

THE ROLE OF GROUP COHESION AS A MEDIATOR VARIABLE ON GROUP PERFORMANCE

Iwang Suwangsih^{1*}, Fendy Suhariadi², Dwi Ratmawati³, Elisabeth Supriharyanti⁴

¹ STIE Mahardhika Surabaya, Indonesia

^{2,3} Airlangga University Surabaya, Indonesia

⁴ Widya Mandala University, Surabaya Indonesia

*Corresponding author; Email: iwang.suwangsih@Stiemahardhika.ac.id¹

Submitted: Aug. 15, 2025; Reviewed: Aug. 21, 2025; Accepted: Sept. 15, 2025; Published: Sept. 30, 2025

Abstract

The goal of this study is to investigate the role of group cohesion as a mediator variable on the influence of group bonding and group norms on group performance. It is necessary to study group performance because good group performance is very important for the organization, which consists of many groups. This research was conducted at the Setia Bhakti Women's Cooperative, which consists of 470 groups, and the sample for this research was 320 groups. This research uses a quantitative approach and uses structural equation models to test the role of group cohesion. This study finds that group cohesion as a mediator variable has an important role, because the effect of group bonding on group performance is significant if it is mediated by group cohesion. Likewise, the relationship between group norms and group performance will be significant if it is mediated by group cohesion. This study contributes to expanding the meaning of important antecedents of group performance through group cohesion. This study also enriches the literature on group performance by using the social capital theory framework because previous research used social network theory.

Keywords: Social capital theory, group bonding, group norm, group cohesion, group performance.

Introduction

A collection of two or more people who have the same relationship is called A group (Langton et al., 2015). A group can be formed from colleagues, or people who meet to form a community. Every individual who joins a group, of course, has different reasons from one member to another, but they habitually have the same aim (Walumbwa et al., 2012). In today's multifarious world, business often is finished their duty by work groups (Klang & Luria, 2021) so that groups are an integral part of the organization (Weldon & Weingart, 1993). In order for an organization to achieve its goals, it must have good performance. For organizations that contain of groups, the group performance of the groups that join the organization will have an influence on the performance of the organization, for this reason the organization must pay attention to the group performance of the groups that join the organization. Meanwhile, acceptable for a group to have high group performance, there needs to be cooperation between members of the group. Cooperation among group members can be established if the group members have good relationships, because good relational group relationships produce great performance (Shah et al., 2006).

High group performance can be achieved if there are good relationships within the group compared to

groups that do not yet have good relationships between members. Good relationships between members in a group are formed because group members already know each other and other members, or in other words, there is already a group bond. Bonding mentions to core relations within a group or team and the basis of bonding lies in "strong tie" relationships within a collectivity such as an organization or team (Han & Hovav, 2013).

Some previous literature states that group ties improve group performance (Balkundi, 2006). The result of Klang & Luria (2021)' study shows that group bonding has a important influence on group performance. Apart from group bonding, the factors that influence group performance are group norms, namely informally agreed rules for acceptable behavior that improve through relations between group memberships (Cialdini & Trost, 1998). The existence of group norms in a group regulates how group members must act or behave, so that group members understand their rights and obligations. The results of research conducted by (Swaab et al., 2008) show that group norms have a positive effect on group performance.

Referring to the results of research conducted by Klang & Luria (2021) which shows that group cohesion mediates the relationship between group bonding and group performance. Group cohesion is a condition that describes the tendency of group members to form

social relationships that produce togetherness (Carron & Brawley, 2000). This research also uses group cohesion equally a mediator variable.

This study was shown at the Setia Bhakti Wanita East Java consumer cooperative which has a savings and loan business unit. In successively a savings and loan business, this cooperative uses a joint responsibility system and its members must work in groups so that membership in this cooperative consists of groups where all the members are women. The groups that are members of this cooperative are formed on the initiative of the group members themselves who already know each other, it is not the cooperative that decides (Supriyono, 2009). The phenomenon that occurs in this cooperative is that there is a decline in the group performance of several groups, which has an impact on the performance of the cooperative. The aim of this research, apart from analyzing the outcome of group bonding on group performance, also aims to fill the research gap in research conducted by Klang & Luria (2021) where the samples from the research were all male members of troops training for war.

