

Sharing is Where the Heart is: A Mediation-Moderation Model of Trust and Generosity Influence on Knowledge Sharing in NPOs

Carla Curado¹, Beatriz Alberto², Mírian Oliveira^{1,3} and Tiago Gonçalves^{1,4}

¹ADVANCE/ISEG Research, ISEG, Universidade de Lisboa, Portugal

²ISEG, Universidade de Lisboa, Portugal

³Pontifícia Universidade Católica do Rio Grande do Sul, Escola de Negócios, Porto Alegre, Brazil

⁴ISCSP, Universidade de Lisboa, Portugal

ccurado@iseg.ulisboa.pt

miriano@pucbrs.br

tgoncalves@iseg.ulisboa.pt

Abstract: Knowledge sharing plays a crucial role in the success of organizations, including those relying on the goodwill of their social actors, such as nonprofit organizations (NPOs). While knowledge-based management practices have been adopted in various types of NPOs, research still lacks a comprehensive understanding of the factors driving knowledge sharing, particularly the role of prosocial motivations. Trust, generosity, and team cohesion are recognized as key determinants of knowledge-sharing behavior, yet their interactions and combined effects in NPOs remain insufficiently explored. Following a research design grounded in Social Exchange Theory, this work examines how trust, generosity, and team cohesion contribute to knowledge sharing within Portuguese NPOs using a mediation-moderation model approach. Using survey data and structural equation modelling, we investigate how generosity and team cohesion mediate and moderate the relationship between trust and knowledge sharing. Our findings indicate that trust has a strong, positive impact on generosity and team cohesion, reinforcing its foundational role in knowledge-sharing dynamics. Furthermore, both generosity and team cohesion are positively associated with knowledge sharing. Notably, team cohesion plays a dual role by mediating and moderating the relationship between trust and knowledge sharing, amplifying its effects. Generosity, however, exhibits a more complex influence, serving as a positive mediator while also acting as a negative moderator in this relationship. These results highlight the nuanced interplay between trust, generosity, and team cohesion in shaping knowledge-sharing behaviors within NPOs. By uncovering such dynamics, this study contributes with valuable insights for both scholars and nonprofit managers, offering a deeper understanding of the mechanisms that foster effective knowledge-sharing environments in NPOs. The findings emphasize the importance of cultivating trust and team cohesion while managing the dual effects of generosity to optimize knowledge-sharing practices in nonprofit organizations. Our results show trust, team cohesion and generosity influencing KS in NPOs as not seen before, however, the present study is not free from limitations, such as the sample size, and the elimination of some variable items throughout the statistical analysis phase. We are aware that results apply to the specific context of Portuguese NPOs, therefore we invite colleagues to replicate the model in other geographies and, thus, test for national culture effects.

Keywords: Non-profit organizations, Trust, Team cohesion, Generosity, Knowledge sharing

1. Introduction

Knowledge is essential for all organizations (Davidavičienė et al., 2020; Santhosé & Lawrence, 2023) such as firms and NPOs. NPOs aim at socioeconomic development, integrating business practices on knowledge-based management, and with concerns about expectations and achieving superior performance (Langmann et al., 2021; Latif & Williams, 2017). The success and level of competitiveness of organizations are associated with critical factors such as knowledge sharing (KS) (Syed-Ikhsan & Rowland, 2004). However, KS does not happen spontaneously, although it is part of organizational life, requiring effort between the parties (Jia et al., 2023). Knowledge emerges and is put into practice in social environments through interactions (Rooney, 2015), culminating in trust (Curado & Vieira, 2019). Trust influences the adoption of generous behaviors (Anand & Walsh, 2016; Glanville et al., 2016), it increases cohesion between team members (Paul et al., 2016) and has a positive and significant impact on KS (Chedid et al., 2020; Mei et al., 2024). Trust among employees facilitates the development of work in teams (Kumi & Copestake, 2022). Generosity promotes strong connections between individuals (Anand & Walsh, 2016), cohesion between team members (Yang & Lin, 2022) and KS (Albinsson et al., 2019; Dwidienawati & Abidinagoro, 2018). Team cohesion influences relationships among team members (Lu & Fan, 2017), increases the willingness to help each other, and share knowledge (O'Reilly & Caldwell, 1985; Xue et al., 2011), all part of being generous and benefiting to third parties (Glanville et al., 2016; Dwidienawati & Abidinagoro, 2018; Dwidienawati et al., 2018). Teams are central points for organizational structure, highlighting their relevant role to the organization's strategy, as well as for KS (Davidavičienė et al., 2020). Therefore, it is essential that NPOs focus on promoting conditions that facilitate KS in their teams (Toner & Martins, 2022). Literature and research on KS in the context of teamwork and within NPOs is scarce and limited (Toner & Martins, 2022), especially in Portuguese NPOs (Curado et al., 2023). Further research is required to determine

whether generosity and team cohesion mediate or moderate the relationship between trust and KS in specific NPOs. Literature on KS antecedents shows contradictory results (Zhao & Detlor, 2023) thus contributing to a research gap. **Therefore, we question the role of trust, team cohesion and generosity in influencing KS in Portuguese NPOs.**

In this study we address such gap by exploring the contribution of trust, generosity and team cohesion for KS in Portuguese NPOs, supported by the Social Exchange Theory (Blau, 1964). We use a linear structural equation modelling analysis approach using survey data to understand the relationships between trust, team cohesion and KS. Due to the previously discussed complexities, we then conducted a mediation-moderation analysis to explore further specific effects that can better support the research goals, aimed at in-depth theoretical and practical contributions.

