

The Role of Knowledge Heterogeneity and Organisational Commitment in Explaining University Organisational Effectiveness: Mediation Mechanism

S. Martono^a, Moh Khoiruddin^b, Nury Ariani Wulansari^c, Vini Wiratno Putri^d, ^{a,b,c,d}Universitas Negeri Semarang, Indonesia, Email: amartono@mail.unnes.ac.id, bkhoiruddin@mail.unnes.ac.id

This study aims at explaining the effect of social capital and trust on university organisational effectiveness through knowledge heterogeneity and organisational commitment as the mediator. There were 267 respondents of employees at State University in Central Java, Indonesia, as the sample. Purposive sampling was used as the sampling technique. The data collection methods were observation, interviews, and questionnaires. The hypothesis testing employed path coefficient values and was carried out by a t-test via SmartPLS 3.0. The results reveal that knowledge heterogeneity was proven to play an essential role in explaining the mechanism of social capital mediation on university organisational effectiveness. Organisational commitment also proved as an explanatory of the mediating mechanism of trust in organisational effectiveness. The results also showed that there was a direct influence of social capital on knowledge heterogeneity and trust in organisational commitment. This study is expected to contribute to the management practices in the university realm, in which universities need to pay attention to the trust and social capital of its employees.

Key words: *Knowledge Heterogeneity, Organisational Commitment, Trust, Organisational Effectiveness.*

Introduction

For decades, human resources have been the greatest asset of any organisation. Every basic function of an organisation is carried out by the employees. Thus, human resources are essential in determining the effectiveness of the organisation as a whole, which is characterised by increasing competitiveness, innovation, and excellence (Channar et al., 2015). Furthermore,

effectiveness is an idea that is often used to express various individual and team results (Costa, 2003). Several studies have shown the vital role of human resources in increasing organisational effectiveness. Human resources that play an essential role in increasing organisational effectiveness are characterised by high social capital and trust (Laschinger et al., 2014; Laski & Moosavi, 2016).

Nevertheless, it seems that the results of research related to how trust and social capital play an important role in increasing organisational positive outcomes still have a contradiction. Laschinger et al. (2014), in their research, show that social capital is an important factor that can drive the effectiveness of performance. Fredette and Bradshaw (2012) also reveal that in a complex, collaborative, and consequential decision environment, social capital is crucial for governance effectiveness. Agyapong et al. (2017), Oh et al. (2004) confirm that social capital owned by groups leads to higher group effectiveness. Meanwhile, research conducted by Pardiman et al. (2017), and Putri and Yuniawan (2016) found that social capital has not been proven to influence performance effectiveness. Likewise, Akintimehin et al. (2019) discovered that neither internal nor external social capital affected the effectiveness of organisational performance.

In particular, to our knowledge, the research gap can also be seen from the relationship of trust towards positive organisational outcomes. Laski and Moosavi (2016), and Phina et al. (2018) found that trust plays an essential role in encouraging positive outcomes, such as OCB and organisational performance. Costa (2003) explained that trust is an important condition for the functioning and welfare of teams in organisations.

This study attempts to re-examine the effect of social capital and trust on organisational outcomes, such as effectiveness with different mechanisms. Organisational commitment and knowledge heterogeneity are two aspects that can be considered as mediating variables (Han & Li, 2015; Allen et al., 2018). Trust owned by individuals will encourage organisational commitment, which in turn creates organisational effectiveness. Organisational effectiveness can also be created through knowledge heterogeneity influenced by individual social capital. It is of interest to know the highlight of this study. First, there is still a gap in research results between trust and social capital on positive organisational outcomes. Thus, the mediation mechanism is expected to be able to explain more comprehensive results. Second, there is a need to study this topic with different samples for generalisation (Laschinger et al., 2014). Furthermore, Agyapong et al. (2017) suggested studying this topic in the domain of different countries, which are more diverse. Thus, examining this research model in Indonesia is very appropriate. Third, research related to organisational effectiveness in a higher education setting as a non-profit institution becomes a need to be continuously developed (Jyoti & Bhau, 2015). Moreover, State University in Indonesia must implement bureaucracy reform as a national

commitment to create effective, efficient, clean, and accountable governance, as well as highly qualified public services (Khoiruddin et al., 2019).

Literature Review

Social Capital

Social capital theory can explain how relationships develop within organisations, both in the internal environment and the external environment. The theory explains that the relationship can have a positive impact on the performance of employees and the organisation (Leana & Van Buren, 1999). Social capital is indeed considered a social resource that is embedded in a social network, which can improve performance outcomes (Lin, 2001). Social capital is also referred to as a resource that is embedded in a network of relationships, which provides the ability to mobilise networks and assets that can be accessed through that network (Nahapiet and Ghoshal, 1998; Fredette & Bradshaw, 2012).

Success in social networking ultimately benefits the organisation as a whole. Therefore, organisations also need to ensure that organisational resources are directed at developing and maintaining an effective relationship between employees and management (Lin, 2001). Then, Bourdieu (1985) defines social capital as a variety of actual and potential resources that can produce a network of work relationships that respect each other and interpret each other. Whereas, