



Robustness and Reliability Evaluation of a model for firm performance

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ABSTRACT

Giving and seeking help are basic individuals' needs; currently helping in the workplace is a subject of great interest. This research aim is to evaluate the reliability and robustness of a model for firm performance, through the variables of seeking and giving help for a good business performance. This research has a qualitative-quantitative approach of correlational, explanatory, cross-sectional type, in five Ecuador-China collaborative work companies. As a tool for data collection, a survey was used, which was later validated by experts using the Murayama's method, a pilot test was carried out and after that the reliability was determined by the Cronbach's Alpha method. Finally, the theoretical model prepared has the reliability and robustness to be applied in the analysis and projections of the studied companies all this is confirmed by statistical methods. These methods are used in their evaluation and it was concluded that when there are quality interpersonal relationships (RQ), seeking help (HS) is more frequent or probable. In labour relationships, the relationships of hierarchy (HR) together with the mediator for help seeking (HS) are effectively correlated. It was shown that when Hierarchy Relationships (HR) are satisfactory, it is more viable to provide help (HG); however, the model showed that these variables have no significant relationships on firm performance.

Keywords: help seeking, help giving, theoretical model, interpersonal relationships.



1. INTRODUCCIÓN

Giving and seeking help are basic needs of every individual. Helping at the workplace is a matter of great interest nowadays, despite the fact of having the social cost that implies the process of making the human being achieve this behaviour. According to previous studies as (Toegel, Kilduff, & Anand, 2013; Rijt, et al, 2013; Eraut, 2007), at work, employees learn this commonly by the social labour context. In fact, co-workers altogether by group activities and consulting one another and also by pursuing and asking help within the labour field, create the opportunity of sharing ideas and information with each other.

However, (Lee et al., 2004; Lee, 2002), demonstrate that it is hard for an individual to recognize his own inability in a particular area of knowledge while facing another individual, since nobody wants to appear inferior to others. No help would be pursued so do not suggest dependence on another person. According to Studdard & Munchus (2008), when an individual recognizes his own knowledge shortcomings, he would actively look for the possible solutions to solve the problem and will consult another person that has the knowledge that he needs.

In order to comprehend better this process, it is important to analyse the mechanisms, the social and emotional factors involved on seeking and giving help; similarly, the influence of trust, experience and hierarchy as relational predictors of such behaviour, as well as the accessibility and expertise on the social labour network of each individual (Nadler, Ellis, & Bar, 2003; Rijt, et al., 2013). This analysis should also consider the emotional support and the socialization outside the work environment that influence on this behaviour, also in terms of friendship, the quality of support and the exchange of valuable information is what allows friends and/or colleagues to help mutually and acquire the specific knowledge needed for the company (Hofmann, Lei, & Grant, 2009; Thacker & Stoner, 2012).

On their behalf (Flynn & Bohns, 2008) indicate that people tend to underestimate the will of offering help to other people; they propose that it is more frequent to provide help as a consequence of social pressure or as a consequence of an altruistic sense. They also argue about the importance of the interaction process at a regulatory level, focusing in the acceptance or rejection of a help request. If this process is proactive, it can be assumed that this relationship will have a direct impact in the company development.



The same author shows that the practice of seeking and giving help between co-workers is a behaviour that influences substantially the work relationship. While there exist more cooperation commitment between co-workers, there will be more reciprocity among them, meaning that, despite the cost that is implied in resources and time, the acceptance associated with providing help within the social circle is more important. (Grodal, Nelson, & Siino, 2015), on their behalf, they identify certain attitudes that generate emotional commitments between the ones who give and provide help, such as expressing urgency, humour, enthusiasm, interest, sympathy and acknowledgment.

Delving into these concepts, the relation of seeking and giving help is truly important, though differences that exist between previous researchers. Reagans & Zuckerman (2001), for example, conclude that through an effective communication, based on others knowledge, the members of a team exchange information and create new knowledge. According to Ostroff (2007), the new technological and labour environment has made these two variables far-reaching because of their intrinsic effects in the performance of the company, since they allow the information to be shifted in several senses and in multiple levels among the departments. In this way, it is easy to conclude that among the organizations where quality relationships and inclusive hierarchical models exist, the acquisition of knowledge facilitates the searching or providing of assistance or support among individuals.