2. Literature review

2.1 Trust

Trust has aroused greater interest in literature, attracting much attention on the role of trust in KS (Yuan et al., 2024). The willingness to share knowledge is higher when mutual benefits are anticipated (Michalová & Maršíková, 2023). Trust only develops if there is reciprocity between the parties in the exchange process (Urbonavicius et al., 2021). Trust concerns an individual's expectation regarding their initial exchange behavior, based on the deduction of positive intentions towards the other party, in a situation of uncertainty and risk (Molm et al., 2000). Such a perspective proposes trust is relevant to improve collaboration between teams in the organizational contexts (Noerchoidah et al., 2022). Therefore, it is imperative that team members cooperate, through sharing knowledge (Gonzalez & De Melo, 2021), in benefit of all parties (Syed-Ikhsan & Rowland, 2004). Trust is promoted by reciprocity (Leung et al., 2019), as well as being a fundamental indicator of KS between individuals (Capestro et al., 2024; Curado et al., 2025). Additionally, trust can be seen as a process through which behaviors are consolidated or weakened (Burke et al., 2007). Thus, trust is a strong premise for KS (Jinyang, 2015). Therefore, we propose:

Hypothesis 1 (H1): Trust is positively and significantly related to KS.

Trust is a fundamental element for practicing generous behaviors (Glanville et al., 2016). It is through trust that team members can overcome individual uncertainties and vulnerabilities (Rosendaal & Bijlsma-Frankema, 2015), replacing them with concern and affection (Chua, 2003). The more trust there is among employees, the greater the adoption of generous behaviors, such as graciousness and mutual assistance (Anand & Walsh, 2016; Glanville et al., 2016). Generosity means giving more than what is necessary (Rooney, 2015). Anand and Walsh (2016) classify salary increases, benefit packages and reward systems as generous acts carried out by employers, in return for the participation of their subordinates in achieving organizational goals. Thus, generosity is said to be beneficial for both parties involved (Anand & Walsh, 2016; Dwidienawati & Abdinagoro, 2018). Therefore, we propose:

Hypothesis 2 (H2): Trust is positively and significantly related to generosity.

NPOs benefit from informal networks, trust-based personal relationships among employees are important to facilitate development of work in teams (Kumi & Copestake, 2022). McEvily and colleagues (2003) mention that the topic of interdependence between individuals within teams is one of the greatest organizational challenges. Trust can exist at team level (Burke et al., 2007), facilitating cohesion between team members (Mayer et al., 1995). There is evidence of a positive influence of trust on team cohesion (Paul et al., 2016), with trust implying reciprocity (Noerchoidah et al., 2022). Thus, it is essential that organizations focus on applying strategies that aim to promote team cohesion (Wei et al., 2022). Since trust generates mutual identification, shared values and social exchanges, it contributes to the development of shared bonds among team members. Hence, trust in teammates is positively related to team cohesion (Kim & Ko, 2021), so, we propose:

Hypothesis 3 (H3): Trust is positively and significantly related to team cohesion.

2.2 Team Cohesion

Team cohesion regards a group phenomenon (Rovio et al., 2009) that comprises the perceptions of team members (Graupensperger et al., 2019). Team cohesion reflects the value that the individuals attribute to the sense of identification, highlighting the potential need to respond to the team's approval or disapproval (Hackman & Knowlden, 2014). Team cohesion, when high, can be associated with normative influences, as well as increased team performance (Rovio et al., 2009). KS is influenced by perceived social pressure (Hackman &

Knowlden, 2014) therefore, team members interactions and pressures play an influence in KS (Ng, 2020). Teamwork among co-workers positively influences NPO's cooperation in such a way as they outperform the non-collaborative NPOs in terms of productivity. Thus, cooperation shapes NPO staff performance (Oberai et al., 2023). Team cohesion is one of the team's defining characteristics (Wojciechowska-Dzięcielak, 2020). It plays a significant role in the relationships established between team members (Lu & Fan, 2017). It is through cohesion that team members tend to increase their willingness to help each other and share knowledge (Xue et al., 2011). In teams with high levels of cohesion there is a greater willingness to share knowledge due to pressure and trust established between its members (O'Reilly & Caldwell, 1985). Therefore, we propose:

Hypothesis 4 (H4): Team Cohesion is positively and significantly related to KS.

