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Marjorie Noboa, Ricardo M. Pino

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Gender moderating role in the relationship between leader humility and employee psychological empowerment

Marjorie Noboa

Social Communications Faculty,
Universidad de Guayaquil,
Av. Delta, Guayaquil 090510, Ecuador
Email: marjorie.noboaa@ug.edu.ec

Ricardo M. Pino*

Escuela de Postgrado,
Universidad Peruana de Ciencias Aplicadas,
Av. Gral. Salaverry 2255, San Isidro 15076, Lima, Peru
Email: ricardo.pino@upc.pe
*Corresponding author

Abstract: The gender difference in leadership and subordinates' empowerment has been a controversial topic studied in several countries. This study examines how gender moderates the relationship between the perceived leader humility and the subordinate psychological empowerment in a country that scores high in the power distance index. Four dyads were studied considering leader gender, male or female, and subordinate gender: M-M, F-M, M-F, F-F. Four hypotheses were tested with a questionnaire applied to 253 MBA students in Ecuador. Multi-group analysis was used with the bootstrapping technique. It was found that gender had a significant moderating effect in three of the studied relationships, being the M-M and F-M dyads the ones that presented the highest correlations. The results showed that male subordinates value humility attributes in their leaders, whether male or female, while the relationship was not significant for the F-F dyad.

Keywords: leader humility; psychological empowerment; gender role; power distance; multi-group analysis.

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Biographical notes: Marjorie Noboa has work experience in administrative areas of private service and manufacturing companies. She is a Professor in Business and Management and a Researcher in Business Administration. She is a University of Guayaquil scholarship holder. She held the position of Dean of Research, Postgraduate and Internationalisation, School of Tourism Director and Research Coordinator. She has publications in journals: *Revista Científica Ecociencia*, *Revista Venezolana de Gerencia*, *Revista de Ciencias Sociales* and *Killkana Social*.

Ricardo M. Pino holds a Doctor en Administración Estratégica de Empresas, Pontificia Universidad Católica del Perú, Doctor of Business Administration, Maastricht School of Management and Master of Business Administration, Universidad del Pacífico. He is the Graduate School Academic Director at Universidad Peruana de Ciencias Aplicadas, a Professor of Strategic Management and Operations Management, Consultant in business process management and business process improvement and a former General Manager at CEYESA Ingeniería Eléctrica S.A. and Centro para el Desarrollo de la Calidad S.A.C.

1 Introduction

Inequality between men and women is still a matter of debate in the leadership literature. This difference broadens when culture power distance (PD) increases (Hofstede Centre, 2018), implying that the discrimination acceptance increases, too (Jahangirov et al., 2015). In high PD contexts, leaders who show a humble behaviour promote subordinates' psychological empowerment (PE) at work (Jeung and Yoon, 2016). On one hand, PE is part of the intrinsic motivation the employee feels when she/he feels capable of performing a task. On the other hand, leader humility (LH) seems to be an essential behaviour to keep in perspective subordinates' achievements and strengths, while leaders focus more on their team than in their own interests (Morris et al., 2005). Leadership success can be measured by the results achieved by his/her team. Regarding the relationship between leaders and subordinates, studies about leader efficacy have shown differences between male and female leaders (Eagly and Carli, 2007). On the other hand, transformational influence is stronger in subordinates when the transformational leader is a woman (Kim and Shin, 2017). More research is needed regarding the identification of the compatibility of work groups. This research used the theory of interpersonal interaction in the work context (Vial et al., 2016), which helps business administrators to determine the formation of empowered work teams considering the gender combination of leaders and subordinates. The present study took humility expressed by the leader as a feature that influences expected results and the professional quality of subordinates. No study was found about subordinates' perception regarding the gender of leaders who express humility.

The purpose of this research was to determine the relationship between LH, as perceived by employee and her/his PE, moderated by leaders' and subordinates' gender. In accordance, the four analysed groups were:

a female leader-female subordinate

b female leader-male subordinate

c male leader-male subordinate

d male leader-female subordinate, in line with the study of Kim and Shin (2017).

This research was conducted in Ecuador, a country that ranks high in the PD index with a score of 78, which is considered high. In a high PD index country, it is believed that inequalities are part of life (Hofstede Centre, 2018). The contribution to literature is that this research is the first to determine that the relationship between LH and PE is different

for different leader and follower gender combinations. The rest of the article is organised as follows: first, the theoretical framework is presented, followed by the methods used. Next, the results obtained and a discussion section. Finally, the article ends with suggestions for future research.

2 Theoretical framework

2.1 LH and PE

The theoretical basis of LH as expressed by the leader is based on the interpersonal theory that proposes "…personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being" [Sullivan, (1953), p.10]. Humility represents an individual characteristic that emerges in the social interactions and is based on the individual behaviour that is acknowledgeable by others and, as so, it is an interpersonal manifestation.

LH arrives in social contexts and has three dimensions:

a willingness

b appreciation

c capacity.

