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**How Female Leaders Persevere:**  
Gender and Leader Identity as Protectors of Mental Health and Motivation

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### **Abstract**

Women in leadership frequently face stigma, bias, and other societal pressures due to their occupation still largely being associated with masculine traits. Simultaneously, female leaders have two identities, being a woman and being a leader. They differ in social norms regarding behavior and thought, thereby often leading them to conflict as they seem mismatched. Such conflict can also have detrimental impacts on female leaders' mental health and motivation to lead. The present study aimed to investigate whether gender and leader identity, the way an individual feels about their gender and occupational social group, separately impact female leaders' stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead. Additionally, it tested whether the conflict between the two identities could explain the relationships between female leaders' identities and the listed mental health and motivation to lead outcomes. Lastly, it was tested whether the extent to which a female leader's held traditional gender role beliefs increased the strength of the relationship between gender identity and identity conflict. Analyses revealed that a high level of gender and leader identity, separately, could have a protective effect on identity conflict, stress, life-satisfaction, and affective motivation to lead. A low level of either identity could have an aggravating effect on the same outcomes. The expected mediating and moderating effects of identity conflict and traditional gender role beliefs were not found. Results are discussed considering implications and limitations. It is concluded that female leaders should strive for a high level of either gender or leader identity and that organizations should design strategies to encourage this, considering the benefits for mental health and motivation to lead.

### **Gender and Leader Identity**

Above all, people are social beings who attach great value to the social groups they identify with (Tajfel, 1981). A social group can be defined as anything, be it as large scale as nationality or as specific as a local sports club. An individual's membership of such social groups and the emotional significance and value this membership holds are highly influential in determining their overall self-concept (Tajfel, 1981). It helps in providing scripts for behavior and thought and allows individuals to categorize themselves and others into social in- and outgroups. For example, being a member of the female gender group is frequently a defining factor of women's self-concept due to the emotional value they attach to it. A unifying common denominator such as a being a woman incentivizes women to act and think in ways that are in line with group related goals and norms (Haslam et al., 2000). Furthermore, holding a leadership position within an organization can be similarly defining (Priest & Middleton, 2016).

Gender identity (GI) and leader identity (LI) are the focal points of this research, as both can be simultaneously present within one person, a woman in leadership (Skinner, 2014). When discussing GI and LI, a certain level of either construct is frequently implied. A woman who has a high level of GI feels positively about and comfortable in being a woman in the same way that a woman with a high level of LI feels positively about and comfortable in her occupation as a leader (Karelaia & Guillen, 2014). This is also known as collective self-esteem (Crocker & Luhtanen, 1990). Collective self-esteem exists in two realms, private collective self-esteem indicates the extent to which the individual feels positively about the social in-group in question, and public collective self-esteem refers to how the individual perceives others' feelings about it (Crocker & Luhtanen, 1990). Both components are equally necessary to full collective self-esteem as individuals place great value onto the opinions of others (Blumer, 1986). Self-esteem is a construct developed by culture which thrives on external validation, thus, if individuals perceive others to feel positively about their social in-group, they feel affirmed in their own feelings and actions (Pyszczynski et al., 2004).

Previous research has found an effect of GI on mental health and motivation to lead in female leaders (Karelaia & Guillen, 2014). Specifically, the more positively a female leader feels about being a woman, the less stress, more life satisfaction, more affective motivation to lead, less social normative motivation to lead, and less identity conflict between being a woman and being a leader, she experiences. Gender/leader identity conflict and motivation to

lead are central to this study and will be explained in more detail in the following section.

The described relationships have not frequently been researched and validated in the female leader context; hence, the present study aimed to replicate them:

***Hypothesis 1a:*** The more positively female leaders feel about their gender group, the less stress they experience.

***Hypothesis 1b:*** The more positively female leaders feel about their gender group, the more life satisfaction they experience.

***Hypothesis 1c:*** The more positively female leaders feel about their gender group, the more affective motivation to lead they experience.

***Hypothesis 1d:*** The more positively female leaders feel about their gender group, the less social-normative motivation to lead they experience.

***Hypothesis 1e:*** The more positively female leaders feel about their gender group, the less gender/leader identity conflict they experience.

The same effects have been found in terms of LI, meaning that the more positively a female leader feels about being a leader, the less stress, more life satisfaction, more affective motivation to lead, less social-normative motivation to lead, and less identity conflict between being a woman and a leader she experiences (Karelaia & Guillen, 2014). The present study aimed to replicate these findings as well.

***Hypothesis 2a:*** The more positively female leaders feel about their leader group, the less stress they experience.

***Hypothesis 2b:*** The more positively female leaders feel about their leader group, the more life satisfaction they experience.

***Hypothesis 2c:*** The more positively female leaders feel about their leader group, the more affective motivation to lead they experience.

***Hypothesis 2d:*** The more positively female leaders feel about their leader group, the less social-normative motivation to lead they experience.

***Hypothesis 2e:*** The more positively female leaders feel about their leader group, the less gender/leader identity conflict they experience.

### **Gender/Leader Identity Conflict**

GI and LI each prescribe behavioral and cognitive norms to those identifying with either group (Hirsh & Kang, 2016). For instance, the female social group is traditionally expected to act and think more passively and reluctantly, mostly seeking male approval. A leader on the other hand, is expected to be more proactive and aggressive, generally masculine coded traits. As these normative standards seem to differ greatly, gender/leader identity conflict (GLIC) is experienced (Hirsh & Kang, 2016). For many women in leadership positions these two expectations may be difficult to combine into one identity, as they feel that leadership responsibilities could put their core identity of being a woman in jeopardy, thus causing GLIC with negative effects in realms of mental health and motivation, among others (Hirsh & Kang, 2016). Mental health and motivation were the focus consequences of the present study, as they are of course crucial to individual health but are also instrumental in maintaining organizational productivity (Fernet, 2013). Employees who are mentally well and motivated perform better, reach top results, and bring more energy to their work (Fernet, 2013).