2.3 Generosity

Generosity regards an individual attitude or an action that goes beyond the call of duty (Rooney, 2015; Dwidienawati et al., 2018). It may be demonstrated by volunteering (Glanville et al., 2016). In recent years, studies related to generosity have been neglected in literature (Anand & Walsh, 2016). Anand and Walsh (2016) state that concepts such as philanthropy, volunteering and altruism refer to generosity. The effectiveness of teams depends on employees' willingness to share information, fostering cooperation. Generosity boosts employees' intrinsic motivation, and it is contagious; thus, the generosity of a few inspires replication of such behavior by others and creates a culture of kindness that provides numerous benefits (Stanley et al., 2023). Generous acts promote benefits to third parties (Glanville et al., 2016; Dwidienawati & Abdinagoro, 2018; Dwidienawati et al., 2018). However, Collet and Morrissey (2007) question the unilaterality of generosity; by sharing their knowledge, individuals hope that, in the future, their team members will reciprocate in the same way (Jinyang, 2015). There is a positive impact of generosity on KS (Albinsson et al., 2019; Dwidienawati & Abdinagoro, 2018). However, individuals do not always act generously due to empathy or altruism, but rather with the intention of enhancing their career status within of the organization (Michalová & Maršíková, 2023). Generous individuals benefit from giving (Collet & Morrissey, 2007). Considering that generosity is a positive attitude towards others, which involves an individual evaluation of the situation (Febriyana & Ridho, 2024; Lazăr et al., 2022), the better the assessment of the behavior, the greater the intention to practice it. Since generosity positively influences KS in profitable settings (Yu et al., 2024), we propose that it happens likewise in NPOs:

Hypothesis 5 (H5): Generosity is positively and significantly related to KS.

2.4 Knowledge Sharing

KS regards a set of behaviors, which include helping others. Even though it directly affects organizational results, KS is an extra-role behavior (Islam & Tariq, 2018). KS is crucial (Jinyang, 2015) for obtaining competitive advantage in organizations (Wojciechowska-Dzięcielak, 2020; Santhose & Lawrence, 2023). KS is important for team processes (Tung & Chang, 2011) however, it does not emerge spontaneously, but through mutual relationships (Chua, 2003) based on trust. It is hard achieving a compete balance between expectations, interests and objectives, making the issue of trust complex to manage (McEvily et al., 2003). A strong team cohesion is reflecting quality and quantity of its interactions (Lu & Fan, 2017) and plays an influence in KS (Ng, 2020). Thus, we propose:

Hypothesis 6 and Hypothesis 7: Team cohesion mediates (H6) and moderates (H7) the effect trust has on KS.

Trust is essential for acting generously (Anand & Walsh, 2016; Glanville et al., 2016) and overcoming individual uncertainties and vulnerabilities (Rosendaal & Bijlsma-Frankema, 2015). Being generous means willingness to give without expecting anything in return therefore, generosity has a positive impact on KS (Albinsson et al., 2019; Dwidienawati & Abdinagoro, 2018). However, considering SET, when an individual invests in a relationship, it is expected that the other party will reward them (Kim & Kim, 2021). Reciprocity aims for mutual support and trust, discouraging counterproductive behaviors, (Leung et al., 2019). Accordingly, the willingness to share knowledge is also higher when individuals anticipate reciprocity (Jeong et al., 2024; Michalová & Maršíková, 2023). Thus, we propose:

Hypothesis 8 and Hypothesis 9: Generosity mediates (H8) and moderates (H9) the effect trust has on KS.

Figure 1 represents our research model.

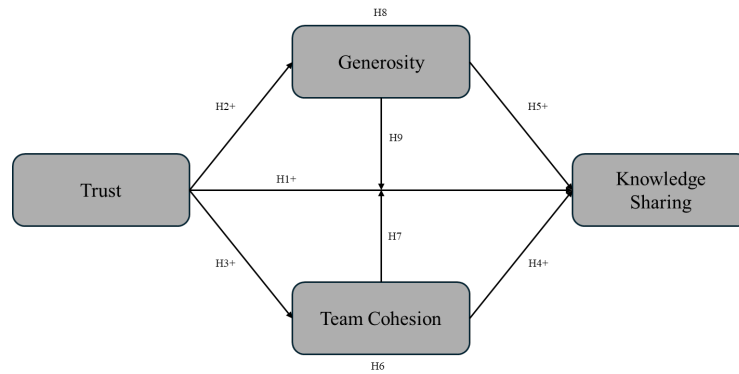


Figure 1: Research model

3. Research Method

This study follows a deductive approach and adopts a quantitative methodology using a cross-sectional survey of Portuguese NPOs. NPOs can encompass non-political and non-governmental organizations, through which no profit is made, holding responsibility for their stakeholders (Latif & Williams, 2017). The role and importance of NPOs has become increasingly evident, both nationally and globally (Latif & Williams, 2017). Data collection was carried out through a questionnaire survey prepared using the online platform Qualtrics. Data collection took place during the Spring of 2024. The KS scale is from Huang (2009) comprising 4 items. The team cohesion scale is from Wendt and colleagues (2009), consisting of 9 items. The generosity scale is from Carmeli et al. (2014) gathering 6 items. The trust scale is from Chow and Chan (2008) composed of 3 items.