However Flynn & Brockner (2003) on their studies, they refer about companies sustain a tendency towards the management of interpersonal relationships before than towards hierarchy, where it is required an horizontal organization more than a vertical. This has given great more importance to team work and has given the employees more influence than the one they had before.

It is appropriate to indicate that in the theoretical analysis of this topic, it has been proven that the acquisition of knowledge is very accurate, since it plays an important role in order that companies achieve rapidity and efficiency. Weerd-Nederhof, Pacitti, Silva Gomes, & Pearson (2002) and Jimenez-Jimenez & Sanz-Valle (2011), propose that since organizational learning, innovation and performance of the company are positively related between them, it is undeniable that searching information through proactive attitudes of asking and providing help benefits the acquisition of important knowledge required for the success of a company (Studdard & Munchus, 2008); if the individual



capacity of asking help in a proactive manner is limited, then the acquisition of resources for the training and development of the company become limited.

In fact, in an era where knowledge has turned into a generating resource of competitive advantages; the proper knowledge management could help companies to develop professionally their employees, improve innovation processes, sales growth, consumers satisfaction and in this way, reach an organizational success (Edvardsson& Durst 2013).

This apparently simple social phenomenon, but unquestionably complex for the diversity of experiences and opinions, influences on the successes of companies in the current and competitive context. This makes specialists of multiple fields to deploy resources on studying the effect of seeking and giving help on the current company development. For that purpose, many models and procedures are designed to try to unify these elements that shape a company and its development. That is why this investigation has as a target, to assess the reliability and robustness of a model for the firm performance, through the variables of seeking and giving help for a good firm performance.

2. METHODOLOGY

This investigation was carried out with a quali-quantitative approach of correlational, explanatory and cross-cutting in five Ecuador-China collaborative companies. As an instrument for information compilation, a survey was designed, using Likert's scale for the elaboration and it was authenticated by experts through Maruyama's method. It was then submitted to a pilot test and then its reliability was determined by the Cronbach's Alfa method. Finally, the non-probabilistic method was applied intentionally at a sample of 300 supervisors of such companies.

The type of models used were: Partial Least Squares Path Modelling, PLS-PM; in order to define the observed and latent variables. A Bootstrapping was done to know the robustness of the load of the indicators and if the relations between variables are statistically significant. Finally, the R^2 (Person correlation coefficient) of the variables was observed in the proposed model.

The theoretical model was designed likewise, where the aspects that shape it are taken into account. Hypotheses emerge that need to be demonstrated, so the model can be validated.

