# Having a Firm Grip: The Interplay of Leader Gender and Leadership Style on Leadership Effectiveness

## ABSTRACT

As females continue to acquire more leadership roles, it becomes crucial to understand how and when female leaders are considered effective in organizational leadership positions that are still predominantly deemed masculine. Amidst the inconclusive findings of leader and follower gender on leadership effectiveness and the lack of a coherent theoretical framework able to explain how and when females can be effective, this study is grounded in the social identity theory of leadership and argues that female leaders can overcome their leadership disadvantage by adopting a leadership style that renders them more prototypical. Subjecting this idea to an empirical test we conducted an experiment in which we matched followers of both gender with a male or female leader who adopted either a participative or directive leadership style. Results showed that the female leader was more effective than the male leader when she adopted a directive leadership style because it rendered her more prototypical. In contrast, no differences were found when the male and female leader adopted a participative leadership style. Furthermore, leader prototypicality positively mediated the relationship between leader gender and measures of leadership effectiveness when the leader was female and engaged in directive leadership.

**Keywords:** Gender, leadership, social identity theory of leadership, prototypicality

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The question of how and when female leaders are effective in what are typically masculine roles becomes ever more evident in current times as the proportion of female leaders increases. In a census in 2015 in the United States, the Pew Research Center showed that there is a substantial increase – though incremental – of females in key leadership positions such as in the American Congress and at the C level of Fortune 500 companies. Nevertheless, when compared to males, female leaders still comprise merely 4.2% of chief executive officers of S&P companies and only 19.2% of board level members (Catalyst, 2014). The fact that female leaders are less likely to find themselves in key leadership positions while at the same time are more likely to be appointed in precarious leadership roles that are almost 'destined' to fail (Ryan, Haslam, Hersby, & Bongiorno, 2011; Ryan & Haslam, 2005) poses the question of whether female leaders are considered as effective as male leaders.

Two major streams of research have previously addressed the effectiveness of female leaders: The first one is grounded in the relational demography literature which looked at the effect of female leaders at the dyadic level (Tsui & O'Reilly III, 1989). In this stream, two theoretical frameworks dominated the discussions – namely the similarity-attraction paradigm (Byrne, 1971) and the more comprehensive self- categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Though via different mechanisms, the main contention of both approaches is that similarity between leaders and followers yields positive outcomes while dissimilarity yields negative outcomes (Tsui & O'Reilly III, 1989; Vecchio & Bullis, 2001). However, empirical evidence in the relational demography approach points to equivocal results at best and thus without a clear indication as to how and when female leaders are most effective

(Adebayo & Udegbe, 2004; Duffy & Ferrier, 2003; Epitropaki & Martin, 1999; Green, Whitten, & Medlin, 2005; Loi & Ngo, 2009; Tsui & O'Reilly III, 1989; Varma & Stroh, 2001; Vecchio & Bullis, 2001).

Role congruity theory (Eagly & Karau, 2002) is the second stream of research that looked at the role of female leaders. The theory postulates that female leaders are only successful to the extent to which the leadership role is congruent with female stereotypes. To be effective, role congruity theory posits that females leaders would need to endorse 'female-like' attributes (communal characteristics) into their leadership roles as long as they are not viewed as inappropriate (Eagly & Karau, 2002). While meta-analytic evidence points to no difference in the effectiveness of male and female leaders per se (Eagly, Makhijani, & Klonsky, 1992), a fine-grained analysis showed that across a range of leadership roles that are predominantly masculine, female leaders were rated as less effective than their male counterparts (Eagly et al., 1992). And while the majority of leadership roles are engraved in masculine stereotypes (Koenig, Eagly, Mitchell, & Ristikari, 2011), role congruity theory does not offer contingency factors that can be explored into rendering female leaders more effective (Eagly & Karau, 2002).

The lack of a comprehensive theoretical framework that can explain what female leaders need to exhibit to be effective in what is typically considered as masculine roles necessitates an approach that can explain how and when female leaders can be endorsed. This study will ground the analysis in the social identity theory of leadership (SITL) (Hogg, 2001; D. van Knippenberg & Hogg, 2003) which offers a plausible way forward. The SITL hinges on the extent to which leaders are considered prototypical – that is, embodying the attitudes, attributes, and behavior of the group – which in turn leads to leadership effectiveness  (Hogg, van Knippenberg, & Rast, 2012). What the SITL further implies is that originally non-prototypical leaders can engage in an array of behaviors that would eventually render them prototypical (e.g., B. van Knippenberg &

van Knippenberg, 2005). One way in which female leaders can then be endorsed is through the use of certain leadership styles. In an organizational role that is stereotypically-male (Koenig et al., 2011), female leaders will need to engage in a leadership behavior that is 'prototypically-male' – namely directive leadership as opposed to participative leadership – in order to be considered prototypical. Once considered prototypical, female leaders will then be able to drive performance, empower followers, build good relationships and be considered as effective leaders.

In doing so, the study contributes to the literature on the effectiveness of female leaders by addressing the inconclusive findings of the relational demography and role congruity literature, and proposing on the basis of SITL that leader gender and leadership style interact in such a way that when females use a more prototypical leadership style they are perceived to be more effective.

## THEORY AND HYPOTHESES

### The Effects of Leader and Follower Gender on Leadership Effectiveness

The effect of leader gender on measures of leadership effectiveness is equivocal at best. While meta-analytic evidence points to no difference between male and female leaders in the overall effectiveness of leaders (Eagly, Karau, & Makhijani, 1995), additional meta-analytic evidence reveals that female leaders are less favorably evaluated then their male counterparts (Eagly et al., 1992). In a series of studies investigating the effect of leader gender with respect to their followers on measures of leadership effectiveness, findings show an array of inconsistent results oscillating between a null effect and a positive or negative effect (e.g., Abu Bakar & McCann, 2014; Adebayo & Udegbe, 2004; Douglas, 2012; Farh et al., 1998; Loi & Ngo, 2009; Tsui & O'Reilly III, 1989). On the other hand, the impact of follower gender on leadership effectiveness seems to be less controversial than that of the leader. With the exception of two studies and few outcomes (Loi & Ngo, 2009; Tsui & O'Reilly III, 1989) and a very small overall

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effect (Eagly et al., 1992), follower gender does not have a main effect on outcomes of leadership effectiveness (Abu Bakar & McCann, 2014; Adebayo & Udegbe, 2004; Douglas, 2012; Farh et al., 1998; Hogg et al., 2006; Loi & Ngo, 2009).

