting: clothing store versus electronics store) MANOVA was conducted to determine whether there were differences in perceptions of the perpetrator across gender of the perpetrator and the two store settings.

As with the previous MANOVA, there was a significant difference in perceptions of the perpetrator based on the perpetrator's gender (male or female), $F(19, 235) = 3.27$, $p < .001$, Wilks' $\Lambda = .791$, partial $\eta^2 = .21$. Follow-up between-subjects ANOVAs were conducted to determine which questions were rated differently based on the perpetrator's gender. There was a significant difference in perceptions of whether the perpetrator was attempting to prove masculinity (for male perpetrator) or attempting to prove that not

¹ Initially, two clothing settings were used (male clothing and female clothing) to ensure gender stereotyping did not result from the gendered nature of the store. As this was not the case, in an attempt to further assess the role of gender stereotypes, the two clothing store settings were combined.

only men can be bad (for female perpetrator), $F(1, 253) = 26.32, p < .001$, partial $\eta^2 = .09$. Participants were again more likely to think that the male perpetrator was attempting to prove masculinity than that the female perpetrator was attempting to prove that not only men can be bad, mean difference = 1.07, $p < .001$, 95% CI [0.66, 1.48]. A new difference did emerge in this analysis, supporting hypothesis 9: participants were more likely to think that the female perpetrator was forced to steal by a partner than the male perpetrator, $F(1, 253) = 8.76, p = .003$, partial $\eta^2 = .03$, 95% CI [0.19, 0.93].

Perceptions of Repeated Shoplifting

To assess hypothesis 12 addressing perceptions of repeated shoplifting, goodness of fit chi square analyses were conducted. Participants response to a yes/no question assessing perceptions of repeated shoplifting (i.e., do you think this person would shoplift repeatedly?) was analyzed. There was a significant difference in the proportion of yes/no responses, $\chi^2(1, N = 273) = 125.37, p < .001, \Phi^2 = .45$ with more yes responses compared to no responses. There was however, no significant difference in the proportions of yes or no responses based on the gender of the perpetrator, $\chi^2(1, N = 273) = 0.14, p = .705, \Phi^2 < .001$. Contradicting hypothesis 12, participants were equally likely to believe that the male versus female perpetrator would shoplift repeatedly (See Figure 2).

A 2 (gender: male versus female) x 3 (setting: women's clothing store, men's clothing store, and electronics store) x 3 (reasons given for repeated shoplifting; see Figure 3) mixed measures ANOVA was conducted to determine whether there were differences in participants' ratings for why a person would engage in repeated shoplifting (hypothesis 12). The between-subjects variables included the gender and the setting, and the within-subjects variable was the reasons for repeated shoplifting. There was a

significant difference in participant's ratings amongst the three reasons one would shoplift, $F(2, 340) = 60.18, p < .001$, partial $\eta^2 = .26$.

Post hoc comparisons were conducted to determine where the differences were between the reasons given for repeated shoplifting. Supporting hypothesis 13, participants rated the likelihood that the perpetrator was stealing to support a drug habit as higher than the likelihood that the perpetrator was a professional shoplifter (mean difference = 1.51, $p < .001$, 95% CI [1.24, 1.78]) and higher than the likelihood that the perpetrator had kleptomania (mean difference = 0.94, $p < .001$, 95% CI [0.67, 1.12]). Participants also rated the likelihood that the perpetrator had kleptomania as higher than the likelihood that the participant was a professional shoplifter, mean difference = 0.57, $p < .001$, 95% CI [0.29, 0.85]. Participants' responses can be seen in Figure 3.

Punishment

To determine whether there were differences across recommended punishments (a warning, a fine, or jail time) for a shoplifter, a goodness of fit chi square analysis was conducted. There was a significant difference between the types of recommended punishments, $\chi^2 (2, N = 270) = 100.07, p < .001, \phi_c = .19$. Most participants recommended the perpetrator get a monetary fine compared to a warning or a jail sentence (See Table 2). The least recommended punishment was a warning.

To determine whether these recommended punishments differed by the gender of the perpetrator, a chi square test of independence was conducted. There were no significant differences in punishment type across genders, $\chi^2 (2, N = 270) = 0.27, p = .872, \Phi^2 = .032$, contradicting hypothesis 14. As seen in Table 2, participants recommended similar punishment types for both the female and male perpetrator.

Discussion

As much as one might like to believe one's own gender does not impact multiple aspects of life, the reality is that gender is one of the most stereotyped constructs that exists within Western society. People can and do place different judgements on others based on gender (Butler, 2004). While some aspects of gender stereotyping are minor (e.g., a mom assuming her daughter wants a doll), other aspects may have very severe consequences. Those that may have severe consequences include perceptions of male versus female perpetrators and how they are treated differently within the justice system solely on their gender. Specifically, males often receive harsher sentences for the same crimes as females (Curry et al., 2004) and the violent male stereotype may explain this. Schema theories suggest that memory can differ based on what perceptions or expectations are held about a person or an event (Johnson, 2009). In the present study possible differences in eyewitness memory based on gender were examined, as well as, whether there were differences in perceptions of a perpetrator based on gender.