Literature Review and Hypotheses Development

Social Capital Theory

This study is based on the social capital theory of Nahapiet & Ghosal (1998) which outlines social capital as the sum of definite and possible resources embedded in, obtainable over, and initiating from a link of relationships possessed by an separate or social unit (Nahapiet & Ghosal, 1998). Social capital is very applicable in the context of cooperatives, because there are several forms of social relations within membership, there is belief in members in each other, in elected representatives, and in management (Feng et al., 2015). Social capital in cooperatives includes member's belief, cooperative status, systems, and so on (Yu & Nilsson, 2018). A network that facilitates interactions between individuals is also called social capital (Liang et al., 2015). In this study, using group bonding and group norms as factors which influence group performance which refers to dimensions of social capital theory. Nahapiet & Ghosal (1998) mentioned that social capital theory had 3 dimensions, namely the structural dimension, the relational dimension and the cognitive dimension.

The structural dimension concerns the properties of social systems and networks of relationships as a whole that describe the impersonal formation of relations among society. In this study we use the concept of the structural dimensions of social capital to refer to the general outline of associations among group members, whether or not there are network ties between

members (group bonding). The relational dimension is a concept that focuses on certain relationships that society have, such as reverence and relationship, that influence their performance. It is through these current private relations that society achieve social purposes such as friendliness, support, and respect. In this study we use the concept of the relational dimension to state to the rules formed by group members and mutually agreed upon (group norms).

Group Bonding and Group Performance

The definition of group bonding is friendship between individuals in a group (Henttonen et al., 2013). Group performance reflects the results of group actions (Klang & Luria, 2021). Several studies conducted on relationship networks in work groups found that closer associations in groups effect on better performance (Jehn & Shah, 1997; Kratzer et al., 2005; Shah et al., 2006). ties create a structure that allows for superior collaboration among group members, which is an significant giver to group performance (Klang & Luria, 2021)

H₁: Group bonding has a direct positive effect on group performance.

Group Norms and Group Performance

Groups create group norms to maintain group conditions because the group does not want to fail (Langton et al., 2015). The existence of group norms is used as a guideline for how group members should behave, what things they can do or what they cannot do. If all members have performed according to group norms that have been mutually agreed upon, this will certainly affect their performance (Postmes et al., 2001).

H₂: Group norms has a direct positive effect on group performance.

Group Bonding and Group Cohesion

Klang's study (2021) states that group bonding is positively connected to group cohesion. The formation of group bonding is based on expressive bonds between group members, so that close bonds of friendship between group members (group bonding) help them stay united and increase their sense of belonging to the group and their moral feelings (perception of cohesion), thus it is a group effort for joint achievements.

H₃: Group bonding has a direct positive effect on group cohesion.

Group Norms and Group Cohesion

The results of Eys's (2006) research show that group norms are related to group cohesion. Group

norms are created based on the agreement of group members as a guide to what group members should do and what group members should not do. If all group members obey the group norms that have been agreed upon, the relationship between group members will improve and form group cohesion.

H₄: Group norms has a direct positive effect on group cohesion.

Group Cohesion and Group Performance

According to Robbin & Judge (2012), high group cohesion in a group will have an impact on the group's high group performance, because group members will work together and support each other to achieve common goals. Cohesion and performance are interrelated, cohesive groups tend to perform better than less cohesive groups (Fry et al., 2019), so group cohesion is significantly related to performance (Tung & Chang, 2011).

H₅: Group cohesion has a direct positive effect on group performance.

Group Cohesion as a Mediator Variable

Group cohesion is an important aspect in managing groups and cohesiveness is an attractive characteristic in a group (Tung & Chang, 2011). High group performance can be achieved if there is cooperation between all group members and cooperation between group members can be realized if within the group cohesion has been formed, namely an individual's sense of belonging to a particular group, and moral feelings related to membership in the group (Bollen & Hoyle, 1990). Group members work together to achieve group goals and have a high commitment to maintaining their group so that it will have an impact on group productivity. Group cohesiveness consists of supporting each other (Fajriyanti et al., 2019).

H₆: The effect of group bonding on group performance is mediated by group cohesion.

