

**Cooperative organizational cultures: An important factor in promoting equal gender  
representation in leadership positions.**

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### **Abstract**

The present study focuses on understanding the relationship between femininity and leadership intention in employees. Based on the theory of planned behaviour and social role theory, the indirect relationship between feminine gender role identity and leadership intention was analyzed through affective motivation to lead and perceived leadership self-efficacy. Additionally, drawing on person-environment fit theory, feminine gender role identity was examined as a moderator of the relationship between cooperative organizational culture and leadership intention. A cross-sectional survey was administered among a sample of 183 full-time employees and results demonstrated that, controlling for sex, perceived leadership self-efficacy mediated the relationship between feminine gender role identity and leadership intention. In addition, feminine gender role identity acted as a moderator strengthening the relationship between cooperative organizational culture and leadership intention, such that highly feminine individuals in high cooperative organizational cultures showed higher intentions to become leaders than individuals with less feminine identities. Limitations of the study and future research suggestions are discussed.

**Keywords:** gender role identity, cooperative organizational culture, leadership intention, affective motivation to lead, perceived leadership self-efficacy.

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## Introduction

While women have slowly increased their participation in social, political, and professional spheres of life (Ryan, et. al., 2016), their engagement in managerial positions remains underrepresented. Although 47% of entry-level positions are occupied by women in Canada and the United States, only 22% of the highest-level positions in organizations are represented by this group (Coury, et al., 2020). The state of Women in Leadership 2020 (2020) refers to this phenomenon as the “glass ceiling”.

The “glass ceiling” was a term acquired in 1986 to symbolize an invisible barrier that mainly women, but also other marginalized groups such as the LGBT community face in their advancement to managerial positions in society (Klenke, 2018). Statistics corresponding to the last five years reveal that this problem reduced by 22% from 2015 to 2020 (McKinsey, 2020). Yet, equal sex representation is far from being achieved as evidence in research suggests that the glass ceiling is still a problem in organizations (Guvener, Kaplan, & Song, 2020).

In addition, Coury, et al., (2020) indicate that the current worldwide pandemic seems to have undermined the progress that women have gained over the recent past, as mothers are reporting to have increased demands at home and a perceived sense of judgement at work, hence, feeling inclined to drop out of their jobs. The impact that these circumstances are having on women’s career progression reminds us of the importance of continuing the examination of what organizations can do to combat the gender disparity in leadership representation at work.

But which factors determine leadership representation in society? Which variables are associated with individuals emerging as leaders? And why are women still underrepresented in managerial roles? Both, individual and organizational factors contribute to determining why women are underrepresented in managerial roles (Klenke, 2018). Regarding the factors that



determine leadership emergence in general, the theory of planned behaviour explains that behaviours (e.g., leadership emergence) are a result of personal intentions, and that those intentions are, at the same time, determined by three main factors: attitude, perceived behavioural control and subjective social norms (Ajzen, 1991).

The theory of planned behaviour literature defines attitude as some sort of evaluation made by individuals regarding specific behaviours, in this case related to becoming a leader (Gird & Bagraim, 2008). Perceived behavioural control represents the extent to which individuals believe that they can control the specific behaviour in question (Krueger & Carsrud, 1993). Finally, the theory of planned behaviour states that subjective social norms are societal pressures to behave in a certain manner (Armitage & Conner, 2001) and these are a third factor that predict intention to behave in specific ways.

With reference to women's underrepresentation in leadership positions, social role theory explains that feminine gender role identities are perceived as incongruent with leadership roles (Elprana, Felfe, Stiehl and Gatzka, 2015). In general, researchers agree that gender role identity is comprised by two dimensions: masculinity and femininity (Bem, 1974; Kolb, 1999; Kim, Hsu, Newman, Harms, & Wood, 2020), and that women have been stereotyped as having a tendency to feel more identified with feminine traits (Eagly & Steffen, 1984).

Behaviours labeled as feminine in the literature are often referred to as being communal and group related (Eagly, Nater, Miller, Kaufmann, & Sczesny, 2020). With feminine characteristics being perceived as opposite to leadership, social role theory states that societal biases towards feminine leaders might affect the actual intentions of feminine individuals to become leaders (Elprana, Felfe, Stiehl and Gatzka, 2015). Consequently, based on the theory of planned behaviour and social role theory, the present study suggests that feminine gender role

identity is related to leadership intention through affective motivation to lead and perceived leadership self-efficacy, over and above the effects of biological sex.

Nonetheless, because the literature tends to highlight that the underrepresentation of women in managerial positions as an issue related to individual women, and not a systemic problem that should be addressed at the workplace level (Arnold & Loughlin, 2019), one emphasis of the current study is to investigate an organizational factor that may be important in increasing feminine individuals' intentions to pursue leadership roles. Although the general discourse has focused on prescribing recommendations for women in their advancement to leadership roles (Arnold & Loughlin, 2019), from a holistic perspective, it is important to understand the type of environment or culture where internal characteristics that have been attributed to women will thrive.

To that end, person-environment fit theory states that human outcomes are maximized when individual values and personal needs are congruent with the resources and values embraced in the environment (Van-Vianen, 2018). From this perspective, a culture that promotes feminine stereotyped values such as communion or group related behaviours, should increase the interest of individuals with these attributes in pursuing leadership roles. Drawing on person-environment fit theory, the current research also examines the interaction between femininity and cooperative (group) organizational culture, and how this interaction may positively impact leadership intention in employees, particularly in those who identify with femininity.

Therefore, this study intends to answer the following research questions:

- Is the feminine gender role identity of an individual indirectly associated with leadership intention through affective motivation to lead and perceived leadership self-efficacy?

- How does feminine gender role identity affect the relationship between cooperative organizational culture and leadership intention?

In the following sections I provide a comprehensive literature review of the topic, an explanation of the method used, a summary of results obtained, a theoretical and practical discussion of the results, and a conclusion. The limitations of the study and implications for future research are included in the discussion section.

### **The theory of planned behaviour**

This study is based on the theory of planned behaviour, which was derived from the theory of reasoned action (Ajzen, 1991). The theory of planned behaviour holds that voluntary actions are caused by the intention to perform those actions, which requires an individual's conscious motivation to spend energy and resources into executing certain behaviours (Conner & Sparks, 2020). The theory of planned behaviour states that the direct predecessor of an actual behaviour is the intention to execute that action (Manning, 2009; Hugh-Jones, et. al., 2014). Kautonen, Van Gelderen and Tornikoski (2013) defined intention as an individual's inclination to behave in a certain way. According to Conner and Sparks (2020), the theory of planned behaviour stipulates that three main variables are considered when trying to predict behavioural intentions: attitudes, subjective norms, and perceived behavioural control towards specific behaviour(s) (see Figure 1).

<Insert Figure 1 from Appendix 4 here>

Attitude towards a behaviour is defined as expectations regarding the virtues of an action and the examination of those virtues (Montaño & Kasprzyk, 2015). Gird and Bagraim (2008) explained that the term 'attitudes' corresponds to evaluations that individuals make about a behaviour.

Perceived behavioural control is the perception that individuals can regulate their own behaviour

(Krueger & Carsrud, 1993). The extent to which an individual controls a situation will play an important role in determining the person's intention to perform a specific behaviour.

Consequently, the more volitional control individuals perceive over a behaviour, the more intentions they will have to behave in that way (Fishbein & Ajzen, 2005), all else being equal.

Finally, subjective norms represent the person's perception of societal pressure to display a behaviour (Armitage & Conner, 2001). This pressure originates from the evaluation that relevant people in the individual's life make about a specific action (Gird & Bagram, 2008).

Armitage and Conner (2001) explained that the impact that each variable has on intention will vary depending on the behaviour and situation. For example, in situations with strong attitudes or normative influences, perceived behavioural control might be less important in prediction of intentions than social norms and attitudes. In situations of complete free will, the intention-behaviour association will most likely be optimal, hence, perceived behavioural control should not play an important role in the relationship. However, as seen in Figure 1, when the behaviour is not under complete voluntary control, perceived behavioural control may moderate the relationship between intention and behaviour such that the greater the perceived behavioural control is, the stronger the intention-behaviour relationship becomes; and the lower perceived behavioural control the weaker the intention-behaviour relationship becomes. Thus, the introduction of perceived behavioural control in the model explicates the reason why not all intentions predict behaviour.

Emerging as a leader in an organization is a complex behaviour that depends on both individual and social or interpersonal factors (Oh, 2012). It seems to be a situation in which people's volitional control is incomplete (Gird & Bagram, 2008), hence, making it feasible to study from a theory of planned behaviour perspective. Identifying the situations in which all individuals might feel more inclined to pursue leadership positions is important for organizations

to promote equal opportunities among their employees. In order to understand the circumstances that maximize or minimize the different relationships among the variables considered in the theory of planned behaviour, possible moderation effects must be analyzed.

Through examination of research regarding the theory of planned behaviour and the study of moderation effects within the model, Conner and Sparks (2020) conducted a comprehensive literature review and reported that a number of recent studies have explored moderation effects within the theory of planned behaviour (i.e., factors that change the size of relationships among the different variables considered in the model). According to their review, the moderators that have been generally examined correspond to health-related behaviours (Conner & Sparks, 2020).

But where in the model can moderation effects take place? It seems that moderation between the variables included in the theory of planned behaviour has been investigated and placed in different orders and combinations, further indicating that the model is flexible to a range of configurations. For example, Godin, Conner, and Sheeran (2005) conducted different studies and revealed that, for certain behaviours, subjective norms not only act as a predictor of intentions but also moderate the relationship between intention and the actual behaviour (see Figure 2). These findings suggest that, under certain circumstances, subjective norms might be a stronger regulator of behaviour than attitudes or perceived behavioural control.