Eyewitness Memory Completeness

In reality, frequencies of shoplifting are similar between men and women (Dean, 2008), however in general, men are more likely to be thought of as engaging in criminal activity (Lugli et al., 2016). This led to the development of hypotheses 1-3 which were developed in relation to the script pointer plus tag hypothesis and the function that unusualness may play when it comes to memory (e.g., a female offender may be seen as unusual). Regarding hypothesis 1, it was predicted that memory completeness would be higher for the female shoplifter compared to the male shoplifter. This was not supported as participants' completeness of recall was similar between genders. It is possible that

the shoplifter's appearance was not varied enough to elicit differences in recall. This is suggested because many participants simply reported "hoodie, baggy pants, and shoes" to describe the perpetrator, as all physical features of the perpetrator were covered (e.g., face, hair, and hands). Similarly, participants' recall of the store setting was not impaired by the predicted focus on the perpetrator (hypothesis 2). It is possible that schemas existing for clothing stores and electronic stores aided the participants in recalling information about the settings, regardless of which gender condition they received.

Consistent with the script pointer plus tag hypothesis, it was thought that incongruent (atypical) matches of perpetrator with the store setting (e.g., woman in electronics store) would yield higher memory completeness (hypothesis 3). Participants in this sample did not remember these incongruent matches any differently than the congruent ones. These incongruent matches of store setting and perpetrator gender may not have been tagged as atypical because public perceptions of what men and women steal may not reflect reality. The reality that male shoplifters tend to steal electronics and female shoplifters stealing clothing (Retail Research, n.d.) may be unknown to the general population and therefore, participants may not have recognized that a woman stealing electronics was out of the ordinary (or the man stealing clothing).

Interestingly, there were differences in the completeness of participants' recall of the setting based on the store setting. Participants remembered significantly less of the setting when exposed to the electronics store compared to the men's and women's clothing section. This may be because people generally visit clothing stores more often than electronic stores, and as such, schemas may be more developed for clothing stores. For example, many people know that clothing stores contain racks of clothing, walls

lined with clothing, and display tables. As for an electronics store, a schema may simply be lots of electronics, and this is what many participants reported in their open-ended responses for the electronics conditions.

Eyewitness Memory Accuracy

Because of the script pointer plus tag theory, similar hypotheses were developed for memory accuracy (hypotheses 4-6). It was thought that the predicted focus on the female shoplifter compared to the male shoplifter would cause participants to remember more accurate information about the perpetrator description (hypothesis 4), and less accurate information about the setting description (hypothesis 5). Hypothesis 4 was supported in that participants had higher accuracy for the female shoplifter descriptions compared to the male shoplifter descriptions. This aligns with the script pointer plus tag hypothesis, in that the female shoplifter may have been seen as atypical and participants were more likely to pay attention to her and therefore to be more accurate in her description compared to their description of the male perpetrator. Alternatively, as suggested by the results, it may be that people associate men with being shoplifters and may have just filled in details that fit with their schema of a male shoplifter, details that were in fact incorrect.

The expectation that participants would focus on the female shoplifter, leading to a detriment in their recall of the setting in that condition was not correct, thus, hypothesis 5 was not supported. Perhaps the focus on the female shoplifter did not draw attention away from the setting, but simply caused participants to spend more time looking at the perpetrator (and not necessarily less time looking at the setting).

Hypothesis 6 stated that that memory accuracy would be higher for incongruent (atypical) matches of gender and store setting (e.g., woman in electronics store) compared to congruent matches. Similar to the results seen with hypothesis 3, when recall accuracy was examined, there were no interactions between gender and store setting. Thus, hypothesis 6 was not supported. As previously proposed, public perceptions of what is typical and atypical for what items men and women steal may not be known.

Specific Memory Details

To assess what role gender schema theory (Bem,1981; Johnson, 2009) might play on memory, hypothesis 7 was developed, suggesting that specific details recalled would align with the gender of the perpetrator (e.g., recalling video games when exposed to the male perpetrator). When participants were asked to recall what specific item may have been stolen, surprisingly, participants suggested similar items for both the male shoplifter and the female shoplifter. This may be explained by the nature of the stimulus used. The pictures did not contain a large number of gender stereotypical items, and as such participants may not have noticed them. Furthermore, as the image was static and not a video (where participants may have been able to gather more information about the items), participants may have felt there was no clear way of choosing an item with the number of items displayed in the stores. A lot of participants for example, simply said the perpetrator would steal clothing from a clothing store making it difficult to assess gender congruency.

In order to further explore hypothesis 7, the inaccurately reported details were assessed to determine whether inaccuracies aligned with gender stereotypes. For

inaccurately reported details aligning with the gender of the perpetrator, participants were more likely to recall more inaccurate information about the male perpetrator than the female perpetrator. This suggests that witnesses may be more likely to recall stereotypically inaccurate information for male shoplifters compared to female shoplifters. Since a female criminal may seem atypical, the script pointer plus tag hypothesis (Graesser et al., 1979) predicts that this situation may be remembered better than with a male criminal. It is possible that participants did find the female shoplifter more surprising, however, we did not see differences in overall memory completeness or in the accuracy of recall across the gender of the perpetrator (hypotheses 1 and 4). Instead, we see a greater number of inaccurate details aligning with the male perpetrator. It is possible that participants' memories were filled in with aspects about the perpetrator that would fit a male (or criminal) stereotype. For example, many participants reported the male perpetrator as wearing white sneakers. For a shoplifter on foot, running sneakers may be the best choice of shoe to ensure a quick get away. With this in mind, it is possible that the male shoplifter caused participants to think more about a criminal stereotype, and therefore may have caused participants to think about what shoe would best fit a shoplifter.