### ***Psychological Wellbeing***

The valence of either GI or LI can have an impact on the severity of the conflict between them and how it in turn affects psychological outcomes. Firstly, partly due to heightened activation of the neural Behavioral Inhibition System (BIS), social identity conflict can lead to heightened stress and anxiety levels, the former being of particular interest for the present study (Hirsh & Kang, 2016). The BIS activates if an individual is actively pursuing two opposing behaviors, such as being a woman and a leader, simultaneously. Secondly, heightened BIS activation due to social identity conflict often leads the individual to feel a lack of purpose and meaning, i.e., reduced life satisfaction (Diener et al., 1985). Both heightened stress and reduced life satisfaction have been found to be consequences of GLIC in female leaders (Karelaia and Guillen, 2014).

### ***Motivation***

While a leadership role does offer plenty of positive rewards, such as power and pay, these positive reinforcements must be high enough to compensate for the experienced role conflict (Ernst Kossek & Ozeki, 1998). GLIC can impact an individual's motivation to fulfill

leadership responsibilities, a two-sided concept encompassing affective and/or social-normative components (Chan & Drasgow, 2001).

**Affective Motivation to Lead.** This component is fueled by personal desire. Someone might be in a leading position as it brings them pleasure and enjoyment (Chan & Drasgow, 2001). GLIC can reduce affective motivation to lead in the case of female leaders, as the perceived mismatch between being a woman and being a leader can inhibit intrinsic enjoyment of leadership tasks (Karelaia & Guillen, 2014). The underlying process can be explained by the difference between acquired and ascribed social identity. Here, leader is an acquired identity, meaning that it is chosen and worked towards. Female, on the other hand is an ascribed identity, as it is frequently assigned to individuals at birth. A way to relieve GLIC is to let go of one of the conflicting identities. As abandoning one's female identity is more difficult, women experiencing this conflict are more likely to abandon their LI, meaning that they neglect their leader responsibilities or even resign from their position in an effort to eliminate the negative feelings associated with identity conflict (Karelaia & Guillen, 2014).

**Social-Normative Motivation to Lead.** In contrast, social-normative motivation to lead is the extent to which someone views leading as their duty and/or does so to satisfy others to enhance social connectedness, irrespective of personal pleasure (Chan & Drasgow, 2001). From this perspective, individuals act in a way that facilitates less disapproval from others (Ibarra & Petriglieri, 2007). As this is specifically typical for those of lower social power and status, a female leader might act in ways she knows will avoid social disapproval. Female leaders experiencing GLIC tend to thus fulfill their responsibilities to avoid negative evaluation from others (Karelaia & Guillen, 2014). This is also grounded in the finding that women tend value social connectedness and communality, hence paying attention to values and opinions of others in their career decision making (Smith, 2011)

The current study is based on a model researched by Karelaia and Guillen (2014) which describes the relationships between GI and LI and stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead being mediated, i.e., explained by GLIC in female leaders. Their study is the first to propose this model, therefore the present research also aimed to find these mediation effects in the current sample.

***Hypothesis 3a: GLIC explains the relationship between GI and stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead in female leaders.***

***Hypothesis 3b: GLIC explains the relationship between LI and stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead in female leaders.***

### **Traditional Gender Role Beliefs, Identity Conflict, and Gender Identity**

The present study aimed to extend the model suggested by Karelaia and Guillen (2014) by adding a moderating variable. The extent to which a female leader believes in traditional gender roles was expected to strengthen the relationship between GI and GLIC. Here, an example of traditional gender roles would be women being intended to take care of the household instead of focusing on their career and/or education.

***Hypothesis 4: The negative relationship between GI and GLIC IS stronger for female leaders who hold more traditional gender role beliefs.***

Holding traditional gender role beliefs is associated with GI and identity conflict. Kleinplatz and colleagues' (1992) found that women who held a high amount of traditional gender role beliefs reported higher levels of identity conflict over traditional versus non-traditional choices. Simultaneously being a woman and a leader is an example of such a traditional versus non-traditional life choice. Further, there is an association between traditional gender role beliefs and gender identity in women (Becker & Wagner, 2009). In the case of women being highly identified with their gender group and holding beliefs related to gender and GI of a more modern and progressive nature, they are more likely to reject traditional gender roles and sexist beliefs of any kind (Becker & Wagner, 2009).

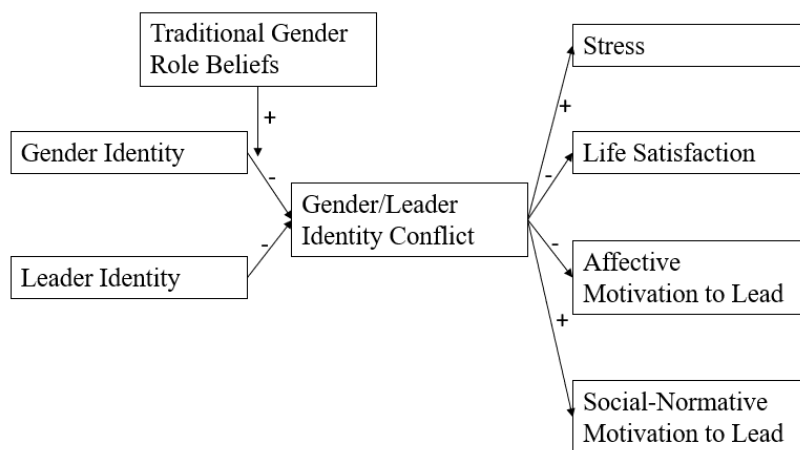
### **The Present Study**

The present study aimed to investigate female leaders' GI and LI and their relationships with stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead. Further, it aimed to test whether GLIC mediated the relationships between female leaders' GI and LI and stress, life satisfaction, affective, and social-normative motivation to lead. Lastly, it investigated whether traditional gender role beliefs moderated the relationship between GI and GLIC. The subject matter is relevant in that it replicates thus far under researched relationships from the perspective of female leaders (Karelaia &

Guillen, 2014). Additionally, the hypothesized moderating effect of traditional gender role beliefs is novel and has not previously been investigated in this context. Overall, the following questions were posed: “Do female leaders with a high level of GI/LI experience less identity conflict, less stress, more affective motivation to lead, and less social-normative motivation to lead?”, “Does female leaders’ GLIC explain the relationships between GI and LI and stress, life satisfaction, affective, and social-normative motivation to lead?”, and “Is the negative relationship between GI and GLIC stronger for female leaders holding more traditional gender role beliefs?”. The full model is displayed in Figure 1.