Willingness is the desire to be involved in a continuous process of reaching a precise self-consciousness through the interactions with others. Regarding appreciation, humble leaders and members can provide a genuine recognition to the efforts, strengths and skills of their partners, colleagues, and subordinates. Finally, capacity relates to the receptivity to comments, ideas and advice received from others and willingness to ask for help (Owens et al., 2013).

Humble leaders catalyse and reinforce mutual development of both themselves and their followers by outwardly, explicitly and transparently expressing enthusiasm in the day-to-day process of learning and growth (Owens and Hekman, 2012). These skills are reflected onto the subordinates and among them, given that on interpersonal interaction the neural system is connected with others creating a more intense inter-cerebral bond with people they relate more every day.

Leader humility reinforces employees' learning orientation, job satisfaction, commitment and retention. Humble people are more willing to adopt learning behaviours to master task performance. Those who are open to ideas and give credit to the contributions of others increase employee job satisfaction. For instance, when leaders recognise the potential of their employees generate in them the desire to stay in the organisation.

Humble leaders create in their followers the sense that their voice is heard, which fosters confidence and motivation. Under these conditions, employee work engagement is achieved (Owens et al., 2013). In addition, followers of humble leaders feel liberated to take the risk of being transparent about their own development process and get exposed to others, without feeling judged. With psychological comfort employees acquire sense of their work as they feel that their strengths and values are appreciated (Owens et al., 2013; Owens and Hekman, 2012).

LH is emulated by members of the work team due to the behavioural process of social contagion (Owens and Hekman, 2016). LH is a shared perception that flows as a cascade through hierarchical levels (Ou et al., 2014). The humility of the leader creates an empowering climate and exerts great impact on follower engagement (Sousa and van Dierendonck, 2015). Empowering climate will motivate subordinates to perform their duties more efficiently so that they can reach their goals.

PE is based on the expectancy theory, that proposes that a person's motivation to increase her/his effort on a given duty depends on two kinds of expectancies: that her/his efforts will have as an outcome the desired performance level, and that this performance will produce the expected results (Lawler, 1977). PE has four dimensions:

a sense, that is the value of work purpose or goals, that is evaluated against the ideals of the individual himself

b impact, that is the degree in which the individual can influence on the strategic, administrative and operative results at work

c competency or self-efficacy, that is the believe of the individual in his capacity to perform tasks based on his abilities

d self-determination, that reflects autonomy in the beginning and continuity of behaviours and work processes (Spreitzer, 1995).

Empowered employees feel able to do their jobs in a more meaningful way, with efficient task performance that leads to improve job satisfaction, influences creative behaviour, challenges employees to apply non-traditional reasoning, and increase employee retention and innovative behaviour (Nederveen et al., 2010; Dust et al., 2014; Choi et al., 2016; Lee et al., 2017; Aydogmus et al., 2017). Empowerment integrates a social structural perspective whose centre is the organisation, and the psychological perspective that focuses on the individual. Companies that share power, information and knowledge to their employees have positive results such as improvement in the quality of work of their employees, quality of product, service, productivity and customer service. Employees also experiment more power when their leaders are accessible and trustworthy. The state in which subordinates are found psychologically empowered is of one constant intrinsically motivation that leads to carry out their daily tasks in a productive manner, and to contribute with creative and innovative ideas that have repercussions on the company's performance (Lee et al., 2017; Dust et al., 2014; Choi et al., 2016; Aydogmus et al., 2017; Nederveen et al., 2010).

Employees working with leaders who show high moral standards, integrity and optimism feel more comfortable and empowered when they perform the required activities for the successful task accomplishment (Avolio, 1999). LH is, too, positively related to PE as it contains positive elements that motivate employees (Jeung and Yoon, 2016). Leadership and managerial support are the organisational factors that impact more in employee PE and work teams (Seibert et al., 2011). Leader humbleness allows subordinates to develop intrinsic motivation (Owens and Hekman, 2012), so there is a positive relationship between LH and subordinate PE (Jeung and Yoon, 2016). Jeung and Yoon study had, as limitation, that the questionnaire was applied in only one multinational company located in South Korea, so the authors recommended more studies in other countries. The present study was conducted in Ecuador, a country that scores higher than South Korea in the PD dimension. The first hypothesis is:

H1 LH is positively related to subordinates PE in a high PD context.

2.2 Leader-subordinate dyad gender

The gender of the leader-subordinate dyad affects the strength of the relationship between transformational leadership and PE (Kim and Shin, 2017). This is due to cultural influences, which impact gender roles. Men are assumed to be strong and predisposed to material success, whereas, women are tender and concerned with quality of life (Manning et al., 2017).

A high degree of egalitarism is predominant in low PD cultures (Gudykunst and Lee, 2003). In egalitarian organisations it is assumed that men and women leadership abilities are legitimate. But when an egalitarian organisation fails, women perception of competency, status domain and interpersonal skills diminish more than in the case of men. Differences between men and women also show up when male leaders qualify their female colleagues with a lower work performance score than the one put for their male colleagues. Nevertheless, women do not discriminate between gender in the performance evaluation they make (Szymanska and Rubin, 2018). Being Ecuador a country that scores high in PD, low egalitarianism is found; meaning, women receive less promotions for managerial positions than men. Then, a second hypothesis is presented:

H2 Leader gender moderates the relationship between LH and PE and the effect is stronger for male leaders.