H₇: The effect of group norms on group performance is mediated by group cohesion.

Figure 1 shows the conceptual model for this study.

Research Methods

Sample and Data Collection

This research uses quantitative methods by testing samples and is causality research. This study did at the Setia Bhakti Wanita East Java consumer cooperative,

Indonesia, involving 3,528 respondents who were members of the Setia Bhakti Wanita East Java consumer cooperative who were members of 320 groups. The data collection technique in this research uses a questionnaire distributed (via Google Forms) to respondents. This study combines primary data and secondary data to support this. The primary data composed was found from respondents' responses which contained data on statement items about group bonding, group norms and group cohesion, while the secondary data collected contained assessments given by the cooperative regarding the group performance of the groups used as samples.

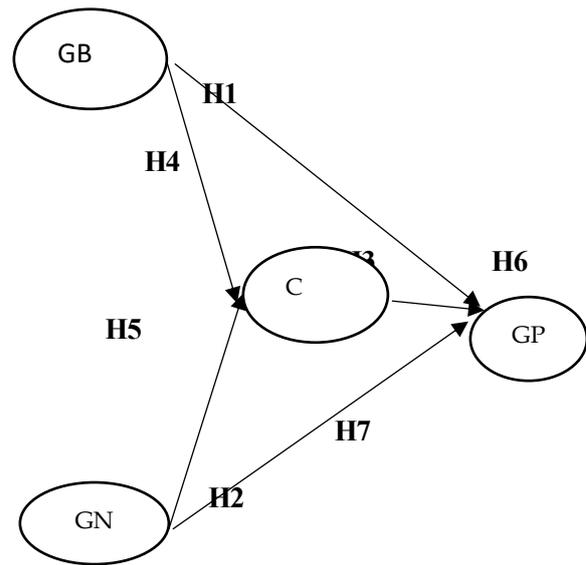


Figure 1. Conceptual model

Analysis Technique

This research uses PLS-SEM data analysis techniques. Because PLS-SEM is a causal modeling approach whose main goal is to maximize the variance explained in the dependent construct, as well as evaluating data quality based on measurement model characteristics (Sarstedt & Cheah, 2019). Hair et al (2018) state that PLS can be used to measure construct models with reflective or formative indicators and PLS can be used when the data distribution is not normal, this happens if there is an interdependence in the data being studied that cannot be guaranteed because there are no required distribution assumptions (Hair et al., 2018).

Variable Definition and Indicator

In this research, the measurement of research variables refers to and adopts previous research which is modified according to the research objectives. In this research the independent variables are group bonding

(X1) and group norms (X2). The group bonding variable is measured using a measurement developed by Han (2013) which consists of four dimensions, twenty-two indicator items. The group norms variable is measured by referring to the measurements created by Eys et al. (2006), which consists of four dimensions with 13 indicator items. The mediating variable group cohesion (Z) is measured based on the Perceived Cohesion Scale (Bollen & Hoyle, 1990), which consists of two dimensions with 5 indicators. The dependent variable is group performance (Y) based on the assessment of group report cards from the Setia Bhakti Wanita East Java consumer cooperative which consists of 3 dimensions with 15 indicators. The measurement scale for all statement items uses a five-point Likert scale: 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree.

Results and Discussion

Descriptive statistical results

Group bonding has an average answer score from 3.32 to 4.50. The group norms indicators have an usual answer score from 4.05 to 4.44. Group cohesion indicators have an average answer score of 4.19 to 4.49. Group performance indicators have a usual score of 2.98 to 4.93.

Consensus Test

All variables in this study were aggregated at the group level, so that before carrying out validity and reliability tests and hypothesis testing, a consensus test was carried out first for agreement within the group to be tested by since the Rwg(j) and ICC (1) indices (Klang & Luria, 2021). The consensus test results for all variables show high agreement because the mean value of rwg(j) is close to 1, namely group bonding is 0.96, group norms are 0.96, and group rater agreement ((Biemann et al., 2012; LeBreton & Senter, 2008).

Validity and Reliability Test Result

In this study, the variables of group bonding, group norms, group cohesion and group performance used second order SEM-PLS processing because each of the four constructs has dimensions. Indicators that had factor loading values below 0.708 were dropped from the research model. Table 1 is the result of statistical calculations.