**Figure 1**

*Conceptual model*



*Note.* This conceptual model depicts the full hypothesized model including the direct and indirect effects of GI and LI on the mental health and motivational outcomes through GLIC. It also displays traditional gender role beliefs moderating the relationship between GI and GLIC.

## Methods

### Participants

An a priori power analysis (Gpower: Faul et al., 2007) indicated that at least 152 participants had to be included in the study in order to reach a sufficient power of .80 and a



medium effect size ( $\alpha = .05$ ). Participants were recruited via the retail company at which the researcher completed an internship and through personal contacts of the researcher at different companies from various sectors. This resulted in a snowball effect, as those contacted were asked to forward the survey to their fellow female colleagues in leadership. The survey was posted to LinkedIn as well.

A total of 156 female leaders participated in this study with a mean age of 44.22 years ( $SD = 11.69$ ) and a mean experience in leadership of 9.36 years ( $SD = 7.83$ ). Inclusion criteria for participation was identifying as a woman, being at least 18 years of age, and working in a leadership position (team and project leaders, supervisors, managers, CEOs). Managing rank was indicated by the number of people who either directly or indirectly reported to the leader. This ranged from 1 to 100+ with a majority of 26.68% of leaders having 1-5 reports. A clear majority of participants were active in the high-tech industry (27.85%). Participants also worked in a wide range of corporate functions, with a majority working in either sales (27.22%), human resources (31.01%), or general management (25.95%). Lastly, while the sample was largely located in Europe (70.89%), participants came from every other region as well. A complete summary of all corporate demographics can be found in Appendix A.

## **Procedure**

The survey was conducted exclusively online on the survey platform Qualtrics (Qualtrics, Provo, UT) using a one-time within group design to measure the independent variables (GI, LI), dependent variables (stress, life satisfaction, affective motivation to lead, social normative motivation to lead), mediating variable (GLIC), and moderating variable (traditional gender role beliefs). After providing active consent, participants were asked to indicate their gender, age, leadership experience, number of people reporting to them, field of work, and country of residence. The complete list of demographic questions can be found in Appendix B. If participants either did not consent, were male, under 18 years of age, or were not in a position of leadership either now or in any point of their career, they could not participate and were sent directly to the end of the survey. Participants then filled in the scales pertaining to each variable, which will be explained in the following section. Upon completion, participants were thanked, debriefed, and provided with contact details in case they had any questions or would like to inquire about the results.

### **Ethical Approval**

This research has been approved by the Faculty Ethics Review Board upon submission to the Utrecht University Student Ethics Review and Registration Site and is thus in accordance with the Dutch Code of Ethics for Psychologists (NIP, 2015).

### **Measures**

#### ***Gender and Leader Identity***

Both GI and LI were assessed using 14 items from the Collective Self-Esteem Scale (CSES; Luhtanen and Crocker 1992). 7 items were employed for each construct, GI and LI respectively, four items reflecting private collective self-esteem (e.g., “I often regret that I belong to the female/female leader social group”) and four items reflecting public collective self-esteem (e.g., “Overall, women/female leaders are considered good by others”). Items were answered on a scale from 1 (strongly disagree) to 7 (strongly agree). Participants first responded to the items based on GI ( $\alpha = .76$ ) and then based on LI ( $\alpha = .87$ ). The complete GI component can be found in Appendix C and the complete LI component can be found in Appendix D.

#### ***Gender/Leader Identity Conflict***

Three items from the Settles (2004) Woman Scientist Identity Interference Scale (WSIIS) assessed the extent of GLIC ( $\alpha = .733$ ). The scale included items such as “I feel that other leaders do not take me seriously because I am a woman” and “Being a manager/leader makes me feel less feminine” which were answered on a scale from 1 (not at all true of me) to 7 (extremely true of me). The full scale can be found in Appendix E.

#### ***Traditional Gender Role Beliefs***

Traditional gender role beliefs were measured using the short form of the Attitudes Towards Women Scale (AWS ( $\alpha = .79$ ); Spence and Helmreich 1973). This scale contained 15 items such as “Swearing and obscenity are more repulsive in the speech of a woman than in a man” and “A woman should be as free as a man to propose marriage” which were rated on a scale from 0 (agree strongly) to 3 (disagree strongly). The full scale can be found in Appendix F.

### ***Stress***

Stress was measured using the 4-item version of the Perceived Stress Scale (PSS ( $\alpha = .76$ ); Cohen and colleagues 1983). Items included “In the last month, how often have you felt that things were going your way?” and “In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?”, which were rated on a scale from 0 (never) to 4 (very often). The full scale can be found in Appendix G.

### ***Life Satisfaction***

Life satisfaction was measured using the 5-item Satisfaction with Life Scale (SWLS ( $\alpha = .82$ ); Diener et al., 1985) which included statements such as “In most ways my life is close to ideal” and “So far, I have gotten the important things I want in life” which were rated on a scale from 1 (strongly disagree) to 7 (strongly agree). The full scale can be found in Appendix H.

### ***Affective Motivation to Lead***

Affective motivation to lead was measured using 5 items from the affective component of the Motivation to Lead Scale (MTLS, ( $\alpha = .80$ ); Chan & Drasgow, 2001), adapted by Bobbio and Rattazzi (2006). Items included “Most of the time I prefer being a leader rather than a follower when working in a group” and “I believe I can contribute more to a group if I am a follower rather than a leader” which were rated on a scale from 1 (totally in disagreement) to 7 (absolutely in agreement). The full scale can be found in Appendix I.

### ***Social-Normative Motivation to Lead***

Social-normative motivation to lead was measured using 5 items from the social-normative component of the MTLS ( $\alpha = .58$ ), also adapted by Bobbio and Rattazzi (2006). Items included “I feel that I have a duty to lead others if I am asked” and “It is appropriate for people to accept leadership roles or positions when they are asked”, which were rated on a scale from 1 (totally in disagreement) to 7 (absolutely in agreement). The full scale can be found in Appendix J.