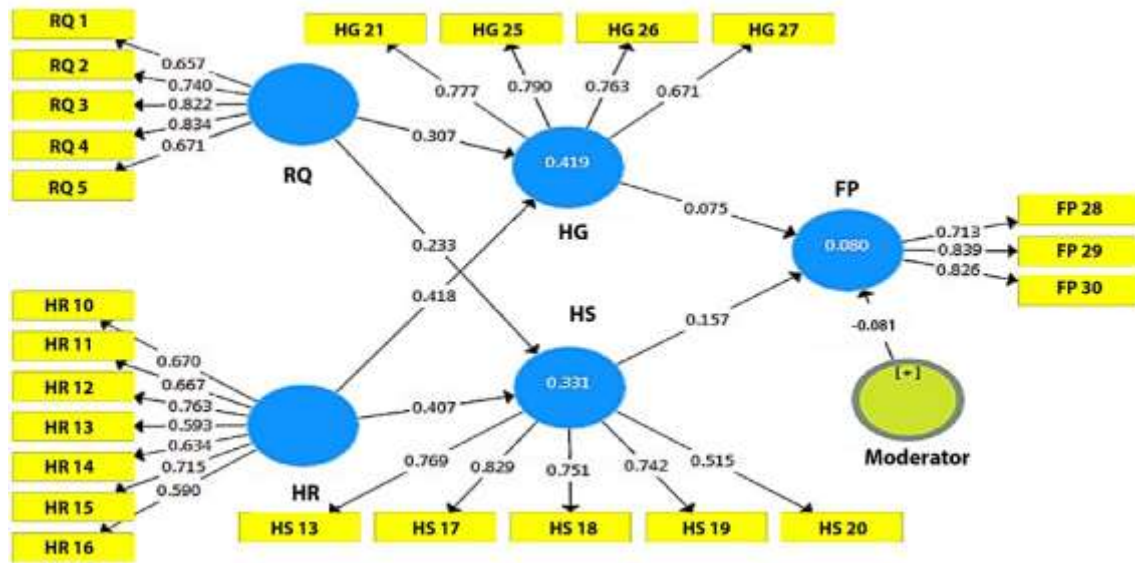
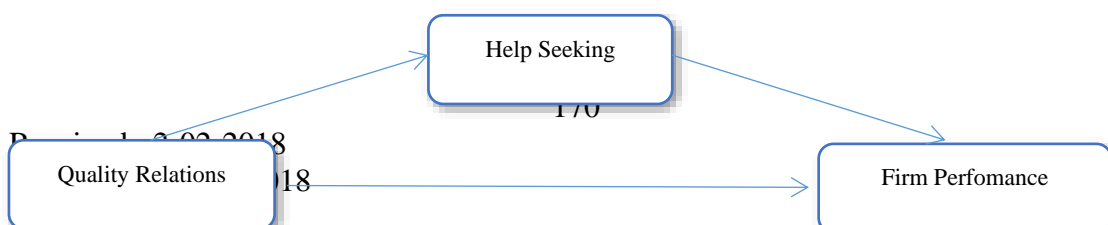


Chart1. Theoretical Model for Firm Performance.

The model was based on the variables of relationships of quality and hierarchy, for being key predictors on seeking and giving help, according to the theoretical studies carried out. The quality of the relationships (RQ) was evaluated by five questions that deepened in the labour relationships among the example supervisors. For example: If you have difficulties at work, would your co-worker try to help you? The hierarchy relationships (HR) were evaluated in seven questions directed to the supervisors. For example: Does your superior worries for solving or clarifying doubts on your labour performance? The help seeking (HS) was evaluated in five example questions. Usually, would you ask for help with matters related with work? The other meter, help giving (HG), was evaluated in four example questions. How enthusiastic do you feel on providing help to your co-workers? Finally, the dependent variable, firm performance (FP), was evaluated in three example questions. Usually, has your organization fulfilled its goals?

2.1 Help seeking as a mediator

The seeking of help contributes to organizational success, greater commitment, new knowledge acquisition and labour performance improvements (Lee F, 2002); a good quality relation at work increase the chances of success of the company, therefore, a proactive attitude of seeking help is an important mediating variable.



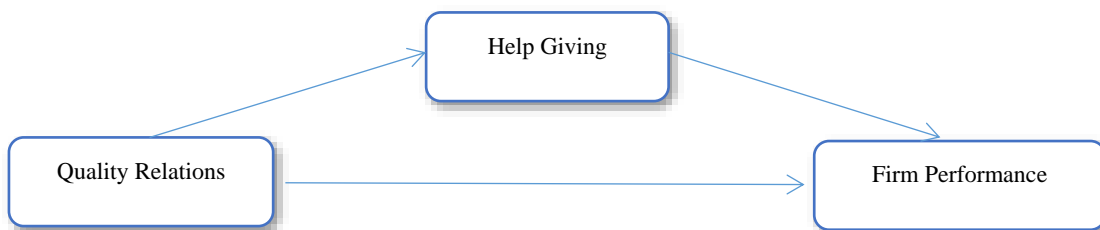


From there, the hypothesis is deduced.

H1: A good quality in interpersonal relationships, usually activates the mediating process of help seeking between them and that would increase the company's performance.

