

Implicit Leadership Theories: Do they differ for male and female leaders?

Investigating the effects of leader gender and work context in the Culturally Endorsed Leadership Theory

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Abstract

Implicit leadership theories have been shown to be potent in the development of global leadership models that accommodate the challenges posed to leadership efforts in a globalized world. Furthermore, the rise of women to leadership positions warrants investigations of whether individuals hold differing implicit leadership theories for men and women. The purpose of this study was to investigate whether implicit leadership theories differ for male and female leaders, and whether the difference was greater in a neutral versus masculine work context. The present research project utilized a short version of project GLOBE's leadership questionnaire that was administered to 579 students (311 women and 268 men) at Norwegian Universities and University Colleges. Results revealed no significant relationship between leaders' gender and the rated importance of leadership attributes, contrary to the hypothesized expectations. Furthermore, a significant but very small interaction-effect between leader gender and work context was found to affect ratings of leader attributes. As such, the rated importance of the leader attributes within the culturally endorsed leadership theory does not differ as a function of leader gender. Methodological limitations as well as theoretical and practical implications of the results are discussed.

Preface

First and foremost I would like to thank Professor Kjell Ivar Øvergård for his invaluable and much appreciated feedback during the entire writing process of the present thesis. Furthermore, I'd like to thank my fellow student, friend and colleague Bjørn Fjærli for the opportunity to work with him on this project. Moreover, Kjell also deserves many thanks for the guidance Bjørn and I received during all phases of our research endeavors. I would also like to thank Associate Professor Cato Alexander Bjørkli for his feedback in the later stages of writing the thesis. Last but certainly not least, I would like to thank Olga Delgado for her help in early phases of the research project.

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Introduction

A substantial amount of research is devoted to the description, development and effect of leadership in organizations (Avolio, Reichard, Hannah, Walumbwa & Chan, 2009; House & Aditya, 1997). Still, the research field is far from exhausted, as the world in which existing knowledge is to be effectively applied keeps changing (House, Dorfman, Javidan, Hanges & Sully de Luque, 2014; Landy & Conte, 2009). Organizations and their leaders find themselves in an environment that is not only in a state of intensifying competitiveness, but also increasing globalization (House *et al.*, 2014; Dorfman, Javidan, Hanges, Dastmalchian & House, 2012; Javidan & Dastmalchian, 2009; Groves & Feyerheim, 2011; House & Javidan, 2001). Mergers with, and acquisitions of, organizations from different nationalities have never been more common (House & Javidan, 2001). As a result, the number of corporations that operate on a multi-national scale has never been higher (House *et al.*, 2014). Consequently, investing in the development of a theoretical framework that describes ideal leadership within a global perspective is warranted more than ever (Dorfman *et al.*, 2012; House, Hanges, Javidan, Dorfman & Gupta, 2004). To accommodate the need for competent global leadership, increased attention has been brought to the contingencies that affect the appreciation of certain leadership attributes around the world (House *et al.*, 2014). Scholars associated with project GLOBE (Global Leadership and Organizational Behavior Effectiveness) have demonstrated how cultural values outline to what degree various leadership attributes are expected to be displayed by leaders in different societies (Den Hartog, House, Hanges, Ruiz-Quintanilla & Dorfman, 1999; Dorfman *et al.*, 2012; House, Hanges, Ruiz-Quintanilla, Dorfman, Javidan, Dickson & Gupta, 1999; House *et al.*, 2004; House *et al.*, 2014). As such, project GLOBE has developed a measure of leadership that enables leadership efforts to be adapted to, and optimized within, distinct societal environments (Dorfman *et al.*, 2012).

However, organizations are experiencing change in more ways than globalization alone. Another important development in the environment of organizations is the rise of women to leadership positions (Eagly & Carli, 2003). For instance, the number of women involved in politics has doubled from 11.3 to 22 percent since 1995 (UN women, 2015). This is albeit still a low percentage considering that the world's population comprises approximately 50% women. The rise of female leadership is well deserved, as women are

shown to perform equally well as men in leadership positions (Mandell & Pherwani, 2003), and are in some cases also asserted to outperform their gender counterparts (*e.g.* Eagly & Carli, 2003; Eagly & Johnsen, 1990; Eagly, Johannesen-Schmidt & Engen, 2003). The possible role of leaders' gender as a contingency that affects the appreciation of various leadership attributes has yet to be subject to scientific investigation within GLOBE's leadership paradigm (House *et al.*, 2014). However, stereotypical beliefs regarding gender differences are argued to induce different expectations as to what kind of leadership behaviors men and women are expected to display (Ayman & Korabik, 2010; Eagly & Karau, 2002; Heilman, 2001; Vecchio, 2002). Literature within the topic has demonstrated that female leaders receive negatively prejudiced evaluations as they do not act in congruence with their gender role (Eagly, 1987a; Eagly & Diekmann, 2005; Eagly & Karau, 2002). Furthermore, this effect has been shown to be especially evident in masculine work contexts (Eagly & Diekmann, 2005; Eagly, Karau & Makhijani, 1995; Heilman, Wallen, Fuchs & Tamkins, 2004; Heilman, 2001).

The present paper addresses leaders' gender and work context as possible contingencies in the appreciation of different leadership attributes. This research is important for two reasons. *First*, further illuminating the contingencies that outline what effective leadership is perceived to be (*i.e.* what leadership attributes that constitute excellent leadership) is essential in the development of global leadership theories (House *et al.*, 2014). *Second*, men and women are preferably offered the same opportunities to advance into leadership positions in the modern organizations of today and tomorrow (Delgado, Øvergård & Henden, 2015). Extending our understanding of how men and women are implicitly expected to behave in leadership positions may possibly shed some additional light on as to why women are still experiencing difficulty advancing to upper echelon leadership positions.

Theory

The concepts of leadership and gender are addressed and then integrated to explain and validate the present hypotheses in the following sections. In interest of brevity, the presentation of leadership will entail the culturally endorsed leadership theory only, as opposed to a broader explication of the concept.

The Culturally Endorsed Leadership Theory

Commonly, leadership theories can be forged from either an etic or emic approach. The etic approach implies an attempt to validate a theory across dissimilar cultures

and other situational environments, whereas emic theories investigate leadership within a certain cultural or social group (Lee, Scandura & Sharif, 2014). Granted, prominent scholars like Bass (1997, 2008) have demonstrated the global potency of an etic approach to leadership with the theory of transformational leadership. For instance, charismatic properties in leaders are globally endorsed (Javidan & Carl, 2005). However, project GLOBE's culturally endorsed leadership theory's (CLT) emic approach allows the identification of contingencies that affect leadership effectiveness in varying cultural settings (House *et al.*, 2014). More specifically, to what extent a wide array of leadership attributes are endorsed and expected differently across nations (Fjærli, Øvergård & Westerberg, 2015; House *et al.*, 2004).

The theoretical basis for the culturally endorsed leadership theory framework builds on Lord and Maher's (1999) implicit leadership theory (ILT). The implicit leadership theory asserts that leaders are recognized as such given that their attributes and behaviors match the attributes and behaviors that their followers believe to be appropriate properties of leaders. Within this paradigm, the nature of, and subsequent perception of quality regarding leadership is defined in the eyes of the one who is to be led. As such, the value of leaders' behaviors are rated by comparing them to the raters' implicit conceptualizations of good and poor leadership attributes and behaviors (Den Hartog *et al.*, 1999). The culturally endorsed leadership theory draws on this assumption, and extends the level of analysis from an individual level to the societal level. Substantial work within the theory has shown that people who share societal cultural values also share a common implicit conceptualization of ideal leadership (House *et al.*, 2004). Within the CLT framework, leadership is defined as "*the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organizations of which they are members*" (House *et al.*, 2014, p. 17).

The culturally endorsed leadership theory is measured by 112 items that reflect different leadership attributes. The 112 items form 21 primary leadership dimensions which themselves have been clustered into six global leadership dimensions: charismatic/value-based, team-oriented, participative, humane-oriented, autonomous and self-protective (House *et al.*, 1999; Javidan, Dorfman, Howell & Hanges, 2010). In an attempt to provide a simplified overview of the vast array of leadership attributes that the CLT covers, the six global dimensions and 21 primary dimensions are presented in Table 1.

Charismatic/value-based leadership reflects the ability to articulate inspiring visions, motivate and convey high expectations of performance (House *et al.*, 2014). Team-

oriented leaders develop and manage effective teams by invoking group cohesions and a sense of common purpose among its members (Dorfman *et al.*, 2012). Furthermore, team-oriented leaders competently organize and manage their team-members' efforts. Such leaders also possess the ability to act in a diplomatic manner whenever conflict should arise within the team (House *et al* 2014; Dorfman *et al.*, 2012). Humane-oriented leaders interact with their subordinates in a compassionate and supportive way (Dorfman *et al.*, 2012). Leaders high in this dimension endorse consideration and generosity towards one another. Consequently, they also emphasize the maintenance of good relationships among subordinates and leaders.