Two theoretical approaches dominated the literature in trying to explain the effects of leader and follower gender on measures of leadership effectiveness. In the dyadic approach to gender dissimilarity where leader and follower gender are thought to interact, results are largely inconclusive. While some studies showed negative outcomes for gender dissimilarity in vertical dyads (Duffy & Ferrier, 2003; Green et al., 2005; Loi & Ngo, 2009; Tsui & O'Reilly III, 1989; Varma & Stroh, 2001; Wayne & Liden, 1995), others showed no effect (Adebayo & Udegbe, 2004; Avery, Volpone, McKay, King, & Wilson, 2012; Bauer & Green, 1996; David, Avery, & Elliott, 2010; Duffy & Ferrier, 2003; Epitropaki & Martin, 1999; Farh et al., 1998; Murphy & Ensher, 1999; Schaffer & Riordan, 2013; Vecchio & Brazil, 2007; Vecchio & Bullis, 2001; Wesolowski & Mossholder, 1997) while some studies showed positive results for gender dissimilarity on a range of attitudinal and performance-related organizational outcomes (Murphy & Ensher, 1999; Vecchio & Brazil, 2007).

Studies in the gender dissimilarity literature are based on theoretical frameworks that have not been utterly successful in accounting for the equivocal results. The predominantly used framework - the similarity-attraction paradigm (Byrne, 1971) postulates that people are drawn to others of similar demographic attributes for this projects similar values, beliefs, and common life experiences. Empirically, however, the underlying mechanisms of the similarity-attraction paradigm (positive affect & liking) did not generate consistent results across a range of attitudinal and performance-related outcomes (Epitropaki & Martin, 1999; Tsui & O'Reilly III, 1989; Vecchio & Brazil, 2007).

An additional theoretical framework used to explain the effect of dissimilarity is the social identity theory (SIT) (Ashforth & Mael, 1989; Reynolds, Turner, & Haslam, 2003; Tajfel & Turner, 1986) and the related self-categorization theory (SCT) (Turner et al., 1987). SIT and SCT stem from group membership and posit that people are primarily motivated to identify with groups in order to reduce uncertainty and enhance their self-esteem (Hogg & Terry, 2000; Turner et al., 1987). In the field of relational demography, gender constitutes a pervasive and dominant characteristic under which people form group membership (Chattopadhyay et al., 2004; Riordan, 2000). Looking at the empirical evidence, demographic similarity in vertical dyads does not always yield positive outcomes. Two key reasons why that is the case could be because the mentioned studies have merely focused on social integration for predicting negative effects of dissimilarity (Schaffer & Riordan, 2013) and did not consider the main processes underlying the SIT perspective (uncertainty reduction and self-enhancement) (Hogg & Terry, 2000). Moreover, the lack of consideration of potential contingency factors might have also contributed to this shortcoming.

The second approach, the role-congruity theory (Eagly & Karau, 2002) shifts focus from the interaction between leader and follower gender and focuses solely on the role of leader gender. The theory postulates that male and female leaders are effective as long as the leadership role is congruent with their respective gender roles. In essence, the success of leaders, and particularly female leaders, is contingent on the extent to which the leadership position is in congruence with gender-based stereotype (Eagly & Karau, 2002). For example, in an experiment with student participants conducted by Hogg and colleagues, it was found that members endorsed a male leader more than a female leader when the group's prototype was mostly instrumental (male-stereotypical attributes) and when members identified strongly with the group (Hogg et al., 2006). Vice-versa results were found if the prototype was female-stereotypical. However, it is

worth noting that while male leaders can thrive in leadership roles prescribed for females, female leaders are not readily accepted for positions that are stereotypically male (Eagly et al., 1992; Koenig et al., 2011). Moreover, research has asserted that leadership positions across most societal contexts are stereotypically male which limit the advancement of women in leadership positions (Eagly & Carli, 2015; Eagly & Karau, 2002; Koenig et al., 2011) thus forming the 'glass ceiling' effect (Eagly & Carli, 2015; Eagly et al., 1995). In that light, it was found that male leaders fare much better in first-level leadership positions while women fare better in second-level positions (Eagly et al., 1995). In addition, male leaders are better rated on perceptions of leader competence and satisfaction with the leader (Eagly et al., 1992).

Nevertheless, more recent evidence on the impact of female leadership cannot be fully explained by the role congruity theory. Although the above stated findings by Hogg et al., (2006) are in line with what the theory proposes, other findings from their experiment – namely that female leaders per se were not less evaluated than male leaders, and more importantly, female leaders of instrumental groups were not less favored than their male counterparts, points to other mechanisms underlying the overall effectiveness of female leaders. In addition, several other research findings refute the main tenant of the role congruity theory in that female leaders have to endorse more communal traits to be accepted by followers; otherwise, they will be 'backlashed'. In a study by Rosette and Tost (2010), it was found that women leaders at the top levels of the organization were better regarded particularly when they engaged in agentic or instrumental behavior. Furthermore, it was recently shown that females tend to emerge and over-emerge as leaders the more they display agentic leadership behavior (Lanaj & Hollenbeck, 2015).

In taking stock of the state of the science attempting to explain the effect of gender on leadership effectiveness, two main conclusions become relevant: Firstly, the inconclusive empirical findings along with the lack of a coherent theoretical framework that can account for

the results in the gender dissimilarity literature warrants a call for a change in perspectives in how the literature has been so far tackled. With equivocal results, it might well be that the interaction between leader and follower gender is not the crucial aspect that leads to leadership effectiveness. Rather, it seems that leader gender plays a much more critical role in the process. Secondly, the shortcomings of the role congruity theory in explaining the effectiveness of female leaders and in offering a way forward for females to break the male-stereotyped nature of leadership calls for a new theoretical framework that can account for such results. At a time where males are often still regarded as better leaders than females with the general contention of "think manager, think male" (Schein, Mueller, & Lituchy, 1998; Schein, 2001) and as female leaders continue to be perceived as occupying an incongruent role and atypical in most of leadership positions (Eagly & Karau, 2002; Koenig et al., 2011), the question rises as to when and how can female leaders prosper in their roles as leaders.