The perception of subordinates towards leader effectiveness may vary regarding their gender as personality traits and social cognition intervene. Small differences exist in personality traits of the big five between men and women in the sense of extraversion and openness to experience, whereas women show more traits of neuroticism and agreeableness than men (Weisberg et al., 2011). These two last traits counterpose. In the first case, it presents volatility characteristics that alter labour relationship between women leader and subordinate. However, in the second case, which refers to elements that keep social harmony, it is a foundation for the relationship of a woman leader and their subordinates whether men or women. Men possess the three extraversion personality traits, openness to experience and consciousness which may favour the efficacy of the humility expressed by the leader about male subordinate PE.

Social cognition has two fundamental dimensions: agency that refers to goal-achievement and task functioning, and communion that refers to maintenance of relationships and social functioning (Abele and Wojciszke, 2014). Leaders, either agentic or communal, should be seen as more effective leaders than their non-communal and non-agentic counterparts. However, these characteristics in humble male and female leaders present differences in leadership effectiveness when communal attributes increase and agentic attributes decrease (Zapata and Hayes-Jones, 2019). These characteristics of communal leadership and the agreeableness personality trait of women subordinates match with maintaining social harmony, which may cause a stronger bond on the leader-subordinate relationship when the subordinate is a woman. Humble leaders could be perceived by their male subordinates as more effective. Besides, subordinates tend to prefer stereotype traits of their own gender (Griffiths et al., 2018). Then, the third hypothesis is presented:

H3 Subordinate gender moderates the relationship between LH and PE and the effect is stronger in male subordinates.

As the interpersonal theory analyses dyads, Vial et al. (2016) suggested to study the different gender relationships between the leader and their subordinates that could affect the compatibility of the teamwork. For one side, a female employee, when exposed to gender role differences, accept discrepancies based on the existence of PD and is less likely to inform relationship conflicts with their male leaders (Graham and Dust, 2018), a situation that would not occur if the boss is a woman. As a result of cultural demands for modesty, men show pride effects and women show humility effects. Women are more likely than men to have an accurate view of themselves, recognise the strengths and accomplishments of others, and define humility as understanding one's real contribution in a team environment (Furnham et al., 2001). Males define humility as an interpersonal style, characterised for being friendly, accessible, and warm (Burak et al., 2015). Female leaders ascribe their power to their charisma, communication skills, diligence, or personal relations but no to their organisational position (Rosener, 1990). Moreover, women are more willing to share knowledge as they need to overcome traditional barriers to continue their professional development (Lin, 2006). This argument is against the one proposed by Abukhait et al. (2018), who indicated that women are more cautious and less prone to share their knowledge with others, a result obtained in the UAE. Female subordinates tend to evaluate female leaders as being better than male leaders (Cuadrado et al., 2012). The studies mentioned above were not conclusive and in cases, contradictory, so the fourth hypothesis is presented:

H4 Gender in the dyad leader-subordinate moderates the relationship between LH and PE and this relationship is stronger when genders are the same.

3 Method

3.1 Sample and procedure

Participants were part-time MBA students from private and public universities who worked for a company and had a boss. 430 questionnaires were answered and 253 were correctly filled out. More than ten respondents per item in the questionnaire were obtained (Hair et al., 2014). Questionnaires were filled out in classrooms in the cities of Guayaquil, Cuenca and Santa Elena. Informed consent was presented and respondents were instructed about the objective of the study and the confidentiality of the data, as shown in Table 1.

To measure LH and PE a total of 21 questions were used, corresponding to seven variables. A seven-point Likert scale was used where 1 expressed total disagreement and 7 meant full agreement. To measure PE, the instrument developed by Spreitzer (1995) was used, consisting of four variables with three questions each. To measure LH the instrument developed by Owens et al. (2013) was used. The original instruments were in English. The forward and backward translation method was used. The questionnaire in Spanish was analysed by an expert panel and reliability was measured. A pilot test was conducted to measure the reliability and clarity of the questionnaire. The test was applied to 38 MBA students in Guayaquil. Cronbach's alpha statistical test was applied to

determine the reliability of the survey whose results ranged between 0.78 and 0.95, exceeding the accepted value of 0.70 to be accepted.

Table 1 Demographic data of the sample selected for the questionnaires

Employment position	*%*	*Age*	*%*	*Time spent working in the company*	*%*	*Selected population*	*%*
Male leaders	60.1%	20–30 years old	31.6%	1–5 years	51.0%	Guayaquil	74.3%
Female leaders	39.9%	30–40 years old	47.4%	5–10 years	26.9%	St. Elena	8.7%
Male subordinates	55.7%	40–50 years old	17.8%	More than 10 years	22.1%	Cuenca	17.0%
Female subordinates	44.3%	Over 50 years old	3.2%				
According to the economic activity of the company	*%*	*According to the size of the company*	*%*	*According to the type of company*	*%*	*According to the type of university*	*%*
Companies engaged in the production of services	75.5%	Large companies	42.3%	Private companies	64.4%	Private universities	66.4%
Other	24.50 %	Medium-sized companies	25.3%	Public companies	35.6%	Public universities	33.6%
		Small companies	32.4%				

Note: All respondents had more than one year working with the same boss.

3.2 Measurements

Data analysis consisted in verifying the multivariant analysis assumptions and the identification of missing data and outliers. To analyse if data complied normality and to detect outliers, Mahalanobis distance (D^2) and Mardia coefficient were calculated using SPSS Amos 24 version. To measure quantitative variables, the Mahalanobis measurement test (D^2) was applied, which has statistical properties with significance tests and measures the multidimensional distance of each observation with respect to the centre of the data. A critical value of $p < 0.001$ was established (Kline, 2011). All p values were less than 0.001, so no outlier was found. Mardia (1970) proposed a multivariate normality test, which is based on the extent of skewness and kurtosis of the set of observable variables. The obtained result indicated bias values lower than 3 and kurtosis values less than 4. Besides, the critical multivariant was 34.45 conservative (Kline, 2011). Normality level was acceptable as all multivariate Mardia coefficients were below 50 (Rodríguez and Ruíz, 2008).

The partial least square (PLS) approach was used as the prediction of one variable over other was analysed, this avoids small sample size problems and minimises biases associated with dichotomous and ordinal measures [Mintu-Wimsatt and Graham, (2004), p.352], in this study the sample size was relatively small and this is a more rigorous

approach in comparison to correlation and regression analyses [Mintu-Wimsatt and Graham, (2004), p.352]. Homoscedasticity refers to the assumption that the dependent variables exhibit equal levels of variance across the range of predictor variables, the variance of the dependent variable should not be concentrated only in a limited range of independent values (Hair et al., 2014). Levine test for evaluating the statistical difference between covariance matrices indicated a significant value of $p < 0.001$, so the null hypothesis was rejected, no homoscedasticity was found.

3.3 Structural model evaluation

The tests that Hair et al. (2014) suggest to evaluate reflective structural models by PLS-SEM estimation are:

a internal consistency analysis with Cronbach's alpha test and composite reliability (CR)

b convergent validity assessment by means of average variance extracted – AVE

d discriminant validity assessment according to Fornell and Larcker (1981) criterion.

The construct humility expressed by the leader was operationalised as a second-order reflective consisting of three first-order reflective constructs. The construct PE was operationalised as a second-order reflective consisting of four first-order reflective constructs. Internal consistency was evaluated through Cronbach's alpha, composite reliability test, and Spearman rho coefficient. Results obtained are shown in Table 2.

Table 2 Internal consistency of the dimensions of the constructs PE and LH

	Cronbach's alpha	*Composite reliability*	*Spearman rho*
PE			
Sense	.841	.904	.845
Competency	.789	.877	.790
Self-determination	.859	.914	.859
Impact	.709	.823	.723
LH			
Willingness	.776	.870	.782
Appreciation	.815	.890	.823
Teaching capacity	.929	.955	.929

Cronbach's alpha results were between .71 and .93. Variables showed a reliable internal consistency higher than the common minimum accepted value of .70. Composite reliability is preferred over the Cronbach's alpha for PLS because it assumes that metrics do not receive the same weight. A modest reliability level corresponds to a value of .7 considered for research in early stages, but in more advanced stages a value of .8 to .9 is preferred (Garson, 2016). The composite reliability coefficients ranged from .82 to .96 indicating that the variables measured adequately LH and PE. Teaching capacity obtained a value of .955 indicating that it could be measuring the same thing as one or more of the other variables. Spearman rho coefficients were between .723 and .929. Regarding convergent validity, all load factors exceeded .70 ranging from .719 to 0.947, as can be

seen in Table 3. Results were significant as values were above .5 with p<.001 (Wixom and Watson, 2001).

The average variance extracted (AVE) values ranged from .608 to .877, as can be seen in Table 3, which is above the threshold value of .50. All factor load values and AVE were above .5 so, it was concluded that it existed convergent validity for all items and variables.