Table 1
Overview of global and primary dimensions in the culturally endorsed leadership theory.

Global Leadership Dimensions	Primary Leadership Dimensions
Charismatic/Value-Based Leadership	Visionary Inspirational Self-sacrificial Integrity Decisive Performance-oriented
Team-Oriented Leadership	Collaborative Team Orientation Team integrator Diplomatic Malevolent Administratively Competent
Participative Leadership	Modesty Humane orientation
Humane-Oriented Leadership	autocratic non-participative
Autonomous Leadership	Autonomous leadership*
Self-Protective Leadership	Self-centered Status conscious Conflict inducer** Face saver Procedural**

*Autonomous leadership is the only global dimension that is comprised of only one primary dimension. ** Conflict inducer and procedural have been relabeled internally competitive and bureaucratic, respectively (House *et al.*, 2014)

Participative leaders involve subordinates in decision-making and implementation (House *et al.*, 1999). The dimension of autonomous leadership depicts the degree to which a leader displays individualistic and independent leadership (Dorfman *et al.*, 2012). Self-protective leadership includes behaviors that are directed towards maintaining and enhancing the social status of a group or the individual (House *et al.*, 1999). Such leaders make sure to be held in great esteem by others, and resort to face-saving in order to prevent being associated with failure.

The dimensions of charismatic/value-based, team-oriented, humane-oriented and participative leadership have been found to be rated as positive leadership styles, whereas self-protective and autonomous leadership have been found to be perceived as negative leadership styles (House *et al.*, 2004). However, the extent of appreciation or acceptance for the respectively positive and negative leadership dimensions varies as a function of the cultural values in different societies (House *et al.*, 2004). Observations that support the link between cultural values and leadership conceptualizations continue to emerge in other cross-cultural leadership literature (Aycan, 2008; Menon, Sim, Ho-Ying Fu, Chiu & Hong, 2010; Schyns, Kiefer, Kerschreiter & Tymon, 2011). Furthermore, recent findings demonstrated that CEOs who act in accordance with their countries' CLT outperform those who deviate from the CLT (House *et al.*, 2014).

However, research within the topic of culturally endorsed leadership theories has yet to investigate to what degree leaders' gender and contextual factors besides cultural values that affect the appreciation of various leadership attributes (House *et al.*, 2014).

Gender and Leadership

Researchers that work within the topic of gender commonly draw a distinction between socio-demographic gender (man or woman) and biological sex (male or female), hence deeming gender to be a construction of society (Spence, Helmreich & Stapp, 1975). However, although gender is advocated to be a social construct, a biological component that affects the propensity to act more feminine or masculine is acknowledged (Udry, 1994). Within the confines of the current paper, gender is best defined as the "psychosocial ramifications of biological sex" (Ayman & Korabik, 2010, p. 2). Within this strain of thought, gender shapes people's schemas, stereotypes, values, attitudes toward and about men and women (Bem, 1993). Moreover, gender-specific stereotypes, identities and social roles define what it means to be a man or woman which manifests itself in differing gender-related expectations regarding behavior (Eagly, 1987a, 1987b; Korabik, 1999).

Gender and leadership style. The rise of women to leadership positions has induced a considerable amount of research on the topic of gender and leadership (Eagly & Carli, 2003). Several meta-analytical studies indicate that men and women differ in the efficiency and style of the way they lead (Eagly & Johnson, 1990; Eagly, Makhijani & Klonsky, 1992; Eagly, Karau, Makhijani, 1995), whereas others reveal no signs of an existing difference (Dobbins & Platz, 1986). Moreover, the accuracy and validity of Eagly and Johnson's (1990) and Eagly and colleagues' (1992) meta-analytic findings has been contested on grounds of both methodological shortcomings and erroneous conclusions in an extensive review article by Vecchio (2002). Another meta-analysis by Eagly, Johannesen-Schmidt and Engen from 2003 found women to display higher levels of transformational and some aspects of transactional leadership as opposed to men. However, albeit an observed effect, the difference between displays of distinct leadership styles was very small, as is similar to observations made in earlier studies on the topic (Bass, Avolio & Atwater, 1996; Maher, 1997; van Engen, van der Leeden & Willemsen, 2001). Consequently, inferring whether male and female leaders consistently display different leadership behaviors is difficult (Vecchio, 2002).

Stereotypes of male and female behavior and leadership. A possible answer to the lack of clarity is literature on the heuristics and stereotypes that individuals use to make inferences about aggregate tendencies in the behaviors of men and women (Vecchio, 2002). A stereotypical belief which has been consistently demonstrated entails how women perceive and enact stronger emotional reactions in the affective dimensions of sadness, guilt and compassion; whereas men tend to have stronger emotional ties to anger and their pride (Shields, 2013). An interesting side to such stereotypes is that they are only found to affect perceptions of behavior when individuals are asked to recall past emotional experiences and responses. Once individuals are asked to self-report recent or current emotional experiences, the stereotypical difference between men and women are not present (Feldman, Barrett, Robin, Pietromonaco & Eysell, 1998; Fisher, 1993; Robinson, Johnson, & Shields, 1998; Shields, 2013).

This effect has not only observed in self-reports; Robinson and colleagues (1998) found the same phenomenon to be present when individuals were asked to recall past and present emotional responses of other men and women. Ratings of the present behavior did not yield observations of gender stereotypical behavior, whereas recollections of past behavior were congruent with stereotypical beliefs. Hence, as opposed to reflect innate gender-specific differences manifested in reality, gender differences are argued to mostly exist within the

confines of our minds (Shields, 2013). Granted, this example stems from a different line of research than the one of interest to the present paper. It may, however, illustrate a possible mechanism in the asserted gender differences concerning leadership style and efficiency. In that regard Vecchio (2002, p. 659) proposes the following:

Extending the logic of the gender heuristic argument to judgments in work settings is a straightforward exercise. The heuristic hypothesis suggests that when respondents are asked to describe their own behavior in a job setting, stereotypic gender differences in anticipated leader inclinations may be difficult to identify. Yet, when subjects/respondents are asked to envision whether gender differences may exist or are asked to generalize over past work experiences, they may be more likely to invoke a gender heuristic to characterize differences among leaders.

In line with Vecchio's (2002) reasoning, Eagly's (1987a) social role theory of sex differences explicates how gender-related stereotypes affect individuals' expectations regarding male and female behavior. These stereotypes dictate the nature of everyday behavior-related expectations toward women and men within a society. The differences in the normative gender-role for men and women are contended to also affect men and women in their leadership behavior and efficiency (Eagly & Carli, 2003). For instance, Ayman (1993) asserts that gender-stereotypes may induce differing expectations regarding the leadership behaviors male and female leaders emphasize. Leaders with masculine personality traits are believed to care more for technicalities and the task at hand, whereas feminine personality traits in the leader will induce more person and relationship-oriented leadership behaviors (Ayman, 1993; Eagly & Diekmann, 2005). Furthermore, an inclination in respondents to define hypothetical ideal leaders in primarily masculine terms has been observed by several studies (Ayman-Nolley & Ayman, 2005; Heilman, Block, Martell & Simon, 1989; Powell & Butterfield, 2002; Schein, Mueller, Lituchy & Liu, 1996). The masculine terms, often referred to as competitiveness, daring and assertiveness, stand in contrast to the stereotypically inferred feminine properties (sensitivity, compassion, understanding) of women and female leaders (Vecchio, 2002).

Recall the aforementioned parallel to research on gender differences in affective and emotional responses which show that there exist differences on a hypothetical and stereotypical level that are not present in reality (Shields, 2013); a similar phenomenon is assumed to be present for gender related differences in leadership (Vecchio, 2002). In the

present research, individuals' perceptions regarding the benefit of displaying various leadership attributes are to be assigned to *hypothetical leaders*, not evaluated in *real leaders*. Following Vecchio's (2002) logic, it is arguably more likely that observations of gender differences are made when rating hypothetical leaders, since the stereotypical beliefs of individuals may play a greater role in determining the believed importance of certain leadership attributes for hypothetical men and women.

Gender, leadership effectiveness and work context. Men and women are evaluated differently irrespective of actual performance. A study by Wennerås and Wold (1997) revealed that peer-reviewers overestimated the academic performance of men and underestimated the performance of female authors when evaluating applications for tenure-track positions. Furthermore, work on the shifting standards theory shows that performance appraisals differ for men and women. A performance deemed to be "good" does not imply the same level of high performance for a woman as it does for a man. As with the aforementioned gender-difference related phenomena, the underlying cause is believed to be stereotypical distortions in subjective assessments of male and female performance (Biernat, 2003; Biernat & Manis, 1994; Biernat & Fuegen, 2001). A rather recent study on the topic found numerical ratings of performance to differ for male and female attorneys in favor of the male attorney, even though the narrative performance reviews were equally positive for both sexes (Biernat, Tocci & Williams, 2011).