**The Social Identity Theory of Leadership**

In order to explain how and when leaders are effective, the SITL postulates that it is crucial to take into consideration that first and foremost leaders are themselves members of the groups that they lead (Hogg, 2001; D. van Knippenberg & Hogg, 2003). Based on the SIT and the SCT theory, the core tenet of the SITL is that group members are more likely to emerge and be effective as leaders the more they embody the group prototype, i.e., a 'fuzzy' set of attributes (attitudes, feelings, behaviors) that captures in-group similarities and out-group differences (Hogg, 2001; van Knippenberg & Hogg, 2003). The SITL postulates that group prototypical members have a major influence over the group's identity – in prescribing who the group is and what behaviors the group endorses (Hogg, et al., 2012).

Consequently, the success of the leader depends on the degree to which the leader possesses the prototype-based attributes of the group and is thus considered prototypical (Hogg,

et al., 2012; van Knippenberg & Hogg, 2003). Unlike non-prototypical leaders who have to

engage in group-serving behavior to be effective (B. van Knippenberg & van Knippenberg,

2005), prototypical leaders are influential and effective because they embody the group's identity

and are directly perceived to care for the collective (Hogg, et al., 2012; Platow & van

Knippenberg, 2001; van Knippenberg, 2011). There is a wide evidence in the literature that

supports the impact of leadership prototypicality on leadership effectiveness, with a focal

emphasis on follower and organizational performance, creativity, and organizational citizenship

behavior (Cicero, Pierro, & van Knippenberg, 2009; Giessner & van Knippenberg, 2008; Hirst et

al., 2009; B. van Knippenberg & van Knippenberg, 2005).

With the absence of other information, individuals turn to demographic attributes,

particularly gender due to its salience and pervasiveness, to inform stereotype-based impressions

(Mackie, Hamilton, Susskind, & Rosselli, 1996). Unlike the dissimilarity approach which mainly

postulates that leadership effectiveness hinges on the demographic similarity between leaders and

followers, the SITL claims that leader prototypicality is not merely contingent on this similarity

between the leader and the group that they lead – as a matter of fact, leader prototypicality does

not have to include demographic similarity (D. van Knippenberg, 2011). Rather, the leader has to

represent the attributes of the group norm (Hogg et al., 2012). With the environments of most

organizations being male-dominated, prototypical leaders may be regarded as those individuals

who are male and who endorse stereotypically-male characteristics (Cejka & Eagly, 1999;

Koenig et al., 2011; Martell, Parker, Emrich, & Crawford, 1998).

Although the SITL and the role congruity theory both regard female leaders in a male-

stereotypical context as occupying a non-prototypical and in-congruent leadership roles that

undermines leadership effectiveness (Eagly & Karau, 2002; Koenig et al., 2011), the SITL can be

taken to advance the role congruity theory in offering a plausible way forward into making

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female leaders effective through prototypicality. Unlike the role congruity theory that prescribes communal leadership characteristics for female leaders as effective leadership behavior, the SITL would propose that female leaders in what is typically regarded as male-leadership roles engage in a male-stereotypical leadership style (agentic behavior) in order to establish their prototypicality which would eventually lead to leadership effectiveness.

In sum, the attributes that the leader represents to the group is what is crucial to be considered prototypical and this largely includes leader gender because of its salience (D. van Knippenberg & Hogg, 2003; D. van Knippenberg, 2011). As prototypicality drives leadership effectiveness (Hogg et al., 2012), female leaders, who are not considered prototypical per se, might be prompted to engage in agentic leadership style rather than a communal style in order to be considered prototypical and thus drive leadership effectiveness.

**Leader Gender and Leader Prototypicality: The Moderating Role of Leadership Style**

According to the leadership literature, leadership behavior mainly dwells over two orientations: one directed towards organizing followers' work processes, namely a task-oriented approach and another in which the leader engages followers in managing the work process – a relationship-oriented approach (Bass & Bass, 2008). Although a narrower description of leadership behavior, directive and participative leadership will be considered as they relate to gender stereotypes and fully depict agentic versus communal behavior associated with male and female leaders (Eagly & Johnson, 1990).

On the task-oriented leadership styles lies *directive leadership* which is defined as behavior aimed at organizing, structuring, and managing a follower's tasks (e.g., Korsgaard, Schweiger, & Sapienza, 1995; Somech, 2006). In essence, directive leadership is concerned with gaining a follower's compliance with directions stipulated by the leader (Bass, 1990). This leadership style relies on the position power imbued from the organizational structure rather than

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personal power to influence follower outcomes (French & Raven, 1959; Yukl & Falbe, 1991).

Directive leadership thus encompasses an agentic leadership style that has mainly been associated

with a male-stereotypical behavior (Correll & Ridgeway, 2003; Eagly & Johnson, 1990;

Ridgeway, 2004).

*Participative leadership*, on the other hand, is more corresponding to the relationship-

based style and adopts a consultative approach with followers before making a decision

pertaining to a task (Bass, Valenzi, Farrow, & Solomon, 1975; Bass, 1990). Participative

leadership encourages team members to manage themselves and advocates for discussions rather

than providing direction (Amabile, Schatzel, Moneta, & Kramer, 2004; Arnold, Arad, Rhoades,

& Drasgow, 2000; Pearce & Sims, 2002). Leaders who engage in participative leadership styles

are more reliant on personal power derived from their experience, status, and persuasiveness

(Yukl & Falbe, 1991). Participative leadership style is considered communal that has mainly

been associated with a female-stereotypical behavior (Eagly & Johnson, 1990; Ridgeway, 2004).

While the SITL does not prescribe a specific leadership style that the leader has to exhibit,

the theory simply postulates that followers look up to prototypical leaders and endorse them

(Hogg et al., 2012). When the leader is male, he is considered high status and is readily regarded

as competent, legitimate, assertive, and possessing leader-like characteristics that are

stereotypically male (Correll & Ridgeway, 2003; Eagly & Karau, 2002; Ridgeway, 2004). As

such, male leaders do not have to resort to an agentic leadership style to appear prototypical but

are more likely to be effective if they rely on their personal power and engage in participative

leadership to influence their followers (Sauer, 2011). In fact, a study by Subašić, Reynolds,

Turner, Veenstra, and Haslam (2011) showed that as leaders are considered part of the 'in-group',

and thus prototypical, they are less tolerated when they resort to harsh power tactics for that

signals a violation of trust in the leader-follower relationship which is detrimental for being

considered prototypical (Rast, Gaffney, Hogg, & Crisp, 2012; D. van Knippenberg & Hogg, 2003; D. van Knippenberg, 2011).