Perceptions of the Perpetrator

Consistent with Cox et al.'s, (1990) study, participants were most likely to think that the shoplifter was stealing because of peer pressure (supporting hypothesis 8). In this study, the most highly perceived motivations for shoplifting included wanting to fit in with friends, being dared to shoplift, and wanting to achieve a status among peers. This suggests that public opinions of shoplifter motivations revolve around peer pressure

(Cox et al., 1990). Consistent with hypothesis 8, and with Cox et al.'s (1990) finding, another commonly perceived reason for shoplifting was to feel the thrill. This suggests that public perceptions of shoplifting motivations also include feeling the thrill.

Hypotheses 9 and 10 were developed to assess whether perceptions of motivations differed by gender of the shoplifter. Although no previous research has assessed this, gender schema theory would predict that perceptions may differ based on which motivations match gender stereotypes (Bem, 1981). Overall, there were not a lot of differences in perceived motivations of the shoplifter based on the gender. However, the few differences that arose aligned with gender stereotypes, putting the male shoplifter in a less favorable light. Hypothesis 9 was that the female shoplifter would be perceived as shoplifting for a friend or family member, as well as being forced to shoplift by her partner. Supporting the hypothesis, participants were more likely to think that the female shoplifter was stealing for a friend, and after collapsing across clothing stores, more likely to think that she was forced to steal by her romantic partner. It appears as if participants more readily excuse the behaviour of the female shoplifter by placing partial blame on someone else (a friend or a boyfriend). This aligns with what the gender schema theory would predict, in that when shown a female shoplifter, participants' attitudes towards that shoplifter were organized in a way that aligns with the gender. Since the female stereotype makes one think of giving behaviours, as well as females not being associated with crime in general (Luigi et al., 2016), it makes sense that participants would think the female shoplifter might be stealing for someone else's gain.

Hypothesis 10 stated that that participants would perceive the male shoplifter as being more likely to be attempting to prove his masculinity (as the masculine stereotype

is more associated with crime), as well as to be stealing for sexual purposes (due to men being stereotyped to commit sexual crimes). Supporting this hypothesis, as well as the gender schema theory (Bem, 1981), participants were more likely to think that the male shoplifter was attempting to prove his masculinity (as opposed to the female shoplifter attempting to prove that not only men can be bad). This indicates that masculinity is more easily associated with shoplifting (or perhaps crime in general). The actual statistics for shoplifting do not reflect a male pattern of stealing. In fact, some even refer to shoplifting as a pink-collar crime since it is one of the few crimes that women commit in greater numbers than men (Caputo, 2011; Krasnovsky & Lane, 1998). Therefore, men being more associated with shoplifting reflects the stereotype that men are stereotyped as bad and women are stereotyped as good (Lugli, 2016). Further supporting hypothesis 10 stating that men who commit crimes may be stereotyped to be sexually motivated (Hanson & Bussiere, 1998), participants were more likely to think that the male shoplifter was shoplifting for a sexual thrill.

Because of the violent stereotype associated with men who commit crime (Vaillancourt, 2010), it was hypothesized (11) that the male shoplifter would be perceived as more violent than the female shoplifter. This hypothesis was supported. Participants were more likely to think that the male shoplifter might assault the cashier or the witness compared to the female shoplifter. Here we can see the violent male stereotype prominent in participants' responses. However, inconsistent with the hypothesis, participants were not more likely to think the male perpetrator was carrying a weapon. Perhaps participants recognized that the nature of this crime (shoplifting) would not require the use of a weapon compared to other types of crime (e.g., armed robbery).

Perceptions of Repeated Shoplifting

Hypothesis 12 stated that since men are more often thought of as being involved with crime compared to women (Vaillancourt, 2010), participants would be more likely to think that the male shoplifter would shoplift repeatedly. This hypothesis was not supported. Results showed that participants responded similarly to the question “Do you think that this person would shoplift repeatedly?” across genders. Interestingly, participants were more likely overall to respond yes compared to no, indicating that common perceptions of a shoplifter include instances of repeated shoplifting, regardless of the gender of the offender. This could possibly be explained with the overall perceived motivations for shoplifting. Since participants were most likely to believe that one would shoplift because of peer influences, this may suggest future shoplifting offences. For example, if someone shoplifted to fit in with their friends who also shoplift, this becomes a group of friends who all shoplift. Therefore, shoplifting within the group may continue.

Brookman (2007) stated that the most commonly reported motivation for shoplifting was to resell the items to buy drugs. Consistent with this, and with hypothesis 13, when asked for reasons a shoplifter would shoplift repeatedly, participants were most likely to think that a shoplifter was attempting to support a drug habit. This suggests that commonly perceived motivations for repeated shoplifting do reflect reality. If participants felt that the shoplifter was stealing to support a drug habit, this would explain why so many participants felt that the perpetrator would shoplift repeatedly.