Based on Table 1, it can be seen that the outer loading results for all variables have an outer loading above 0.708, indicating that these variables are able to

explain more than 50% of the indicator variance, which shows that item reliability is acceptable.

Table 1.
Outer loading of exogenous, mediator and endogenous variables

Variable	Dimension	Item	Outer Loading	Outer loading dimension			
GB	X1.1	X1.1	0,870	0,895			
		X1.2	0,919				
		X1.3	0,897				
		X1.4	0,864				
		X1.5	0,774				
	X1.2	X1.9	0,725	0,780			
		X1.10	0,833				
		X1.11	0,888				
		X1.12	0,803				
		X1.13	0,919				
		X1.14	0,923				
		X1.15	0,918				
	X1.3	X1.17	0,864	0,902			
		X1.18	0,880				
		X1.19	0,882				
		X1.20	0,909				
		X1.22	0,818				
		GN	X2.1		X2.1	0,966	0,828
					X2.2	0,975	
	X2.3			0,972			
	X2.2		X2.4	0,953	0,919		
			X2.5	0,948			
X2.7			0,805				
X2.3	X2.8		0,766	0,881			
	X2.9		0,895				
	X2.10		0,786				
	X2.4		X2.11		0,826	0,901	
			X2.12		0,914		
			X2.13		0,879		
			GC		Z1.1		Z1.1
Z1.2	0,957						
Z1.3	0,936						
Z1.2	Z1.4	0,960		0,932			
	Z1.5	0,963					
	Z1.6	0,720					
GP	Y1	Y1	0,803	0,775			
		Y2	0,727				
		Y3	0,884				
	Y2	Y7	0,851	0,912			
		Y11	0,870				
	Y3	Y12	0,820	0,800			
		Y14	0,901				

From the internal consistency reliability results, it can be seen in Table 2 that the group bonding variable has a CR and Cronbach alpha value of <0.95, this shows that there is consistency in the measurement items for measuring statement items. An acceptable Average Variance Extracted (AVE) value must have a value > 0.50, which means that the construct is able to

explain at least 50% of the variance of the items (Fornell & Larcker, 1981). Based on Table 2, it can be seen that the four variables with all dimensions have a value of > 0.5, so it can be said that the latent variable is able to explain the large variation in several items, so it can be ensured that the items have formed a unity in each construct.

Table 2
Internal consistency reliability

Variable	Cronbach alpha	Composite Reliability	AVE
<i>Group bonding</i>			
X1.1	0,916	0,919	0,750
X1.2	0,835	0,864	0,663
X1.3	0,909	0,909	0,846
X1.4	0,920	0,921	0,759
<i>Group Norms</i>			
X2.1	0,970	0,970	0,943
X2.2	0,894	0,895	0,904
X2.3	0,831	0,856	0,663
X2.4	0,845	0,856	0,763
<i>Group Cohesion</i>			
Z1.1	0,936	0,937	0,887
Z1.2	0,864	0,939	0,789
<i>Group Performance</i>			
Y1	0,745	0,848	0,651
Y2	0,651	0,851	0,741
Y3	0,659	0,852	0,742

Discriminant validity shows the uniqueness of a construct from other constructs in the structural model. In this study, the discriminant validity assessment used the Fornell and Larcker matrix

Table 3
Discriminant validity (Fornell and Lacker Matrix)

Variable	Group bonding	Group Cohesion	Group Norms	Group Performance
Group Bonding	0.784			
Group Cohesion	0.805	0.926		
Group Norms	0.825	0.808	0.815	
Group Performance	0.067	0.115	0.084	0.787

The results of the hypothesis test can be seen in Table 4.

The outcomes of the H1 test show that group bonding has no significant effect on group performance. These findings are not in line with the outcomes of a previous study which was done by Klang & Luria (2021) which stated that group bonding had a positive influence on group performance. According to Klang

et al (2021), the strength of group bonding can be seen from how often members interact and give each other trust. The more often they interact, the stronger the group bonding in the group because they get to know each member better and the sense of trust also increases. grow. In this study, group bonding had no effect on group performance because there was very minimal interaction between them, they only met once a month during group meetings, so group bonding in these groups had not been formed optimally even though they had been members of the group for quite a long time so they had not has an impact on improving group performance.