Contrary to male leaders, female leaders do not instantly signal a stereotypically-male leadership style and will have to resort to a more 'leadership-prototypical' behavior – namely directive leadership style (Eagly & Johnson, 1990; Heilman, 2001; Koenig et al., 2011) - in order to be prototypical. While this refutes numerous empirical evidence showing that females are 'backlashed' when they engage in male-like leadership behavior (agentic, directive, autocratic) (Eagly & Johnson, 1990; Eagly & Karau, 2002), more recent evidence has shown that female leaders are better rated when they engage in agentic-like behaviors (see Lanaj & Hollenbeck, 2015; Reid, Palomares, Anderson, & Bondad-Brown, 2009; Rosette & Tost, 2010). Moreover, often being considered as low status and less competent in leadership positions (Chattopadhyay et al., 2004; Correll & Ridgeway, 2003; Ridgeway, 2004), females are not imbued with personal power and  might even be unable to exercise participative leadership to have an influence on their followers (Sauer, 2011). In essence, female leaders might be better off with a directive leader style for that builds on their positional rather than their personal power (Sauer, 2011). In addition, an extension to the SITL, the uncertainty reduction theory (Hogg, 2011) postulates that people are motivated to reduce uncertainty related to their identity or the group that they identify with. Given the low status and low competence attributions imbued for female leaders, they are likely to provoke feelings of uncertainty in the groups that they lead (Chattopadhyay, George, & Ng, 2011). Research has shown that when subject to uncertainty, a directive or even an autocratic leadership style rendered the leader more prototypical than using a non-autocratic leadership style (Rast, Hogg, & Giessner, 2013).

Thus, in order to be perceived prototypical, female leaders will have to engage in a directive leadership style and male leaders in a participative leadership style.

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*Hypothesis 1a: Female leaders who engage in a directive leadership style will be*

*perceived as more prototypical than male leaders who engage in a directive leadership*

*style*

*Hypothesis 1b: Male leaders who engage in a participative leadership style will be*

*perceived as more prototypical than female leaders who engage in a participative*

*leadership style.*

**Leader Prototypicality as a Mediator of the Interactive Effects of Leader Gender and Leadership Style on Leadership Effectiveness**

Based on SITL and our earlier arguments we suggest that leader prototypicality will mediate the interactive effects of leader gender and leadership effectiveness. Once the leader is considered prototypical, they are likely to influence followers to reach prescribed work outcomes. The SITL postulates that leadership prototypicality is the primary reason that underlies why leaders are effective (Hogg et al., 2012; D. van Knippenberg, 2011) and leadership prototypicality has shown positive effects on follower and organizational performance, creativity, and organizational citizenship behavior (Giessner & van Knippenberg, 2008; Hirst et al., 2009; Pierro, Cicero, Bonaiuto, van Knippenberg, & Kruglanski, 2005; B. van Knippenberg & van Knippenberg, 2005).

Female leaders will be regarded more prototypical than male leaders when they exercise directive leadership and male leaders will be considered more prototypical than their female counterparts when they engage in participative leadership. These influences on leader prototypicality affect measures of leadership effectiveness such as when the leader is considered prototypical, they are able to exhibit leadership effectiveness (Hogg et al., 2012). The result is a relationship between leader gender and leadership effectiveness, moderated by leadership style, and mediated by leader prototypicality.

Leader gender has a positive effect on leadership effectiveness when the leader is male and exercises participative leadership through a positive effect on leader prototypicality and a positive effect of leader prototypicality on leadership effectiveness. When the leader is male and exercises participative leadership by asking followers for input in managing work processes, he projects a sense of security and competence (Ridgeway, 2004) that makes the follower perceive him as being more prototypical. The more the leader is considered prototypical the more likely will he be effective as previously shown (Giessner & van Knippenberg, 2008; Hirst et al., 2009; Pierro, Cicero, Bonaiuto, van Knippenberg, & Kruglanski, 2005; B. van Knippenberg & van Knippenberg, 2005). The relationship is different for female leaders: When a female leader engages in participative leadership and adopts a consultative approach, she might be further viewed as lacking in competence and not providing the guidelines required for the group (Ridgeway, 2004; Sauer, 2011). As a result, followers are less likely to consider such a leader prototypical which will lead to negative measures of leadership effectiveness.

*Hypothesis 2a: Under participative leadership, leader prototypicality will mediate a positive relationship between leader gender and leadership effectiveness when the leader is male and a negative relationship when the leader is female*

In contrast, leader gender has a positive effect on leadership effectiveness when the leader is female and exercises directive leadership through a positive effect on leader prototypicality and a positive effect of leader prototypicality on leadership effectiveness. When the leader is female and exercises directive leadership, this not only projects a prototypically-male leadership style that signals a willingness to take charge of the position and to drive work results (Sauer, 2011) but also contributes to mitigating the uncertainty provoked due of the gender of the leader

(Chattopadhyay et al., 2011; Hogg, 2011). In times of uncertainty, followers are likely to endorse leaders who prescribe strict guidelines about what the group stands for and what is required from them (Rast et al., 2012, 2013). When a female leader exercises directive leadership, she is likely to be considered prototypical which will eventually lead to positive work outcomes. However, if a male leader engages in directive leadership, he will be perceived as unnecessarily relying on the power of his position (Sauer, 2011). In that case, followers are likely to negatively interpret such behavior as in being overly assertive and lacking in competence and trust (Hogg et al., 2012; Subašić et al., 2011). This will negatively impact on leader prototypicality and will thus negatively affect leadership effectiveness.