Because men have been seen to receive harsher sentences than women for violent crimes (Curry et al., 2004), it was hypothesized that (14) participants would recommend harsher punishments for the male shoplifter compared to the female shoplifter. However, results showed that participants recommended similar punishments for the male and female shoplifter (hypothesis 11). This suggests that for incidents of shoplifting, gender stereotypes are evident, but this may not impact how a potential jury member recommends a punishment. Even though the man was rated as being more likely to be violent, participants may have recognized that the scenario which they were shown did not depict any violence. This study suggests that punishments for shoplifting do not differ as they seem to with violent crimes (Curry et al., 2004), possibly because shoplifting is a non-violent crime. More research focused on other non-violent crimes should be assessed to determine if this difference in punishments across genders is unique to violent crimes.

Implications

When considering eyewitnesses' memory for the setting of a crime, these results suggest that witnesses may remember more about settings that are familiar to them. For example, a witness may better remember the setting of a crime when it occurred in a Walmart type department store since people often visit department stores. However, if a crime occurred in an unfamiliar place, such as in a pool facility, witnesses' memories may be less complete.

Results suggest that people may recall more inaccurate information that fits with a gender stereotype about male shoplifters compared to female shoplifters. This may mean that in real life settings, details reported about male shoplifters are reported more

inaccurately compared to those about female shoplifters. As a consequence, it may be more difficult to catch a male shoplifter since his person description may contain inaccurate information. For example, if a witness inaccurately reports seeing the perpetrator as having a tattoo (which would match a male or criminal stereotype), this may make it extremely difficult to catch the shoplifter if he flees the scene.

As discussed above, the female shoplifter was judged more favorably compared to the male. For those who witness shoplifting, how they perceive the crime could change how they might react. For example, if witnesses see a man shoplifting and felt that he might be doing it for a sexual reason, the witnesses may have negative thoughts about that shoplifter and this could influence the witnesses' decision to alert authorities. Also, if witnesses thought that a shoplifter was likely to be violent, they may feel that the situation is more serious and choose to alert authorities. However, it is also possible that this perception of violence may cause a witness to be afraid of the perpetrator, and therefore he/she may be less likely to alert authorities. In a different manner, if a witness saw a woman shoplifting and perceived her to be stealing for a friend or being forced to steal by someone else, the witness may choose not to report the shoplifter.

Fortunately, this sample suggests that for shoplifting, punishments may be similar across genders despite the differences in perceptions. It is important to note though that participants were alone when making these decisions, whereas in real life jury situations, jurors do not make these decisions alone. When members of a jury have certain opinions about a perpetrator and/or the crime he/she has committed, these opinions may be enhanced after group discussions (Bray & Noble, 1978). This phenomenon is referred to as group polarization. For example, if members of a jury individually believe that a

shoplifter should receive a fine, after discussing this together, they may decide on a harsher fine compared to what they would have recommended individually. With this in mind, if jury members have negative perceptions about a male shoplifter, it is possible that further discussions may exacerbate these negative perceptions and perhaps recommended punishments may become more extreme.

Limitations

The present study is not without limitations. One potential limitation is the pictures used for the stimuli. The three photos were taken at local shopping centres and therefore, participants from this area may have recognized the settings from their own daily lives. It is possible that participants' memory for store settings was affected by this. Some participants did indicate that they knew the store well (e.g., a previous employee). This could explain why participants remembered more about the clothing sections than the electronics section, as people are probably more likely to go into clothing stores than they are electronic stores.

It has been shown that memory recall is significantly better when participants are asked for a verbal account compared to a written account (Sauerland & Sporer, 2011). This means that eyewitness data collection through surveys may be less reliable than interview style data collection. Some participants wrote short and general answers (e.g., electronics) to eyewitness questions (e.g., please list everything you can remember about the setting) and some chose to omit these questions entirely. It is likely that participants in this study remembered more than they chose to report.

Some previous research has demonstrated that schemas can influence one's memory differently based on how much time has passed since witnessing an event

(Graesser et al., 1979). Initially, it is the atypical aspects of an event that are better remembered (Graesser et al., 1979). However, after time passes, people may be more likely to remember the typical aspects of an event (Graesser et al., 1979). This suggests that, over time, one's memory of an event will be filled in with information that is consistent with a given script or expectation about an event (Bartlett & Burt, 1933; Piaget, 1952). Supporting this, Bartlett and Burt demonstrated that memories that do not align with a typical script may be changed in a way that makes more sense to the individual. Thus, it seems as if atypical aspects of an event are better remembered initially but overtime, these atypical aspects are changed to make more sense given the circumstances. In regards to those who witness crimes, it is important to consider how much time passes between the time the crime actually happens and when the witness speaks with the police. The script pointer plus tag hypothesis suggests that recall may be very different based on the timing of the interview (Graesser et al., 1979). Although this poses a limitation on the present study, it provides future researchers with a direction to pursue. Future researchers who are focusing on how schemas interact with eyewitness memory may want to conduct follow up interviews to determine how atypical and typical aspects of a situation are remembered based on the amount of time that has passed.