<Insert Figure 2 from Appendix 4 here>

Similarly, other researchers have revealed that moderation can take place earlier in the model. For example, Figure 3 shows that subjective norms can regulate the relationships between the other two predictors (i.e., perceived behavioural control and attitudes) and intentions (Povey, Conner, Sparks, James, and Shepherd, 2000; Al-Swidi, Huque, Hafeez, & Shariff, 2014; Park, Klein, Smith, & Martell, 2009). Finally, some studies suggest that certain variables in the model

might be more or less predictive, given specific types of behaviours and situations (Sieverding, Matteredne, & Ciccarello, 2010; Fekadu & Kraft, 2002).

<Insert Figure 3 from Appendix 4 here>

### **Applications of the theory of planned behaviour**

According to Conner and Sparks (2020), the theory of planned behaviour has been studied in different contexts such as drug use, sexuality, risk-related behaviours, physical activity, dietary intentions, and screening behaviours, which are categorized as health-related behaviours. Although much of the research related to the theory of planned behaviour has focused on understanding health-related behaviours, the theory has also been applied to predicting entrepreneurial intentions (Krueger & Carsrud, 1993; Autio, Keeley, Klofsten, Parker, & Hay, 2001; Van Gelderen, et al., 2008; Shahab, Chengang, Arbizu, & Haider, 2019) and certain aspects of leadership intentions and behaviours (Jorgensen, Martin, & Nursey-Bray, 2018; Rahaman, Stouten, & Guo, 2019; Mali, Kuzmanovic, Nikolic, Mitic, & Terek, 2019; Turgut, Schlachter, Michel, & Sonntag, 2020).

Within the leadership sphere, Rahaman, Stouten and Guo (2019) used the theory of planned behaviour to examine the predictors of ethical leadership. The authors conducted a field study where 119 supervisor-subordinate dyads participated. The results revealed that the leader's perceived behavioural control and positive attitude to ethical actions anteceded ethical intentions to lead, whereas subjective norms did not act as a predictor.

Turgut, Schlachter, Michel and Sonntag (2020) identified variables associated with health-promoting leadership behaviours that have been considered in the theory of planned behaviour (i.e., attitudes, social norms and perceived behavioural control). There were 315 managers who completed this cross-sectional survey study. The data revealed that health-

promoting attitudes and subjective norms were positively related to health-promoting leadership behaviours whereas low health-promoting perceived behavioural control was negatively related to the display of those behaviours in leaders.

With regards to leadership intention, Jorgensen, Martin and Nursey-Bray (2018) used the theory of planned behaviour to explain the underrepresentation of women in senior managerial positions. Survey data was collected from 148 supervisors working within the government sector. The corresponding questions delved into their intentions to be promoted into executive level positions. The results indicated that women and men had equivalent intentions to apply for managerial positions. Additionally, subjective norms and perceived behavioural control were found to be significantly related to leadership intention whereas attitude was not. The authors attributed the underrepresentation of women in leadership positions to societal biases.

Research has also focused on studying entrepreneurial intentions, a construct that shows some overlap with leadership intention (Gieure, del Mar Benavides-Espinosa, & Roig-Dobón, 2020). For instance, Mali, Kuzmanovic, Nikolic, Mitic, and Terek (2019) analyzed the link between leadership styles experienced from supervisors and individual entrepreneurial intention in employees. Five hundred and forty employees working for different organizations in Serbia participated in this study. The results revealed that individuals who perceived their own work success as low reported higher levels of entrepreneurial intentions when they were exposed to unethical leadership behaviours at work. In this case, an unethical leader can contribute to the formation of entrepreneurial intentions by arousing positive attitudes to entrepreneurship. Contrary, employees who perceived their own work success as high, reported higher levels of entrepreneurial intentions when they were exposed to ethical leadership behaviours at work (with positive attitudes toward entrepreneurship mediating this relationship).

Ruiz-Alba, Vallespín, Martín and Rodríguez-Molina (2014) tested the moderating role of gender on the relationship between the three predictors in the theory of planned behaviour and entrepreneurial intentions. Making use of data from undergraduates in Spain, their results showed that attitude toward leadership and perceived behavioural control were positively related to entrepreneurial intentions whereas subjective norms were not. Further data showed that sex moderated the relationship between subjective norms and perceived behavioural control but did not have a direct impact on entrepreneurial intention. Lastly, Bagheri and Pihie (2014) drew on data from 719 undergraduate students located in Malaysia to study how gender affects the relationship between entrepreneurial intention and its three predictors. Their results revealed that attitudes and perceived behavioural control had stronger effects on men's entrepreneurial intention whereas attitudes and subjective norms had larger influence on women's intention to become an entrepreneur.

### **Leadership intention as a predictor of leadership emergence**

The literature often refers to leadership intention as an aspiration to be in positions of power, which would likely be possible by being promoted in an organization (e.g., being promoted into a CEO role) (Fedi & Rollero, 2016; Sheppard, 2018; Fritz, Van-Knippenberg, 2017). Therefore, this study conceptualizes leadership intention as an inclination to seek promotions (see 'Measures' section).

Research suggests that the study of leadership intention is relevant as it predicts individuals' actual behaviour to seek leadership positions (Schoon, Martin, & Ross, 2007; Schoon & Polek, 2011; Tharenou, 2001). Schoon and Polek (2011) conducted a longitudinal study to explore the relationship between career aspirations in adolescents and career success in adults across two samples of British individuals that were born in 1958 and in 1970. Their



findings showed that career aspiration predicted career success so that individuals who aspired to get a professional job tended to pursue postgraduate education more frequently than those who did not aspire to get a professional job. In addition, Tharenou (2001) conducted a survey study among Australian employees to identify personal traits that were related to managerial advancement. The study indicated that aspiration for managerial positions was one of the strongest predictors of managerial advancement. Thus, the present study assumes that leadership intention is an acceptable indicator of actual leadership emergence, and intention is the ultimate outcome examined.

With regards to leadership intention, the above studies suggest that the moderating role of gender within the theory of planned behaviour remains unclear. The present study could complement previous research by incorporating contextual variables that affect behavior (i.e., culture) and challenging the predominant paradigm of the gender dichotomy (Hyde, 2014). Consequently, drawing on the theory of planned behavior, I test a model linking attitudes, subjective norms, and perceived behavioral control to leadership intention. Feminine gender role identity is presented as an additional variable in the model that is indirectly related to leadership intention through attitudes and perceived behavioural control. I infer that feminine gender role identity will moderate the relationship between organizational culture and leadership intentions in employees. Specifically, I anticipate that an organizational culture that promotes cooperation will be important in encouraging individuals who identify as feminine to aspire to leadership positions. In the following sections I provide the rationale for the three hypotheses that comprise my study.

**Feminine gender role identity and leadership intention: The mediating effect of attitude and perceived self-efficacy**

*Sex, femininity and leadership intention*

The idea that males have stronger intentions to become leaders in society has contributed to explaining the sex disparity in leadership emergence (Singer, 1989; Powell & Butterfield, 2003; Sheppard, 2018). For example, Singer (1989) surveyed a sample of 220 final year university students in New Zealand with the objective to compare sex differences in leadership aspirations. The data showed that contrasted with females, males had a stronger intention to become leaders. Moreover, Powell and Butterfield (2003) collected data from undergraduate and graduate students in the USA at two different points in time between 1976 and 1999, hoping to find a decrease in sex differences in leadership intentions. Their results showed that sex differences did not significantly reduce over time, indicating that males had still stronger intentions to emerge as leaders than females in 1999. Later, Sheppard (2018) examined the same phenomenon using a sample of 467 university students and found that females had less interest in top leadership positions and associated beneficial attributes with such positions less frequently than males.

However, other meta-analytical and empirical studies support the notion that sex differences in leadership intention are actually explained by gender role identity (Gershenoff & Foti, 2003; Badura, et. al., 2018; Zhang, Qiu, Dooley, & Choudhury, 2020). Although the idea that human beings consist of a binary classification (women and men) played an initial important role in determining the history of psychological research (e.g., Hyde, 2014), the gender binary has been challenged by modern research showing practical evidence such as neuroscience data that disproves the sexual dichotomy of the human encephalon; neuroendocrinology observations

that confront the idea of being genetically determined to be a woman or a man; psychological results that reveal the existence of similarities between females and males, research on individuals who identify themselves as having nonconforming identities; and studies suggesting that the propensity to perceive gender/sex as a binary classification is culturally learned and, hence, manipulable (Hyde, Bigler, Joel, Tate, & van Anders, 2019).

For that reason academic research has indicated the existence of a clear distinction between the constructs sex and gender. Sex is biologically regulated at birth (i.e., being a female or a male) (Torggrimson & Minson, 2005), while gender refers to a continuum of acquired characteristics that individuals learn from socialization and experience (Karami, Ismail, & Sail, 2011), and it is associated with behaviours socially regarded as feminine or masculine (O'Reilly & O'Neill, 2004). Therefore, I propose that the study of gender requires the examination of a continuum of traits (referred to as gender role identity in the present study) rather than a dichotomic comparison between females and males.

In general terms, feminine and masculine behaviours have been labeled as being communal or agentic, respectively (Diekmann & Eagly, 2000). According to Eagly, Nater, Miller, Kaufmann and Sczesny (2020), communal behaviours are characterized by an interest for other people and their well-being (e.g., empathetic, warm and expressive), whereas agentic actions are seen as focused on the self and one's own goal achievement (e.g., competitive, ruthless and assertive).