*Hypothesis 2b: Under directive leadership, leader prototypicality will mediate a positive relationship between leader gender and leadership effectiveness when the leader is female and a negative relationship when the leader is male*

**METHOD**

In order to understand the direction and the nature of causal relationships and to establish internal validity, an experimental design was chosen for this study (Aguinis & Bradley, 2014; Grant & Wall, 2009). By conducting an experiment, alternative explanations for covariation between variables can be ruled out and a clearer understanding of underlying mechanisms and processes can be generated (Shrout & Bolger, 2002; Stone-Romero & Rosopa, 2010). Furthermore, an experimental approach is not uncommon in the study of SIT, SCT  (Brewer, 1979; Tajfel, 1982), leadership (e.g., Bono & Judge, 2003; Grant, Hofmann, & Carolina, 2011; Sauer, 2011) and the SITL (Hains, Hogg, & Duck, 1997; Hogg, Hains, & Mason, 1998; Platow & van Knippenberg, 2001).

**Sample and Design**

*Participants.* One hundred and fifty one students from a UK-based business school participated in this study. Participants were approached during their summer workshops and asked to take part in exchange for personalized feedback on study scales along with refreshments. The mean age of participants was 24.3 years old, and of the total respondents, 48.7% were males and 51.3% were females. The nationality of participants varied and 26% were UK citizens. In total, 93% were undertaking their postgraduate study.

*Procedure.* Based on the scenario by Sauer (2011), participants were asked to play the role of a management consultant in Advance Consulting – a small management consulting firm which serves well-known clothing enterprises. General demographic information about the firm was provided with the aim of not evoking any gender differences. Participants were told that they have been working with Advance Consulting for almost a year and that they just got assigned on a new project; a turnaround plan for a clothing manufacturer called Kimonos. They were informed that they will now work alongside a new leader, Thomas or Mary (pending on the condition), and that they have not met their leader before.

Participants were approached during the workshops and asked whether they would like to take part in a 30-minute study about leadership. Interested participants were then split by gender and ushered to separate rooms with trained administrators where they were randomly assigned to the female or male leader condition and the participative or directive leadership style condition. After walking participants through the information sheet, they were asked to sign an informed consent and this was followed by explaining the context of the study. Participants were then told that another member of the organization has already conducted an assessment report on Kimonos and that they will see a video of their leader discussing the results of the assessment report with one of their colleagues. They were later informed that their leader will address them with a

message at the end of the video. The videos were displayed on a large screen using a projector. After the introduction, participants were subject to the different manipulations.

     ***Design and Manipulations.*** A 2 (leader gender) x 2 (follower gender) x 2 (leadership style: participative vs. directive) between-subject design was adopted. Participants were split by gender and were randomly assigned to one of the experimental conditions based on their gender to control for their perception regarding how the leader deals with members of the opposite sex. The number of participants per cell ranged between 16 (in the male leader, male follower and directive leadership condition) and 20 (in the female leader, female follower, directive leadership condition; male leader, female follower, participative leadership condition; and male leader, male follower, participative leadership condition). Leader gender and leadership style were manipulated by means of showing participants four different videos of a male or female leader using a directive or participative leadership style. The video clips were created specifically for this study and the same actors appeared in the allotted conditions. *Leader gender* was manipulated by having either a male actor or a female actress appear in the respective experimental condition. The scripts for both actors were exactly the same. The actors were of similar ages, ethnicity, and nationality.

     Largely based on the manipulation of leadership style by Sauer (2011), *leadership style* was manipulated through the leader's dialogue with the alleged participants' colleague who appeared in the video with the leader. In the directive manipulation, the leader decides on the objectives of the tasks and gives the follower strict instructions on how to approach the project. In this manipulation, the leader does not invite any input from the follower. After the leader finishes briefing the follower on the next steps, they then look at the camera and addresses the participants with a message. The content of the message is based on items comprising directive leadership (Pearce & Sims, 2002). The leader informs the participants that they will set their

performance objectives and standards and that they will provide them with guidelines on how to do their tasks. Moreover, the leader tells the participants that they will set their finalized work schedules. The leader then asks the participants to do a task that they will be given and informs them that they have 3 minutes to finish the task. In the participative leadership manipulation, although the leader informs the follower that they have their own ideas on how to go about the project, they engage with the follower in a dialogue on what objectives to set and how to proceed with the work tasks. The video then shows the follower coming up with ideas while the leader welcomes the input. In this manipulation, the leader invites input from the follower and they together discuss what to do. As in the directive condition, after the leader finishes briefing the follower on the next steps, they then look at the camera and address the participants with a message. The content of the message is based on items comprising participative leadership (Arnold et al., 2000). In the message, the leader encourages the participants to express their ideas and suggestions and tells them that they will consider their input even if they initially disagreed with them. The leader then informs the participants that they will consider their take on things when putting forward the plan and objectives of the task. At the end of the video, the leader then asks the participants to do a task that they will be given and informs them that they have 3 minutes to finish the task.

　　　*Task.* The experimental task was an ideation task and required participants to think, in 3 minutes, of as many items as possible that a clothing factory can generate. The use of ideation tasks in leadership research is not uncommon (Bono & Judge, 2003; Kahai, Sosik, & Avolio, 2004; B. van Knippenberg & van Knippenberg, 2005) and has been used in contexts measuring constructs other than creativity while treating the ideation task as a mere output measure (Bono & Judge, 2003; van Dijke, De Cremer, & Mayer, 2010).　After the task, participants were asked to

complete a questionnaire. Throughout the experiment, participants were prompted to work individually.

**Dependent Measures**

*Manipulation Checks.* Participants responded to 2 scales that assessed the leadership style exhibited by the leader. Directive leadership was measured by a 6-item scale (Pearce & Sims, 2002). A sample item includes "My team leader sets the goals for my performance". Participative leadership was also measured by a 6-item scale (Arnold et al., 2000) and a sample item is "My team leader listens to my ideas and suggestions". Both scales were scored on a 5-point rating scale, ranging from 1=strongly disagree to 5=strongly agree. Both the directive ($\alpha$ = .76) and the participative leadership scale ($\alpha$ = .93) demonstrated good reliability.

Leadership style manipulation was piloted one week prior to the study with a group of students ($N$ = 41; 22 females & 19 males) with similar demographics and from the same university from which the sample for the study was drawn. Participants in the pilot study were divided by gender and walked through the procedure of the study. They then responded to measures of leadership style and leadership effectiveness. Results of the pilot study indicated that participants in the directive leadership condition perceived the leader as being more directive than did participants in the participative leadership style condition ($M$ = 4.07, $SD$ =.88 vs. $M$ = 3.23, $SD$ =.15), $F(1, 39)$ =11.75, $p < .01$). Moreover, participants in the participative leadership condition perceived the leader as being more participative than did participants in the directive leadership style condition ($M$ = 4.29, $SD$ =.58 vs. $M$ = 1.92, $SD$ =.76), $F(1, 39)$ =125.54, $p < .001$).