Conclusion

The present study suggests that the violent male stereotype may not be the only gender stereotype that interacts with perceptions of those who commit crimes. It seems as though gender stereotypes have subtle but evident impacts on eyewitness memory, influencing the accuracy of memory recall for a perpetrator. This could be extremely problematic in reality, as recalling inaccurate details about a perpetrator may discredit the

witness. As well as this, inaccurately reported details may decrease the likelihood that an actual male shoplifter is held accountable for his crime (e.g., ‘the witness remembers a tattoo... but I don’t have one! It wasn’t me!’). This data also suggests that there are not many differences in the perceptions of shoplifters, however, the ones that do exist align with gender stereotypes. When people with these perceptions enter a courtroom as jurors, their perceptions have the potential to be exacerbated through discussions with other jury members, furthering the negative perceptions of a man (or lessening negative perceptions of a woman). These differed perceptions may not have impacted recommended punishments in this sample, however, that is not to say this would reflect reality when decisions are not made by one person.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Bartlett, F. C., & Burt, C. (1933). Remembering: A study in experimental and social psychology. *British Journal of Educational Psychology*, *3*, 187-192. doi: 10.1111/j.2044-8279.1933.tb02913.x
- Bem, S. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, *88*, 354-364. doi: 10.1037/0033-295X.88.4.354
- Bray, R. M., & Noble, A. M. (1978). Authoritarianism and decisions of mock juries: Evidence of jury bias and group polarization. *Journal of Personality and Social Psychology*, *36*, 1424-1430. doi:10.1037/0022-3514.36.12.1424
- Brookman, F., Mullins, C., Bennett, T., & Wright, R. (2007). Gender, motivation and the accomplishment of street robbery in the United Kingdom. *British Journal of Criminology*, *47*, 861-884. doi:10.1093/bjc/azm029
- Butler, J. (2004). *Undoing gender*. New York, NY: Routledge.
- Caputo, G. A., & King, A. (2011). Shoplifting: Work, agency, and gender. *Feminist Criminology*, *6*, 159-177. doi:10.1177/1557085111402815
- Clifford, B. R., & Hollin, C. R. (1981). Effects of the type of incident and the number of perpetrators on eyewitness memory. *Journal of Applied Psychology*, *66*, 364. doi: 10.1037/0021-9010.66.3.364
- Cox, D., Cox, A. D., & Moschis, G. P. (1990). When consumer behavior goes bad: An investigation of adolescent shoplifting. *Journal of Consumer Research*, *17*, 149-159. doi: 10.1086/208545

- Curry, T. R., Lee, G., & Rodriguez, S. F. (2004). Does victim gender increase sentence severity? Further explorations of gender dynamics and sentencing outcomes. *Crime & Delinquency, 50*, 319-343. doi: 10.1177/0011128703256265
- Dean, J. J. (2011). The cultural construction of heterosexual identities. *Sociology Compass, 5*, 679-687. doi: 10.1111/j.1751-9020.2011.00395.x
- Dean, T. (2008). Theft and gender in late medieval bologna. *Gender & History, 20*, 399-415. doi: 10.1111/j.1468-0424.2008.00526.x
- Graesser, A. C., Gordon, S. E., & Sawyer, J. D. (1979). Recognition memory for typical and atypical actions in scripted activities: Tests of a script pointer+ tag hypothesis. *Journal of Verbal Learning and Verbal Behavior, 18*, 319-332. doi: 10.1016/S0022-5371(79)90182-8
- Hanson, R. K., & Bussiere, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology, 66*, 348.
- Johnson, F. (2009). Gender schema theory. In S. W. Littlejohn & K. A. Foss (Eds.), *Encyclopedia of communication theory* (Vol. 2, pp. 437-438). Thousand Oaks, CA: Sage. doi: 10.4135/9781412959384.n162
- Kramer, T., Buckhout, H., & Eugenio, R. (1990). Weapon focus, arousal, and eyewitness memory. *Law and Human Behavior, 14*, 167-184. doi: 10.1007/BF01062971
- Krasnovsky, T., & Lane, R. C. (1998). Shoplifting: A review of the literature. *Aggression and Violent Behavior, 3*, 219-235. doi:10.1016/S1359-1789(97)00022-0
- Lugli, L., Obertis, A. C., & Borghi, A. M. (2016). Hitting is male, giving is female: Automatic imitation and complementarity during action observation. *Psychological Research, 80*, 1-12. doi:10.1007/s00426-016-0808-8

- Piaget, J. (1952), *The origins of intelligence in children*. New York, NY: International Universities Press.
- Pickel, K. L. (1999). The influence of context on the 'weapon focus' effect. *Law and Human Behavior*, 23, 299-311. doi:10.1023/A:1022356431375
- Lindholm, T., & Christianson, S. (1998). Gender effects in eyewitness accounts of a violent crime. *Psychology, Crime and Law*, 4, 323-339. doi: 10.1080/10683169808401763
- Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behavior*, 13, 585-589. doi:10.1016/s0022-5371(74)80011-3
- Rothbart, M., Evans, M., & Fulero, S. (1979). Recall for confirming events: Memory processes and the maintenance of social stereotypes. *Journal of Experimental Social Psychology*, 15, 343-355. doi: 10.1016/0022-1031(79)90043-X
- Sauerland, M., & Sporer, S. L. (2011). Written vs. spoken eyewitness accounts: Does modality of testing matter? *Behavioral Sciences & the Law*, 29, 846-857. doi: 10.1002/bsl.1013
- Vaillancourt, R. (2010). In Canadian Electronic Library (Firm), Canadian Centre for Justice Statistics and Statistics Canada (Eds.), *Gender differences in police-reported violent crime in Canada, 2008*. Ottawa, Canada.: Statistics Canada.