## Analysis

PROCESS macro for IBM SPSS Statistics (Hayes, 2012) was used to analyze all effects. Model 4 was employed to investigate the direct and indirect effects of GI and LI on stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead. Model 1 was used to analyze the moderation effect of traditional gender role beliefs on the relationship between GI and GLIC.

## Results

Descriptive statistics for all scales are shown in Table 1 and direct and indirect relationships are shown in Tables 2-5.

Firstly, hypothesis 1a was confirmed; GI significantly negatively predicted stress within female leaders,  $b = -.24$ ,  $t = -3.82$ ,  $p < .001$ . Hypothesis 1b was also confirmed, as GI significantly positively predicted life satisfaction in female leaders,  $b = .43$ ,  $t = 4.82$ ,  $p < .001$ . Hypothesis 1c too was supported; GI was a significant positive predictor of affective motivation to lead,  $b = .20$ ,  $t = 2.81$ ,  $p = .01$ . Contrary to hypothesis 1d, GI did not significantly negatively predict social-normative motivation to lead,  $b = .03$ ,  $t = .39$ ,  $p = .70$ . Lastly, hypothesis 1e was supported, as GI was a significant negative predictor of GLIC,  $b = -.78$ ,  $t = -6.19$ ,  $p < .001$ . As for the indirect effects of GI, hypothesis 3a was not supported as GLIC was not a significant mediator for the indirect effect of positive GI on stress,  $b = -.04$ , 95% CI [-.11, .02], life satisfaction,  $b = .06$ , 95% CI [-.04, .18], affective motivation to lead,  $b = .06$ , 95% CI [-.01, .14], or social normative motivation to lead,  $b = -.02$ , 95% CI [-.11, .08].

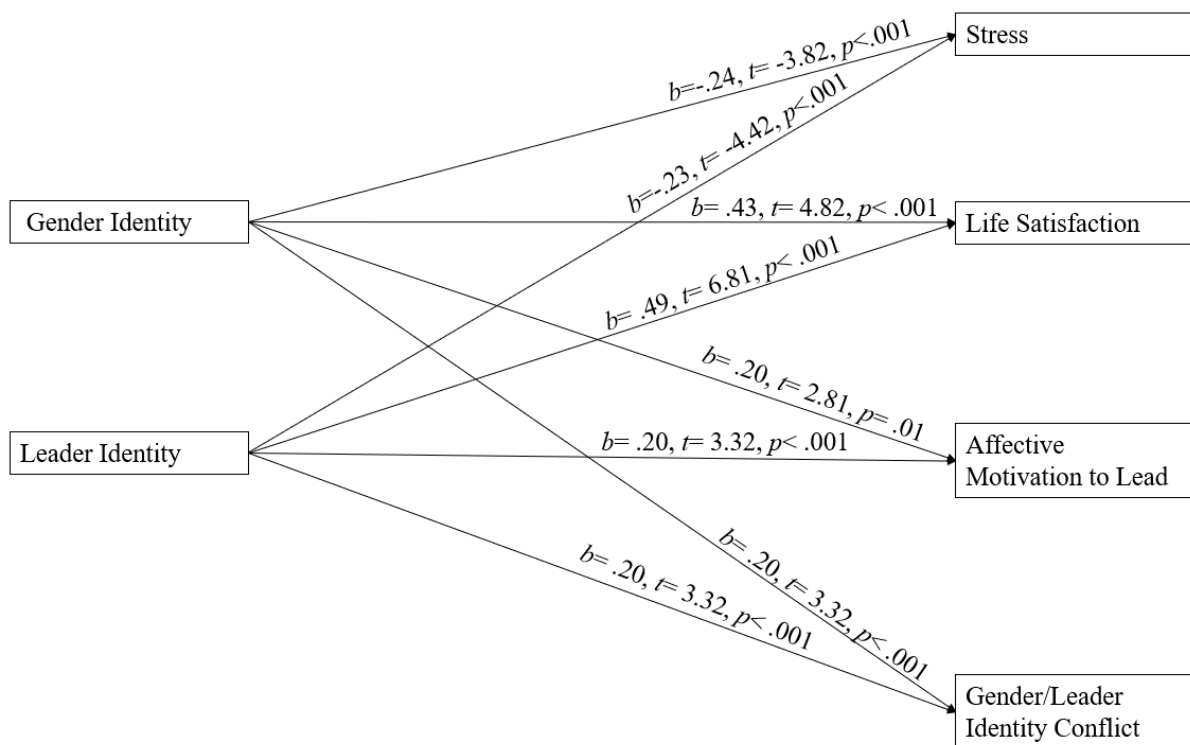
Hypothesis 2a was confirmed; LI significantly negatively predicted stress within female leaders,  $b = -.23$ ,  $t = -4.42$ ,  $p < .001$ . Hypothesis 2b was also confirmed, as LI significantly positively predicted life satisfaction in female leaders,  $b = .49$ ,  $t = 6.81$ ,  $p < .001$ . Hypothesis 2c too was supported; LI was a significant positive predictor of affective motivation to lead,  $b = .20$ ,  $t = 3.32$ ,  $p < .001$ . Contrary to hypothesis 2d, LI did not significantly negatively predict social-normative motivation to lead,  $b = .02$ ,  $t = .26$ ,  $p = .80$ . Lastly, hypothesis 2e was supported, as LI was a significant negative predictor of GLIC,  $b = -.72$ ,  $t = -6.74$ ,  $p < .001$ . As for the indirect effects of LI, hypothesis 3b was not supported as GLIC was not a significant mediator of the indirect effect of LI on stress,  $b = -.03$ , 95% CI [-.09, .03], life satisfaction,  $b = .01$ , 95% CI [-.07, .09], affective motivation to lead,  $b = .05$ ,

95% CI [-.02, .12], or social normative motivation to lead,  $b = -.01$ , 95% CI [-.10, .09].

Finally, hypothesis 4 was not supported, as traditional gender role beliefs did not moderate the negative relationship between GI and GLIC,  $b = .40$ , 95% CI [-.35, 1.16]. All significant effects are shown in Figure 2.