As previously mentioned, concepts of leadership and successful management are stereotypically defined in predominantly masculine terms (Eagly, 2007; Heilman *et al.*, 1989; Powell & Butterfield, 2002; Schein *et al.*, 1996). In work contexts dominated by men, women in leadership positions are devaluated as they are perceived to inadequately accommodate the masculine properties that are prescribed in order to be a good leader (Eagly & Karau, 2002; Heilman, 2001). Early research revealed little evidence of such prejudice (Dobbins & Platz, 1986; Feldman, 1993). More recent findings, however, indicate a contextual effect in evaluations of leader effectiveness that induces individuals to assign lower ratings of performance to female leaders that operate in male dominated work settings (Eagly & Diekmann, 2005; Heilman, 2001; Heilman *et al.*, 2004). Thus, the perception of women's behavioral deviations from their gender role may be more intensified when they hold leadership positions in work settings dominated by men and masculine values (Eagly & Karau, 2002; Heilman, 2001).

Moreover, a recent investigation of maritime leaders by Delgado and colleagues

(2015) revealed an inclination in female leaders to underestimate their own leadership abilities; whereas male leaders were more likely to overestimate theirs. More specifically, female leaders exaggerated their negative, and downplayed their positive, leadership attributes, as opposed to male leaders who did the opposite. Ratings provided by subordinates, peers and superiors uncovered no real difference between the male and female maritime leaders. These findings stand in line with the claim that self-evaluations may be subject to stereotypical thinking (Vecchio, 2002) and that such effects are stronger in male-dominated work contexts (*e.g.* Eagly & Karau, 2002).

Aim of this Paper

The purpose of this study is to investigate whether implicit leadership theories differ for male and female leaders, and whether the difference is greater in a neutral versus masculine work context.

Hypothesis 1. As heuristics and stereotypes are argued to affect the expectations and evaluations of leaders (Ayman & Korabik, 2010), especially within a hypothetical sphere (Vecchio, 2002), it is proposed that the same effect may be present in implicit leadership theories. Similar to how underlying cultural values are shown to shape people's implicit beliefs about ideal leadership (House *et al.*, 2004; House *et al.*, 2014), it is hypothesized that underlying gender stereotypes will affect the perceptions of elements in the culturally endorsed leadership theory. Furthermore, attempts to find earlier research similar to the present research were fruitless. Consequently, in order for the hypothesis not to be too suggestive, a decision was made to refrain from inferring the nature of difference between hypothetical male and female leaders. For these reasons no predictions concerning which attributes will be rated as more or less important depending on the leaders' gender are made; only that they will differ in some way. Thus, the following hypothesis is presented:

Hypothesis 1: Individuals will rate the importance of 21 leadership attributes differently as a function of the gender of the leader.

Hypothesis 2. Research has revealed that female leaders are prejudiced in male dominated work settings as they are stereotypically perceived to lack the necessary properties to function in such a setting (Eagly & Karau, 2002; Heilman, 2001). As such, the effect assumed in hypothesis 1 is hypothesized to be intensified in masculine work settings. An example of a male dominated work context is the maritime industry, in which the occupation of a captain has commonly been prescribed to men (Delgado *et al.*, 2015). Hence, the expectation of displayed leadership attributes in respectively male and female leaders will

differ even more when the hypothetical leader is portrayed to operate in a work context predominantly populated by men, like the maritime sector (Delgado *et al.*, 2015). As with hypothesis 1, the present paper refrains from inferring whether some attributes will be rated differently whereas others will not as a function of the leaders' gender. Hypothesis 2: *The rated importance of leadership attributes in respectively men and women will be larger in a masculinized work context like the maritime sector as opposed to a more gender-neutral marketing work context.*

Method

The Present Project

The present research project was initiated and carried out by two master students under supervision by Professor Kjell Ivar Øvergård at the community college of Buskerud and Vestfold (HBV) and Associate Professor Cato Alexander Bjørkli at the University of Oslo (UiO). As the students initiated the project, the scope and ambitions of the project were first outlined by the students and then approved by a supervisor. Decisions regarding methodological choices were made in collaboration with, and approved by, Professor Øvergård.

In total, three attempts to collect data were made throughout the project. In early stages a web-form of GLOBE's original leadership survey was distributed to an international sample of maritime leaders via a colleague of one of the supervisors. The questionnaire yielded an extremely low response rate. The questionnaire comprised 443 items. A total of 2904 individuals received an email-invitation, of which only 96 (3.3%) responded. Furthermore, only 26 (27.1%) of the 96 responses were complete. This was presumably due to the sheer size of the GLOBE questionnaire. As another attempt to recruit participants from the maritime sector in Norway was unsuccessful, a change of both the project's scope and measurement tool was warranted.

Consequently, the students proposed the presented scope of the project. In consideration of obtaining a sufficient number of responses in a rather short period of time, a new survey was developed. By using GLOBE's 21 primary leadership dimensions as items, a new and substantially shorter version of the survey was constructed. The new survey was developed by the students, and modified via feedback from a supervisor. The presently investigated data were collected by the students.

Sample and Procedure

A total of 579 (311 women and 268 men, $M_{age} = 24.2$, $SD_{age} = 5.01$) students from Norwegian universities and University colleges participated in the study. Respondents represented a total of 29 nationalities, but 84.6 percent of these were Norwegian. The second and third most represented nations were Brazil and Russia with 2.2 and 1 percent of the total sample, respectively. Possible respondents were recruited while either working alone or in breaks between lectures. Possible respondents were made aware that participation was voluntary and that they could choose not to hand in the form should they happen to change their mind. Participants were given access to free sweets. Each participant was randomly selected to answer one of two different versions of the questionnaire (male leader, female leader). Randomization occurred by mixing the two versions of the questionnaire randomly into the stacks of questionnaires that were distributed to respondents. In total, 116 men and 160 women completed the female questionnaire, and 103 men and 164 women completed the male questionnaire (numbers are corrected for missing scores).

In terms of making the data as comparable to earlier GLOBE work as possible, it would have been optimal to have a sample comprised of respondents from the business sector. Again, difficulty in obtaining a proper sample prompted the choice of conducting a data collection at Universities and Community Universities.

Ethical Considerations

Participation in the research was deemed highly unlikely to possibly expose any individual to physical or psychological harm or displeasure. As previously stated, participants were informed in both verbal and written form that participation was voluntary and withdrawal from the study would have no consequences. Furthermore, the expected duration of participation, which was approximately 10 minutes, and proceedings to complete the questionnaire were outlined to all possible participants.

One concern was that respondents who had volunteered and received sweets would feel obliged to participate even though they had changed their mind. Consequently, when the survey was presented verbally to possible respondents they were reassured that one could withdraw under any circumstances. Another possible issue that was addressed pertained to some of the male or female respondents possibly being offended if they answered a survey with portrayed leaders of the opposite gender. Some respondents may have been offended that the leader portrayed in the questionnaire was explicitly a member of the other gender, and may have believed it to be rather sexist. Consequently, a decision was made to ask

respondents whether they would like to be debriefed and informed of the underlying purpose of the project and our hypotheses. Consent forms and special storage of data was deemed unnecessary as responses were anonymous and no sensitive data were collected.

Survey

For this study, a short version of project GLOBE’s original leadership- survey (GLOBE foundation, 2006) was constructed. The following sections describe the nature of the scale and the experimental manipulation that was added to the questionnaire.

Scale. The original survey comprises 112 leadership items. These 112 items construe 21 primary leadership dimensions (House *et al.*, 2014). In the version of the survey used for the present thesis, the 21 primary leadership dimensions served as items. Furthermore, each of the short-version’s 21 items was accompanied by an explanatory elaboration of the items’ meaning (see Figure 1).

Figure 1

Guide for survey proceedings, properties of the rating scale and how the questions were structured in the questionnaire. The respondent’s ratings were placed to the far right of the questions.

Leader description 1

Jane Edwards is the CEO of a marketing firm that operates in large parts of Europe. Jane and the corporate team lead 60 employees with varying responsibilities and tasks within the firm. As CEO, she is enriched with authority and is involved in high-level decision-making. Her responsibility is to ensure corporate growth and the well being of the firm and its employees, as well as creating strategies toward increasing both the short- and long-term value of the firm.

Survey for description 1

Underneath are several behaviors and characteristics that can be used to describe leaders. Each behavior or characteristic is accompanied by a short definition to clarify its meaning. Please indicate with a number ranging from 1 to 7 to what degree the varying characteristics and behaviors inhibit or contribute to Jane’s performance as a leader.

SCALE	
1	= This attribute greatly inhibits a CEO from being an outstanding leader.
2	= This attribute somewhat inhibits a CEO from being an outstanding leader.
3	= This attribute slightly inhibits a CEO from being an outstanding leader.
4	= This attribute has no impact on whether a CEO is an outstanding leader.
5	= This attribute contributes slightly to a CEO being an outstanding leader.
6	= This attribute contributes somewhat to a CEO being an outstanding leader.
7	= This attribute contributes greatly to a CEO being an outstanding leader.