This study uses a sample of 222 respondents of Portuguese NPOs. The sample, regarding these NPOs, was extracted using public databases provided by the Calouste Gulbenkian Foundation (2015), the Portuguese Environment Agency and the ONG.PT. Sample descriptives on NPOs indicate that there is a greater number of female individuals (72.1%), with the majority of the sample aged between 35 and 44 (27%) and 45 and 54 years old (33%). Most respondents have been practicing volunteering activities for 15 or more years (55%), accumulating them with another professional activity (55%).

To test the hypotheses in this study, we use a partial least squares (PLS) structural equation modelling (SEM) analysis, considering its ability to assess small and medium data samples (Chin, 2010). According to Wu and Hu (2012), the sample should be ten times the number of indicators of the most complex construct, or ten times the number of antecedents linked to an endogenous construct (team cohesion comprises 9 items). Given our sample size ($n=222$), the necessary conditions for conducting a PLS analysis are satisfied. PLS allows for an empirical assessment that combines a measurement model and a structural model (Hair et al., 2011), associating each construct with the items that measure it (Cepeda-Carrion et al., 2019). We used IBM SPSS (Statistical Package for Social Sciences) and SmartPLS 4.0 to run the analyses.

4. Results and Discussion

The initial measurement model evaluates the group of items that best represents each scale (Soh et al., 2017), considering each load value should be greater than 0.5 (Chin, 2010). Thus, 1 item from the team cohesion scale (TC1) and 2 items from the generosity scale (G3, G6) were eliminated. Subsequently, the reliability of the constructs was analyzed using Cronbach's Alpha and Composite Reliability, all of which meet or close to the minimum threshold (0.7) (Hair et al., 2011). Regarding convergent validity, it was assessed using the average variance extracted (AVE), confirming that all constructs have a value greater than 0.5 (Hair et al., 2011). Multicollinearity was also deemed a reduced threat, since factor inflation value is lower than 3 (Hair et al., 2019) or a 5 (Hair et al., 2011).

Evaluation of our research model was developed using the non-parametric bootstrapping approach (Chin, 2010), with a view to determining and precision of path coefficients, as well as testing hypotheses (Soh et al., 2017). Regarding the measure of model fit to the original data (R^2) and the internal measure of consistency between the original and cross-validation predicted data (Q^2), findings also show that the model predictive quality is above the recommended thresholds (Hair et al., 2011). The model fit to the original data shows high consistency levels for KS as the main dependent variable ($R^2 = 0.449$) with approximately 45% of its data variation explained by the model. Regarding the cross-validation prediction, findings show that all items in the model have predictive validity, ensuring further consistency ($Q^2 = [0.039; 0.506] > 0$). Table 1 presents and confirms the positive and

significant relationships for the significant threshold ($p < 0.01$ and $p < 0.05$). In agreement with the results obtained, there is evidence supporting that trust is positively and significantly related to KS ($\beta=0.287$, $p < 0.05$) generosity ($\beta=0.0524$, $p < 0.05$) and team cohesion ($\beta=0.800$, $p < 0.05$). There is a positive relationship between generosity and KS ($\beta=0.261$, $p < 0.05$) and between team cohesion and KS ($\beta= 0.224$, $p < 0.05$). Table 2 also provides an overview of the correlation information between variables.

Table 1: Path coefficients and p-values for the structural model

Relationship	β	T-test	p-value	Confidence interval (95%)	Hypothesis
Trust -> Knowledge sharing	0.224	2.122	0.034	[0.012; 0.425]	H1 (Supported)
Trust -> Generosity	0.524	8.727	0.000	[0.401; 0.633]	H2 (Supported)
Trust -> Team cohesion	0.800	35.190	0.000	[0.750; 0.839]	H3 (Supported)
Team cohesion -> Knowledge sharing	0.287	3.034	0.002	[0.110; 0.482]	H4 (Supported)
Generosity -> Knowledge sharing	0.261	4.501	0.000	[0.132; 0.362]	H5 (Supported)

Table 2: HTMT ratio with correlations

	Team cohesion	Trust	Generosity	Knowledge Sharing	Generosity x Trust	Team Cohesion x Trust
Team cohesion						
Conf	0.885					
Gen	0.627	0.688				
Partilha	0.606	0.664	0.718			
Generosity x Trust	0.231	0.414	0.369	0.418		
Team Cohesion x Trust	0.558	0.626	0.277	0.260	0.510	

Note: Correlations between variables are displayed on bold. "X" states the ration between variables under the moderation test.

The subsequent mediation-moderation analysis reveals contrasting results. The initial indirect specific effects pertaining to the role of team cohesion as both a mediator (H6) and moderator (H7) of the relationship between trust and KS show significant effects are significant ($p < 0.05$). Therefore, trust exerts a positive effect to feelings of team cohesion that, in turn, also lead to KSs ($\beta = 0.230$; $p < 0.05$) (H6). Similarly, the stronger the feelings of team cohesion, the stronger the direct relationship between trust and KS is perceived ($\beta = 0.184$; $p < 0.05$) (H7). Nevertheless, contrasting evidence exists in the mediation-moderation role of generosity in the relationship between trust and KS (H8 and H9). Results show that, while generosity is a positive mediator between trust and KS ($\beta = 0.137$; $p < 0.05$), generosity is also a negative moderator of the direct relationship between trust and KS ($\beta = -0.183$; $p < 0.05$). Therefore, trust fosters a positive influence on generosity that, in turn, positively influences KS (H8). Nevertheless, high generosity exerts an influence between trust and KS, reducing the strength of such direct relationship (H9).