2.2 Help Giving as a mediator

Giving help develops equality feelings, social utility, independence and value. Also, it allows each person to be conscious of their own strengths. (Roberts, et al., 1999; Batson, Chang, Orr, & Rowland 2002; Gerdes 2011) consider that the empathy and the concern for another person's situation are prerequisites to offer collaboration to whoever is in need. Bennett & Barkensjo (2005) conclude that a good quality of interpersonal relationships is related with job satisfaction and quality of service related with behavioural outcomes such as trust. These precepts suggest that good quality relationships in the workplace promote the action of giving help and that would impact the firm performance.



From there, the hypothesis is deduced.

H2: A good quality of interpersonal relationships activates the mediating process of help giving among them and that would increase the firm performance.

2.3 Seeking help as a mediator

In the relationships between superiors and subordinates, it is allowed to visualize that people are seen as holders of relevant knowledge for a specific task. Their opinion is more valuable, therefore is likely for individuals to approach these people in order to seek for help (Nadler, Ellis, & Bar, 2003). This is the case of superiors who have reached this status, due to their labour capacity. Specifically, the main reason to ask for advice or to



seek for help is given by the capacity of the superior, from the cognitive point of view and related with any subordinate.

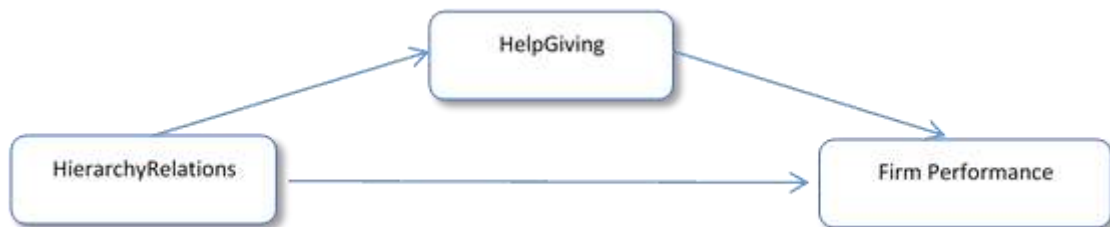


The hypothesis is deduced.

H 3: Hierarchical level make the mediating process of seeking help more viable and this affects positively the corporate performance.

2.4 Help giving as a mediator

In the same way as in the previous case, providing help from the hierarchical level to a subordinate could be a determining factor in the firm performance. Feeling as a subordinate that your superior is capable of satisfying your cognitive needs, would elevate the performance as an employee and the firm performance as a consequence.

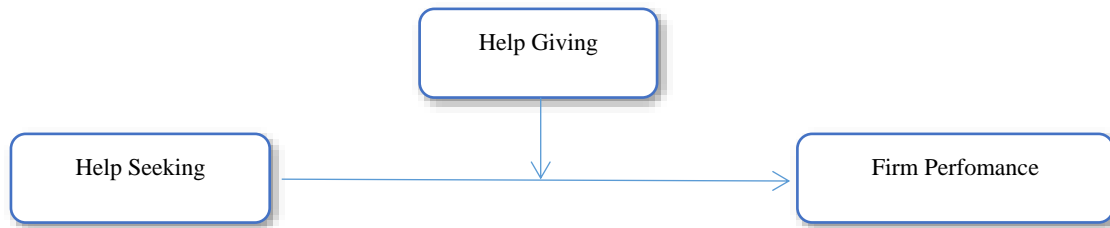


The hypothesis is deduced.

H4: Hierarchical level make the mediating process of giving help more viable and this affects positively the firm performance.

2.5 Help giving as a moderator

Accepting help is a necessary and important step on help interaction (Grodal, Nelson, & Siino, 2015). This process of asking and providing help creates a continuous cognitive and emotional commitment. Analysing the impact of the response to a request for help could be an important factor in the business performance.



The hypothesis is deduced.

H5: Giving required help is an important moderator towards a help request and affects the firm performance.

3. RESULTS

The validation of the survey, according to the Cronbach's Alfa reliability model demonstrates:

Chart 1. Reliability Results

Cronbach's Alfa	Standardized elements of C.A.	Number of elements
0,892	0,893	29

Results near to 1 demonstrate the reliability of the survey applied.