**Figure 2**

*Significant model*



*Note.* This conceptual model depicts only the significant direct effects of GI and LI on stress, life satisfaction, affective motivation to lead, and GLIC (hypotheses 1a, b, c, e, and 2a, b, c, e)

**Table 1**

*Means, SDs, and variable correlations*

Variable	Mean	SD	1	2	3	4	5	6	7
Stress	2.43	.68							
Life Satisfaction	5.39	1.00	-.52**						
Affective MTL	4.62	.76	-.28**	.30**					
Social-normative MTL	4.63	.85	.07	-.04	.02				
Traditional Gender Role Beliefs	1.34	.37	.28**	-.22**	-.06	-.10			
GI	5.72	.85	-.29**	.36**	.22**	.03	-.17*		
LI	5.62	.98	-.34**	.48**	.26**	.02	-.17*	.72**	
GLIC	2.77	1.48	.23**	-.25**	-.22**	.01	.06	-.45**	-.48**

\*. Correlation is significant at the .05 level (2 tailed)

\*\* . Correlation is significant at the .01 level (2 tailed)

**Table 2**

*Path coefficients and indirect effects of GI and LI on Stress (standard errors in brackets)*

	Path coefficients		Indirect effects
	To stress	To GLIC	95% CI
<b>Model 1</b>			
From GI	-.24 (.06)*	-.78 (.13)*	
From GLIC	.11 (.04)*		
GI→GLIC→Stress			-.11, .02
<b>Model 2</b>			
From LI	-.72 (.61)*	-.72 (.11)*	
From GLIC	.11 (.04)*		
LI→GLIC→Stress			-.09, .03

*\*Effect is significant*

**Table 3**

*Path coefficients and indirect effects of GI and LI on Life Satisfaction (standard errors in brackets)*

	Path coefficients		Indirect effects
	To life satisfaction	To GLIC	95% CI
<b>Model 1</b>			
From GI	.43 (.09)*	-.78 (.13)*	
From GLIC	-.17 (.05)*		
GI→GLIC→LS			-.04, .18
<b>Model 2</b>			
From LI	.49 (.07)*	-.72 (.11)*	
From GLIC	-.17 (.05)*		
LI→GLIC→LS			-.07, .09

*\*Effect is significant*

**Table 4**

*Path coefficients and indirect effect of GI and LI on Affective Motivation to Lead (standard errors in brackets)*

	Path coefficients		Indirect effects
	To affective MTL	To GLIC	95% CI
<b>Model 1</b>			
From GI	.20 (.07)*	-.78 (.13)*	
From GLIC	-.12 (.04)		
GI→GLIC→Stress			-.01, .14
<b>Model 2</b>			
From LI	.20 (.06)*	-.72 (.11)*	
From GLIC	-.12 (.04)*		
LI→GLIC→Stress			-.02, .12

*\*Effect is significant*

**Table 5**

*Path coefficients and indirect effects of GI and LI on Social-Normative Motivation to Lead (standard errors in brackets)*

	Path coefficients		Indirect effects
	To social-normative MTL	To GLIC	95% CI
<b>Model 1</b>			
From GI	.03 (.08)	-.78 (.13)	
From GLIC	.01 (.05)		
GI→GLIC→Stress			-.11, .08
<b>Model 2</b>			
From LI	.02 (.07)	-.72 (.11)	
From GLIC	.01 (.05)		
LI→GLIC→Stress			-.10, .09

*\*Effect is significant*



## **Discussion**

The present study aimed to investigate the direct and indirect effects of GI and LI on stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead through GLIC in female leaders. Furthermore, it tested whether holding traditional gender role beliefs could strengthen the negative relationship between GI and GLIC.

### **The Direct Effects of GI and LI**

As expected, analyses revealed that the higher a female leader's GI, the lower her stress, the higher her life satisfaction, the higher her affective motivation to lead, and the lower her GLIC (Hypotheses 1a, b, c, e). The relationships between GI and mental health outcomes imply that female leaders who reported a high level of GI, i.e., felt more comfortable and positive about their gender group, experienced lower stress, and higher life satisfaction levels. This indicates that positive GI can have a buffering effect on the pressures that come with being a female leader. On the other hand, low/negative GI can act as an aggravator of such pressures and have the according negative effects on female leaders' overall stress and life satisfaction levels. GI was also found to have an enhancing effect on affective motivation to lead, indicating that a female leader feeling highly identified with and positive about her gender group is likely motivated to lead due to intrinsic factors such as personal pleasure and satisfaction (Karelaia & Guillen, 2014). Heightened affective motivation to lead is desirable, as it implies a positive, intrinsic motivation which is sustainable in the long term (Van Dam et al., 2017).

In the same vein, analyses found that the higher a female leader's LI, the lower her stress, the higher her life satisfaction, the higher her affective motivation to lead, and the lower her GLIC (Hypotheses 2a, b, c, e). A female leader who is comfortable in and highly identifies with her leader group is likely to experience less stress, more life satisfaction, and more affective motivation to lead. This also implies LI to have a buffering effect on negative and an enhancing effect on positive mental health and motivational outcomes. Against expectations, the present study did not find that either GI or LI significantly predicted social-normative motivation to lead (Hypotheses 1d and 2d). This could perhaps be explained by social-normative motivation to lead being negatively associated with holding a leadership position, meaning that people who are motivated to lead by a sense of duty or fear of negative

evaluation are either work in minor roles or not in leadership positions in the first place (Rosch et al., 2015). Considering that this sample consisted purely of leaders, it is likely that this construct and associations with it were simply not present.

### **The Mediating Effect of GLIC**

Contrary to expectations, analyses did not find that GLIC explained the effects of GI and LI on stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead (Hypotheses 3a and b). Nevertheless, it is still important to note that GLIC on its own was significantly related to both GI and LI, stress, life satisfaction, and affective motivation to lead. Firstly, this reveals that female leaders who felt positively about their gender group were less likely to experience a conflict between their two identities. Karelaia and Guillen (2014) explain that positive/high GI takes away from the persistent urge to lead in a socially prescribed manner that does not match one's values and identity. In doing so, highly identified female leaders can discover and develop a leadership strategy that matches them personally. Confidently leading by one's own standards is beneficial as one's strategy is less likely to be influenced by societal standards that do not coincide with one's own (Karelaia & Guillen, 2014). Having accomplished a personalized leadership strategy, one could then also effectively integrate a healthy LI which again has an enhancing effect on mental health and motivational outcomes. Secondly, it can be deduced that female leaders who feel positively about and comfortable in their leader group experienced less conflict between being a woman and being a leader as well.