With the objective to explore the impact that gender role identity has on leadership emergence, Gershenoff and Foti (2003) conducted an experiment with 200 female undergraduate students that were assigned to groups of four members and categorized according to their gender role identity. The participants were labeled as either masculine or feminine based on median splits of the variable of study. The results revealed that female individuals with a masculine

gender role identity emerged as leaders more than participants with feminine identities. Likewise, Badura, et. al., (2018) conducted a meta-analysis examining 1632 effect sizes and found that traits that have been regarded as feminine are negatively related to leadership emergence, while masculine traits have a positive relationship with this variable.

Furthermore, Zhang, Qiu, Dooley and Choudhury (2020) conducted a study to examine how sex and gender role identity in combination and independently affect leadership intentions. The data was collected from Chinese Government sectors through a cross-sectional survey. The results indicated that gender role identity predicted leadership aspiration while sex did not, showing that for both females and males, individuals with masculine behaviours or tendencies scored higher in leadership intentions than people who identified as feminine.

Considering this evidence, the present study controls for biological sex while testing the effects of gender role identity. Specifically, I investigate the effects that feminine gender role identity has on leadership intention, over and above biological sex. The subsection below delves into femininity as a predictor of leadership intentions from a theoretical perspective, and provides empirical data supporting that femininity might have an indirect relationship with leadership intention through attitude toward leadership and perceived behavioural control.

### **Feminine gender role identity and its connection with attitude and self-efficacy**

The above discussion leaves some room for questioning the reason why feminine gender role identities are associated with lower leadership intentions. According to Elprana, Felfe, Stiehl and Gatzka (2015), the phenomenon can be explained by social role theory which states that labour distribution may result in gender role stereotypes in society, perpetuating segregation and inequality among individuals. Particularly, femininity and leadership are often conceived as opposing or incongruent ideas in society, which may not only cause prejudices against feminine

leaders, but also perpetuate the stereotypes by encouraging them to display confirming behaviours (Elprana, Felfe, Stiehl, & Gatzka, 2015). For instance, because feminine individuals are believed to be more communal, they are more inclined to take caregiving positions in organizations and at home, instead of performing as leaders (Eagly, Wood, & Diekmann, 2000).

According to Morton (2017), the leadership stereotype in society is highly associated with masculinity and agency. Individuals lacking these traits will be perceived as having less leadership potential. Thus, drawing on social role theory, it can be assumed that a society that does not associate femininity with leadership would somehow discourage individuals who identify as feminine from pursuing leadership positions. This may apply not only to women. In fact, some gender nonconforming individuals may also be perceived as violating the traditional masculine agentic gender role and face similar prejudice in society (Kranz, Probstle, & Evidis, 2016), which might deter them from engaging in leadership roles. As a result, it can be inferred that highly feminine or individuals of any gender role other than masculinity could be less likely to intend to seek leadership roles.

Still, disentangling how feminine gender role identity leads to lower leadership intentions, and identifying whether this is a direct relationship is relevant. Based on theory of planned behaviour and social role theory, the present study suggests that feminine gender role identity is indirectly associated with leadership intention through attitude and perceived behavioural control (e.g., self-confidence, perceived self-efficacy).

Some empirical research provides support for these assumptions. For instance, in support of the existence of a linkage between feminine gender role identity and attitude, Kolb (1999) performed a longitudinal study to identify different predictors of leadership emergence. A sample of 123 university students participated in the study. Their findings revealed that feminine gender role identity did not significantly correlate with leadership attitude whereas masculinity did.

On the other hand, backing the idea that there is a relationship between feminine gender role identity and perceived behavioural control, Smirles, et al., (2020) conducted a qualitative study in which 35 females from Japan were interviewed to understand their perception of gender role stereotypes, and future intentions to lead. One of the topics that emerged from the interviews was that participants identified as feminine and expressed a sense of having low self-confidence to perform as leaders.

Therefore, the present study poses that feminine gender role identity will be associated with attitude toward leadership and perceived behavioural control. The following subsections will further explain how attitude and perceived behavioural control are, at the same time, linked to leadership intention.

#### ***Attitude towards leadership and intention to lead***

Allport (1933) described the term attitude as a mental state of an individual toward objects and situations. Later, Eagly and Chaiken (1993) provided a more detailed definition explaining that attitudes are psychological states that result from assessing an entity with some extent of like or dislike. Despite a certain amount of disagreement regarding the definition of ‘attitudes’, Albarracín, Johnson, Zanna and Kumkale (2005) stated that scholars have always considered that attitudes have an evaluative nature and that they can transform over time.

The literature suggests that attitude predicts leader emergence (Miner, 1978; Kirkpatrick and Locke, 1991 (Kirkpatrick & Locke, 1991); Kolb, 1997; Mael, Waldman, & Mulqueen, 2001; Appelbaum, Audet, & Miller, 2003; Hong, Catano, & Liao, 2011). In particular, Kolb (1977) conducted a study using both self-reported and group evaluations of leader emergence to examine the relationship between leadership emergence and attitude toward leadership among other variables. A sample of undergraduate students from an eastern university in the United States

participated in this study. The results revealed that attitude toward leadership predicted leadership emergence. Likewise, Mael, Waldman and Mulqueen, (2001) designed a survey study in the United States to identify attitudinal variables that differentiate individuals who aspire to management positions from people who do not. The data showed that people who intended on getting a management role tended to have a motivation for power, desire to influence or dominate other people, and be respected.

According to Kondalkar (2007), attitudes have cognitive and affective components. The cognitive component is associated with a value statement that results from ideas and beliefs that individuals hold. For example, the importance of working hard is a value statement that an individual may have. On the other hand, the affective component has more to do with emotions and mood states toward people, situations, or objects. For instance, someone might dislike an individual because of an impression that the individual is not hard working (Kondalkar, 2007). Interestingly, research has shown that affect-based attitudes are more accessible in memory than cognition-based attitudes (Verplanken, Hofstee, & Janssen, 1998; Giner-Sorolla, 2004; Huskinson & Haddock, 2006), suggesting that the affective component is more important and relevant to measure than cognition (Murphy & Zajonc, 1993).

Furthermore, the literature has suggested that attitudes and motivation might refer to the same construct (Peak, 1955). Specifically, some researchers argue that the affective component of attitudes can be displayed or manifested as affective motivation to lead. For instance, Hong, Catano and Liao (2011) conducted two studies with student participants in Canada to explore the role of affective attitudes in the prediction of leadership. The authors measured attitude toward leadership through affective motivation to lead, arguing that that affective motivation to lead refers to the affective component of attitude toward leadership. The results suggested that high levels of affective motivation to lead predicted leadership emergence. Therefore, I hypothesize:

***Hypothesis 1:*** *Affective motivation to lead will mediate the relationship between feminine gender role identity and leadership intention while controlling for sex.*

***Perceived leadership self-efficacy and intention to lead***

Perceived behavioural control has frequently been operationalized as perceived self-efficacy in theory of planned behaviour research (Terry & O’Leary, 1995; Povey, Conner, Sparks, James, & Shepherd, 2000; Trafimow, Sheeran, Conner, & Finlay, 2002; Ajzen, 2002; Kraft, Rise, Sutton, & Røysamb, 2005; Zolait, 2014). According to Zulkosky (2009), self-efficacy was first defined in social cognitive theory (Bandura, 1989) as an internal state that differentiates how people think, feel, behave and get motivated. For Bandura (1989), the concept of self-efficacy represented a predictor of human behaviour. Accordingly, social cognitive theory states that individuals with high levels of self- efficacy tend to frame complex tasks as motivating challenges instead of avoiding them.

Bandura (1989) stated that human actions are controlled by a variety of cognitive and affective processes such as reasoning, planning, stress, and depression, and that these processes are regulated by self-efficacy (Bandura, 1989), which is an attribute that results from social experience (Zulkosky, 2009). Individuals with high levels of self-efficacy experience lower degrees of stress and depression and higher reasoning and planning capabilities. Consequently, perceived self-efficacy can be defined as individuals’ beliefs in their own capabilities and resources required to succeed in a specific situation (Chen, Gully, & Eden, 2001).

Furthermore, in terms of self-efficacy and its association with leadership intention, research suggests that perceived leadership self-efficacy predicts an individual’s intention to lead (Singer, 1989; Singer, 1990; Clarke-Anderson, 2004; Baker, Larson, & Surapaneni, 2016). Singer (1990) conducted a survey study among high school students to determine the relationship



between perceptions of leadership self-efficacy and leadership intention. The results revealed that people's self-efficacy predicted leadership intention in students. This data mirrors that of Singer (1989) showing that stronger intentions to occupy leadership positions are associated with higher perceptions of leadership self-efficacy.

Later, Clarke-Anderson (2004) designed a correlational study at an energy corporation located in the United States to explain the relationship between self-efficacy and leadership intention. The results of this study showed that a sense of leadership self-efficacy predicted the intention to lead. Consistent with previous results, Baker, Larson and Surapaneni (2016) conducted a study with college students to understand what factors drive leadership intention. Within their model, leadership self-efficacy led to leadership intention. Therefore, I propose:

***Hypothesis 2: Perceived leadership self-efficacy will mediate the relationship between feminine gender role identity and leadership intention while controlling for sex.***

Although finding potential explanations of how femininity is linked to lower leadership intentions might provide insight into the individual characteristics that contribute to women's underrepresentation in managerial roles, one must be careful to not perpetuate the approach that encourages women to change in order to fit a male-centered corporate context (Enderstein, 2018). Rather, it is important to look at organizational factors that promote leadership intentions in diverse employees. The present study emphasizes the role that cooperative organizational culture has in promoting employees' intention to lead, particularly in those who identify as feminine. The following subsection explores the concept of culture and its association with leadership intentions. Theoretical grounding is provided to incorporate femininity as a possible moderator that potentiates this relationship.