Figures and Tables

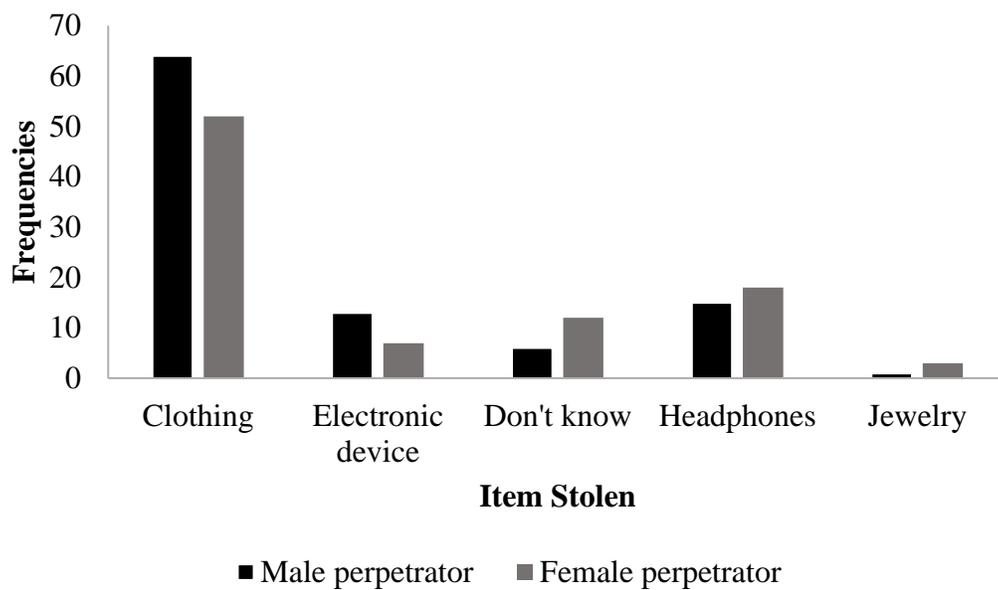


Figure 1. Frequencies of participant responses when asked which item may have been stolen from the scene.

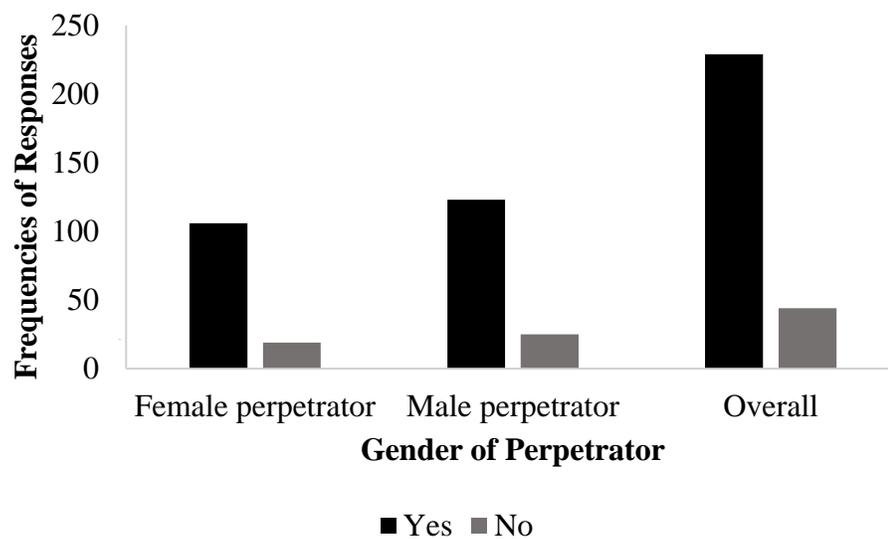


Figure 2. Frequencies of yes versus no responses to the question “Do you think that this person would shoplift repeatedly?”

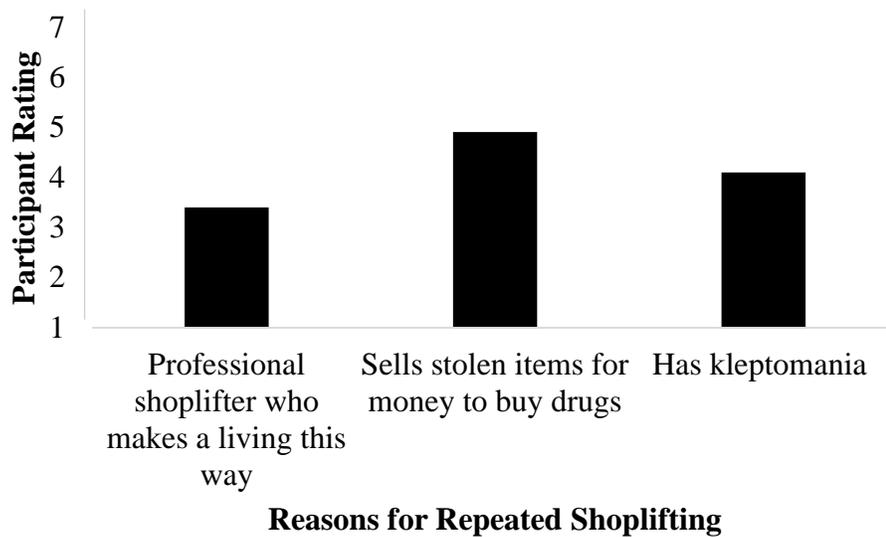


Figure 3. Participant responses on a 1 (*extremely unlikely*) - 7 (*extremely likely*) scale to statements addressing why one would shoplift repeatedly.