In general, lack of expected indirect effects could be explained by sample characteristics. The present sample was smaller than those of the research the hypotheses were based on. It was also less diverse, as there were clear majorities present in terms of region of residence, field of work, and rank of leadership. For example, it may be that the hypothesized indirect effect of GI on stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead (Hypothesis 3a) was simply not present within a sample of majority lower rank leaders, as opposed to higher rank managers, such as that of Karelaia & Guillen (2014). Furthermore, alternative mediators could have been present that were not considered in this study. For example, the negative association between GI and stress could alternatively be explained by gender typicality, the extent to which an individual views themselves as a typical representation of their gender group (Chuku, 2017). Based on the

finding that gender typicality is positively related to self-esteem and negatively related to stress, it could be supposed that the more positive a female leader feels about her gender group, the more typical of a woman she considers herself to be, and the less stress she experiences.

### **The Moderating Effect of Traditional Gender Role Beliefs**

The negative relationship between female leaders' GI and GLIC was expected to be stronger for those holding traditional gender role beliefs about women's roles in family, work, and education (Hypothesis 4), however, this was not the case. A possible explanation for this lack of effect could be the novelty of the hypothesis. This was the first time this exact relationship was investigated; thus, the hypothesis was only based on associations that traditional gender role beliefs had with GI and GLIC separately (Kleinplatz et al., 1992; Becker & Wagner, 2009).

### **Practical Implications**

Findings suggest social opinions (or the female leader's impression thereof) to be influential in female leaders' comfort in and positive feelings about their gender and leader groups. Results convey that it is desirable for female leaders to strive for high levels of either GI or LI. For this reason, it is important to discuss how this knowledge can be implemented in organizational processes and overall culture to enhance female leaders' GI and/or LI. Positive GI or LI may be difficult to train directly, however, it could be done through the indirect path of authenticity (Roberts & Dutton, 2009). If individuals feel as though they can express themselves authentically in the workplace they perceive themselves as more authentic beings and experience feelings of joy and happiness. Such authenticity then makes individuals feel more positively about their identity, such as for example GI (Roberts & Dutton, 2009).

A way to allow female leaders to feel free to express themselves authentically at the workplace could be to make them feel welcome, wanted, and needed. This could be achieved in several ways, for example, to make women feel more comfortable and confident in leadership positions, their descriptions must change. Findings of the present study indicate that female leaders who experience a mismatch between their GI and LI tend to experience

more stress, less life satisfaction, and less affective motivation to lead. Too often, leadership positions are described using traits traditionally associated with men. If a description contains more traits which are either universally identifiable or specifically more applicable to female leaders, such as interpersonal sensitivity, collaboration, and cooperation, women might feel more comfortable and confident in their leadership roles and thus feel invited to express themselves authentically at work (Nohria & Khurana, 2010).

Another strategy to encourage female leaders to express themselves authentically at the workplace could be always writing leadership positions out as part time, a strategy that is gaining popularity in an effort to transport and retain more women in leadership positions (Karlshaus, 2020). This is based on the finding that women are more likely to work (or expect to work) part time at some point throughout their career due to family planning (Finch et al., 2014). This strategy could communicate to women that they were specifically considered in the creation of this role, rather than being an afterthought, thereby assuring them that leadership is not a purely masculine trait. Additionally, a lot of sexist discourse within organizations is brushed under the rug and viewed as harmless, such as referring to a group of female employees as “the girls” or “ladies”. This infantilizes and excludes women, discredits their work, contributes to stereotypes surrounding the narrative of women being unfit leaders, and thus discourages women from expressing themselves authentically at work (Madsen, 2021). Sexist language, even if meant jokingly, can negatively affect individual’s gender self-esteem (Hack et al., 2020). Since positive gender identity in female leaders is beneficial, such language should stop as it is offensive and counterproductive.

Lastly, while leadership development initiatives are available, they are usually broad in nature as they must accommodate a large range of individuals (Ely et al., 2010). Rather than training women on how to achieve the status quo of acceptable leader traits, a leadership coaching could perhaps have the objective to measure a client’s GI and/or LI and aim to increase it to buffer possible conflict and enhance mental health and motivational outcomes which may be related to their deficits in leadership strategy.

### **Limitations and Future Research**

The present study is limited in several ways which should be highlighted and considered when conducting future studies of a similar nature.

The AWS is old and measures a construct known as “traditional sexism” (McHugh & Frieze, 1997). While this scale remains the most used instrument to measure sexist cognitions towards women, some items are representative of the time of the scale’s development, thereby making it slightly outdated. Furthermore, traditional sexism is blatant and overt, people today are often less likely to respond truthfully to such statements (McHugh & Frieze, 1997). Future research should thus analyze gender role beliefs from a more modern point of view using scales measuring covert forms of sexism. Additionally, the WSIIS was not originally designed to measure identity conflict of female leaders and has not been sufficiently validated in this sample. The validity of this tool should be further investigated by applying it to a larger, more diverse sample of female leaders.

Lastly, as is frequently the case in social psychology research, data was collected using only self-report measures. Social desirability can frequently influence answers, especially in the case of sensitive topics such as mental health and attitudes towards women (Van de Mortel, 2008). To control for social desirability, a specific scale, such as the Social Desirability Scale-17 (SDS-17; Stöber, 2001) could have been added into the survey, however, this was decided against in favor of brevity. Moreover, the design was cross-sectional, making the relationships between the different variables a product of the specific moment of data collection. Hence, causality and presence of effect over time cannot be assumed. It would be beneficial to look at the relationships of interest over an extended period, allowing more clarity surrounding the validity of these relationships. Moreover, specifically in the case of women who are new to leadership, a longitudinal study could reveal how their identities, conflict, mental health, and motivational outcomes develop as they progress in their role.

Another opportunity for future research would be to extend this study to the leaders’ subordinates by investigating how the outcomes of the relationships found in the present study could perhaps affect them. This would be relevant to research considering the direct impact a leader’s mental health can have on that of their subordinates (Chen et al., 2019). If a highly gender identified female leader experiences less stress, more life satisfaction, and more affective motivation to lead, does this also positively affect her subordinates’ mental health and view of her leadership style? This could be operationalized in a follow up study, recruiting subordinates of leaders who have previously taken part in the present study.