	Leadership Attributes	Associated Characteristics
1	Visionary	<i>She has foresight, exhibits preparedness, is anticipatory and plans ahead</i>
2	Inspirational	<i>She is enthusiastic, positive, a morale booster and motive arouser</i>
3	Self-Sacrificial	<i>She is a risk taker, self-sacrificial and convincing</i>
4	Integrity	<i>She is honest, sincere, just and trustworthy</i>
5	Decisive	<i>She is willful, decisive, logical and intuitive</i>
6	Performance Oriented	<i>She is improvement-oriented, excellence- and performance-oriented</i>

Associated characteristics. As an example, the primary dimension of “visionary” served as the item to be rated and the accompanying section of “associated characteristics read “she has foresight, exhibits preparedness is anticipatory and plans ahead” (see Figure 1).

The items that comprised the primary dimension of “visionary” (foresight, preparedness, anticipatory and plans ahead) in GLOBE’s original survey were the ones included in the description (see Figure 1). Thus, GLOBE’s primary leadership dimensions served as leadership attribute-items to be rated on a rating scale ranging from 1 to 7. For further elaboration on the properties of the rating-scale, see Figure 1.

The “Associated Characteristics” column was added for two reasons. First, to enhance the comprehensibility of the various leader attribute-items and what they were meant to entail. Second, in interest of allowing possible comparisons to earlier GLOBE research to be made, the underlying factorial structure was wanted as similar to GLOBE’s model (House *et al.*, 2014) as possible.

Table 2

Descriptions for respectively male and female leaders in a marketing and maritime domain

		<i>Leader gender</i>	
		<i>Male</i>	<i>Female</i>
<i>Marketing</i>		<i>John Edwards is the CEO of a marketing firm that operates in large parts of Europe. John and the corporate team lead 60 employees with varying responsibilities and tasks within the firm. As CEO, he is enriched with authority and is involved in high-level decision-making. His responsibility is to ensure corporate growth and the well-being of the firm and its employees, as well as creating strategies toward increasing both short- and long-term value of the firm.</i>	<i>Jane Edwards is the CEO of a marketing firm that operates in large parts of Europe. Jane and the corporate team lead 60 employees with varying responsibilities and tasks within the firm. As CEO, she is enriched with authority and is involved in high-level decision-making. Her responsibility is to ensure corporate growth and the well-being of the firm and its employees, as well as creating strategies toward increasing both the short- and long-term value of the firm.</i>
		<i>Michael Turner is captain of a passenger ferry traveling between Oslo and Kiel. Michael leads a highly trained team with varying responsibilities within the ship. All onboard, including crew and passengers, are under his authority, ultimately rendering him responsible for the safety and efficiency of all operations during voyage. Among others, such operations include navigation, crew management, passenger well-being and so forth.</i>	<i>Michelle Turner is captain of a passenger ferry traveling between Oslo and Kiel. Michelle leads a highly trained team with varying responsibilities within the ship. All onboard, including crew and passengers, are under her authority, ultimately rendering her responsible for the safety and efficiency of all operations during voyage. Among others, such operations include navigation, crew management, passenger well-being and so forth.</i>

Experimental manipulation. To test hypothesis 1, the questionnaire included two short descriptions of respectively two male or female leaders in order to induce respondents to think of either a male or female leader when rating leadership attributes. To test hypothesis 2, one leader was presented as a CEO in an international marketing firm whereas the second description portrayed the captain of a ship; the latter serving as the male dominated work context. Each description was followed by a guide of what to do next, followed by the 21 leader attribute items (See Figure 1). The male and female CEO and captain descriptions are presented in Table 2.

To further induce the rater to think of either a female or male leader as the ratings were assigned, the leaders' gender was referred to in the "Associated Characteristics" column ("She is..." versus "He is...") (see Figure 1). Each questionnaire included exclusively either female or male leaders across both work contexts.

Research Design

A split-plot experimental design with 'gender of leader' as between-group variable and 'work domain' as within-subject variable was employed, as the split-plot design allows comparisons of between-group effects across several experimental conditions or repeated measures (McGee, 2005). Since a split-plot design was employed, a repeated measures GLM analysis using IBM SPSS version 22 was the chosen tool for testing the investigated relationships. A GLM model was chosen because the properties of the analysis matched the nature of the present research design. Furthermore, there currently exist no non-parametric alternatives for multivariate analyses in IBM SPSS or in other statistical packages like SAS. Likewise, effect size measures for multivariate non-parametric analyses similar to two-way ANOVA are still a relatively recent endeavor and are not included in standard statistical software-packages (Grissom & Kim, 2012).

Preliminary Tests of Reliability

The reliability of the obtained measures was tested with calculations of Cronbach's Alpha using IBM SPSS version 22. First, the reliability for the culturally endorsed leadership theory's six dimensions of leadership was calculated. The Cronbach's Alpha for the six dimensions can be inspected in Table 4. George and Mallery's (2003) rule of thumb for interpretation of Cronbach's alpha (see Table 3) was used to assess the reliability of the scales and subscales.

As can be derived from Table 4, the reliability of the scales is, at best, questionable

and poor for the various dimensions. Not one of the dimensions reached an acceptable alpha above .7 (Table 4). Although most of the alpha scores are above the unacceptable level of below .5, some authors do not consider alphas lower than .7 to be of any interest (DeVellis, 2003; Tavakol & Dennick, 2011). However, interpretation of alpha scores needs to be done with the scales' number of items in mind. Hence, one ought to adjust the interpretation of the alpha according to the number of items (Cortina, 1993).

Table 3
George and Mallery's (2003) rule for interpretation of Cronbach's Alpha.

Cronbach's Alpha (α)	Assumed quality
$\alpha > .7$	Acceptable
$\alpha > .6$	Questionable
$\alpha > .5$	Poor
$\alpha < .5$	Unacceptable

Regardless, the reliability of the scales and subscales were evaluated as being too low to be utilized in further analysis. Consequently, a decision was made to investigate the 21 items as separate variables. This was not seen as a major issue as the main objective for the research was to detect gender differences in implicit leadership theories, as opposed to the direct measurement of the six dimensions in the culturally endorsed leadership theory (House *et al.*, 2014).

Table 4
Overview of Cronbach's Alpha statistics for the CLT-dimensions as measured by the presently employed questionnaire.

GLOBE global dimension	Cronbach's alpha	
	Marketing condition	Maritime condition
Charismatic/value-based leadership	.601	.433
Team-oriented leadership	.688	.613
Participative leadership	.519	.415
Humane-oriented leadership	.626	.677
Autonomous leadership	.*	.*
Self-protective leadership	.650	.521

*Calculations of Cronbach's Alpha are not possible as the dimension is measured by a single item.

Preparation of data

To ease the interpretation of results, the negatively framed items in the questionnaire

were reversed. The list of reversed items included the items of “nonparticipative”, “autocratic”, “malevolent”, “self-centered”, “status conscious”, “conflict inducer”, “face-saver” and “bureaucratic”. This list was based on the leader attributes that House and colleagues (2004) found to be negatively rated across all countries that were investigated. These findings have been firmly replicated in a recent study conducted in Norway (Fjærli *et al.*, 2015).

As the negative leader attributes are reversed, it is possible to draw conclusions from the sum-scores of the 21 variables. Rather intuitively, utilizing unreversed scores to compute a sum-score would render the positive and negative variables to null each other out; consequently distorting the results. The presently employed practice is consistent with recent leadership research that investigated a combination of negative and positive leadership attributes (Delgado *et al.*, 2015).

The sum-score in question is to be observed as a total score of how much the investigated variables (leadership attributes) are believed to affect leaders’ performance. High scores would be viewed as an indication of an expectation toward the display of positive leader attributes (*e.g.* visionary) and a higher discontent for the display of negative leader attributes (*e.g.* malevolent) and vice versa for a total score closer to 1.

Evaluation of Effect Sizes

An increasingly common practice in research pertains to the consideration of effect size, as opposed to solely utilizing *p* values (Levine & Hullet, 2002), in determining the significance of observed effects in research (See also Cohen, 1992, 1994). In the present research, partial eta squared (η_p^2) served as the measure of effect size, as it is the only effect size statistic offered by IBM SPSS 22 in GLM repeated measure-analyses. Cohen’s (1988) rules for interpretation of partial eta squared effect sizes will be applied in the interpretation of the present observations. As such, partial eta squared statistics larger than .02, .13, and .26 will be evaluated to be small, medium and large effect sizes, respectively (Cohen, 1988).

Results

To test for the effect of leaders’ gender upon the rated importance of the various leadership attributes, a 21x2 (leader attributes x work domain) repeated measures GLM analysis was conducted using IBM SPSS version 22. Note that only aggregated mean scores of the ratings given to the 21 leader attribute variables are displayed. Hence, the score may imply both higher appreciation of positive leader attributes and lower acceptance toward

negative leader attributes. However, in interest of simplicity, the mean scores will be investigated only as measures of total difference in ratings of leader attributes in male and female leaders.