Table 1
Descriptive Statistics for Perceived Motivations for Shoplifting across Genders

Motivation	Gender of the Perpetrator		
	Male <i>M(SD)</i>	Female <i>M(SD)</i>	Overall <i>M(SD)</i>
Wanted to fit in with friends	5.10(1.19)	5.28(1.14)	5.18(1.16)
Wanted to feel thrill of shoplifting	4.82(1.36)	4.91(1.32)	4.86(1.34) ^a
Was dared to shoplift	4.76(1.25)	4.93(1.24)	4.84(1.25) ^a
Was trying to achieve a status among peers	4.78(1.33)	4.72(1.46)	4.76(1.39) ^a
Was stealing for a friend	4.26(1.41)	4.58(1.17)	4.41(1.31) ^c
Was suffering from a mental illness	4.22(1.44)	4.55(1.45)	4.37(1.45) ^{cd}
Was stealing for a family member	4.04(1.50)	4.03(1.41)	4.04(1.46) ^d
Was forced to steal by partner	3.11(1.43)	3.65(1.38)	3.36(1.43) ^b
Felt that the store owned them	3.15(1.52)	3.30(1.54)	3.21(1.53) ^b
Wanted to feel a sexual thrill	2.86(1.40)	2.73(1.43)	2.80(1.41)
Stolen item would bring sexual satisfaction	2.62(1.40)	2.60(1.42)	2.61(1.41)

Note. All overall means were significantly different from each other except for those denoted with same superscript letters.

Table 2
Frequencies of Participants Responding with Each Recommended Punishment

Gender	Recommended Punishment		
	Warning	Monetary fine	Jail time
Female perpetrator	21	74	28
Male perpetrator	23	93	31
Overall	44	167	59

Appendix A

Photos





Appendix B

Scenarios

The picture shown was taken from security footage of a theft that happened early last week. The picture was taken just before the theft occurred A witness who was also in the store heard the thief's friend call her Rebecca. The witness reported hearing the thief ask her friend to distract the cashier.

The picture shown was taken from security footage of a theft that happened early last week. The picture was taken just before the theft occurred A witness who was also in the store heard the thief's friend call him Robert. The witness reported hearing the thief ask his friend to distract the cashier.

Appendix C

Survey Package

Perceptions and Attitudes towards Shoplifting

Informed Consent Form

The purpose of this Informed Consent Form is to ensure you understand the nature of this study and your involvement in it. This consent form will provide information about the study, giving you the opportunity to decide if you want to participate.

Researchers: This study is being conducted by Shelbie Anderson as part of an honors thesis course requirement for Psychology 4951/4959. I am under the supervision of Dr. Kelly Warren.

Purpose: The study is designed to investigate attitudes and perceptions of shoplifting. The results will be used for an honors thesis. The study may be published in the future.

Task Requirements: You will be asked to complete a questionnaire. Questions will be in relation to attitudes and perceived behaviors of shoplifters (For example, why do you think someone would steal?). There are no right or wrong answers to the attitude statements; we are only interested in your opinions. You may omit any questions you do not wish to answer.

Duration: The questionnaire will take approximately 10 minutes to complete.

Risks and Benefits: There are no obvious risks or benefits involved with your participation in this study.

Anonymity and Confidentiality: Your responses are anonymous and confidential. Please do not put any identifying marks on any of the pages. All information will be analyzed and reported on a group basis. Thus, individual responses cannot be identified. Although I am not collecting any identifying information, the online survey company, Survey Monkey, hosting this survey is located in the United States and as such is subject to U.S. laws. The U.S Patriot Act allows authorities access to the records of internet service providers. Therefore, anonymity and confidentiality cannot be guaranteed. If you choose to participate in this survey, you understand that your responses to the survey questions will be stored and may be access in the ISA. The security and privacy policy for the web survey company can be found at the following link: http://www.SurveyMonkey.com/monkey_privacy.aspx.

Right to Withdraw: Your participation in this research is totally voluntary and you are free to stop participating at any time.

Contact Information: If you have any questions or concerns about the study, please feel

free to contact my supervisor, Dr. Kelly Warren at kwarren@grenfell.mun.ca. As well, if you are interested in knowing the results of the study, please contact Kelly after April 2017.

This study has been approved by an ethics review process in the psychology program at Grenfell Campus, Memorial University of Newfoundland and has been found to be in compliance with Memorial University's ethics policy. If this study has raised any concerns for you, I encourage you to contact the mental health helpline at 1 (866) 531-2600.

By proceeding to the next page, consent is implied.

Survey

The picture shown was taken from security footage of a theft that happened early last week. The picture was taken just before the theft occurred. A witness who was also in the store heard the thief's friend call her/him Rebecca/Robert. The witness reported hearing the thief ask her/his friend to distract the cashier.

{Picture}

You will now be asked about your opinions about the thief. There are no right or wrong answers. We are only interested in your opinions. Many motivations exist for why someone might steal something. I am interested in why you think this person would steal.

Please read the following statements and respond according to your beliefs.