## **Promoting leadership intention in employees: Cooperative organizational culture and feminine gender role identity**

Previous research has associated the concept of culture with the internalization of social norms in a community (Morris, Hong, Chiu, & Liu, 2015). In particular, the literature suggests that social norms are the manifested representation of the organizational culture experienced in a workplace (Balthazard, Cooke, & Potter, 2006; Chatman & O'Reilly, 2016). The present study operationalizes social norms within the theory of planned behaviour as the culture present in organizations. According to Watkins (2013), organizational culture is an important factor that affects the behaviour of employees. Although the definition of this concept implies a certain degree of ambiguity (Longman, Daniels, Bray, & Liddell, 2018), there is some agreement in defining the construct as a pattern of assumptions, values, and beliefs that shape the behaviour of employees in an organization (Bauer & Erdogan, 2012).

Schein (2004) studied the relationship between organizational culture and leadership, and highlighted that leadership should not be studied without examining culture in organizations. This author also argued that culture defines the meaning of leadership in a specific setting, the recommended practices to attract followers, and the protocols required to get promotions. Recent literature suggests that organizational cultures are often gendered (Cahusac, & Kanji, 2014; Rutherford, 2014; Ghasemi, 2020), which means that gender is present in the practices and ideologies that determine the distribution of power or leadership emergence in those organizations (Acker, 1992). A meta-analysis examined 1632 effect sizes and revealed that gender disparities in leadership emergence are mainly explained by organizations' tendency to promote agentic traits over communal behaviours, and men's inclination to display agentic traits versus women's preference for communal behaviours (Badura, Grijalva, Newman, Yan, & Jeon, 2018). This argument suggests that gendered organizational cultures in today's world are prone to

favour the emergence of leaders with a strong desire to compete against others, but suppress the rise of those individuals that display a genuine interest to cooperate with their community.

Marchand, Haines and Dextras-Gauthier (2013) described different types of organizational cultures: group, hierarchical, developmental and competitive. Relevant to the present study, the group culture is characterized by promoting cooperation, mutual participation, team cohesion and trust. Although it seems that there is a preference for organizational cultures that promote agency and competition in society (Badura, Grijalva, Newman, Yan, & Jeon, 2018), the literature suggests that cooperative cultures may, in fact, have a positive effect on employees' leadership intention.

For example, Fritz and Van-Knippenberg (2017) administered an online survey among full-time employees and hypothesized that cooperative cultures would promote leadership intentions. The findings showed that females' leadership intentions were higher in environments that fostered the interpersonal aspect of cooperative cultures. In addition, males' leadership intentions were also higher in cooperative cultures that exalted a collective aspect. As both females and males seemed to benefit from a culture high in cooperation, the results indicate that, regardless of sex, cooperative organizational cultures are positively associated with leadership intention in employees.

Assuming that sex and gender role identity are different constructs but relate to each other (i.e., females are believed to be more feminine or display communal behaviours as opposed to males, who are perceived as more masculine or agentic individuals), the above study leaves some room to question the role of gender identity in the relationship between culture and leadership intention. To this end, Torgrimson and Minson (2005) explained that typical feminine and masculine attributes in society are a result of national culture. According to Aaltio and Mills (2003), the importance of culture in understanding organizations and their dynamics has been

acknowledged, yet the interaction between gender role identity and the latter variable is still neglected in research. Therefore, this study examines gender role identity and cooperative organizational culture together in predicting leadership intention.

Based on the stereotypes that society holds about different sexes, feminine and masculine gender role identities are associated with different behavioural characteristics (Eagly & Johnson, 1990). Feminine individuals are believed to be more community-oriented, expressive, caring and compassionate, whereas masculinity is characterized by instrumentality, agency, competition, dominance and ambition (Badura, Grijalva, Newman, Yan, & Jeon, 2018). Eagly (1987) argued that females tend to be more communal than males due to societal or national culture and the exposure to traditional gender stereotypes that demand more community-based characteristics in women and more competitive traits in men. Similarly, Suh, Moskowitz, Fournier and Zuroff (2004) explained that while agency is defined as seeking power to differentiate the individual from others, communion refers to intimacy, identification with their environment, and solidarity with a social entity.

From a theoretical perspective, Van-Vianen (2018) stated the main principles of person-environment fit theory. This framework holds that the combination of person and environment acts as a better predictor of human outcomes than each element does independently, and that outcomes reach their maximum level when person (e.g. values and personal needs) and environment (e.g. resources, values) are congruent. Thus, people obtain the highest outcomes when the environment provides resources that they consider as important, and they reach the lowest outcomes when there is no fit between the environment and their personal needs (Van-Vianen, 2018). From an empirical approach, Fritz and Van-Knippenberg (2017) administered a survey to a sample of full-time employees in Britain, and found that individuals with communal inclinations who felt more identified with the environment in their organization reported higher

leadership intentions than those individuals who did not feel identified with the environment in their organization (i.e., organizational culture). Therefore, assuming that individuals who identify as more feminine, and appreciate community, will experience greater fit in cooperative organizational cultures that foster mutual participation and trust, I hypothesize:

***Hypothesis 3:** Feminine gender role identity will moderate the relationship between cooperative organizational culture and leadership intentions, such that when femininity is high, the relationship between cooperative organizational culture and leadership intentions will be stronger than when femininity is low. This will hold while controlling for sex.*

Consequently, the conceptual model proposed in this research study is shown in Figure 4.

<Insert Figure 4 from Appendix 4 here>

## **Methods**

### **Procedure and Participants**

Ethics approval was obtained from ICEHR (Interdisciplinary Committee on Ethics in Human Research) (see approval in Appendix 1). The study procedure consisted of creating a short recruiting message explaining the purpose of the project and providing a link to an online survey hosted on Qualtrics (<https://www.qualtrics.com/>). Recruitment of participants was performed through Prolific (<https://www.prolific.co/>), which is a United Kingdom online organization that recruits samples of individuals around the world for research purposes under the agreement that researchers will provide economic incentives to these participants.

The participant recruitment message was posted on Prolific, and participants were compensated £ 1.66 for completing the survey. Individuals who participated in this study clicked on a link to Qualtrics, which first directed them to an informed consent they had to read and agree

with before completing the corresponding questionnaire (Full measures in Appendix 2).

Completion of the survey took on average 20 minutes, with a median of 16.78 minutes and a standard deviation of 11.13 minutes. Two attention check questions were included in a random order within the questionnaire. Respondents had to pass both attention check questions to be considered in the study. Participants were told that they could withdraw from the study at any point they decided to do so. The use of Prolific enabled the study to fully ensure anonymity to participants as no identifying information was provided to researchers.

Of the initial 200 respondents, a total of 17 participants were eliminated from the database based on failing attention check questions. None of the participants' completion time fell below 5.65 minutes, which was one standard deviation below the median, therefore no participants were eliminated due to responding too quickly. In total, 183 participants' data were included in the final data set, and 8.5% of the data was eliminated.

The final sample was comprised of 93 individuals that identified as females, 88 that reported to be males, and two individuals who were gender nonconforming. Regarding ethnicity, 150 participants were European, while the remaining individuals were from Asia, Latin America, Africa, and other regions of the world. The majority of participants were single (51.4%), followed by married individuals (25.1%) and people who had a common-law partner (19.7%). The remaining participants were either widowed, divorced, or preferred not to say.

Most of participants completed a master's degree or a PhD (27.3%) or had a bachelor's degree (18%), while the rest attended either college, university (22.4%) or completed high school. Finally, on a scale from 1 to 7, participants reported their intentions to apply for a more senior leadership position within their organization. Males obtained a mean of 4.7 with a standard deviation of 1.65, while women had a mean of 4.37 and a standard deviation of 1.88. Overall, participants reported to have the intention to apply for more senior leadership roles.

## Measures

Full measures are included in Appendix 2.

*Affective motivation to lead.* This variable was measured using the 9-item ‘Affective’ subscale of the Motivation to Lead scale designed by Chan and Drasgow (2001). Examples of items are: “Most of the time, I prefer being a leader than a follower when working in a group.”, “I am the type of person who likes to be in charge of others.”, and “I am the type who would actively support a leader but prefers not to be appointed as leader.”. Responses to these items were scored in a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach’s alpha corresponding to this measure was 0.88.

*Perceived leadership self-efficacy.* The 8-item Leadership Self-Efficacy scale developed by Murphy (1992) was used to measure this variable. Items such as “I know a lot more than most about what it takes to be a good leader”, “I am confident of my ability to influence a group I lead”, and “I have no idea what it takes to keep a group running smoothly” conform this scale. A 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used to register participants’ responses. A coefficient alpha of .90 was obtained when the corresponding analyses were run.

*Cooperative organizational culture.* Measured using the ‘Group’ subscale of the 27-item Organizational Culture Profile Instrument (Marchand, Haines, & Dextras-Gauthier, 2013). This subscale has 7 items and begins with the statement: “Please indicate to what extent each of the values listed below describes your organization on a scale ranging from not at all (1) to a great extent (5)”. The question is followed by items describing different values, for example “Fairness”, “Respect for the individual’s rights”, and “Working in collaboration with others” (items referring to the ‘Group’ measure). The coefficient alpha for this measure was 0.88.

*Feminine gender role identity.* This variable was measured using the 8-item ‘Femininity’ subscale of the 24-item Personal Attributes Questionnaire (Helmreich, Spence, & Wilhelm, 1981). The instrument initiates with a question followed by eight statements describing the kind of person the respondent is, for example: “Not at all emotional... Very emotional”, “Not at all kind... Very kind.”, “Not at all understanding of others... Very understanding of others.”. Participants’ responses were scored in a 5-point Likert scale ranging from 0 (none of that characteristic) to 4 (all of that characteristic). Cronbach alpha for this measure was 0.76.