Results confirm the hypothesized relationships in this study. Trust is positive and significantly related to KS, supporting Hypothesis 1. Such evidence corroborates previous extensive literature across different settings (Yeboah, 2023) and extends it to the limited research on NPOs. Trust is the social support of relationships; thus it influences social exchange behaviors (Jinyang, 2015) in this case of behaviors of KS in the domain of NPOs. The positive and significant relationship between trust and generosity was also supported, confirming Hypothesis 2. This relationship corroborates the rationale that identifies the adoption of acts of generosity is fostered by the level of trust between individuals (Glanville et al., 2016). Hypothesis 3 was likewise confirmed, demonstrating evidence of a positive and significant relationship between trust and team cohesion. Trust is the basis for maintaining social exchange processes (Mitterer & Mitterer, 2023) and therefore contributing to team cohesion. High levels of cohesion are associated with trust established between its members (O'Reilly & Caldwell, 1985), namely within NPOs teams. Team cohesion positively and significantly influences KS, corroborating Hypothesis 4. Team cohesion builds on a sense of identification (Wojciechowska-Dzięcielak, 2020) that leads to extra-role behaviors (Maksum et al., 2020), like KS (Islam & Tariq, 2018), which are very relevant for NPOs. Results

demonstrate empirical evidence of a positive and significant relationship between generosity and KS, confirming Hypothesis 5. Individuals can benefit more than they lose from shared resources (Hatamleh et al., 2023). Thus, KS is an act of generosity, particularly relevant in knowledge-intensive organizations like NPOs (Holzer et al., 2016). In support of Hypotheses 6, team cohesion keeps the relationships among team members (Lu & Fan, 2017) leading them to share knowledge (Xue et al., 2011). In teams with high levels of cohesion there is a greater willingness to share knowledge due to pressure and trust established between its members (O'Reilly & Caldwell, 1985). Regarding Hypothesis 8 the evidence is very clear. The greater the trust, the greater the adoption of generous behaviors among individuals (Anand & Walsh, 2016; Glanville et al., 2016), because generosity involves a positive attitude towards others (Febriyana & Ridho, 2024; Lazăr et al., 2022) impacting on KS (Albinsson et al., 2019; Dwidienawati & Abdinagoro, 2018). Therefore, team cohesion and generosity, the greater the influence of trust on KS in NPOs (Oberai et al., 2023; Stanley et al., 2023). The results obtained from the moderation testing show that there is a positive moderation effect of team cohesion (supporting Hypothesis 7). Consistent with results from Hypotheses 6 testing, team cohesion plays a relevant role in the relationship between trust and KS. Team members interactions and social pressure influence KS (Ng, 2020). Mutual trust among team members emerges from social exchanges (Kim & Kim, 2021) through interdependent relationships (Urbonavicius et al., 2021) tending to be more positive and lasting in cohesive teams (Cohen et al., 2013; Maksum et al., 2020). Therefore, such evidence is only natural, yet important to occur in NPOs. Regarding Hypothesis 9 the evidence is not supportive, but rather interesting by unveiling psychological mechanisms. We can identify a valid parallel rationale. Altruism, being a trait closely related to generosity, has been found to reduce the positive association between trust and KS (Wu et al., 2009). This indicates that while altruism (and by extension, generosity) generally promotes KS, it might also alter the dynamics of how trust influences this process. Regarding relational dynamics, the relationship between trust and KS can be complex and influenced by various factors. For instance, integrity-based trust was found to have a negative effect on knowledge-seeking behavior in some contexts (Mohammed & Kamalanabhan, 2020). Such complexity suggests that different forms of trust and relational factors can interact in unexpected ways. Finally, the negative moderation may be due to complex interactions. Given that altruism can reduce the positive impact of trust on KS (Wu et al. 2009) it is plausible that generosity might also have complex interactions with trust. Previous research suggests that when individuals share knowledge purely out of altruism (a concept that presents behavioral similarities to generosity) a culture of complacency with knowledge might exist (cf. Sedighi et al., 2016; Yu et al., 2024). Such findings might posit an alternative route of psychosocial phenomena that can overcome the need for trust to achieve KS due to an altruistic status quo in NPOs – that of by default expectations of generosity among its members. We argue that generosity could potentially shift the focus from trust-based motivations to other forms of social exchange, thereby altering the direct impact of trust on KS.

5. Conclusions, Limitations and Future Research

This study uses the support of the social exchange theory to understand the relationships between trust, generosity, and team cohesion, and their impacts on KS among team members of Portuguese NPOs. Trust has the capacity to positively and significantly influence generosity and team cohesion, and the three have a positive relationship with KS. Our results show trust, team cohesion and generosity influencing KS in NPOs as not seen before. The present study is not free from limitations, such as the small sample size, possible due to the questionnaire response time. The elimination of some variable items throughout the statistical work may have biased the research results obtained. Results apply to the specific context of Portuguese NPOs, therefore we invite colleagues to replicate the model in other geographies and thus test for national culture effects. The transversality of data collection does not allow us to study the evolution of relationships between the variables; thus, we suggest future longitudinal developments to understand the dynamics of the model.