*Leader prototypicality.* Leader prototypicality was measured by a 3-item scale (B. van Knippenberg & van Knippenberg, 2005). A sample item is "My team leader represents what is

characteristic about my team". Responses were scored on a 5-point rating scale, ranging from 1=strongly disagree to 5=strongly agree. The scale was highly reliable (α = .89).

   *Leadership Effectiveness.* Because leadership effectiveness is not only measured in terms of performance-related outcomes, we extend the outcomes by including that when leaders are considered prototypical, this will result in commitment, support, and trust in the leader (Hogg et al., 2012) which leads to the formation of a good leader-member relationship (Cropanzano & Mitchell, 2005; Graen & Uhl-bien, 1995). By having good leader-member relationships, a host of positive attitudinal and behavioral outcomes are bound to follow (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007). Moreover, since among the tasks of the leader is to inspire, motivate, and enable followers to take on more responsibilities at work, we extend our range of outcomes to include the effect of prototypicality on psychological empowerment (Spreitzer, 1995). Psychological empowerment is defined as a motivational construct where an employee perceives that they have a choice in initiating and regulating their actions, have the competence and ability to perform well on the job, have an influence on the environment, and the meaningfulness of the job (Spreitzer, 1995). Psychological empowerment has been linked with a range of outcomes of leadership effectiveness (Pieterse, van Knippenberg, Schippers, & Stam, 2009; Spreitzer, Janasz, & Quinn, 1999).

   *Perceived Leadership Effectiveness.* Perceptions of leadership effectiveness was measured by an 8-item scale adapted from the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1995). A sample item is "My leader is effective in meeting my job-related needs". Responses were scored on a 5-point rating scale, ranging from 1=not at all to 5=frequently if not always. The scale demonstrated high reliability (α = .9).

*Leader-member Exchange.* LMX was measured by a 7-item scale (Graen & Uhl-bien, 1995). A sample item includes "How well does your leader understand your job problems and needs?" Items were scored on a 5-point rating scale and the scale had high reliability ($\alpha = .8$).

*Empowerment.* Empowerment was measured by a 12-item scale (Spreitzer, 1995) consisting of 4 sub-constructs: meaning, competence, self-determination, and impact. A sample item from each of the constructs includes "The work I do is very important to me", "I am confident about my ability to do my job", "I have significant autonomy in determining how I do my job", "My impact on what happens in my department is large". The scale demonstrated high reliability ($\alpha = .9$).

*Performance.* Performance was measured by counting the number of items generated by each participant thus constituting a measure of fluency (Reiter-Palmon & Illies, 2004). Although fluency constitutes one measure of creative performance, other leadership researchers have treated this output quantity measure as an objective measure of performance per se (see Bono & Judge, 2003).

**Analysis Method**

Hypothesis 1a and 1b were tested using analysis of covariance (ANCOVA) where follower gender (dummy coded as 0 = male participant and 1 = female participant) was entered as a covariate to control for the effect of participant gender. To probe for specific interactions, post hoc analyses using the Sidak-Bonferroni adjustment was used (Sidak, 1967). This particular method was chosen, and not the Bonferroni adjustment, for, like the Bonferroni adjustment, it corrects the possibility for the familywise error rate for multiple comparisons while moderating the Bonferroni adjustment's adverse impact on statistical power (Field, 2009; Keppel & Wickens, 2004). As recommended by Stevens (1999), a 4-variable interaction term was created denoting the interaction between leader gender and leadership style.

Hypothesis 2a and 2b were tested using bias corrected bootstrapping procedures recommended for testing moderated mediation (Preacher & Hayes, 2008; Preacher, Rucker, & Hayes, 2007; Shrout & Bolger, 2002). The bootstrapping procedure generates a sampling distribution of the product of the regression coefficients through approximating the coefficients in numerous resamples that are representative of the population from which the sample of the study was drawn (Edwards & Lambert, 2007). Coefficient estimates are then used to compute the product of the regression coefficients which are then rank ordered to locate percentile values that form 95% confidence interval (CI) (Edwards & Lambert, 2007; Preacher & Hayes, 2008). A bias-corrected confidence interval is then obtained by adjusting the confidence intervals for differences between the product from the sample and the median of the products estimated from the bootstrap samples (Edwards & Lambert, 2007; Preacher & Hayes, 2008). If the confidence intervals do not contain zero, then there is proof of moderated mediation (Preacher et al., 2007). Based on the recommendation of Hayes (2015), 10000 bootstrap resamples will be used for this analysis.

<center>**RESULTS**</center>

**Manipulation Checks**

Comparing means for participants' perception of leadership style, it was evident that participants in the participative leadership condition perceived the leader as being more participative than did participants in the directive leadership style condition ($M = 3.9$, $SD = .63$ vs. $M = 2.34$, $SD = .97$), $F(1, 146) = 133.88$, $p < .001$, $h^2 = .47$. Participants in the directive leadership condition perceived the leader as being more directive than did participants in the participative leadership style condition ($M = 3.99$, $SD = .61$ vs. $M = 3.66$, $SD = .51$), $F(1, 146)$ $= 12.22$, $p < .01$, $h^2 = .07$.

Prior to testing hypotheses 1a and 1b, an ANCOVA was run to check for significant interaction between leader gender and leadership styles on prototypicality. ANCOVA results show that the interaction between leader gender and leadership style had a significant effect on leader prototypicality after controlling for follower gender ($F(1, 144) = 2.83$, $p < .1$, $h^2 = .019$). The interaction is displayed in Figure 1. Due to the significance of this interaction, hypotheses 1a and 1b can be tested using the post hoc Sidak-Bonferroni method in ANCOVA.

**Hypothesis Testing**

*Hypothesis 1.* Hypothesis 1a stated that female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who engage in directive leadership style and the results support this prediction: As can be seen in Figure 1 participants viewed female leaders who engage in directive leadership as more prototypical ($M = 2.77$, $SD = .14$) than male leaders who engage in directive leadership ($M = 2.26$, $SD = .14$), $p < .1$. Those results support hypothesis 1a. On the other hand, participants did not report a significant difference on leader prototypicality between male leaders and female leaders who engage in participative leadership ($M = 3.37$, $SD = .13$ for male leaders, $M = 3.43$, $SD = .14$ for female leaders, $p = $ n.s.) thus disconfirming hypothesis 1b.