*Leadership Intention.* This construct was measured using one of the subscales of the 16-item Entrepreneurial Intentions instrument developed by Liñán and Chen (2009). The subscale used in this study was comprised by 4 items and adapted so that it measured leadership intentions instead. This instrument consisted of items such as “I will make every effort to get a promotion” and “I am determined to seek a promotion”. Responses were scored in a 7-point Likert scale ranging from 1 (totally disagree) to 7 (totally agree). A Cronbach alpha of 0.95 was obtained in this study.

*Sex.* With the intention to show the effect of feminine gender role identity over and above sex, sex was controlled for in the analyses and coded as follows: 0 = women and nonconforming individuals; 1 = men. Nonconforming participants were grouped with women because the present study is interested in examining traits that do not fall under masculinity or male-stereotypical behaviours<sup>1</sup>.

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<sup>1</sup> I also analyzed the data controlling for organizational tenure (years working at company). This did not change the results, hence for parsimony I report the results controlling only for sex.



## Results

Table 1 shows means, standard deviations, alphas, and correlations for all the variables examined in this study. The hypotheses were tested using standard OLS regressions in SPSS 27 using PROCESS v3.5 by Hayes (2013). All mediation analyses were based on 95% confidence intervals (CI), with 5,000 bootstrap samples. Hypotheses 1 and 2 were tested with Model 4. Feminine gender role identity was entered as the predictor variable, leadership intention as the outcome variable, affective motivation to lead and perceived leadership self-efficacy were entered as mediators and sex was a covariate. The results did not support Hypothesis 1 (see Table 2); feminine gender role identity was not related to leadership intention through affective motivation to lead. However, Hypothesis 2 was supported (see Table 3), meaning that feminine gender role identity was related to leadership intention through leadership self-efficacy controlling for sex ( $b = 0.25$ ,  $SE = 0.10$ ,  $CI [0.07, 0.47]$ ).

<Insert Table 1 from Appendix 4 here>

<Insert Table 2 from Appendix 4 here>

<Insert Table 3 from Appendix 4 here>

Hypothesis 3 was tested using ordinary least squares regression with Model 1 of PROCESS v3.5 by Hayes (2013). Cooperative organizational culture was entered as the predictor variable, leadership intention as the outcome variable, feminine gender role identity as the moderator and sex as a covariate. The results indicated that the interaction between gender role identity and cooperative organizational culture was significant while controlling for sex ( $b = 0.48$ ,  $t(4,178) = 2.06$ ,  $p = 0.04$ ; see Table 4), supporting Hypothesis 3. A graph illustrating the interaction was produced to determine the form of the moderation. Figure 5 illustrates that when

femininity is high, the relationship between the two variables is stronger ( $b = 0.72$ ,  $t(4,178) = 3.43$ ,  $p = 0.0008$ ) than when femininity is low ( $b = 0.43$ ,  $t(4,178) = 2.70$ ,  $p = 0.008$ ), supporting Hypothesis 6.

<Insert Table 4 from Appendix 4 here>

<Insert Figure 5 from Appendix 4 here>

## Discussion

Built on the theory of planned behaviour, social role theory and person-environment fit theory, this study examined affective motivation to lead and perceived leadership self-efficacy as potential mediators between feminine gender role identity and leadership intention.

Subsequently, feminine gender role identity was investigated as a moderator of the relationship between cooperative organizational culture and leadership intention.

Results demonstrated that perceived leadership self-efficacy mediated the relationship between feminine gender role identity and leadership intention while controlling for sex. This result shows that perceived leadership self-efficacy explains the relationship between feminine gender role identity and leadership intention. As well, it indicates that regardless of sex, individuals who identify as feminine may perceive themselves as lacking efficacy when it comes to leadership, hence, affecting their intentions to become leaders. This finding mirrors research arguing that feminine individuals tend to show lower levels of leadership intention (Gershenoff & Foti, 2003; Badura, et. al., 2018; Zhang, et. al., 2020), but it adds value to the literature by examining the process through which these variables are related: perceived leadership self-efficacy.

Derived from these results, it can be inferred that feminine individuals might not feel confident to perform as leaders, even though they might be interested and feel motivated to take

leadership roles. According to social role theory, the above phenomenon occurs because of the widely spread stereotype that femininity is an opposing attribute to leadership (Elprana, et. al., 2015), which might affect the perception of highly feminine individuals regarding their own capabilities, therefore, impacting their intentions to lead. Nonetheless, from a situational perspective, it is relevant to identify the specific circumstances that have the potential to disrupt this trend.

Pertaining to moderation, the data revealed that femininity was associated with a strengthened relationship between cooperative organizational culture and leadership intention over and above sex. Irrespective to their sex, highly feminine individuals in high cooperative organizations will show more intentions to become leaders than people with less feminine identities. This finding suggests that promoting an environment in which community-caring, expressiveness, and compassion are valued, would foster employees' intention to become leaders in general (as the literature suggests), but it would especially benefit feminine individuals.

According to person-environment fit theory, this phenomenon may occur because feminine individuals with communal inclinations might feel more identified with a cooperative culture in their organization, thus, increasing their aspirations to become leaders. From a practical perspective, this finding illustrates that the promotion of cooperative work cultures could be an important strategy to reduce the gender gap in leadership representation in organizations.

The finding that mediation and moderation can take place in the proposed model, even while controlling for sex, indicates that feminine gender role identity seen as a continuum of traits, has predictive power over and above biological sex. This finding lends support to the notion that sex differences in leadership intention are actually explained by gender (Gershenoff & Foti, 2003; Badura, et. al., 2018; Zhang, et. al., 2020). Moving forward, it is important to reiterate

the need to analyze gender as a continuum of traits rather than a dichotomous construct (females and males). The examination of gender as a continuous variable might also represent a more inclusive way to study individuals and their identities.

The results also showed that affective motivation to lead did not act as a mediator between feminine gender role identity and leadership intention. While many studies have substantiated the link between these two variables (Miner, 1978; Kirkpatrick and Locke, 1991; Kolb, 1997; Mael, Waldman, & Mulqueen, 2001; Appelbaum, Audet, & Miller, 2003; Hong, Catano, & Liao, 2011), there are some that have not (e. g. Jorgensen, Martin, & Nursey-Bray, 2018). My study falls into the latter category. Considering that the theory of planned behaviour has been widely studied in the literature and that the role of the predictors in the model is supported by research, this finding was surprising. One possible explanation is that measuring attitude toward leadership as affective motivation to lead did not adequately capture the notion of attitude. Moving forward, it would be worth using a different measure to test the potential mediating effect of attitude toward leadership between feminine gender role identity and leadership intention. This could provide further insight regarding the underrepresentation of feminine individuals in leadership roles.

Finally, the present study reaffirms that the predictors in the theory of planned behaviour have the potential to be placed in different orders and combinations, meaning that the model is flexible to an extensive array of configurations. Theories such as social role theory and person-environment fit-theory can support the introduction of additional variables that might act as mediators and/or moderators into the model originally considered in the theory of planned behaviour. This mirrors the revised literature (Godin, et. al., 2005; Povey, et. al., 2000; Al-Swidi, et. al., 2014; Park, et. al., 2009), and encourages researchers to explore different configurations of variables relevant to their topics of interest.

As with any study, this research is not without limitations. First, with the idea of having equal representation of females and males, the data was collected through Prolific online platform, which according to some, may raise concerns regarding sampling demographics, data quality and ethicality (Newman, et. al., 2020). However, in order to minimize these concerns, I requested that Prolific include participants from different nationalities and backgrounds. As well, two attention-check questions were included throughout the survey and participants were compensated based on the amount of time they spent on answering the questionnaire (Porter, et. al., 2019; Newman, et. al., 2020; Aguinis, et. al., 2020).

Second, the cross-sectional nature of the data does not allow inference of causality (Woodside, 2011) and may be a limitation, especially when testing mediation because mediation suggests a time ordered sequence to the variables of study. In addition to the study being cross-sectional, because the survey used self-reported measures without time separation, common method bias could be an issue (Donaldson & Grant-Vallone, 2002; Podsakoff, et. al., 2003; Podsakoff, et. al., 2012).

While alternative ways to measure some of the variables in the model would have helped to relieve this concern, asking individuals to report their self perceptions is the most valid way to measure the variables of interest. However, certain procedural strategies were used to reduce common method bias associated with self-reported measures in research (Jordan & Troth, 2019). For example, valid and reliable measures were used in the study to increase the item clarity of the scales, reversed coded items were included, the instructions given to participants were highly detailed and an email address was provided to them for any questions they had while completing the survey (Jordan & Troth, 2019).

Also, the achievement of a statistically significant interaction might indicate that the results of this study are not due to chance, and therefore, alleviate concerns of common method

bias. Additionally, Conway and Lance (2010) indicate that there are misconceptions regarding common method bias, and they advise that following some of the procedures described above should be enough and expected from authors. However, Conway and Lance (2010) do not recommend to perform statistical control analyses as these have provided deficient practical results. Because there are opposing views regarding the extent of the common-method bias problem related to self reports (Podsakoff, et. al., 2012; Spector, 2006), this limitation remains debatable. Nevertheless, future research may want to focus on retesting the model with separation of time between the measurement points and/or a longitudinal approach.

Third, although the idea of recruiting participants through Prolific online platform was to obtain data from individuals belonging to different nationalities and backgrounds, most of participants were European, which might affect the generalizability of results in this study. As countries have contrasting levels of gender equity (Global Gender Gap Report 2021, 2021), the examined relationships may be different based on national or societal culture. It would be interesting if future research efforts focused on accessing more diverse samples that represent larger populations in society. This would provide further clarity on whether the obtained relationships can be generalized to a range of countries.