Additionally, this study collected data from participants working in different regions, sectors, and differing in number of subordinates. Future research could investigate whether the relationships of interest vary based on one or all of these factors. For example, does a female leader working in the IT industry, which is considered to be more masculine, experience the relationship between GI and stress differently than a female leader working in retail? As female leadership is more common in sectors such as retail, it could be expected for female leaders to feel more comfortable in and positive about her gender and leader group and thus experience better mental health and motivational outcomes (Brody et al., 2014). Finally, since this study is centered solely around women in occupations historically considered masculine, it would be interesting to see whether these relationships prevail for men in historically feminine lines of work such as nurses and kindergarten teachers, as research has shown men to experience social identity conflict as well (Hirsh & Kang, 2016).

### **Conclusion**

While more women are entering and remaining in leadership positions as time progresses, they still face scrutiny deeming them unfit for the role, which is a notion that is easily internalized. The objective of the present study was to investigate the direct and indirect effects of GI and LI on stress, life satisfaction, affective motivation to lead, and social-normative motivation to lead in a sample of female leaders. Additionally, it tested whether the negative relationship between GI and GLIC was stronger for female leaders holding traditional gender role beliefs. Results implied that female leaders who exhibit a high level of GI or LI experience less stress, more life satisfaction, and more affective motivation to lead. Further, the less GLIC a female leader experiences, the less stress, more life satisfaction, and more affective motivation to lead she experiences.

To conclude, it can be said that a high level of GI can have a buffering effect on negative and an enhancing effect on positive mental health and motivational outcomes in female leaders. A high level of LI can have the same effect. Thus, a high level of GI and/or LI is beneficial for women in leadership and worth striving for, considering the theoretical and practical implications. It should be the goal of organizational and coaching initiatives to encourage authentic expression in the workplace to enhance positivity of gender identity of female leaders to reap the mental health and motivational benefits discussed. Doing so could gain and sustain more women in leadership positions which is a sustainable long-term goal.

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**Appendix**

**Appendix A: Corporate Demographics Table**

*Corporate Demographics Summary*

Reports		Location		Corporate function		Industry	
1-5	26.68%	Africa	0.63%	Administration	4.43%	Travel & transport	2.53 %
5-10	22.15%	Asia Pacific	1.90%	Finances	0.63%	Hospitality	4.43%
10-20	22.78%	Europe	70.89%	General management	25.95%	Aerospace & Defense	0.63%
20-50	13.92%	Latin America	12.03%	Human Resources	31.01%	Banking	1.90%
50-100	4.43%	Middle East	1.90%	Marketing	2.53%	Chemicals	0.63%
100+	10.13%	North America	10.76%	Sales	27.22%	Consumer Products	2.53%
		Oceania	1.90%	Production	3.80%	Defense & Security	0.63%
				Public Relations	3.80%	Healthcare	1.90%
				Purchasing	0.63%	High tech	27.85%

Higher education & research	5.70%
Insurance	1.27%
Life sciences	1.90%
Oil & gas	1.27%
Other services	1.27%
Professional Services	9.49%
Public sector	3.16%
Retail	8.86%
Sports & Entertainment	0.63%
Telecommunications	3.16%
Utilities	5.06%
Wholesale distribution	0.63%
Other	14.56%

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**Appendix B: Demographic questions**

**How old are you (in years)?**

**What gender do you identify with?**

- Man
- Woman
- Self-described, namely...

**Have you been in a leadership position at any time throughout your career?**

- Yes
- No

**How long have you been in leadership position(s) throughout your career (years)?**

If you have been in a leadership position for less than a year, please write 0.

**How many people report to you (Direct and indirect reports)?**

- 1-5
- 5-10
- 10-20
- 20-50
- 50-100
- 100+

**Please indicate your industry**

- Aerospace & defense
- Automotive

- Banking
- Chemicals
- Consumer products
- Defense & security
- Engineering, construction, and operations
- Healthcare
- High tech
- Higher education & research
- Hospitality
- Industrial machinery & components
- Insurance
- Life sciences
- Media
- Mill products
- Mining
- Oil & gas
- Other services
- Professional services
- Public sector
- Retail
- Sports & entertainment
- Telecommunications
- Travel & transport
- Utilities

- Wholesale distribution
- Other, please specify

**In which corporate function do you operate?**

- Administration
- Finances
- General management
- Human resources
- Marketing
- Production
- Public relations
- Purchasing
- Sales

**Which region are you located in?**

- Europe
- Asia pacific
- Middle east
- Africa
- Oceania (AUS & NZ)
- Latin America
- North America



**Appendix C: Collective Self-Esteem Scale (CSES) (Gender Identity)**

Please rate every statement depending on how much you agree with it. There are no right or wrong answers. Do not spend too much time on any statement.

1= Strongly disagree

2= Disagree

3= Somewhat disagree

4= Neutral

5= Somewhat agree

6= Agree

7= Strongly agree

Nr.	Item	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1.	I often regret that I belong to the female social group.	1	2	3	4	5	6	7
2.	In general, I'm glad to be a woman.	1	2	3	4	5	6	7
3.	Overall, I often feel that being a woman is not worthwhile.	1	2	3	4	5	6	7
4.	I feel good about being a woman.	1	2	3	4	5	6	7
5.	Overall, women are considered good by others.	1	2	3	4	5	6	7
6.	Most people consider women to be more effective than other groups.	1	2	3	4	5	6	7
7.	In general, others respect women.	1	2	3	4	5	6	7
8.	In general, others think that women are unworthy.	1	2	3	4	5	6	7

**Appendix D: Collective Self-Esteem Scale (CSES) (Leader Identity)**

Please rate every statement depending on how much you agree with them. There are no right or wrong answers. Do not spend too much time on any statement.