Figure 1 about here

*Hypothesis 2.* Hypothesis 2a predicted the mediation path by leadership prototypicality in the relationship between leader gender and measures of leadership effectiveness will be moderated by leadership style such that when the leader is male and exercises participative leadership the relationship will be positive versus when the leader is female and exercises participative leadership. Results showed that there was no indirect effect of leader gender on leadership effectiveness via leader prototypicality when the leader used a participative leadership

style (perceptions of leadership effectiveness: conditional indirect effect: -.03; 95% CI Low = -.2070; CI High = .1511; LMX: conditional indirect effect: -.02; 95% CI Low = -.1702; CI High = .1265; empowerment: conditional indirect effect: -.03; 95% CI Low = -.2109; CI High = .1293; performance: conditional indirect effect: -.02; 95% CI Low = -.5659; CI High = .4362) thus disconfirming hypothesis 2a.

Hypothesis 2b predicted the mediation path by leadership prototypicality in the relationship between leader gender and measures of leadership effectiveness will be moderated by leadership style such that when the leader is female and exercises directive leadership the relationship will be positive versus when the leader is male and exercise directive leadership. Results showed that the differences between male and female leaders on measures of leadership effectiveness are accounted for by leader prototypicality when the leader uses a directive leadership style. Females are more effective than males because they are perceived as more leader prototypical (perceived leadership effectiveness: conditional indirect effect: .26; 95% CI Low = .0524; CI High = .4954; (LMX: conditional indirect effect: .22; 95% CI Low = .0374; CI High = .4062; empowerment: conditional indirect effect: .25; 95% CI Low = .0563; CI High = .5110). However, the opposite pattern was observed for performance where there was a significant and negative moderated mediation when the leader was female and exercised directive leadership (conditional indirect effect: -.58; 95% CI Low = -1.6469; CI High = -.0414). In sum, hypothesis 2b was largely supported.

## DISCUSSION

Amidst the rise and the continued challenges that female leaders face in 'stereotypically-male' leadership roles (Catalyst, 2014; Koenig et al., 2011), our goal was to develop a framework to capture how and when female leaders drive leadership effectiveness. Through addressing

inconclusive findings in the gender dissimilarity literature (e.g., Tsui & O'Reilly III, 1989) and in the role congruity theory (Eagly & Karau, 2002), we developed a model grounded in the SITL (Hogg & Terry, 2000; Hogg et al., 2012; D. van Knippenberg & Hogg, 2003). Our model explains the effect of leader gender on leadership effectiveness through leader prototypicality which we hypothesized is a product of the interaction of leader gender with leadership style (directive vs. participative): Female leaders will be considered more prototypical than their male counterparts when they engage in directive leadership; the opposite relationship is predicted for participative leadership style. The findings by and large support our model.

The results of our study showed that, contrary to the role congruity theory (Eagly & Karau, 2002) that states that female leaders are mostly backlashed when they exercise autocratic leadership styles and are more negatively rated than their male counterparts (Eagly & Johnson, 1990; Eagly et al., 1992), when compared to male leaders, female leaders are considered more prototypical when they engaged in directive leadership. As participants watched the video of the leader interacting with a hypothetical colleague, they were able to derive more information about the leader. Apart from demographics that signal group categorization, people look to a set of behaviors that prescribe in-group similarities and consider a leader prototypical if they engage in the behavior endorsed by the group (Hogg et al., 2012; Hogg, 2001). When females take the lead, they are regarded to be less congruent and less competent than males in leadership roles (Eagly & Karau, 2002; Ridgeway, 2004) and if they resort to directive leadership, they are engaging in a prototypical leadership style that accentuates the power of their positions thus asserting themselves in the leadership role (Sauer, 2011).

The difference in ratings of prototypicality between male and female leaders exercising directive leadership can also be explained with the uncertainty reduction hypothesis (Hogg & Terry, 2000). Unlike male leaders, female leaders were likely to have caused uncertainty amongst

some participants about whether or not they are competent and can drive work results (Chattopadhyay et al., 2011). Along the lines of the findings by Rast et al., (2013), exercising directive leadership has served to reduce this uncertainty rendering female leaders with directive leadership better than male leaders with directive leadership.

Furthermore, more recent evidence also supports the findings from our experiment – women leaders at the top level of the organization were more effectively rated particularly due to the agentic behavior that they engaged in (Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010).

In addition, our moderated mediation hypothesis stating that leader prototypicality will mediate the relationship between leader gender and leadership effectiveness under directive leadership was supported such that the relationship was positive for female leaders and negative for male leaders. The results indicate that females are not only considered more prototypical than males when they exercise directive leadership, but are also able to build good relationships with followers and make them feel more empowered in addition to being considered more effective. This pattern is detrimental for male leaders.

On the other hand, our results showed that participants equally favored participative leadership for both male and female leaders. This is in line with previous research showing a general preference towards relationship-oriented leadership approaches, including participative leadership (Judge et al., 2004). Another possible explanation for this result could be by the fact that our sample consisted of business school students who might have decreased stereotypes associated with gender, as found by other researchers (Powell, Butterfield, & Parent, 2015). In that light, participants generally preferred participative leadership and the gender of the leader did not play a significant role. However, we did not find a significant mediation of leadership prototypicality of the interaction between leader gender and participative leadership on measures of leadership effectiveness. Although participants preferred participative leadership, it could well

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be that this leadership style is not ideal to render male leaders effective. Alternative leadership styles have to be explored.

Our second key finding clearly shows that it is not the similarity to the leader that drives leadership effectiveness as depicted in the dissimilarity literature (Tsui & O'Reilly III, 1989). Rather it is the perception of leader prototypicality which is a function of the interaction between leader gender and leadership style. We found that leader prototypicality mediates the path from leader gender to measures of leadership effectiveness with the exception of task performance. This could well be the case due to the nature of the task itself: As participants were asked to carry a simple output generation task, the instructions were straightforward and did not require significant leadership intervention (Fiedler, 1964; Kerr & Jermier, 1978).