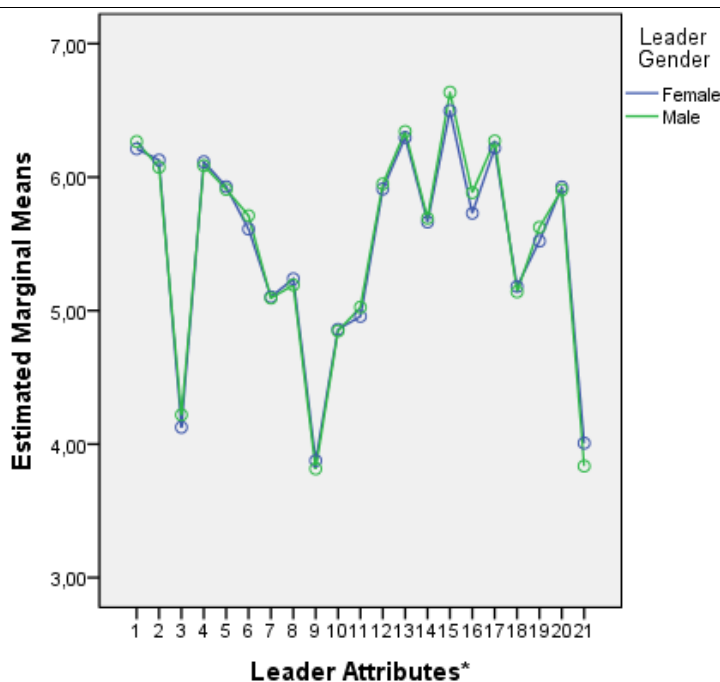
Tests of Sphericity and Normality

Mauchly's test of showed that the assumption of sphericity was violated ($X^2 = 1524.12$, $df = 209$, $p < .000$). The Greenhouse-Geisser correction was used to adjust the degrees of freedom to correct the violation (Field, 2013).

A Shapiro-Wilk test was conducted to test whether the distribution of scores followed a normal distribution. The test revealed that every single variable in both work contexts did not have normally distributed scores ($p < .000$).

Figure 2

Comparison of mean ratings given to the 21 leader attributes for male and female leaders.



*Leader attributes: 1) Visionary, 2) Inspirational, 3) Self-Sacrificial, 4) Integrity, 5) Decisive, 6) Performance oriented, 7) Nonparticipative, 8) Autocratic, 9) Autonomous, 10) Modesty, 11) Humane Orientation, 12) Collaborative Team Orientation, 13) Team Integrator, 14) Diplomatic, 15) Malevolent, 16) Administratively Competent, 17) Self-Centered, 18) Status Conscious, 19) Conflict Inducer, 20) Face-Saver, 21) Bureaucratic.

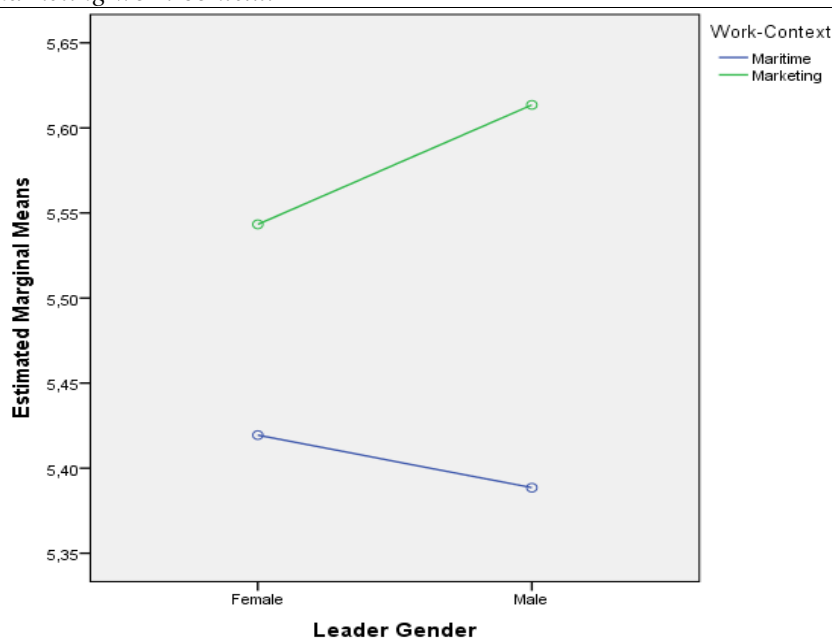
Hypothesis 1: The Effect of Leader Gender

The aggregate of rated importance of leadership attributes across both work contexts

was higher for male leaders (Mean = 5.501, 95% CI [5.449, 5.553]) than female leaders (Mean = 5.481, 95% CI [5.429, 5.534]). However, the difference was not significant and of miniscule effect size ($F(1, 540) = .272$, $Mean^2 = 2.197$, $p = .602$, $\eta_p^2 = .001$). Note that the means for these differences are aggregate scores of ratings from both work contexts. For a comparison showcase of the mean scores given to the individual 21 items, see Figure 2.

Leader gender x Items. The interaction effect between items and leader gender indicated that there was no overall effect ($F(12.007, 6483.897) = .849$, $Mean^2 = 1.644$, $p = .599$, $\eta_p^2 = .002$). Thus, there were no single variables that were rated differently as a function of leader gender.

Figure 3
Estimated marginal means for female and male leaders in the maritime and marketing work-context.



Hypothesis 2: The effect of work context

A close to medium main effect of work context affected the ratings given to the leader attributes ($F(15.310, 8267.143) = 52.131$, $Mean^2 = 49.20$, $p < .000$, $\eta_p^2 = .088$). Work-context and leader gender exerted a significant but very small interaction effect upon the rated benefit of leadership attributes in male and female leaders ($F(1, 540) = 8.189$, $Mean^2 = 14.538$, $p = .004$, $\eta_p^2 = .015$). As can be derived from Figure 3, the display of leader attributes is rated as more beneficial for male than female leaders in the marketing work context ($Mean_{male} = 5.614$, 95% CI [5.556, 5.671]; $Mean_{female} = 5.543$, 95% CI [5.484, 5.602]). In the maritime

work context, the display of leader attributes was rated to be of higher benefit to female leaders (Mean_{male} = 5.389, 95% CI [5.332, 5.445]; Mean_{female} = 5.419, 95% CI [5.362, 5.444]). Consequently, hypothesis 1 is rejected and hypothesis 2 is partially accepted.

Discussion

The purpose of this study was to investigate to what extent the display of leadership attributes are beneficial to a varying degree in respectively male and female leaders, and whether this difference was greater in a masculine opposed to a neutral work context.

Hypothesis 1 stated that there would be an observable difference in the appreciation of the 21 leadership attributes as a function of leaders' gender. Based on the observations made, hypothesis 1 is rejected. Hypothesis 2 stated that hypothesized effect from hypothesis 1 would be intensified in a masculine work setting. Hypothesis 2 is not rejected ($p < .05$) by the present observations. However, the effect size of the observed effect is miniscule ($\eta_p^2 = .015$), and can hardly be considered to yield any theoretical or practical significance.

Assuming that these results represent reality, a few implications of this research can be derived. *First*, the present observations indicate that implicit leadership theories do not differ for male and female leaders. As such, one can arguably be inclined to assert that GLOBE's culturally endorsed leadership theory (House *et al.*, 2014) is not affected by leader gender. As such, project GLOBE's culturally endorsed leadership theory may accommodate in a globalized world with both male and female leaders.

Second, the medium main effect of work context ($\eta_p^2 = .088$) indicates that the appreciation of leader attributes varies between work contexts. Consequently, it seems that the culturally endorsed leadership theory may also be sensitive to the work context in which leadership is to be practiced, not the only the culturally values of a country. As such, the culturally endorsed leadership theory may be employed to allow leadership efforts to be assessed and adjusted to distinct organizational environments.

Third, the present findings stand in contrast to the assumptions made by Ayman & Korabik (2010) and other scholars who contend that different leadership behaviors are expected from men and women (e.g. Ayman, 1993; Eagly & Carli, 2003). Furthermore, Vecchio's (2002) stated notion concerning the stylistic differences that have been observed in male and female leaders being caused by stereotypical perceptions of male and female leadership is not supported.

Fourth, earlier findings have demonstrated that leadership is defined in mainly

masculine terms (e.g. Eagly, 2007; Powell & Butterfield, 2002). According to the present findings, this does not seem to affect to what degree male and female leaders are rated to benefit from displaying the presently measured leadership attributes. The observations made in investigation of hypothesis 2 indicate that a masculine work context may induce slightly different expectations regarding the leadership attributes of leaders. An observation that stands in line with earlier discussed findings (Eagly *et al.*, 1995; Eagly & Karau, 2002). However, the miniscule magnitude of the effect ($\eta_p^2 = .015$) renders little practical significance to be drawn from the findings. As such, it seems that the leader attributes that are expected to be important to leaders are the same for male and female leaders irrespective of a marketing or maritime work context.