Table 3 Load factors, cross load factors, and AVE values

	Sense	*Competency*	*Self-determination*	*Impact*	*Willingness*	*Appreciation*	*Capacity*
EP001	**.893**	.423	.280	.411	.038	.131	.128
EP002	**.814**	.388	.243	.468	.176	.237	.208
EP003	**.906**	.436	.311	.476	.095	.164	.108
EP004	.423	**.872**	.233	.355	.080	.112	.076
EP005	.384	**.868**	.166	.384	.014	.033	.036
EP006	.394	**.776**	.230	.389	–.118	.015	–.069
EP007	.293	.226	**.870**	.358	.372	.400	.403
EP008	.260	.233	**.889**	.431	.244	.275	.249
EP009	.295	.204	**.891**	.393	.289	.329	.270
EP010	.413	.411	.471	**.819**	.072	.167	.101
EP011	.349	.231	.260	**.719**	.074	.073	.078
EP012	.445	.382	.289	**.796**	.120	.154	.122
HEL001	.230	.007	.284	.146	**.809**	.682	.702
HEL002	.025	.013	.299	.056	**.817**	.516	.572
HEL003	.028	–.034	.271	.077	**.866**	.692	.732
HEL004	.169	.088	.289	.132	.628	**.843**	.697
HEL005	.141	.059	.328	.152	.611	**.824**	.615
HEL006	.203	.023	.351	.162	.717	**.896**	.790
HEL007	.174	.053	.296	.122	.765	.781	**.922**
HEL008	.130	.000	.343	.144	.748	.769	**.947**
HEL009	.167	–.001	.335	.099	.764	.764	**.939**
AVE	.760	.705	.780	.608	.691	.731	.877

Note: Load factors for each construct are in bold.

To test discriminant validity two evaluation criteria were used: the first test evaluated the load factors for each item. Constructs load coefficient were evaluated. Results of all items for each PE dimension were between .719 and .906, as can be seen in Table 3. All items showed load factors below .50 with other dimensions of the PE construct indicating discriminant validity among them. However, each item for all dimensions of the LH construct ranged from .516 to .781, well above .50, which showed low discrimination between dimensions. Those results indicated signs of high correlation between LH dimensions.

The second test measured the square root of the average standardised variance. AVE values should be higher than the variance that each construct shared with the other constructs in the model (Fornell and Larcker, 1981). Values obtained for cross loads for

willingness, appreciation, and teaching capacity constructs were higher than the ones for the other constructs, although lower than the AVE square root. Results are shown in Table 4.

Table 4 Correlation between constructs and AVE square root

	Sense	*Competency*	*Self-determination*	*Impact*	*Willingness*	*Appreciation*	*Capacity*
Sense	**.872**						
Competency	.478	**.840**					
Self-determination	.320	.250	**.883**				
Impact	.518	.448	.446	**.780**			
Willingness	.117	-.007	.341	.114	**.831**		
Appreciation	.202	.065	.378	.174	.765	**.855**	
Capacity	.168	.018	.347	.130	.810	.824	**.936**

Note: AVEs square root values are shown in the diagonal, in bold.

The structural model path coefficients estimation is based on minimum square ordinal regressions. For that reason, multicollinearity between dimensions in the model must be avoided. To determine construct collinearity over the variance inflation factor was verified for all constructs. Values ranged from 1.27 to 4.81. All results were below the acceptance point of 5, indicating that there was no multicollinearity (Garson, 2016; Hsu and Chang, 2014). Correlation between LH indicator variables could complicate data interpretation and cause false conclusions. Although Owens et al. (2013) determined that the construct presented a better fit with three factors and second order, because the results showed signs for LH to be a one-factor construct, factorial tests were performed to determine the behaviour of the indicator variables in the Ecuadorian context. SPSS 25 was used to measure discriminant analysis, principal component analysis and exploratory factorial analysis.

Regarding discriminant analysis, willingness correlated high with capacity and appreciation, all from the LH construct. In both cases, values were above .95. Appreciation showed a correlation index of .94 with teaching capacity. The three LH dimensions seemed to explain the same phenomena. Principal component analysis indicated that LH had only one factor. Exploratory factor analysis, through principal axis factoring with varimax rotation showed that LH had one factor, too. It was concluded that HL had only one factor with nine items.

To measure if data contamination existed for the common-method variance, a marker variable was included in the questionnaire. The assumption was that when the common-method variance is present in all variables, the marker variable will be affected (Cernas et al., 2017). The test followed the procedure recommended by Podsakoff et al. (2003). All items were reflectively associated with the marker variable. The model is shown is Figure 1.

One marker variable with two items was included in the questionnaire to be measured with the same Likert scale used for the rest of the items. Common-method load factor values were insignificant, while the indicators of the substantive variables were considerably higher (.73) than the ones of the common-method (.01). So, the

common-method variance potential was not significant (Liang et al., 2007). Results of the load factors and substantive variables are shown in Table 5.

Figure 1 Model with the common-method factor (see online version for colours)