As well, because the global pandemic situation has impacted work-life balance in society (Hjálmsdóttir & Bjarnadóttir, 2021), some could highlight that the collection of data during these times might be a limitation of my study. Yet, a large percentage of the sample (both female and male) still reported to have high intentions to become leaders. It is also unlikely that the current worldwide situation is responsible for the significant results obtained in terms of the relationships of these variables. In spite of this, post-pandemic research could replicate this study to test whether these results are consistent.

Future research might examine how other types of organizational cultures (e.g., competitive, hierarchical, developmental) in combination with feminine and masculine gender role identities may affect employees' intention to become leaders. Likewise, future studies can further analyze the combined and independent effects that gender and sex have on leadership intention. Identifying the ways that sex and gender role identity account for leadership disparity, would provide a deeper insight into the effectiveness of conceptualizing gender as a continuum of traits instead of a dichotomous variable (women / men). Finally, further research could delve into including masculinity in the study of how cooperative organizational cultures affect leadership intention. The examination of individuals with high levels of femininity and high levels of masculinity, and how they behave within a cooperative organizational culture, in comparison with individuals high in femininity but low in masculinity, would be an important contribution to research in the topic.

The current study may have important implications for practitioners. For example, the findings might provide some insight to HR professionals and organizations on the type of culture that could be promoted in order to increase the representation of individuals who identify as feminine in leadership positions at work. This should be of concern for workplaces, especially for those that praise themselves to be "Best Place to Work", which is an index that considers inclusion and camaraderie as key indicators of a successful workplace (Gehrels, 2019).

It must be acknowledged that research in this area is relevant and needed in society. Gender, seen as a continuum of traits rather than a dichotomous variable, could provide some insight on why the glass ceiling does not only affect females. Moving forward with gender research, science could focus on identifying and understanding which organizational factors would mitigate the gender gap in leadership representation at work. This would set a clear standard on how to promote a feeling of fairness among employees in the workplace. Finally,

organizations can learn from this research that an atmosphere of compassion and true cooperation is an important factor in creating more equal leadership opportunities.

### **Conclusion**

Based on the theory of planned behaviour, social role theory and person-environment fit-theory, the present cross-sectional survey study showed that perceived leadership self-efficacy mediated the relationship between feminine gender role identity and leadership intention. This means that femininity is associated with reduced leadership intentions in employees through a lack of perceived leadership self-efficacy. In addition, the findings suggested that femininity has the potential to maximize the relationship between cooperative organizational culture and leadership intention. Such results hold while controlling for sex. Finally, it must be noted that a culture of cooperation in organizations will promote leadership intention in employees, particularly, in those who identify as feminine.



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**Appendix 1: Ethics Approval and Amendment**



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:	20210515-BA
Approval Period:	July 24, 2020 – July 31, 2021
Funding Source:	
Responsible Faculty:	Dr. Kara Arnold Faculty of Business Administration
Title of Project:	<i>Employees' Intention to Seek Promotion at Work</i>

July 24, 2020

Ms. Nora Moreno  
Faculty of Business Administration  
Memorial University of Newfoundland

Dear Ms. Moreno:

Thank you for your submission to the Interdisciplinary Committee on Ethics in Human Research (ICEHR), seeking ethical clearance for your research project. The Committee appreciates the care and diligence with which you prepared your application. However, the time needed to complete the survey seems underestimated; as it will likely require 30 minutes rather than 15 minutes. This should be revised in the recruitment message and in the consent form, and the compensation should be increased accordingly. The recruitment message and the consent form should also state that demographic questions will be asked, and indicate the standardized and other scales that are used in the survey. As well, participants should be reminded at the beginning of the survey that any questions can be skipped. Please complete the ICEHR - Post-Approval Document Submission form and upload the revised recruitment, consent, and survey documents.

The project is consistent with the guidelines of the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*. Full ethics clearance is granted for one year from the date of this letter. ICEHR approval applies to the ethical acceptability of the research, as per Article 6.3 of the *TCPS2* (2018). 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.

The *TCPS2* requires that you submit an Annual Update to ICEHR before July 31, 2021. 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. If you need to make changes during the project which may raise ethical concerns, you must submit an Amendment Request with a description of these changes for the Committee's consideration. 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. All post-approval 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,

Russell J. Adams, Ph.D.  
Chair, Interdisciplinary Committee on  
Ethics in Human Research  
Professor of Psychology and Pediatrics  
Faculties of Science and Medicine

RA/th

copy: Supervisor – Dr. Kara Arnold, Faculty of Business Administration



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ICEHR Number:	20210515-BA
Approval Period:	July 24, 2020 – July 31, 2021
Funding Source:	
Responsible Faculty:	Dr. Kara Arnold Faculty of Business Administration
Title of Project:	<i>Employees' Intention to Seek Promotion at Work</i>
Amendment #:	01

September 1, 2020

Ms. Nora Moreno  
Faculty of Business Administration  
Memorial University of Newfoundland

Dear Ms. Moreno:

The Interdisciplinary Committee on Ethics in Human Research (ICEHR) has reviewed the proposed revisions for the above referenced project, as outlined in your amendment request dated August 31, 2020, and is pleased to give approval to the revised survey, as described in your request, provided all other previously approved protocols are followed.

If you need to make any other changes during the conduct of the research that may affect ethical relations with human participants, please submit an amendment request, with a description of these changes, via your Researcher Portal account for the Committee's consideration.

Your ethics clearance for this project expires July 31, 2021, before which time you must submit an annual update to ICEHR. 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 requires contact with human participants, is completed and/or terminated, you need to provide an annual update with a brief final summary, and your file will be closed.

Annual updates and amendment requests can be submitted from your Researcher Portal account by clicking the *Applications: Post-Review* link on your Portal homepage.

The Committee would like to thank you for the update on your proposal and we wish you well with your research.

Yours sincerely,

Kelly Blidook, Ph.D.  
Vice-Chair, Interdisciplinary Committee on  
Ethics in Human Research

KB/bc

cc: Supervisor – Dr. Kara Arnold, Faculty of Business Administration

## **Appendix 2: Informed Consent Form**

Title: Employees' Intention to Seek Promotion at Work

Researcher: Nora Elena Daher Moreno  
Memorial University of Newfoundland  
Faculty of Business Administration  
[edahermoreno@mun.ca](mailto:edahermoreno@mun.ca)

Supervisor: Dr. Kara Arnold  
Memorial University of Newfoundland  
Faculty of Business Administration  
[arnoldk@mun.ca](mailto:arnoldk@mun.ca)

You are invited to take part in a research project entitled "Employees' Intention to Seek Promotion at Work."

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, Nora Elena Daher Moreno, if you have any questions about the study or would like additional information before you consent.

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 study once it has started, there will be no negative consequences for you, now or in the future.

### **Introduction:**

My name is Nora Elena Daher Moreno, and I am a graduate student in the Faculty of Business Administration at Memorial University. As part of my master's thesis, I am conducting research under the supervision of Dr. Kara Arnold.

By completing this survey, you will allow us to measure your perceptions of characteristics of your organization and your attitudes and perceptions about seeking promotion opportunities.

**Purpose of study:** We, Nora Elena Daher Moreno, a Master's student, and Dr. Kara Arnold, a Professor at the Faculty of Business Administration, Memorial University, are carrying out a study with the objective to examine how different workplaces and personal attitudes are related to employees' intention to seek promotions.

**What you will do in this study:** In this study, you will be answering questions in an online survey. The questions ask about your workplace and some self-descriptions related to your behaviour and attitudes at work. Please remember that you do not need to answer any questions that make you feel uncomfortable, and you can withdraw from the survey at any point should you wish to do so. Questions will ask about demographics, workplace stressors, personal attitudes, expertise, and societal and cultural aspects at work that may affect your interest in seeking promotion.

**Length of time:** The survey will take approximately 20 minutes to complete.

**Withdrawal from the study:** You may withdraw from the survey at any time simply by closing your internet browser. However, once you hit the submit button, it will not be possible to remove your responses. There are no consequences for withdrawing from the survey.

**Possible benefits:** Because work plays such a significant role in our lives, it is important to learn more about how work-related aspects influence employee career development. By completing this questionnaire, you are contributing to the advancement of academic research in the area, and you may benefit from deriving a sense of satisfaction or enjoyment from your contribution to science. You will have the opportunity to view a summary of the findings should you wish to do so.

**Compensation:** You will be paid £ 1.66 for completion of this survey. We will only be able to provide compensation if you submit the survey as your Prolific ID number will only be recorded if you submit the survey.

**Possible risks:** There is a small psychological risk to taking part as some of the questions in the survey may bring up unpleasant experiences. Remember you do not have to answer any questions that make you uncomfortable. You can skip any questions by selecting 'Next'. Participation in this study is completely voluntary, and you may exit the survey at any time. If you are experiencing stress or anxiety related to completing this survey, please consult with a health care provider near you.

**Confidentiality:** Confidentiality is ensuring that identities of participants are accessible only to those authorized to have access. Therefore, confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use, or disclosure. Thus, only the researchers and authorized research assistants will have access to the data. Although the results from this research project will be published and presented at conferences, the data will be

reported in aggregate (group) form, so that it will not be possible to identify individuals. Please do not put your name or other identifying information in the survey.

**Anonymity:** Anonymity refers to not disclosing participants' identifying characteristics, such as name or description of physical appearance. Since this data will be collected without requesting a unique identifier (e.g., student number, name, mail address, telephone or email address), it will be anonymous and there is no way we can link the data to you. We will ask for your Prolific ID number and this will allow us to provide you compensation for taking part, without having to access to any other personal identifying information. Lastly, we assure you that we will make every reasonable effort to ensure your anonymity so that you are not identified in any reports, presentations, or publications.