Ethics Statement: The research project was submitted to the Ethics Committee of ISEG – Lisbon School of Economics and Management, being in full compliance with ISEG's principles and rules regarding research ethics (Opinion 11/2024)

AI Statement: No AI or LLM tools were used in the draft or during data analysis procedures of the current work.

References

- Albinsson, P.A., Perera, B.Y., Nafees, L., & Burman, B. (2019). Collaborative Consumption Usage in the US and India: An Exploratory Study. *Journal of Marketing Theory and Practice*, 27(4), 390–412.
- Anand, A., & Walsh, I. (2016). Should knowledge be shared generously? Tracing insights from past to present and describing a model. *Journal of Knowledge Management*, 20(4), 713–730.
- Blau, P.M. (1964). *Exchange and power in social life*. New York: Wiley.

- Burke, C.S., Sims, D.E., Lazzara, E.H., & Salas, E. (2007). Trust in leadership: A multi-level review and integration. *The Leadership Quarterly*, 18(6), 606–632.
- Calouste Gulbenkian Foundation (2015). *Contactos de ONG Portuguesas* [Base de dados], outubro de 2015. Lisboa: Fundação Calouste Gulbenkian Cidadania Ativa. Available at: <https://gulbenkian.pt/programas/cidadania-ativa1/base-de-dados-ong/>
- Capestro, M., Rizzo, C., Klietnik, T., Peluso, A.M., & Pino, G. (2024). Enabling digital technologies adoption in industrial districts: The key role of trust and knowledge sharing. *Technological Forecasting and Social Change*, 198.
- Carmeli, A., McKay, A.S., & Kaufman, J.C. (2014). Emotional Intelligence and Creativity: The Mediating Role of Generosity and Vigor. *The Journal of Creative Behavior*, 48(4), 290–309. h
- Cepeda-Carrion, G., Cegarra-Navarro, J.-G., & Cillo, V. (2019). Tips to use partial least squares structural equation modelling (PLS-SEM) in knowledge management. *Journal of Knowledge Management*, 23(1), 67–89.
- Chin, W.W. (2010). How to Write Up and Report PLS Analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares* (655–690). Springer Berlin Heidelberg.
- Chow, W. S., & Chan, L.S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & Management*, 45(7), 458–465.
- Chua, A. (2003). Knowledge sharing: A game people play. *Aslib Proceedings*, 55(3), 117–129.
- Cohen, L., Manion, L. & Morrison, K. (2013). *Research Methods in Education*, 6th ed., Routledge, New York, NY.
- Curado, C., Henriques, P., Oliveira, M., & Martins, R. (2023). Organisational culture as an antecedent of knowledge sharing in NGOs. *Knowledge Management Research & Practice*, 21(3), 449–461.
- Curado, C., & Vieira, S. (2019). Trust, knowledge sharing and organizational commitment in SMEs. *Personnel Review*, 48(6), 1449–1468.
- Curado, C., Araújo, C. F., Oliveira, M., & Gonçalves, T. (2025). The theory of reasoned action perspective on knowledge sharing: A meta-analytic review. *Management Review Quarterly*, 1-48.
- Davidavičienė, V., Al Majzoub, K., & Meidute-Kavaliauskiene, I. (2020). Factors Affecting Knowledge Sharing in Virtual Teams. *Sustainability*, 12(17), 1–15.
- Dwidienawati, D., & Abidinagoro, S.B. (2018). Generosity's antecedents and outcomes—A proposed relationship between Generosity and Intention in Indonesia's BPJS Kesehatan. *Journal of Business & Retail Management Research*, 12(02), 49–59.
- Dwidienawati, D., Arief, M., & Abidinagoro, S.B. (2018). Influence of Customer Generosity to Intention in Participating to Future Charity Directly or Mediated by Positive Emotion. *International Journal of Engineering & Technology*, 7(4.38), 1047–1050.
- Febriyana, D., & Ridho, A. (2024). Instilling Generous Behavior in Students in the school environment. *International Journal of Islamic Educational Research*, 1(1), 1-6.
- Glanville, J.L., Paxton, P., & Wang, Y. (2016). Social Capital and Generosity: A Multilevel Analysis. *Nonprofit and Voluntary Sector Quarterly*, 45(3), 526–547.
- Graupensperger, S., Benson, A.J., Bray, B.C., & Evans, M.B. (2019). Social cohesion and peer acceptance predict student-athletes' attitudes toward health-risk behaviors: A within- and between-group investigation. *Journal of Science and Medicine in Sport*, 22(12), 1280–1286.
- Hackman, C.L., & Knowlden, A.P. (2014). Theory of reasoned action and theory of planned behavior-based dietary interventions in adolescents and young adults: a systematic review. *Adolescent Health, Medicine and Therapeutics*, 5, 101–114.
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Hatamleh, I.H.M., Safori, A.O., Habes, M., Tahat, O., Ahmad, A.K., Abdallah, R.A.-Q., & Aissani, R. (2023). Trust in Social Media: Enhancing Social Relationships. *Social Sciences*, 12(7), 416.
- Holzer, A., Kocher, B., Bendahan, S., Mazuze, J., & Gillet, D. (2016). Fostering Knowledge Sharing in NGOs. *Proceedings of the Eighth International Conference on Information and Communication Technologies and Development*, 1–4.
- Huang, C.-C. (2009). Knowledge sharing and group cohesiveness on performance: An empirical study of technology R&D teams in Taiwan. *Technovation*, 29(11), 786–797.
- Islam, T., & Tariq, J. (2018). Learning organizational environment and extra-role behaviors: The mediating role of employee engagement. *Journal of Management Development*, 37(3), 258–270.
- Jeong, J., Lee, J., & Kim, B. J. (2024). The relationship between high-performance work system and knowledge sharing behavior via perceived organizational support: the moderating role of coaching leadership. *Current Psychology*, 43(27), 23082-23102.
- Jia, L., Liang, Z., Lei, C., & Huang, L. (2023). A study on the effects of college students' knowledge-sharing behavior on group performance and individual social status. *Frontiers in Psychology*, 14, 1–11.
- Jinyang, L. (2015). Knowledge sharing in virtual communities: A social exchange theory perspective. *Journal of Industrial Engineering and Management*, 8(1), 170–183.
- Kim, D.Y., & Kim, H.-Y. (2021). Trust me, trust me not: A nuanced view of influencer marketing on social media. *Journal of Business Research*, 134, 223–232.
- Kim, K., & Ko, E.-J. (2021). The influence of emotional intelligence on team cohesion and the mediating effects of self-efficacy and trust: time-lagged approach. *Team Performance Management*, 27(7/8), 540-552.