Table 4
Direct and indirect effect

Hypothesis	Path	Std beta	Std. error	CR	P-Value	Decision
H1	GB-GP	-0,080	0,093	0,866	0,193	Not significant
H2	GN-GP	0,014	0,091	0,152	0,440	Not significant
H3	GB-GC	0,435	0,061	7,186	0,000	Significant
H4	GN-GC	0,449	0,064	7,064	0,000	Significant
H5	GC-GP	0,169	0,079	2,135	0,016	Significant
H6	GB → GC → GP	0,071	0,034	2,136	0,016	Significant
H7	GN → GC → GP	0,078	0,040	1,905	0,028	Significant

The outcomes of the H2 test expression that group norms have no significant effect on group performance. This outcome is not in line with the results of a previous study that was done by (Swaab et al., 2008) which stated that group norms influence group performance. Group norms are rules created by a group and agreed upon by all group members and used as guidelines for group members to behave or act. According to Langton et al (2015) group norms are used to maintain group conditions. In this study, group norms had no effect on group performance because the 2019 Covid pandemic had an impact on changes in members' behavior, they were reluctant to attend group meetings even though one of the group norms was that members were required to attend group meetings. Since the outbreak of the Covid-19 outbreak, almost every company has implemented social distancing norms that have led to work from home (WFH), where this work from home policy has led to the formation of new Covid-19 service norms and is contrary to old social norms (Suhariadi et al., 2023).

The outcomes of the H3 test show that group bonding has a significant effect on group cohesion. The results of this research confirm previous study which

was done by Klang (2021) which showed that group bonding was positively connected to group cohesion. The existence of group bonding in a group will help them stay united and upsurge their sense of belonging to the group and their moral feelings (perception of cohesion). Research results (Kratzer et al, 2005) show that the frequency of friendship ties has positive and negative consequences on team performance, while the frequency of friendship ties is positively related to performance.

The outcomes of the H4 test expression that group norms have a significant effect on group cohesion. This research supports previous research conducted by Eys et al (2006) which shows that there is an association between group norms and group cohesion. Norms have been defined as standards or expectations that describe how group members should or should not behave. Thus, group norms help in creating a structured and effective group environment. Likewise, with the joint responsibility groups in the East Java Setia Bhakti Wanita, each group has group norms that are different from other groups because the members who join are very heterogeneous, so the group determines group norms according to the agreement of the group members. Groups whose group norms have better relations between members in the group will also be better or in other words, the group cohesion will be better, because group norms determine how group members should behave and act so as to create a structured and effective group environment (Eys et al., 2006).

The outcomes of the H5 test expression that group cohesion has a significant effect on group performance. The outcomes of this study are in line with the outcomes of previous study conducted by Bahli (2005) which showed that there was a significant positive impact of task cohesion on group performance, but there was no effect of social cohesion on group performance. According to Bahli (2005) when there is a greater level of task cohesion, groups will perform better, task cohesion is important for performance and not social cohesion. This finding is also in line with the results of research conducted by Gupta (2020) which shows group cohesion has a positive impact on student engagement and group performance. Group performance refers to the results and procedures by which the group achieves common goals (Gupta & Bakker, 2020). Cohesion and performance are interrelated, cohesive groups tend to perform better than less cohesive groups (Fry et al., 2019).

The outcomes of the H6 test expression that group bonding has a significant effect on group performance with the mediation of group cohesion. It shows that group cohesion has the ability to mediate group bonding on group performance, the better group cohesion,

the more group performance will improve. Group bonding does not have a direct effect on group performance, but by involving group cohesion, group bonding has an effect on group performance. According to Klang (2021), close group bonding between group members will keep them united and upsurge their sense of belonging to the group as well as their moral feelings so that the group's goal of improving group performance will be achieved, thus it can be said that group cohesion is a mediator between group bonding and group performance. The groups that are members of the East Java Setia Bhakti Wanita cooperation are formed because of group bonding between the members of the group, they already know each other from one member to another and over time they interact with each other for a long time, of course the emotional bond between group members becomes higher so that a group is formed. cohesion within the group. When group cohesion is higher, group members have a stronger sense of belonging to their group so they will fight to maintain the condition of their group so that it remains good. Group members will try to remain part of the group even though they have to take joint responsibility because one of the members cannot pay their obligations to the cooperative, but the main thing is group cohesion in the group; there is a sense of concern among members towards other members to help members who experienced a disaster.