Chart 2. Results of the Model's Regression

	Help Giving(HG)	Help Seeking (HS)	Firm Performance (FP)
Help Giving	NA	NA	0,075
Help Seeking	NA	NA	0,157
Moderator	NA	NA	-0,081
Quality Relations (QR)	0,307	0,233	NA
Hierarchy Relations (HR)	0,418	0,407	NA

Hypothesis I: this one measures the quality of relationships with the mediator help seeking (HS) and firm performance (FP), the value of (QR) with (HS) is 0,233, meaning it is significant. However, with the dependent variable (FP), it does not have high significance 0,157, which allows to assert that in the proposed model, when there exist interpersonal relationships of quality, asking for help is more frequent or expected, but they do not define the firm performance. These results match with Hofmann, Lei, & Grant (2009), their study suggests that trust between individuals is what encourages people to seek for help without being embarrassed or feeling vulnerable. The same author continues



annotating that quality and reliance on relationships, favour the pursuit of help, while people that lack of this type of relationships would have less decision on asking for help. On the other hand, in the firm performance case (Podsakoff, Whiting, Podsakoff, & Blume 2009; Flynn F. 2005; Bouckennooghe, Asma, & Raja, 2015) found that usually exists a positive impact between help seeking and performance; whereas (Geller & Bamberger, 2012) suggest that is not always correct to expect positive results of that correlation on the long term since there should be also considered the learning commitment of the individual.

Hypothesis II: this one measures if the quality of the relationships (QR) motivates a behaviour of help giving (HG) and the dependent variable (FP). (QR) with (HG) have a significant relation of 0,307; with relation to (FP) it is 0,075, which is not highly significant, it is deduced that appropriate interpersonal relationships encourage more to provide help (HG) than to seek for help (HS) but these variables do not decide the firm development. This results do not match with (Lee F. , 2002) who presents that help seeking contributes substantially to organizational success, greater organizational commitment and improvements in the labour performance of employees. Nevertheless, this results match with (Liu & Batt, 2010), who poses that quality of relationships facilitates the exchange of resources among employees. According to Nohria, Groysberg, & Lee (2008), quality labour relationships create an enormous motivation improvement. Besides that, Cavallo, Zee, & Tory, (2016) suggest that giving help could be particularly beneficial when people are going through moments of inefficiency; while the ones being helped are concerned for the value of the help obtained and pursue that the person providing help, gets involved personally on finding an answer to the problem. These studies talk about the relation between relationships of quality considering the fact of help giving. Regarding to the correlation towards firm performance, it was not found any available literature.

Hypothesis III: this one measures the relation between hierarchy relationships (HR) and firm performance (FP) through the seeking help mediator (HS). In this case the relation between (HR) and (HS) is significant with a value of 0.047, however when the relation with (FP) is evaluated, a value of 0,0157 is obtained and this value is not appreciably significant. There are theories that suggest that employees that seek for help, develop a better understanding of how to perform a specific task and this contributes positively to



their performance. These results do not match the studies of (Navarro & Carmona-Lavado, 2010), who demonstrated that the hierarchical relations are the union among the employee and the organization; a key piece both for the performance evaluation, the distribution of responsibilities and resources allocation for their development. The relationship boss-subordinate, that at the beginning can be qualified as an economic exchange relationship, could potentially become a social exchange relationship where emotional links are developed. It has been proven that, employees who maintain relationships of good quality with their bosses, obtain greater performance, satisfaction and commitment levels. They develop behaviours beyond their strict job's obligations (Wayne, Shore, & Liden, 1997; Kee, Ansari, & Aafaqi, 2004; Lee J., 2005).

Hypothesis IV: this one measures the relation between hierarchy relationships (HR) and the providing help mediator (HG), as well as their impact over the firm performance (FP). In this case the relation between (HR) and (HG) is highly significant with a value of 0.418. However, when evaluating the relation with (FP) a value of 0,075 is obtained, it is not appreciably significant. Regarding to this hypothesis, there is no bibliography that allows to stablish references towards the results obtained.

Hypothesis V: this one measures the relation between seeking for help (HS) and firm performance (FP), taking as a moderator of both, help seeking (HS). In this case the moderator (HG) exposes figures of -0,081, in other words, this does not modify the relation between the independent variable seeking for help and the dependent variable firm performance. These results do not match with the studies of Feeney & Collins (2015), who present that people provide help to people near them, so they can achieve goals that, in another way, they could not have achieved.(Flynn & Brockner, 2003) conclude that help behaviours are mainly limited, due to the social cost involved on helping another person, from the assistant's perspective, helping requires time and effort. As a result, it can reduce a worker's productivity. On his behalf, (Gouldner, 1960) stood out that the co-workers motivation to provide help is the reciprocity. People help others, because others have helped them or could help them in the future(Blau P. , 1963).

Additionally, who asks for help gives a higher status to who provides this help, in exchange of his collaboration. Other studies have been focused on: the initial decision of helping, the perspectives of people that are willing to collaborate, the value of help and



the contemplations about the help they have received by accepting it (Flynn & Brockner, 2003), (Grant, Dutton, & Rosso, 2008) (Grant & Dutton, 2012).

Chart3. Bootstrapping Results

	Statistics t (O/STDEV)	P Value
Help Giving ->Firm Performance	0.658	0.511
Help Seeking ->Firm Performance	1.345	0.179
Moderator ->Firm Performance	1.426	0.155
Quality Relations_ ->Help Giving	5.337	0.000
Quality Relations_ ->Help Seeking	3.052	0.002
Hierarchy Relations->Help Giving	7.283	0.000
Hierarchy Relations->Help Seeking	5.535	0.000

It is observed that three relations that did not show any statistical significance, were found. Help Giving – Firm Performance (p=0,511), Help Seeking – Firm Performance (p=0,179) and the Moderation effect with Firm Performance (0,155). The rest are significantly related (p< 0,05). The relation between the indicators identified before, does not define in an accurate way (FP).

Chart4. R² Results

	R Square
Help Giving	0,419
Help Seeking	0,331
Firm Performance	0,080

The R² (Person correlation coefficient) of the variables in the proposed model, has a significant result in every case ($\alpha < 0,05$). Under the mentioned criterion, the performance of the latent variable help giving, was superior. This (R²) index, must be interpreted in the same form than the R² obtained in the analysis of multiple regression. Therefore, this measure indicates the construct's quantity of variance, which is explained by this model. Falk and Miller (1992) reveal that the explained variance of the endogenous variables (R²), should be higher or equal to 0,1. The values of R² that are lower than 0,1, even if they are statistically significant because they provide very little information. Consequently, the relations that are developed as a hypothesis associated to this latent variable have a very low predictive level. Starting from this statistic test, the firm



performance construct ($R^2=0,080$) does not possess an acceptable power of prediction. The remaining constructs of the model have a satisfactory power of prediction.

4. CONCLUSIONS

The theoretical shaped model, even when it does not match with previous models in the reviewed bibliography has reliability and robustness to be applied in the analysis and projections of the studied companies. All this was confirmed by the statistical methods used on the evaluation. Thus, when there exists interpersonal quality relationships (QR) and the request of help (HS), it is more prevalent and viable that labour relationships are efficient. This, likewise encourages help giving behaviour (HG) in the employee and seeking for help (HS). It is compelling to specify that none of these variables make viable or affect meaningfully the firm performance (FP) of the companies studied.

The model demonstrates that the Hierarchical Relationships (HR) combined to the seeking help mediator (HS), correlate in an effective form. In other words, the employees seek for help from individuals in a higher status, since they expect that their knowledge is more useful, compared to the knowledge of lower hierarchies. In addition to that, when asking for help, the information transference is encouraged trough cooperation networks. Despite this, they do not define any of the two variables in the corporate performance of the studied companies.

In the same way, it is demonstrated that when Hierarchical Relationships (HR) are satisfactory, it is more viable to provide help. Nonetheless, it does not determine the firm performance on the studied companies. The model demonstrates that, because there is no relation between asking help and the firm performance, the giving help moderator does not fulfil its function.



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