An Attempt to make Sense of the Present Findings

At this point, one may propose two assumptions concerning the understanding of the present results. *First*, the observed results somewhat reflect reality, despite the abundance of literature that would suggest otherwise (e.g. Eagly, 2007; Ayman & Korabik, 2010; Eagly & Carli, 2003). *Second*, methodological circumstances like faulty experimental manipulations and measurement errors distorted the hypothesized effect in question; consequently suppressing a possible effect from being observed in the present research. As available research fails to provide possible explanations as to why the present observations were made, a discussion of the latter assumption is warranted.

One ought to consider the possibility that the experimental manipulation in the employed questionnaire did not elicit the proper state of mind in the respondent (Vecchio, 2002). To clarify, consider that the respondent would need to think of the hypothetical leader as a woman to utilize any implicit stereotypical beliefs about women and female leadership that might differ from those held about male leaders. Given that the questionnaire failed to induce stereotypical thought patterns to be employed by respondents, any possible effects remain uncovered.

Furthermore, to avoid making the investigator's hypothesized assumptions too transparent in the questionnaire, having respondents rate both male and female leaders was avoided. However, allowing respondents rate the importance of leadership attributes in both male and female leaders could possibly have yielded different results. The reasoning behind this argument comprises three underlying assumptions. *First*, individuals hold the stereotypical belief that men and women are different in terms of behavioral and psychological properties (Shields, 2013). *Second*, although these differences have been shown

to be virtually non-existent in reality, the stereotypes guide us in tasks concerning hypothetical evaluations of gender differences in men and women (Vecchio, 2002; Shields, 2013). *Third*, these stereotypical beliefs are used to differentiate men and women to a greater extent rather than defining the behavioral properties of a man or woman.

Given these assumptions, the stereotypical beliefs are more likely to be utilized by individuals in tasks of comparative nature as opposed to tasks where no comparisons are implied. As an example, two different questions may be raised; “how should women act given these circumstances”, versus “how should a woman act given these circumstance, compared to a man?”. In more simplistic terms the questions may be framed “what are women like?” versus “what are women like, compared to men?”. One may argue that once an individual is made aware that both a male and female leader is being defined, the stereotypical “men and women are different” thought pattern is more likely to occur. In this instance the individuals’ ratings may more likely be affected by stereotypical beliefs about men and women. Consequently, a questionnaire that induces the respondent to make comparisons between genders may have yielded results of more significance. Albeit of logical nature, these assumptions could be interesting to investigate further, as comparisons between genders are likely to occur in real organizational proceedings concerning selection of candidates and promotions (Eagly, 2007).

Methodological Limitations

In regard to the generalizability and practical applicability of the present findings, some methodological limitations of the utilized sample and research design ought to be addressed. The generalizability of the reported observations is limited to the population from which the sample is drawn. Consequently, one ought to be cautious when making inferences about the investigated phenomena in, for example, organizations with a workforce with a mean age of 34 based on the present results. As a result, the practical implications that this research could have posed are somewhat reduced. Intuitively, research of this kind may be more useful to scholars and practitioners within the development a model of global leadership if the results are generalizable to the kind of context and populations in which the knowledge is to be applied.

Sample size. Another issue to address is the size of the sample. According to Bartlett, Kotrlik and Higgins’ (2001) guidelines for determination of sample size the investigated sample is adequate. An important consideration to account for was the fact that a categorical variable was essential to the analysis (leader gender), which opts for a larger sample than

exclusively using a scaled variable (e.g. 7-point rating scale). Nevertheless, greatly altering the sample size would hardly have had any critical impact on the present study. The miniscule effect sizes are evident across all relationships (Cohen, 1988), significant or not. In this case, altering the sample size may have affected the p -values of the relationships and subsequently their likelihood of reaching statistical significance (Cohen, 1994). The effect size, however, would not have been affected accordingly, as effect size is not affected by sample size the same way p -values are (Cohen, 1992, 1994). Granted, sample size may reduce the standard deviation as larger samples increase the likelihood of scores being centered on the mean (Field, 2013).

Test reliability and validity. The poor or at best questionable reliability of the measurement tool may possibly have had an impact on the present research. Whilst the low alphas of the presently utilized questionnaire (see Table 4) are not entirely unacceptable to some authors (George & Mallery, 2003), others suggest that the low alphas put the consistency of the measurements into question (DeVellis, 2003). Uncertainty of a measurement tool's reliability entails uncertainty about the validity of the observations made by the instrument; an unreliable instrument cannot be valid the same way an invalid test can be reliable (Tavakol & Dennick, 2011).

With this in mind, shortly discussing the construct and content validity of the questionnaire is warranted. A questionnaire's level of construct validity addresses to what degree the questionnaire measure what it is intended to measure (Cronbach & Meehl, 1955). Moreover, it is important to note that construct validity of a measure can hardly be proven by a single study. Construct validity is assumed from studies that confirm that the questionnaires' measures correlate with the intended constructs (Peter, 1981). Consequently, expecting flawless construct validity in the present questionnaire would arguably have been a long stretch. Yet, a question still remains as to whether the questionnaire measured the variety of leadership facets that it was intended to measure.

One possible issue in this regard is the content validity of the questionnaire. According to Lawshe (1975), evaluating content validity pertains to whether the contents of a questionnaire reflect the array of facets of whatever it is intended to measure. In the present case, that would be an implicit leadership theory which resembles the culturally endorsed leadership theory's theoretical base as much as possible. In the present questionnaires defense, the actual contents and structure of the questions in the utilized questionnaire were based on the previously used and validated GLOBE questionnaire (House *et al*, 2004).

However, according to common sense, contents of a questionnaire really only matter if the respondent actually comprehends the intended nature of those contents. In this respect, two possible issues with the present questionnaire should be brought to light.

First, the explanatory definitions of the original 112 GLOBE items were excluded in the process of making a short version of the questionnaire. As an example, the item of “Anticipatory” was accompanied by the following definition: “*Anticipates, attempts to forecast events, considers what will happen in the future*” (from GLOBE’s Alpha questionnaire, GLOBE foundation, 2006, p. 11). The present questionnaire did albeit include explanatory definitions, but they were arguably not nearly as elaborative as the ones explaining GLOBE’s original items. In comparison, recall the first item in the present questionnaire, “Self-Sacrificial”, which was accompanied by the following definition: “She is a risk taker, self-sacrificial and convincing”. One may argue that the first item’s meaning is more clear-cut in comparison to the second item. Consequently, it is possible that the short questionnaire was stripped of explanatory information to a point where the respondent had a difficult time making sense of the various items.

Second, the questionnaire was administered in English to a sample of which 84.6 percent were Norwegian respondents. This was not considered to be an issue as English can be considered to be a second language in Norway (Machan, 2014; English proficiency index, 2014). However, some terms may have required a highly academic appreciation of the English language in order to aid in the comprehension of the item’s’ nature. This may have further stripped the respondent of information essential to the respondent’s understanding of the items; and subsequently the content validity of the questionnaire.

Choice of analysis. The choice of data analysis in conjunction with the nature of the available data is possibly an issue in regard to the accuracy of the present findings. The aforementioned choice of the GLM repeated measures was made based on the apparent match between the employed split-plot research design and the properties of a GLM analysis. However, a few assumptions regarding the nature of variables and properties of the data should be taken into consideration when employing a GLM analysis. A short discussion of possible issues follows.

In order to conduct a GLM repeated measures analysis, the dependent variable should be measured at a continuous level. As such, the 7-point rating scale utilized in the present research is a good fit. Furthermore, the independent variables should comprise two categorical groups. This assumption is accommodated with the use of gender (Male, Female) and work

context (Marketing, Maritime) as independent variables well. Thus, the choice of analysis seems right in considering the nature of the variables in the present research design.

However, assumptions regarding the descriptive properties of the data are not met sufficiently. A GLM analysis assumes the distribution of scores in the dependent variable to be approximately normally distributed. A Shapiro-Wilk test of normality conducted in IBM SPSS 22 revealed that normality was violated. This is a possible issue, but GLM analyses are actually rather robust in this regard, and moderate violations are consequently not detrimental to the validity of results (Harwell, Rubinstein, Hayes, & Olds, 1992; Lix, Keselman, & Keselman, 1996).

Future Research

To counteract many of the various methodological limitations of the present research, future research within this topic ought first and foremost to utilize different measurement tools and samples. If possible, researchers may want to attempt a similar project with the original GLOBE questionnaire comprised of 112 items. Alternatively, I suggest the investigation of only one or two of the leadership dimensions in the culturally endorsed leadership theory. The main concern should still be to measure possible differences in the conceptualizations of male and female leadership, not the entirety of the culturally endorsed leadership theory. Either way it is important to utilize more reliable and valid tools of measurement than those used in the present research.