Rebecca/Robert was trying to achieve a status among her/his peers

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert wanted to feel the 'thrill' of shoplifting

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert felt that the store owed her/him

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca was trying to prove to her peers that not only men can be 'bad' / Robert wanted to prove his masculinity to his peers

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Being in possession of the stolen item will give Rebecca/Robert sexual gratification

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert was dared to shoplift

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert feels a sexual thrill from shoplifting

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert was forced to steal by her/his boyfriend/girlfriend

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert wanted to fit in with her/his friends who also shoplift

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert was stealing something for a friend

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert was stealing something for a family member

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert was suffering from a mental illness

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Do you think that Rebecca/Robert would shoplift repeatedly? Yes/no

Some shoplifters will shoplift on multiple occasions. I am also interested on your

opinions about why this individual might shoplift repeatedly. Please read the following statements and respond according to your beliefs.

Rebecca/Robert is a professional shoplifter and makes a living this way

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Rebecca/Robert wanted to sell a stolen item so that she/he could use the money for drugs

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Kleptomania is defined as an impulse disorder in which an individual cannot resist the urge to steal (American Psychiatric Association, 2013). For those who suffer from this illness, thoughts about stealing are very frequent and the items stolen may not even have significant value or usefulness.

What is the likelihood that Rebecca/Robert has kleptomania?

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

Please answer the following questions with respect to your opinions regarding the theft.

What item do you think was stolen?

How likely is it that Rebecca/Robert is a drug addict?

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

What is the likelihood that Rebecca/Robert was carrying a weapon?

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

What is the likelihood that the cashier would have been physically assaulted if he or she had tried to intervene?

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

What is the likelihood that the witness would have been physically assaulted if he or she had tried to intervene?

1= extremely unlikely 2=moderately unlikely 3= somewhat unlikely 4= not sure 5= somewhat likely 6= moderately likely 7= extremely likely

In addition to knowing your opinions, I am interested in what you remember. You were not told this at the beginning as knowing you will need to remember something generally means paying closer attention to it. In reality, we often need to remember things we do not know we will need to remember. Please answer the following questions about the picture. Do not worry if you cannot remember everything. I am only interested in what you do remember.

Please list everything that you remember about the perpetrators appearance.

Please list everything that you remember about the setting at the store.

What do you think is appropriate punishment for Rebecca/Robert?

1= a warning 2= fine of 100\$ 3= fine of 200\$ 4= fine of 500\$ 5= 2 days in jail 6= 1 week in jail 7= 1 month in jail

Finally, you will be asked some demographic questions. This data will be analyzed on a group basis. No individual responses will be looked at.

What is your gender? Man/Woman/ please specify

What is your age?

What is the highest level of education you have completed? No Schooling Completed, Elementary, High School (no diploma), High School (diploma/GED), Some University/College, Undergraduate Degree Completed, Some Graduate Level Course Work, Graduate Degree Completed, Professional Degree, Doctorate Awarded

Where do you currently reside?

Ontario, Quebec, British Columbia, Alberta, Manitoba, Saskatchewan, Nova Scotia,
Newfoundland and Labrador, New Brunswick, Prince Edward Island, Northwest
Territories, Yukon, Nunavut, Other

Thank you for your participation.

Debriefing

This study was designed to investigate how you perceive theft, how you remember theft, and the relationship between the two.

I would like to assure you that the picture shown at the beginning of the survey was fake and was not taken from any security footage.

You were not told at the beginning of the study that you would need to remember what was in the photo. This information was not told to you because we did not want you to focus on the photo differently. In real eyewitness situations, witnesses are not aware of crimes beforehand and are often asked to relay their memory at a later time.

If you have any questions or concerns about this research, please contact Dr, Kelly Warren (kwarren@grenfell.mun.ca).

If participation in this study has raised any issues or concerns for you, I encourage you to contact the mental health helpline at 1 (866) 531- 2600.

Thank you again for your participation in this study.

Appendix D
Coding Sheets

Information Provided – Setting – Men’s Clothing Section

Detail	Provided (yes/no) If yes ...	Accurate (yes/no)
Store		
Men’s clothing section		
Clothing on walls		
Clothing on racks		
\$20 sign		
50% off jeans sign		
Shirts folded on shelves		
Clothing is for cool weather (e.g., no shorts on display)		
Area well lit		
Warehouse one logo		
Mirror on wall		
Mannequins		
Ladder in corner		
Grey floors		
Wooden walls		

Information Provided – Perpetrator

Detail	Provided (yes/no) If yes ...	Accurate (yes/no)
Gender		
Grey Hoodie with darker band		
Dark Grey Sweatpants		
Grey/Brownish Shoes		
Slouched Position		

Information Provided – Setting – Electronics Store

Detail	Provided (yes/no) If yes ...	Accurate (yes/no)
Electronics Store		
Headphones label		
Red Walls		
Front shelf empty		
Pictures of headphones on wall		
Headphones		
Other small electronics		
Locked cabinet displays		

Information Provided – Setting – Women’s Clothing Section

Detail	Provided (yes/no) If yes ...	Accurate (yes/no)
Store		
Women’s clothing section		
Clothing on walls		
Clothing on racks		
Sale racks in front		
Area well lit		
Table with clothes folded		
Warehouse one logo		
Mannequins		
Ladder in corner		
Grey floors		
Wooden walls		