- Kumi, E., & Copestake, J. (2022). Friend or Patron? Social Relations Across the National NGO–Donor Divide in Ghana. *The European Journal of Development Research*, 34, 343–366.
- Latif, K.F., & Williams, N. (2017). Team effectiveness in Non-Governmental Organizations (NGOs) projects. *Evaluation and Program Planning*, 64, 20–32.
- Lazăr, A., Sirbu, I., Barth, K., Bacter, C., & Hatos, A. (2022). Generosity and Environmental Protection: How Strong Is the Relationship between Giving and Sustainability? *Sustainability*, 14(2), 1–15.
- Leung, W.K.S., Shi, S., & Chow, W.S. (2019). Impacts of user interactions on trust development in C2C social commerce: The central role of reciprocity. *Internet Research*, 30(1), 335–356.
- Lu, L., & Fan, H.-L. (2017). Strengthening the bond and enhancing team performance: Emotional intelligence as the social glue. *Journal of Organizational Effectiveness: People and Performance*, 4(3), 182–198.
- Maksum, I., Handoko, T.H., & Fikriah, N.L. (2020). Group cohesiveness on performance: mediating effect of collective organization citizenship behavior. *Jurnal Manajemen*, 24(03), 443–459.
- Mayer, R.C., Davis, J.H., & Schoorman, F.D. (1995). An Integrative Model of Organizational Trust. *The Academy of Management Review*, 20(3), 709–734.
- McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an Organizing Principle. *Organization Science*, 14(1), 91–103.
- Mei, Y., Huang, J., Liu, J., & Jia, L. (2024). A Study of Factors Influencing Construction Workers' Intention to Share Safety Knowledge. *Buildings*, 14(2), 1–14.
- Michalová, T., & Maršíková, K. (2023). Epistemological Approach to Knowledge Sharing Issues at Universities in the COVID-19 Pandemic: Altruism and Social Exchange Theory Context. *Filosofija. Sociologija*, 34(1), 94–106.
- Mitterer, D.M., & Mitterer, H.E. (2023). The Mediating Effect of Trust on Psychological Safety and Job Satisfaction. *Journal of Behavioral and Applied Management*, 23(1), 29–41.
- Mohammed, N., & Kamalanabhan, T.J. (2020). Interpersonal trust and employee knowledge sharing behavior: Creative performance as the outcome. *VINE Journal of Information and Knowledge Management Systems*, 50(1), 94–116.
- Molm, L.D., Takahashi, N., & Peterson, G. (2000). Risk and Trust in Social Exchange: An Experimental Test of a Classical Proposition. *American Journal of Sociology*, 105(5), 1396–1427.
- Ng, K.Y.N. (2020). The moderating role of trust and the theory of reasoned action. *Journal of Knowledge Management*, 24(6), 1221–1240.
- Noerchoidah, N., Mochklas, M., Indriyani, R., & Arianto, A. (2022). The Mediating Effect of Knowledge Sharing on Interpersonal Trust and Job Satisfaction of Creative Industry in East Jawa. *Matrik: Jurnal Manajemen, Strategi Bisnis Dan Kewirausahaan*, 16(1), 87–98.
- Oberai, H., Mishra B.S., Antony, L.R., Soundararajan, & Singh, S. (2023). Cooperation affects NGO staff performance patterns. *International Journal of Intellectual Property Management*, 13(3-4), 494–511.
- ONG.PT (2024). *ONG's Portuguesas*. <https://ong.pt/dir/>
- O'Reilly, C.A., & Caldwell, D.F. (1985). The impact of normative social influence and cohesiveness on task perceptions and attitudes: A social information processing approach. *Journal of Occupational Psychology*, 58(3), 193–206.
- Paul, R., Drake, J.R., & Liang, H. (2016). Global Virtual Team Performance: The Effect of Coordination Effectiveness, Trust, and Team Cohesion. *IEEE Transactions on Professional Communication*, 59(3), 186–202.
- Rooney, D. (2015). Knowledge appreciates your generosity: Exploring a meeting point between knowledge and wisdom. *Prometheus*, 33(4), 395–410.
- Rosendaal, B., & Bijlsma-Frankema, K. (2015). Knowledge sharing within teams: Enabling and constraining factors. *Knowledge Management Research & Practice*, 13(3), 235–247.
- Rovio, E., Eskola, J., Kozub, S. A., Duda, J.L., & Lintunen, T. (2009). Can High Group Cohesion Be Harmful?: A Case Study of a Junior Ice-Hockey Team. *Small Group Research*, 40(4), 421–435.
- Santhosa, S.S., & Lawrence, L.N. (2023). Understanding the implementations and limitations in knowledge management and knowledge sharing using a systematic literature review. *Current Psychology*. 42, 32427–32442.
- Soh, C. Q. Y., Rezaei, S., & Gu, M.-L. (2017). A structural model of the antecedents and consequences of Generation Y luxury fashion goods purchase decisions. *Young Consumers*, 18(2), 180–204.
- Stanley, M.L., Neck, C.P., & Neck, C.B. (2023). The dark side of generosity: Employees with a reputation for giving are selectively targeted for exploitation. *Journal of Experimental Social Psychology*, 198, 104503.
- Syed-Ikhsan, S.O.S., & Rowland, F. (2004). Knowledge management in a public organization: A study on the relationship between organizational elements and the performance of knowledge transfer. *Journal of Knowledge Management*, 8(2), 95–111.
- Toner, J., & Martins, J.T. (2022). Institutional isomorphism in collaborative, cross-cultural, project-based development work: An inquiry into the knowledge sharing behaviour of volunteers. *Journal of Knowledge Management*, 26(7), 1763–1788.
- Tung, H., & Chang, Y. (2011). Effects of empowering leadership on performance in management team: Mediating effects of knowledge sharing and team cohesion. *Journal of Chinese Human Resources Management*, 2(1), 43–60.
- Urbonavicius, S., Degutis, M., Zimaitis, I., Kaduskeviciute, V., & Skare, V. (2021). From social networking to willingness to disclose personal data when shopping online: Modelling in the context of social exchange theory. *Journal of Business Research*, 136, 76–85.
- Wei, M., Hao, S., & Ren, X. (2022). Nonspatial Proximity and Project Team Resilience: The Role of Knowledge Sharing and Team Cohesion. *Discrete Dynamics in Nature and Society*, 2022, 1–15.