**Use, Access, Ownership and Storage of Data:** Data will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly research. Also, it will be stored on a password-protected computer and/or USB stick and any hard copies will be kept in a locked filing cabinet. Only the researcher, her supervisor, or authorized research assistant(s) will have access to the anonymous data. The data will not be used for archival purposes; rather it will be maintained in case the research is "audited" by another researcher or future analyses are required for revision purposes in the publication process.

**Third-Party Data Storage:** An online survey company, Qualtrics, is hosting this survey. It is an institutionally approved, industry leading survey tool. All data is stored in Canada. The security and privacy policy for the web survey company can be found at the following link: <http://qualtrics.com/privacy-statement/>.

**Sharing of Results with Participants:** If you are interested in the results of the study, you may email Nora Elena Daher Moreno expressing interest and you will be notified of results when the study is published. Alternatively, a summary will be posted on Dr. Arnold's website (<http://karaarnold.com>) once the data analysis is completed, which we anticipate will be in September of 2021.

**Reporting of Results:** The collected data will be used in a thesis that will be published, submitted for journal publication, and potentially presented at conferences. The data will be reported without any personally identifying information in aggregated (group) form. This thesis will also be publicly available at Memorial University's QEII Library which you can access using this URL: <http://www.library.mun.ca/>

**Questions:** We would be more than happy to answer any questions that you have about the study via email. If you would like more information about this study, please contact: Nora Elena Daher Moreno ([edahermoreno@mun.ca](mailto:edahermoreno@mun.ca)) or Dr. Kara Arnold ([arnoldk@mun.ca](mailto:arnoldk@mun.ca)).

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](mailto:icehr@mun.ca) or by telephone at 709-864-2861.

**Consent:**

By completing this survey, you agree that:

- You have read the information about the research.
- You have been advised that you may ask questions about this study at any point.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw from the study, without having to give a reason, and that doing so will not affect you now or in the future. You can end your participation by simply closing your browser or navigating away from this page.
- You understand that this data is being collected anonymously and therefore your data **cannot** be removed once you submit this survey.

By consenting to this online survey, 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.

Clicking *Accept and Start Survey* below and submitting this survey constitutes consent and implies your agreement to the above stipulations.

### Appendix 3: Demographics and Measures

#### Demographics

1. Please enter your prolific ID: \_\_\_\_\_
2. What is your age? \_\_\_\_\_

3. I identify as:

Female (1)

Male (2)

Transgender female (3)

Transgender male (4)

Gender nonconforming (5)

I prefer not to report my gender (6)

I prefer to report my gender this way: \_\_\_\_\_

4. My supervisor identifies as:

Female (1)

Male (2)

Transgender female (3)

Transgender male (4)

Gender nonconforming (5)

I prefer not to report my supervisor's gender (6)

5. Please indicate which country you reside and work \_\_\_\_\_

6. Please indicate the ethnic group you identify with:

Indigenous (1)

Asian (2)

African (3)

Anglo-American (4)

Latin-American (5)

European (6)

Middle East (7)

Oceania (8)

Other. Please specify: \_\_\_\_\_



7. What is your marital status?

- Single (1)
- Married (2)
- Have a common-law partner (3)
- Divorced or separated (4)
- Widowed (5)
- Prefer not to say
- Other. Please specify: \_\_\_\_\_

8. What is your level of education?

- High-School (1)
- College or university (2)
- Completion of college diploma (3)
- Completion of a Trade and/or apprenticeship program (4)
- Completion of undergraduate university degree (5)
- Completion of Master or PhD (6)
- Other-Please explain: \_\_\_\_\_

9. Please indicate the type of industry you work for:

- International-private sector (1)
- National-private sector (2)
- Public sector (3)
- Non-profit organization (4)
- Family business (5)
- None of the above. Please specify: \_\_\_\_\_

10. How long have you worked in your current position? \_\_\_\_\_ / \_\_\_\_\_  
YEARS / MONTHS

11. How long have you worked in your Company? \_\_\_\_\_ / \_\_\_\_\_  
YEARS / MONTHS

**Measures**

- **Affective Motivation to Lead):** Chan, K. Y., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: understanding the motivation to lead. *Journal of applied psychology*, 86(3), 481.

Please respond to each of the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Most of the time, I prefer being a leader than a follower when working in a group.							
I am the type of person who is not interested to lead others.							
I am definitely not a leader by nature.							
I am the type of person who likes to be in charge of others.							
I believe I can contribute more to a group if I am a follower rather than a leader.							
I usually want to be a leader in the groups that I work in.							
I am the type who would actively support a leader but prefers not to be appointed as leader.							
I have a tendency to take charge in most groups or teams that I work in.							
I am seldom reluctant to be the leader of a group.							

- **Perceived behavioural control (Leadership Self-Efficacy):** Murphy, S. E. (1992). *The contribution of leadership experience and self-efficacy to group performance under evaluation apprehension* (Doctoral dissertation).

Please respond to each of the following statements.

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I know a lot more than most about what it takes to be a good leader.							
I know what it takes to make a group accomplish its task.							
In general, I'm not very good at leading a group of my peers.							
I am confident of my ability to influence a group I lead.							
I have no idea what it takes to keep a group running smoothly.							
I know how to encourage good group performance.							
I am able to allow most group members to contribute to the task when leading a group.							
Overall, I doubt I could lead a group effectively.							

- **Feminine gender role identity:** For full questionnaire refer to Helmreich, R. L., Spence, J. T., & Wilhelm, J. A. (1981). A psychometric analysis of the Personal Attributes Questionnaire. *Sex Roles*, 7(11), 1097-1108.

The items below inquire about what kind of person you think you are. Each item consists of a PAIR of characteristics, with the numbers 0, 1, 2, 3, 4. For example:

Not at all artistic	0	1	2	3	4	Very artistic
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Each pair describes contradictory characteristics - that is, you cannot be both at the same time, such as very artistic and not at all artistic. The numbers form a scale between the two extremes. You are to choose a number which describes where YOU fall on the scale. For example, if you think that you have no artistic ability, you would choose 0. If you think that you are pretty good, you might choose 4. If you are only medium, you might choose 2, and so forth.

<b>1</b>	Not at all emotional.	0	1	2	3	4	Very emotional. *
<b>2</b>	Not at all able to devote self completely to others.	0	1	2	3	4	Able to devote self completely to others. *
<b>3</b>	Very rough.	0	1	2	3	4	Very gentle. *
<b>4</b>	Not at all helpful to others.	0	1	2	3	4	Very helpful to others. *
<b>5</b>	Not at all kind.	0	1	2	3	4	Very kind. *
<b>6</b>	Not at all aware of feelings of others.	0	1	2	3	4	Very aware of feelings of others. *
<b>7</b>	Not at all understanding of others.	0	1	2	3	4	Very understanding of others. *
<b>8</b>	Very cold in relations with others.	0	1	2	3	4	Very warm in relations with others. *

Note: Asterisks represent the extreme feminine response for these items.

- **Leadership intention (Intention to seek promotion):** Adapted scale from Liñán, F., & Chen, Y.W. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.

In the statements that follow, please indicate your level of agreement with the statements, where (7) represents **complete agreement**, and (1) represents **complete disagreement**. Thank you very much for your cooperation.

**Intention to seek promotion**

1- My professional goal is to be promoted to the highest level possible in my career.						
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
<b>Totally Disagree</b>						<b>Totally Agree</b>

2- I will make every effort to get a promotion.						
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
<b>Totally Disagree</b>						<b>Totally Agree</b>

3- I am determined to seek a promotion.						
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
<b>Totally Disagree</b>						<b>Totally Agree</b>

4- I am seriously thinking about how I can get a promotion in the future.						
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>

- Cooperative organizational culture:** For full questionnaire, refer to Marchand, A., Haines, V. Y., & Dextras-Gauthier, J. (2013). Quantitative analysis of organizational culture in occupational health research: a theory-based validation in 30 workplaces of the organizational culture profile instrument. *BMC Public Health*, 13(1), 443.

Please indicate to what extent each of the values listed below describes your organization on a scale ranging from not at all (1) to a great extent (5):

	Not at all (1)	(2)	(3)	(4)	A great extent (5)
Fairness.					
Respect for the individual's rights.					
Tolerance.					
Being socially responsible.					
Being people oriented.					
Being team oriented.					
Working in collaboration with others.					

**Appendix 4: Tables and Figures****Table 1 – Descriptive statistics and correlations for all study variables**

Variable	M	SD	$\alpha$	1.	2.	3.	4.	5.
1. Affective motivation to lead	4.07	0.53	0.88					
2. Leadership self-efficacy	4.18	0.50	0.90	0.31**				
3. Gender role identity	3.79	0.61	0.76	0.07	0.16*			
4. Cooperative organizational culture	3.78	0.83	0.88	0.07	0.01	0.21**		
5. Leadership intention	4.53	1.78	0.95	0.13	0.41**	0.06	0.21**	
6. Sex	-	-	-	0.06	0.11	-0.31**	-0.002	0.09

Note:  $N=183$ , \*\*correlation is significant at .01 (2-tailed); \*correlation is significant at .05 (2-tailed). Sex was coded as follows: 0 = women and gender nonconforming individuals; 1 = men.

**Table 2**

Direct and indirect effects model coefficients for effects of gender role identity on leadership intention (affective motivation to lead as mediator).