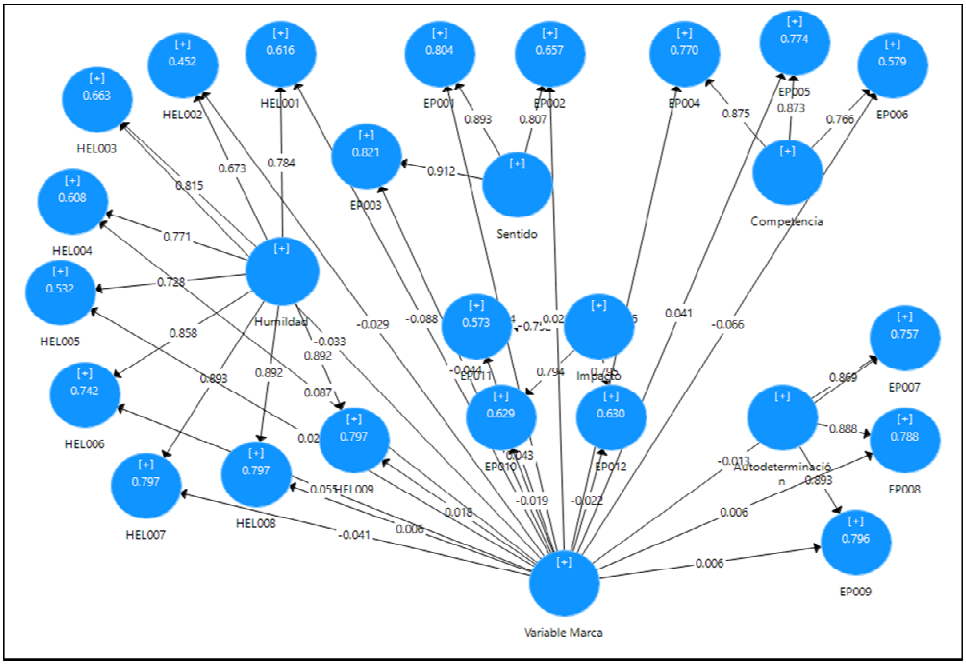


Table 5 Substantive variable load factors and common-method

Dimension	*Code*	*Substantive variable load factor (R1)*	*R1²*	*Method factor load (R2)*	*R2²*
Willingness to see oneself with precision	HEL001	.784	.614	–.088	.008
	HEL002	.673	.453	–.029	.001
	HEL003	.815	.664	–.033	.001
Appreciation for others' strengths and contribution	HEL004	.771	.595	.087	.008
	HEL005	.728	.530	.022	.000
	HEL006	.858	.735	.055	.003
Teaching capacity	HEL007	.893	.798	.041	.002
	HEL008	.892	.796	.006	.000
	HEL009	.892	.795	.018	.000
Sense	EP001	.893	.797	.024	.001
	EP002	.807	.651	.022	.000
	EP003	.912	.831	–.044	.002

Table 5 Substantive variable load factors and common-method (continued)

Dimension	*Code*	*Substantive variable load factor (R1)*	*R1²*	*Method factor load (R2)*	*R2²*
Competency	EP004	.875	.766	.015	.000
	EP005	.873	.763	.041	.002
	EP006	.766	.587	–.066	.004
Self-determination	EP007	.875	.766	–.013	.000
	EP008	.873	.763	.006	.000
	EP009	.766	.587	.006	.000
Impact	EP010	.869	.755	–.019	.000
	EP011	.888	.789	.043	.002
	EP012	.893	.797	–.022	.000
Average		.851	.728	.008	.001

4 Results

The SmartPLS SEM evaluation is composed of the significance test of path coefficients, the determination coefficient R^2, the predictive relevance Q^2 and the size effects f^2. In the structural model evaluation, the proposed hypotheses were tested using the non-parametric bootstrapping resample technique of 5,000 samples. The t-Student values for each indicator were obtained as well as the standard errors and confidence intervals to test the hypotheses (Chin, 1998).

Structural model test consisted in the analysis of R^2. According to Falk and Miller (1992) the suggested minimum value is .10. The obtained R^2 was .103 indicating that LH explained 10.3% of PE. Cohen's effect size test was performed to calculate the degree in which an exogenous construct contributes to explain an endogenous construct (Hair et al., 2012). The f^2 values in the range from .02 to .15 are considered to have a small effect, from .15 to .35 is a medium effect and values higher than .35 are considered a large effect. The sized obtained for LH was f^2 =.07, so LH explained PE with a small effect.

To evaluate the predictive relevance of the structural model paths to the endogenous variables the test Stone-Geisser Q^2 was used (Hair et al., 2012). The Q^2 value was obtained through the SmartPLS blindfolding procedure, with an omission data of 7. Following Hair et al. (2012) recommendation, the cross-validity redundancy was analysed. Q^2 value was .02. According to Tenenhaus et al. (2005), values higher than cero indicate predictive relevance. Values higher than .02 indicate a small effect, higher than .15 a medium effect and higher than .35 a large predictive effect. It was concluded that there is predictive relevance of the LH dimensions in subordinates PE but with a small effect.

Path coefficient between LH and PE was β = .259 with $p < .001$ and $t = 4.82$. Established parameters were of a significance level equal to .05 and critical t of 1.96. The obtained values of the path coefficient and predictive supported H1, LH is positively correlated to subordinates PE in a high PD context.