Furthermore, future research designs could include a condition in which respondents are asked to rate the importance of attributes to a leader of both sexes. It is interesting to investigate whether the presently hypothesized effects may be evident in scenarios where individuals are asked to compare the sexes.

Moreover, the investigated sample consisted of students with a mean age of 24 years. In order for future research to pose meaningful practical implications for real life practice, samples from drawn from seasoned organizational settings may be important. Investigating a sample with a higher mean age is interesting also in consideration of the significant relationship between respondent age and rated importance of leader attributes.

To expand the scope of the present findings, cross-cultural studies within this topic should be conducted for a few reasons. First, such research could extend our knowledge regarding Ayman and Korabik's (2010) assertion that gender and culture exert a joint effect upon perceptions surrounding leadership phenomena. Second, literature shows that the opportunities for women to attain leadership responsibility differ across different cultural

backgrounds. For instance, women in Nordic countries advanced into leadership positions far earlier than women in seemingly similarly developed countries like France or Belgium (Karvonen & Selle, 1995). Similar differences in countries with catholic heritage as opposed to countries predominantly tied to religious paradigms of protestant heritage (Kenworthy & Malami, 1999). Third, cultural values also affect GLOBE's implicit leadership theories (House *et al.*, 2004; House *et al.*, 2014). With GLOBE's findings and Ayman and Korabik's (2010) review in mind, one may contend the value of investigating whether leaders' gender exerts differing effects upon implicit leadership theories in differing societal and cultural environments.

Another approach that future research could embrace is an investigation qualitative in nature. Analyzing individuals' narratives about their perceptions and thoughts about gender differences may unveil thus far uninvestigated contingencies.

Conclusion

The aim of the current research was to investigate whether implicit leadership theories differ for male and female leaders, and whether the difference is greater in a neutral versus masculine work context. According to the observations made in the present research, the implicit leadership theories did *not* differ as a function of leaders' gender. Furthermore, an interaction effect between work context and leaders' gender was found to significantly affect the implicit leadership theories as rated for male and female leaders. However, the effect size of this relationship was far too small to be of any practical significance. Given that the present observations are true, the present paper may conclude that the individuals in the investigated sample do not hold differing implicit leadership theories for respectively male and female leaders. Furthermore, that work-context in interaction with leader gender exerts a miniscule effect upon the appreciation of leader attributes for male and female leaders. However, the present author would like to emphasize that the magnitude of the methodological limitations in the present research deem the findings to be suggestive at best.

References

- Ayman, R. (1993). Leadership perception: The role of gender and culture. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 137-166). New York, NY: Academic Press.
- Ayman-Nolley, S., & Ayman, R. (2005). Children's implicit theory of leadership. In B. Schyns & J. R. Meindl (Eds.), *Implicit leadership theories: Essays and explorations* (pp. 189-233). Greenwich, CT: Information Age
- Avolio, B. J., Reichard, R. J., Hannah, S. T., Walumbwa, F. O., & Chan, A. (2009). A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies. *The leadership quarterly*, 20(5), 764-784.
DOI: <http://dx.doi.org/10.1016/j.leaqua.2009.06.006>
- Aycan, Z. (2008). Cross-cultural approaches to leadership. In M. F. Peterson, P. B. Smith, & D. C. Thomas (Eds.), *Handbook of cross-cultural management research*. Thousand Oaks, CA: Sage.
- Ayman, R., & Korabik, K. (2010). Leadership: Why gender and culture matter. *American Psychologist*, 65(3), 157. DOI: <http://dx.doi.org/10.1037/a0018806>
- Bass, B. M. (1997). Does the transactional-transformational leadership paradigm transcend organizational and national boundaries? *American Psychologist*, 52(2), 130-139.
DOI: <http://dx.doi.org/10.1037/0003-066X.52.2.130>
- Bass, B. M. (2008) Globalization and cross-national effects. In B. M. Bass & R. Bass (Eds.), *The Bass Handbook of Leadership: Theory, research and managerial implications* (pp. 980-1048). New York: Free Press.
- Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *Applied Psychology: An International Review*, 45, 5-34. DOI: 10.1111/j.1464-0597.1996.tb00847.x
- Bem, S. L. (1993). *The lenses of gender: Transforming the debate on sexual inequality*. New Haven, CT: Yale University Press.
- Biernat, M. (2003). Toward a broader view of social stereotyping. *American Psychologist*, 58, 1019-1027. DOI: <http://dx.doi.org/10.1037/0003-066X.58.12.1019>
- Biernat, M., & Fuegen, K. (2001). Shifting Standards and the Evaluation of Competence: Complexity in Gender-Based Judgment and Decision Making. *Journal of Social Issues*, 57 (4), 707-724. DOI: 10.1111/0022-4537.00237
- Biernat, M., & Manis, M. (1994). Shifting standards and Stereotype-Based Judgments.

- Journal Of Personality and Social Psychology*, 66 (1), 5.20. DOI:
<http://dx.doi.org/10.1037/0022-3514.66.1.5>
- Biernat, M., Tocci M. J., & Williams J. C. (2011). The Language of Performance Evaluations: Gender-Based Shifts in Content and Consistency of Judgement. *Social Psychological and Personality Science*, 1-7. DOI: 10.1177/1948550611415693
- Cohen, J. (1988). *Statistical power analysis for behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum
- Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, 112 (1), 155-159. DOI: 10.1037/0033-2909.112.1.155
- Cohen, J. (1994). The Earth Is Round ($p < .05$). *American Psychologist*, 49(12), 997-1003. DOI: 10.1037/0003-066X.49.12.997
- Cortina, J.M. (1993). "What is coefficient alpha? An examination of theory and applications". *Journal of Applied Psychology*, 78, 98–104. DOI: 10.1037/0021-9010.78.1.98.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct Validity in psychological tests. *Psychological Bulletin*, 52 (4), 281-302. DOI: 10.1037/hoo40957
- Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., & Dorfman, P. W. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, 10(2), 219-256. DOI: 10.1016/S1048-9843(99)00018-1
- Delgado, O., Øvergård, K. I., Henden, V. (2015). Women are better leaders than they think: gender differences in the self-assessment of leadership skills in the maritime industry. In M. Kitada, E. Williams, L. L. Froholdt (eds). *Maritime Women, Global Leadership* (pp. 201-216). Berlin, Germany: Springer Verlag.
- DeVellis R. (2003) *Scale development: theory and applications*. Thousand Okas, CA: Sage.
- Dobbins, G. H., & Platz, S. J. (1986). Sex-differences in leadership—how real are they?. *Academy of Management Review*, 11, 118–127. DOI: 10.5465/AMR.1986.4282639
- Dorfman, P., Javidan, M., Hanges, P., Dastmalchian, A., & House, R. (2012). GLOBE: A twenty year journey into the intriguing world of culture and leadership. *Journal of World Business*, 47(4), 504-518. DOI:10.1016/j.jwb.2012.01.0
- Eagly, A. H. (1987a). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.
- Eagly, A. H. (1987b). Reporting sex differences. *American Psychologist*, 42, 756–757.

DOI:10.1037/0003-066X.42.7.755

- Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly, 31*, 1-12. DOI: 10.1111/j.1471-6402.2007.00326.x
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly, 14*, 807-834. DOI: 10.1016/j.leaqua.2003.09.004
- Eagly, A. H., & Diekmann, A. B. (2005). What is the problem? Prejudice as an attitude-in-context. In J.F. Dovidio, P. Glick, & L. Rudman (Eds.), *On the nature of prejudice: Fifty years after Allport* (pp. 19–35). Malden, MA: Blackwell.
- Eagly, A. H., & Johnsen, B. T. (1990). Gender and Leadership Style: A Meta-Analysis. *Psychological bulletin, 108*(2), 233-256. DOI: <http://dx.doi.org/10.1037/0033-2909.108.2.233>
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological review, 109*(3), 573-598. DOI: <http://dx.doi.org/10.1037/0033-295X.109.3.573>
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin, 117*, 125–145. DOI:10.1037/0033-2909.117.1.125
- Eagly, A. H., Johannesen-Schmidt, M. C., & van Engen, M. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 95*, 569–591. DOI: <http://dx.doi.org/10.1037/0033-2909.129.4.569>
- EF EPI: EF English Proficiency Index. (2014, January 1). Retrieved March 7, 2015, from <http://www.ef.no/epi/#eur>
- Feldman, K. (1993). College students' view of male and female college teachers: Part II. Evidence from student evaluations of their classroom teachers. *Research in Higher Education, 34*, 151-211. DOI: 10.1007/BF00992161
- Feldman Barrett, L., Robin, L., Pietromonaco, P. R., & Eyssell, K. M. (1998). Are women the “more emotional” sex? Evidence from emotional experiences in social context. *Cognition and Emotion, 12*, 555–578. DOI:10.1080/026999398379565
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Fischer, A. (1993). Sex differences in emotionality: fact or stereotype? *Feminism and Psychology, 3*, 303–318. DOI: 10.1177/0959353593033002