The outcomes of the H7 test show that group norms have a significant effect on group performance with the mediation of group cohesion. This means that group cohesion has the ability to mediate group norms on group performance. The better the group cohesion, the more group performance will improve. Group norms do not have a direct influence on group performance, but by involving group cohesion, group norms influence group performance. Group norms are rules made by a group and have been mutually agreed upon. The groups that are members of the SBW group also create group norms according to the group's character. These rules are made for the common benefit of all group members and group members agree to these rules because of group cohesion in the group.

Conclusions and Implications

The outcomes of this study state that neither group bonding nor group norms has a significant direct effect on group performance, but by adding group cohesion as a mediating variable the results are that group bonding and group cohesion have a significant effect on group performance

The contribution of this study is to explain the important role of group cohesion in a group. A group will

have good performance if there is also good group cohesion.

Grounded on the outcomes of this study, it can be seen that an important factor for improving group performance is group cohesion. The existence of group cohesion in a group shows that members have a sense of belonging to their group, members feel part of their group so that members will persist in remaining in their group and they will try to maintain the condition of the group. The higher the group cohesion, the higher the group performance of a group. Efforts to increase group cohesion include forming group bonds within the group and creating group norms, because with group bonding, interactions between members are established and mutual trust arises. The existence of group norms regulates how group members must behave so that members understand their rights and obligations.

This research still has limitations. This research was conducted on groups with very heterogeneous characteristics and very little interaction between group members, so the results of this research are that group bonding and group norms do not have a significant effect on group performance; therefore, further research should be carried out on groups that have interaction between members more often. Besides that, the future researcher uses another organization that consists of some groups.

References

- Balkundi, P. (2006). Poliomyelitis in British and American Troops in the Middle East. *British Medical Journal*, 49(1), 49–68. <https://doi.org/10.1136/bmj.1.4355.841>
- Biemann, T., Cole, M. S., & Voelpel, S. (2012). Within-group agreement: On the use (and misuse) of r_{WG} and $r_{WG(J)}$ in leadership research and some best practice guidelines. *Leadership Quarterly*, 23(1), 66–80. <https://doi.org/10.1016/j.leaqua.2011.11.006>
- Bollen, K. A., & Hoyle, R. H. (1990). Perceived cohesion: A conceptual and empirical examination. *Social Forces*, 69(2), 479–504. <https://doi.org/10.1093/sf/69.2.479>
- Carron, A. V., & Brawley, L. R. (2000). Cohesion conceptual and measurement issues. *Small Group Research*, 31(1), 89–106. <https://doi.org/10.1177/104649640003100105>
- Cialdini, R. ., & Trost, M. R. (1998). The handbook of social psychology (Vol. 2, 4th ed., pp. 151-192). New York, NY: McGraw-Hill. In *Contemporary Sociology*, 27(6). <https://doi.org/10.2307/2654253>
- Eys, M. A., Hardy, J., & Patterson, M. M. (2006). Group norms and their relationship to cohesion in an exercise environment. *International Journal of Sport and Exercise Psychology*, 4(1), 43–56. <https://doi.org/10.1080/1612197x.2006.9671783>
- Fajriyanti, F., Panjaitan, N. K., & Kuswanto, S. (2019). Budaya, Pengaruh Dan, Organisasi Kelompok, Kohesivitas Kepuasan, Terhadap Karyawan, Kerja Pt, D I Bni, Bank. *Jurnal Aplikasi Manajemen Dan Bisnis*, 5(3), 455–465.
- Feng, L., Friis, A., & Nilson.Jerker. (2015). Social Capital among Members in Grain Marketing Cooperatives of Different Sizes Li. *Agribusiness An International Journal*, 32(1), 113–126. <https://doi.org/10.1002/agr>
- Fry, M. J., Cochran, J. J., Ohlmann, J. W., & Anderson, D. R. (2019). *Copyright 2019 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203. 333–337.*
- Gupta, M., & Bakker, A. B. (2020). Future time perspective and group performance among students: Role of student engagement and group cohesion. *Journal of Applied Research in Higher Education*, 12(5), 1265–1280. <https://doi.org/10.1108/JARHE-05-2019-0128>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). The Results of PLS-SEM Article information. *European Business Review*, 31(1), 2–24.
- Han, J. Y., & Hovav, A. (2013). To bridge or to bond? Diverse social connections in an IS project team. *International Journal of Project Management*, 31(3), 378–390. <https://doi.org/10.1016/j.ijproman.2012.09.001>
- Henttonen, K., Johanson, J. E., & Janhonen, M. (2013). Work-team bonding and bridging social networks, team identity and performance effectiveness. *Personnel Review*, 43(3), 330–349. <https://doi.org/10.1108/PR-12-2011-0187>
- Klang, M., & Luria, G. (2021). Group Bonding and Effectiveness: Cohesion's Moderating Role and Leaders' Relationship Mediating Role. *Small Group Research*, 52(4), 431–456. <https://doi.org/10.1177/1046496420977915>
- Langton, N., Robbins, S. P., & Judge, T. A. (2015). Organizational behaviour. In *Psychology and People: A Tutorial Text*. Pearson. https://doi.org/10.1007/978-1-349-16909-2_19
- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11(4), 815–852. <https://doi.org/10.1177/1094428106296642>
- Liang, Q., Huang, Z., Lu, H., & Wang, X. (2015).