4.1 Multigroup analysis

The moderating variable gender was dichotomic: male = 1 and female = 0. Categoric moderating variables could be included in the PLS path model to determine the effect in a specific relation and are divided in subsamples. In the same theoretical model, it was estimated each one of the subsamples in order to determine in which group the correlation between LH and PE was higher. SmartPLS-SEM with bootstrapping of 5,000 sub-samples was used. Data were divided in four groups:

a female leader-female subordinate, 50 samples (F, F)

b male leader-male subordinate, 92 samples (M, M)

c female leader-male subordinate, 50 samples (F, M)

d male leader-female subordinate, 61 samples (M, F).

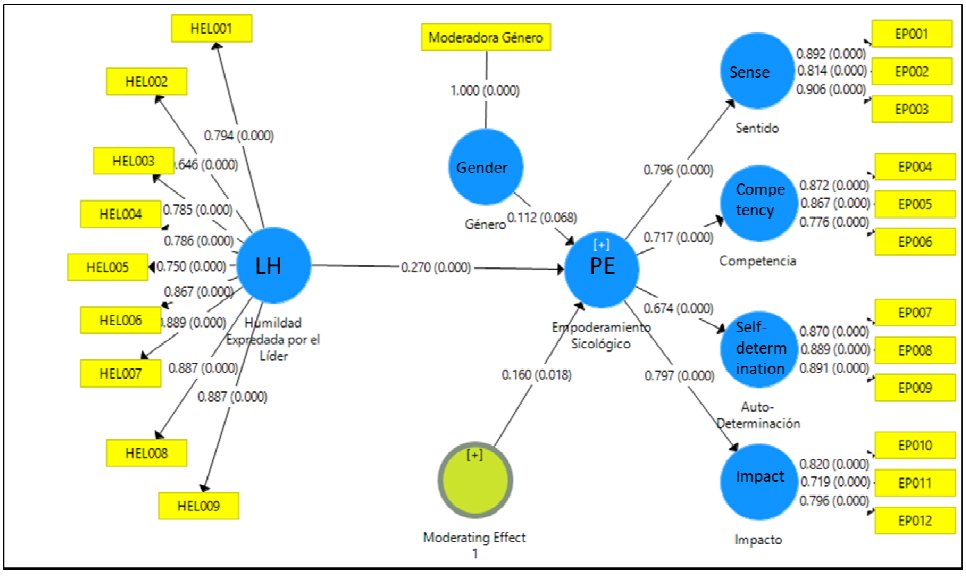
The moderating effect of each one of the four groups was evaluated. The result for the M-M group was $\beta = .393$, $t = 4.837$ and $p < .001$. This group presented the strongest effect in the relationship between LH and PE giving support to Hypothesis H2, leader gender moderates the relationship between LH and PE and the effect is the strongest for male leaders. The result for the F-M group was $\beta = .374$, $t = 4.158$ and $p < .001$. Those results gave support to hypothesis H3, subordinate gender moderates the relationship between LH and PE and the effect is stronger when the subordinate is male. The result for the F-F group was $\beta = –.25$, $t = 0.71$ and $p = .48$ no significant. The result for the M-F group: $\beta = .23$, $t = 2.05$ and $p = .040$ gave partial support to Hypothesis H4, gender moderates the relationship between LH and PE, only for male leaders, and the effect is stronger when both leader and subordinate are men. Obtained results are shown in Table 6.

Table 6 Path coefficients, t and p values for the four dyads analysed

	Group (leader-subordinate)	*Path coefficient*	*t*	*p value*
LH → PE	Male, male (M, M)	.393	4.837	0.000
	Female, male (F, M)	.374	4.158	0.000
	Male, female (M, F)	.232	2.051	0.040
	Female, female (F, F)	–.246	0.705	0.481

To evaluate the gender moderating effect in the structural model orthogonalisation was used. This approach is applicable because the exogenous variable and the moderating variable were measured reflexively. The evaluated model is shown in Figure 2. It was obtained a path coefficient $\beta = .11$ and $p = .07$, that shown a positive moderating effect though no significant. However, the interaction effect showed $\beta = .16$ and $p = .02$, positive and significant. These values show a positive and significant interaction of gender in the relationship between LH and PE.

Figure 2 Estimated model with gender as moderating variable (see online version for colours)



5 Discussion

The gender moderating effect in the relationship between LH and PE was stronger when both leader and subordinate were men. This result is similar at the one obtained by Kim and Shin (2017). The second group having the strongest effect in the relationship between PE and LH was F-M. This effect is attributed to the fact that the male subordinate assumes that leadership is stereotyped for men (Koening et al., 2011), however, perceiving behaviours of humility in the female leader is interpreted as hierarchical equality. The strongest relationships were obtained for the dyads where subordinates were male, meaning that male subordinates value humble leaders, regardless their gender. It is likely that male subordinates, when noticing that their leader acknowledges his own mistakes and limitations and seeks comments from them, feel a sense of being an important part of the work community (Owens et al., 2013). When a leader shows agentic characteristics such as being controller, independent and influencer, male subordinates are likely to prefer a shared leadership. Male subordinates are more psychologically empowered than female subordinates when they perceive a humble behaviour from their leaders, a sign that could be interpreted as a search for professional equality.