**Theoretical Implications**

The key theoretical contribution of this study lies in showing how the SITL is able to explain how and when female leaders are effective above and beyond the gender dissimilarity literature and the role congruity approach. This contribution builds on how and when female leaders are considered prototypical in a typical organizational context and was done by exploring how leader gender interacts with leadership style to influence perceptions of leader prototypicality which in turn leads to leadership effectiveness. Unlike previous research (Cejka & Eagly, 1999; Eagly & Karau, 2002; Ridgeway, 2004) that necessitated that female leaders engage in communal leadership behavior to be accepted, our study offered a plausible way forward and extended the role congruity theory on the basis of the SITL and posit that for females to prosper in leadership roles, they have to adopt prototypical leadership behavior which would likely include a prototypically-male leadership style. The findings point to an interesting development

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in that directive leadership have a more detrimental effect on prototypicality for males but not for females.

In addition, our research contributed to the study of the SITL: While leader prototypicality has mainly been studied as a moderator (e.g., Giessner & van Knippenberg, 2008; B. van Knippenberg & van Knippenberg, 2005), this study explored the role of leadership styles in rendering leaders prototypical. In addition, this study adds to work of Rast and colleagues (2013) and Yoshida, Sendjaya, Hirst, & Cooper (2013)  by looking at the mediating role of prototypicality and how and when it leads to leadership effectiveness. Furthermore, the findings of our study extended the work of Rast and colleagues (2013) on the SITL and the uncertainty reduction hypothesis by showing that directive leadership works to reduce the uncertainty induced by female leaders which eventually leads to positive evaluations of leadership effectiveness, LMX, and employee empowerment.

**Practical Implications**

The findings of this experiment shed important light for organizations seeking to fully equip their female leaders with tools to prosper in their leadership roles. For starters, this study bears good news to organizations as it seems that incongruent stereotypes negatively affecting the role of female leaders are on the decrease. With that being established, former leadership styles that were used to be detrimental for female leaders now play to their advantage, at least when compared with their male counterparts. In that light, organizations can now train their female leaders on directive leadership and give them more leverage to practice the leadership style – at least in an organizational context similar to the one simulated in this experiment. Moreover, organizations are also compelled to support females in leadership positions particularly when they engage in agentic leadership behavior as this has been shown to positively drive leadership effectiveness through perceptions of leader prototypicality. In addition, organization can enhance

the impact of their leaders by making sure that males do not resort to directive leadership. In addition, the findings could also inform practitioners that in order to exhibit leadership effectiveness, leader and follower demographics do not need to be matched. Rather, practitioners should make sure that the leader engages in 'prototypical' leader behavior in order to be effective, and that, in most organizational cases, is firstly agentic leadership behavior.

**Limitations and Future Avenues for Research**

This study is not without its limitations. Firstly, while this study is characterized with high internal validity, it has low external validity (Shrout & Bolger, 2002). Future research in a field setting is recommended to replicate the findings. Secondly, the characteristics of the sample might have also played a role (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Participants were students put in an artificial setting which might look different had they been in a real work setting with 'real leaders'. However, the effects found in our study might as well be stronger in a real setting and we might have found support for all our hypotheses. Although our moderated meditation model had a different source for our independent and dependent variable and is thus less prone to common method biases, our mediator and outcome measure suffer from common rater effect (Podsakoff et al., 2003). As such, we cannot conclude causality with regards to the mediator. Future research addressing this gap is recommended. Finally, exploring other leadership styles and their effects on prototypicality across a wider range of organizational tasks and settings is recommended for future research. It is likely that these variables play an important role in determining when female and male leaders are perceived to be prototypical.

**Conclusion**

In this study, we addressed the gap in the literature explaining how and when female leaders exhibit leadership effectiveness in what are typically considered masculine leadership roles. We shifted focus from the relational demography literature and the role congruity theory and grounded the analysis in the SITL by asserting that the path between leader gender and leadership effectiveness is mediated by leader prototypicality. Our findings by and large support our predictions and suggest that SITL might provide a viable alternative explanation as to how and when female leaders exhibit leadership effectiveness. It also offer organizations with an additional set of tools on which they can train their female leaders and support them in their leadership roles.

**FIGURE 1**
**MODERATING EFFECT OF LEADERSHIP STYLE ON THE RELATIONSHIP
BETWEEN LEADER GENDER AND LEADER PROTOTYPICALITY**
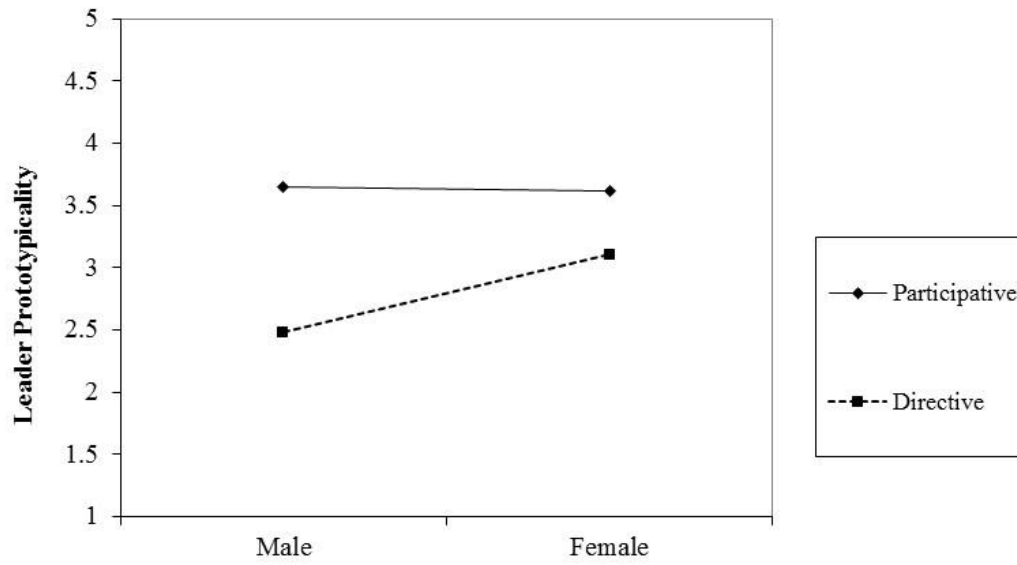
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