- Fjærli, B. A. B., Øvergård, K. I., & Westerberg, T. V. (2015). Maritime Managers of the Future- What do They Think is Good Leadership? *TransNav: The International Journal on Maritime Navigation and Safety of Sea Transportation*, 9(1), 107-111. DOI: 10.12716/1001.09.01.13
- George, D., & Mallery, P. (2003). *SPSS for windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Boston: Allyn & Bacon
- GLOBE foundation. Research Survey: GLOBE Project (Global Leadership and Organizational Behavior Effectiveness Project). (2006, January 1). Retrieved April 10, 2015, from http://www.hangeslab.umd.edu/index_files/GLOBE_Phase_2_Alpha_Questionnaire.pdf
- Grissom, R. J., & Kim, J. J. (2012). *Effect sizes for research: Univariate and multivariate applications*. New York: NY. Routledge.
- Groves, K. S., & Feyerherm, A. E. (2011). Leader cultural intelligence in context: Testing the moderating effects of team cultural diversity on leader and team performance. *Group & Organization Management*, 1-32. DOI: 1059601111415664.
- Harwell, M. R., Rubinstein, E. N., Hayes, W. S., & Olds, C. C. (1992). Summarizing Monte Carlo results in methodological research: The one- and two-factor fixed effects ANOVA cases. *Journal of Educational and Behavioral Statistics*, 17(4), 315-339. DOI: 10.3102/10769986017004315
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657-674. DOI:10.1111/0022-4537.00234
- Heilman, M. E., Block, C. J., Martell, R. F., & Simon, M. C. (1989). Has anything changed? Current characterizations of men, women, and managers. *Journal of Applied Psychology*, 74, 935-942. DOI: <http://dx.doi.org/10.1037/0021-9010.74.6.935>
- Heilman, M.E., Wallen, A.S., Fuchs, D., & Tamkins, M.M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology*, 89(3), 416-427. DOI: 10.1037/0021-9010.89.3.416
- House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis?. *Journal of management*, 23(3), 409-473. DOI: 10.1177/014920639702300306
- House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., Javidan, M., Dickson, M., & Gupta, V. (1999). Cultural influences on leadership and organizations: Project

- GLOBE. *Advances in global leadership*, 1, 171-233. DOI: not found.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage publications.
- House, R. J., Dorfman, P. W., Javidan, M., Hanges, P. J., & Sully de Luque, M. F. (2014). *Strategic Leadership Across Cultures: The GLOBE study of CEO leadership behavior and effectiveness in 24 countries*. Thousand Oaks, CA: Sage publications.
- Javidan, M., & Carl, D. E. (2005). Leadership Across Cultures: A study of Canadian and Taiwanese Executives. *Management International Review*, 45(1), 23-44.
- Javidan, M., & Dastmalchian, A. (2009). Managerial implications of the GLOBE project: A study of 62 societies. *Asia Pacific Journal of Human Resources*, 47(1), 41-58.
DOI: 10.1177/1038411108099289
- Javidan, M., Dorfman, P. W., De Luque, M. S., & House, R. J. (2006). In the eye of the beholder: Cross cultural lessons in leadership from Project GLOBE. *The Academy of Management Perspectives*, 20(1), 67-90. DOI: 10.5465/AMP.2006.19873410
- Javidan, M., & House, R. J. (2001). Cultural acumen for the global manager: Lessons from Project GLOBE. *Organizational Dynamics*, 29(4), 289-305. DOI: not available
- Javidan, M., Dorfman, P. W., Howell, J. P., & Hanges, P. J. (2010). Leadership and cultural context: A theoretical and empirical examination based on Project GLOBE. In N. Nohria & R. Khurana (Eds.), *Handbook of leadership theory and practice*. Boston: Harvard Business Press.
- Karvonen, L., & Selle, P. (1995). *Women in Nordic Politics*. Aldershot: Dartmouth
- Kenworthy, L., & Malami, M. (1999). Gender inequality in Political Representation: A Worldwide Comparative Analysis. *Social Forces*, 78 (1), 235-269.
DOI: 10.1093/sf/78.1.235
- Korabik, K. (1999). Sex and gender in the new millennium. In G. N. Powell (Ed.), *Handbook of gender and work* (pp. 3–16). Thousand Oaks, CA: Sage.
- Landy, F. J., & Conte, J. M. (2009). *Work in the 21st century: An introduction to industrial and organizational psychology* (3rd ed.). New York: John Wiley.
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28, 563-575. DOI: 10.1111/j.1744-6570.1975.tb01393.x
- Lee, K., Scandura, T. A., & Sharif, M. M. (2014). Cultures have consequences: A configural approach to leadership across two cultures. *The Leadership Quarterly*, 25(4), 692-710.

- DOI: 10.1016/j.leaqua.2014.03.003
- Levine, T. R., & Hullet, C. R. (2002). Eta squared, Partial Eta Squared, and Misreporting of Effect Size in Communication Research. *Human Communication Research*, 28 (4), 612-625. DOI: DOI: 10.1111/j.1468-2958.2002.tb00828.x
- Lix, L. M., Keselman, J. C., & Keselman, H. J. (1996). Consequences of assumption violations revisited: A quantitative review of alternatives to the one-way analysis of variance F test. *Review of Educational Research*, 66(4), 579-619.
DOI: 10.3102/00346543066004579
- Lord, R.G., & Maher, K.J. (1991). *Leadership and information processing: Linking perception and performance*. Boston: Unwin Hyman
- Machan, T. (2014, March 7). Norwegian English: A fusion language. Retrieved April 22, 2015, from <http://blog.oxforddictionaries.com/2014/03/norwegian-english-fusion-language/>
- Maher, K. J. (1997). Gender-related stereotypes of transformational and transactional leadership. *Sex Roles*, 37, 209–225. DOI: 10.1023/A:1025647811219
- Mandell, B., & Pherwani, S. (2003). Relationship between emotional intelligence and transformational leadership style: A gender comparison. *Journal of business and psychology*, 17(3), 387-404. DOI:
<http://link.springer.com/article/10.1023/A:1022816409059>
- McGee, D. (2005). Split Plot Designs. *Encyclopedia of Biostatistics*, Online, 1-5.
DOI: 10.1002/0470011815.b2a16073
- Menon, T., Sim, J., Fu, J. H. Y., Chiu, C. Y., & Hong, Y. Y. (2010). Blazing the trail versus trailing the group: Culture and perceptions of the leader's position. *Organizational Behavior and Human Decision Processes*, 113(1), 51-61.
DOI: 10.1016/j.obhdp.2010.04.001
- Peter, J. P. (1981). Construct validity: a review of basic issues and marketing practices. *Journal of Marketing Research*, 18 (2), 133-145. DOI:
<http://www.jstor.org/stable/3150948>
- Powell, G. N., Butterfield, D. A., & Parent, J. D. (2002). Gender and managerial stereotypes: have the times changed? *Journal of Management*, 28, 177–193.
DOI: 10.1177/014920630202800203
- Robinson, M. D., Johnson, J. T., & Shields, S. A. (1998). The gender heuristic and the database: Factors affecting the perception of gender-related differences in the

- experience and display of emotions. *Basic and Applied Social Psychology*, 20, 206–219. DOI: 10.1207/s15324834basp2003_3
- Shields, S. A. (2013). Gender and Emotion: What We Think We Know, What We Need to Know, and Why It Matters. *Psychology of Women Quarterly*, 00 (0), 1-13. DOI: 10.1177/0361684313502312
- Schyns, B., Kiefer, T., Kerschreiter, R., & Tymon, A. (2011). Teaching implicit leadership theories to develop leaders and leadership: How and why it can make a difference. *Academy of Management Learning & Education*, 10(3), 397-408. DOI: 10.5465/amle.2010.0015
- Schein, V. E., Mueller, R., Lituchy, T., & Liu, J. (1996). Think manager—think male: a global phenomenon? *Journal of Organizational Behavior*, 17, 33–41. DOI: <http://www.jstor.org/stable/2488533>
- Spence, J. T., Helmreich, R., & Stapp, J. (1975). Ratings of self and peers on sex role attributes and their relation to self-esteem and the conceptions of masculinity and femininity. *Journal of Personality and Social Psychology*, 32, 29–39. DOI:10. 1037/ h0076857
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education*, 2, 53-55. DOI: 10.5116/ijme.4dfb.8dfd.
- UN women. Facts and Figures: Leadership and Political Participation. (2015, February 1). Retrieved March 13, 2015, from <http://www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures#notes>
- van Engen, M. L., van der Leeden, R., & Willemsen, T. M. (2001). Gender, context and leadership styles: a field study. *Journal of Occupational and Organizational Psychology*, 74, 581–598. DOI: DOI: 10.1348/096317901167532
- Vecchio, R. P. (2002). Leadership and gender advantage. *The Leadership Quarterly*, 13, 643–671. DOI: <http://www.sciencedirect.com/science/article/pii/S104898430200156X>