Dyads formed with different genders showed a weaker correlation between LH and PE than for the M-M dyad although they still were significant and positive. For the dyad M-F, female subordinates value a humble behaviour from their male leaders, an expected result considering a high PD context (Graham and Dust, 2018). Having a humble leader could be perceived as an opportunity to be valued by their own strength and professional skills and in this way, to be empowered at work. As in the study of Kim and Shin (2017) it can be said that male subordinates are more psychological empowered having humble leaders than their female counterparts.

Finally, the effect of the humble female leader over the female subordinate PE is neutral. Female transformational leadership does not empower female subordinates (Kim and Shin, 2017). In the same line, this study found female LH was not related to the female subordinate PE. Despite these results, in a previous study, female subordinates evaluated their female leaders as being more effective than male leadership (Cuadrado et al., 2012). It seems that female subordinates are indifferent to their female leaders showing a humble behaviour. Several factors exist that could explain this effect and more research is needed. Female leadership is perceived as less legitimate (Vial et al., 2016) and, for that reason, the increase in the participation of women in managerial positions continues to be slow and unequal (Kuschel and Salvaj, 2018). The personality traits that women possess, such as neuroticism and affability, volatility and social harmony (Weisberg et al., 2011) and being servant, compassionate and kind, all of which show humbleness behaviours, could be perceived by subordinates as signs of weakness in a leader and this could affect their professional roles. Female subordinates might wish to have a strong, rather than humble, female leader.

This study contributes to the academic literature by shedding light on how gender affects the way in which people react to humility behaviours expressed by male and female leaders. It was shown that differences exist in three of the four dyads leader-subordinate, and that the one that generated more PE in subordinates was the one formed by a male leader showing a humble behaviour and male subordinate. On the contrary, for female leaders who show a humble behaviour and female subordinate, no significant relationship was found.

This study also contributes to generalise the results obtained by Jeung and Yoon (2016), in which one of the limitations was that 85% of their study participants were men. In the present study, a more balanced participation was obtained between genders, with 55.7% being men and 44.3% being women. It could be affirmed that a positive and significant relation exists between LH and subordinate PE in high and moderate high levels of PD contexts. In a practical sense, the results of this study imply that part of the competitive advantage of companies is the leaders' humility because they are considered a valuable resource, difficult to imitate and that empowers subordinates. Additionally, the results show that female leaders who express humility exert the same empowering force on male subordinates as male leaders.

6 Conclusions

This study presents empirical evidence regarding leaders' humble behaviour at work. First, it showed that a positive relationship exists between LH and PE, in line with the results obtained by Jeung and Yoon (2016). This result contributes to generalise the relationship between LH and subordinate PE. LH is a valuable resource to empower subordinates.

The moderating gender effect in the relationship between LH and PE varies according each of the four groups analysed. This was expected by the personal interaction theory (Vial et al., 2016). Leader gender could promote or harm the employee PE. Additionally, when the subordinate is male, the intensity of the relationship between LH and PE is greater, both with male and female leaders. Likewise, when the humble leader is male, he empowers both male and female subordinates. However, when the humble leader is

female, she only empowers male subordinates. And when the subordinate is a woman, she is only empowered when the humble leader is a man. Finally, the relationship between LH and PE is stronger when the gender combinations are different F-M and M-F. By perceiving humble behaviours from the leader employees feel that their personal development is an objective at work and they become intrinsically motivated (Owens and Hekman, 2012).

This study has several implications for business administration. For one side, it contributes to strategic human resource management in leaders' selection and teams' integration considering gender as a variable. The effect is stronger for male leaders, implying they could use humility as a tool to psychologically empower their subordinates. Certain components of a humble leadership, such as self-consciousness, value other strengths and being open to new learning are fundamental factors for effective leaders as they promote the employee's personal growth in high PD contexts.

7 Suggestions for future research

The obtained results open new questions that require further research to describe those personality factors possessed by both women and men which could explain the differences found between the four dyads leader-subordinate.

Despite the presented contributions this study possesses several limitations:

1 The results were obtained only in one country, Ecuador. It is necessary to conduct further research in other countries, especially the ones with low PD index.

2 Regarding research design, the study was cross-sectional so no causality was determined. More research is necessary that collects data in several periods of time to analyse the dynamics of the four relationships studied.

3 A convenience sample using part-time MBA students was used and it may affect the generalisation of results. Further research is necessary considering samples from other populations.

LH was measured using Owens et al.'s (2013) instrument, that presents a second order model applied in South Korea and the USA, with three dimensions, each one measured with three items (Jeung and Yoon, 2016; Owens and Hekman, 2016; Qian et al., 2018). In the present study, the model fit better with one factor with nine observable variables. Further research is recommended to determine if LH presents different statistical fits according to cultural context of the population studied.

The conduction of new studies is suggested to determine if professional persistence and professional development constitute other factors that influence the female leader participation (Kuschel and Salvaj, 2018), and the adoption of not only communal attributes but also to the agentic attributes (Griffiths et al., 2018), usually attributed to men, that could help to achieve an effective leadership.

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