Antecedent	Consequent									
	Affective motivation to lead (M)					Leadership intention (Y)				
	Coeff	SE	p	LLCI	ULCI	Coeff	SE	p	LLCI	ULCI
Affective motivation to lead (M)	-	-	-	-	-	0.39	0.25	0.12	-0.10	0.88
Feminine gender role identity (X)	0.08	0.07	0.21	-0.05	0.22	0.29	0.22	0.19	-0.15	0.74
Sex (C)	0.10	0.08	0.22	-0.06	0.26	0.44	0.28	0.11	-0.09	0.99
Indirect effect	-	-	-	-	-	0.03	0.04	-	-0.03	0.11
	$R^2 = 0.01$ F(2, 180) = 1.17, p = 0.31					$R^2 = 0.03$ F(3, 179) = 1.92, p = 0.13				

Note: X = independent variable (Feminine gender role identity); Y = outcome (Leadership intention); M= mediator (Affective motivation to lead); C = Covariate; LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.



**Table 3**

Direct and indirect effects model coefficients for effects of gender role identity on leadership intention (leadership self-efficacy as mediator).

Antecedent	Consequent									
	Leadership self-efficacy (M)					Leadership intention (Y)				
	Coeff	SE	p	LLCI	ULCI	Coeff	SE	p	LLCI	ULCI
Leadership self-efficacy (M)	-	-	-	-	-	1.40	0.25	<0.001	0.91	1.88
Feminine gender role identity (X)	0.18	0.06	0.004	0.06	0.30	0.29	0.22	0.19	-0.15	0.74
Sex (C)	0.18	0.08	0.02	0.03	0.34	0.44	0.28	0.11	-0.09	0.99
Indirect effect	-	-	-	-	-	0.25	0.10	-	0.07	0.47
	$R^2 = 0.06$ $F(2, 180) = 5.37, p = 0.005$					$R^2 = 0.17$ $F(3, 179) = 12.04, p < .001$				

Note: X = independent variable (Gender role identity); Y = outcome (Leadership intention); M = mediator (Leadership self-efficacy); C = Covariate; LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

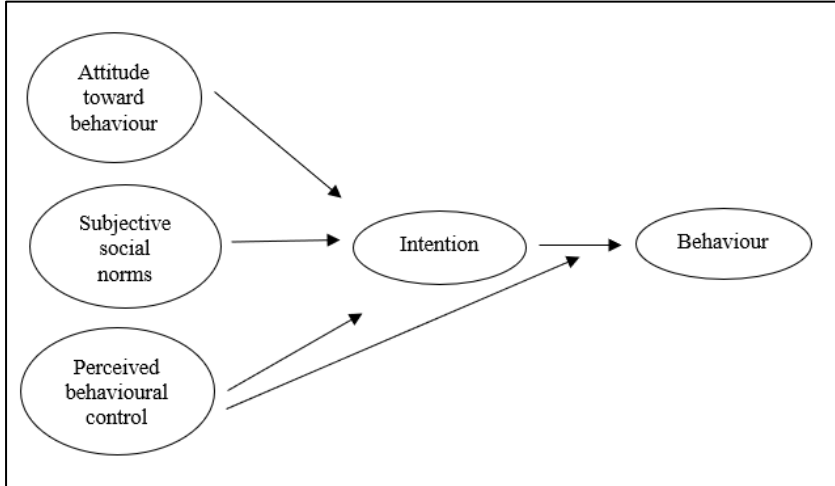
**Table 4**

Feminine gender role identity as moderator of cooperative culture – leadership intention relationship.

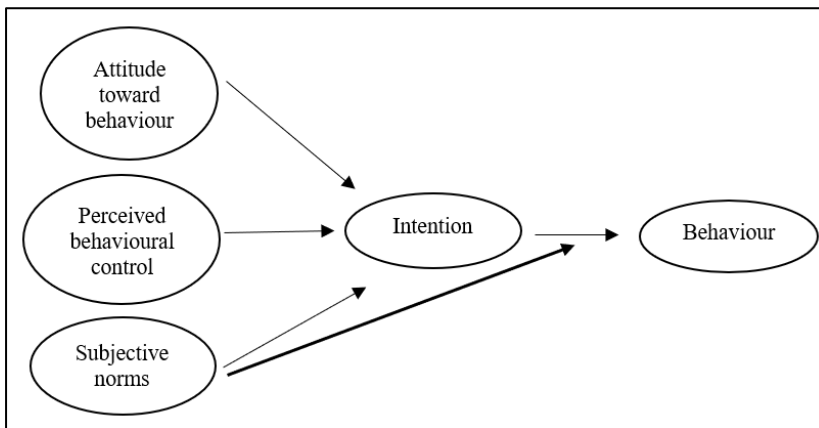
	Coeff	SE	T	p
Constant	4.29	0.18	23.47	0.00
Feminine gender role identity	0.14	0.22	0.62	0.53
Cooperative organizational culture	0.43	0.16	2.70	0.007
Feminine gender role identity × Cooperative organizational culture	0.48	0.23	2.06	0.04
Sex	0.39	0.27	1.44	0.15

Notes. N = 183. Model summary:  $R^2 = .08$ ,  $F(4, 178) = 3.82$ ,  $p < .01$ .  $R^2$  increase due to interaction:  $\Delta R^2 = .02$ ,  $F(1, 178) = 4.24$ ,  $p < .05$ .

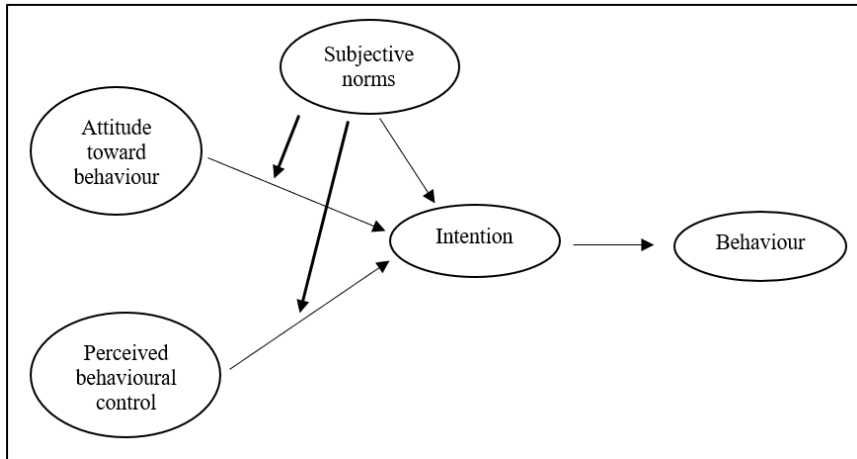
**Figure 1:** Perceived behavioural control as a moderator in the relationship between intention and behaviour.



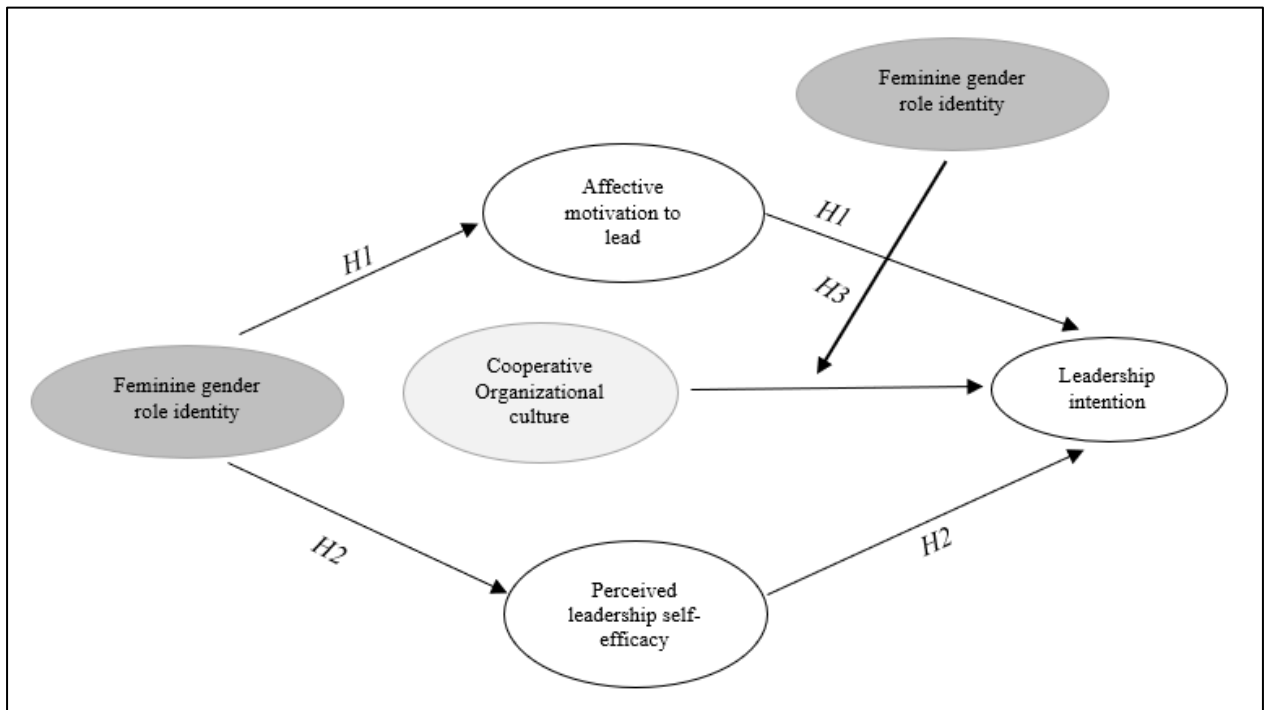
**Figure 2:** Subjective norms acting as a moderator of the relationship between intention and behaviour.



**Figure 3:** Subjective norms moderating the relationship between attitude, perceived behavioural control and intention.



**Figure 4:** Model of proposed relationships.



**Figure 5:** Moderating effect of feminine gender role identity on the relationship between cooperative organizational culture and leadership intention.