- Wendt, H., Euwema, M.C., & Van Emmerik, I.J.H. (2009). Leadership and team cohesiveness across cultures. *The Leadership Quarterly*, 20(3), 358–370.
- Wojciechowska-Dzięcielak, P.M. (2020). Knowledge Sharing Facilitators and Barriers in the Context of Group Cohesion—A Literature Review. *International Journal of Information and Education Technology*, 10(1), 31–36.
- Wu, W.L., Lin, C.H., Hsu, B.F., & Yeh, R.S. (2009). Interpersonal trust and knowledge sharing: Moderating effects of individual altruism and a social interaction environment. *Social Behavior and Personality: An International Journal*, 37(1), 83-93.
- Wu, L. & Hu, Y.P. (2012). Examining knowledge management enabled performance for hospital professionals: A dynamic capability view and the mediating role of process capability. *Journal of the Association for Information Systems*, 13(12), 976- 999.
- Xue, Y., Bradley, J., & Liang, H. (2011). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management*, 15(2), 299–312.
- Yang, H.-H., & Lin, Y.-T. (2022). How Knowledge Sharing and Cohesion Become Keys to a Successful Graduation Project for Students from Design College. *SAGE Open*, 12(3), 1–13.
- Yeboah, A. (2023). Knowledge sharing in organization: A systematic review. *Cogent business & management*, 10(1), 2195027.
- Yu, W., Qin, X., & Li, M. (2024). Leader generosity and employee knowledge sharing: an episodic perspective of generalized reciprocity. *Leadership & Organization Development Journal*, 45(8), 1526-1547.
- Yuan, Y., Liu, P., Liu, B. and Cui, Z. (2024). Small talk and knowledge sharing: a moderated dual-facilitating pathway model based on interpersonal trust and perceived similarity. *Journal of Knowledge Management*, 28(6), 1538-1565.
- Zhao, L., & Detlor, B. (2023). Towards a contingency model of knowledge sharing: interaction between social capital and social exchange theories. *Knowledge Management Research & Practice*, 21(1), 197-209.