1= Strongly disagree

2= Disagree

3= Somewhat disagree

4= Neutral

5= Somewhat agree

6= Agree

7= Strongly agree

Nr.	Item	Strongly Disagree				Strongly Agree		
		1	2	3	4	5	6	7
1.	I often regret that I belong to the female leader social group.	1	2	3	4	5	6	7
2.	In general, I'm glad to be a female leader.	1	2	3	4	5	6	7
3.	Overall, I often feel that being a female leader is not worthwhile.	1	2	3	4	5	6	7
4.	I feel good about being a female leader.	1	2	3	4	5	6	7
5.	Overall, female leaders are considered good by others.	1	2	3	4	5	6	7
6.	Most people consider female leaders to be more effective than other groups.	1	2	3	4	5	6	7
7.	In general, others respect female leaders.	1	2	3	4	5	6	7
8.	In general, others think that female leaders are unworthy.	1	2	3	4	5	6	7

**Appendix E: Woman Scientist Identity Interference Scale (WSIIS) (Adapted to the leader context)**

Please rate every statement depending on how true they are of you. There are no right or wrong answers. Do not spend too much time on any statement.

1= Not at all true of me

2= Mostly not true of me

3= Somewhat not true of me

4= Neutral

5= Somewhat true of me

6= Mostly true of me

7= Extremely true of me

Nr.	Item	Not at all true of me				Extremely true of me		
		1	2	3	4	5	6	7
1.	I feel that other leaders do not take me seriously because I am a woman.	1	2	3	4	5	6	7
2.	Being a leader makes me feel less feminine.	1	2	3	4	5	6	7
3.	I think I am not influential enough because I am a woman.	1	2	3	4	5	6	7

**Appendix F: Attitudes Towards Women Scale (AWS)**

Please rate every statement depending on how much you agree with them. There are no right or wrong answers. Do not spend too much time on any statement.

0= Agree strongly

1= Agree mildly

2= Disagree mildly

3= Disagree strongly

Nr.	Item	Agree strongly		Disagree strongly	
1.	Swearing and obscenity are more repulsive in the speech of a woman than in a man.	0	1	2	3
2.	Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing laundry.	0	1	2	3
3.	It is insulting to women to have the “obey” clause remain in the marriage service.	0	1	2	3
4.	A woman should be free as a man to propose marriage.	0	1	2	3
5.	Women should worry less about their rights and	0	1	2	3

	more about becoming good wives and mothers.				
6.	Women should assume their rightful place in business and professions along with men.	0	1	2	3
7.	A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.	0	1	2	3
8.	It is ridiculous for a woman to run a locomotive and for a man to darn socks.	0	1	2	3
9.	The intellectual leadership of a community should be largely in the hands of men.	0	1	2	3
10.	Women should be given equal opportunity with men for apprenticeship in the various trades.	0	1	2	3
11.	Women earning as much as their dates should bear equally the expense when they go out together.	0	1	2	3

- |     |  |   |   |   |   |
|-----|--|---|---|---|---|
| 12. | Sons in a family should be given more encouragement to go to college than daughters.   | 0 | 1 | 2 | 3 |
| 13. | In general, the father should have greater authority than the mother in raising the children                                 | 0 | 1 | 2 | 3 |
| 14. | Economic and social freedom is worth far more to women than acceptance of the ideal femininity which has been set up by men. | 0 | 1 | 2 | 3 |
| 15. | There are many jobs in which men should be given preference over women in being hired or promoted.                           | 0 | 1 | 2 | 3 |
-

**Appendix G: Satisfaction with Life Scale (SLS)**

Please rate every statement depending on how much you agree with them. There are no right or wrong answers. Do not spend too much time on any statement.

1= Strongly disagree

2= Disagree

3= Somewhat disagree

4= Neutral

5= Somewhat agree

6= Agree

7= Strongly agree

Nr.	Item	Strongly Disagree					Strongly Agree		
1.	In most ways my life is close to ideal.	1	2	3	4	5	6	7	
2.	The conditions of my life are excellent.	1	2	3	4	5	6	7	
3.	I am satisfied with my life.	1	2	3	4	5	6	7	
4.	So far I have gotten the important things I want in life.	1	2	3	4	5	6	7	
5.	If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7	

**Appendix H: 4-Item Perceived Stress Scale (PSS-4)**

The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. In each case, please indicate your response by indicating HOW OFTEN you felt or thought a certain way.

0= Never

1= Almost never

2= Sometimes

3= Fairly often

4= Very often

Nr.	Item	Never				Very often
1.	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
2.	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
3.	In the last month, how often have you felt that things were going your way?	0	1	2	3	4
4.	In the last month, how often have you felt difficulties were piling up	0	1	2	3	4



so high that you could not  
overcome them?

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**Appendix I: Motivation to Lead Scale (MTLS) (Affective)**

Please rate every statement depending on how much you agree with them. There are no right or wrong answers. Do not spend too much time on any statement.

1= Strongly disagree

2= Disagree

3= Somewhat disagree

4= Neutral

5= Somewhat agree

6= Agree

7= Strongly agree

Nr.	Item	Strongly Disagree					Strongly Agree		
1.	Most of the time I prefer being a leader rather than a follower when working in a group.	1	2	3	4	5	6	7	
2.	I believe I can contribute more to a group if I am a follower rather than a leader.	1	2	3	4	5	6	7	
3.	I usually want to be the leader in the groups that I work in.	1	2	3	4	5	6	7	
4.	I am the type who would actively support a leader but prefers not to be appointed as leader.	1	2	3	4	5	6	7	
5.	I have a tendency to take charge in most groups or teams that I worked in.	1	2	3	4	5	6	7	

**Appendix J: Motivation to Lead Scale (MTLS) (Social-Normative)**

Please rate every statement depending on how much you agree with them. There are no right or wrong answers. Do not spend too much time on any statement.

1= Strongly disagree

2= Disagree

3= Somewhat disagree

4= Neutral

5= Somewhat agree

6= Agree

7= Strongly agree

Nr.	Item	Strongly Disagree				Strongly Agree		
1.	I feel that I have a duty to lead others if I am asked.	1	2	3	4	5	6	7
2.	I agree to lead whenever I am asked or nominated by the other members.	1	2	3	4	5	6	7
3.	It is appropriate for people to accept leadership roles or positions when they are asked.	1	2	3	4	5	6	7
4.	It is not right to decline leadership roles.	1	2	3	4	5	6	7
5.	I would never agree to lead just because others voted for me.	1	2	3	4	5	6	7