- Social Capital, Member Participation, and Cooperative Performance: Evidence from China's Zhejiang. *International Food and Agribusiness Management Review*, 18(1), 49–78.
- Nahapiet, J., & Ghosal, S. (1998). Social capital intellectual capital and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Postmes, T., Spears, R., & Cihangir, S. (2001). Quality of decision making and group norms. *Journal of Personality and Social Psychology*, 80(6), 918–930. <https://doi.org/10.1037/0022-3514.80.6.918>
- Sarstedt, M., & Cheah, J. H. (2019). Partial least squares structural equation modeling using SmartPLS: a software review. *Journal of Marketing Analytics*, 7(3), 196–202. <https://doi.org/10.1057/s41270-019-00058-3>
- Shah, P. P., Dirks, K. T., & Chervany, N. (2006). The multiple pathways of high performing groups: The interaction of social networks and group processes. *Journal of Organizational Behavior*, 27(3), 299–317. <https://doi.org/10.1002/job.368>
- Suhariadi, F., Sugiarti, R., Hardaningtyas, D., Mulyati, R., Kumiasari, E., Saadah, N., Yumni, H., & Abbas, A. (2023). Work from home: A behavioral model of Indonesian education workers' productivity during Covid-19. *Heliyon*, 9(3), e14082. <https://doi.org/10.1016/j.heliyon.2023.e14082>
- Supriyono. (2009). Aplikasi Penerapan Sistem Tanggung Renteng. Koperasi Wanita Setia Bhakti Wanita Surabaya.
- Swaab, R. I., Phillips, K. W., Diermeier, D., & Husted Medvec, V. (2008). The pros and cons of dyadic side conversations in small groups: The impact of group norms and task type. *Small Group Research*, 39(3), 372–390. <https://doi.org/10.1177/1046496408317044>
- Tung, H.-L., & Chang, Y.-H. (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. <https://doi.org/10.1108/20408001111148720>
- Walumbwa, F. O., Morrison, E. W., & Christensen, A. L. (2012). Ethical leadership and group in-role performance: The mediating roles of group conscientiousness and group voice. *Leadership Quarterly*, 23(5), 953–964. <https://doi.org/10.1016/j.leaqua.2012.06.004>
- Weldon, E., & Weingart, L. R. (1993). Group goals and group performance. *British Journal of Social Psychology*, 32(4), 307–334. <https://doi.org/10.1111/j.2044-8309.1993.tb01003.x>
- Yu, L., & Nilsson, J. (2018). Social capital and the financing performance of farmer cooperatives in Fujian Province, China. *Agribusiness*, 34(4), 847–864. <https://doi.org/10.1002/agr.21560>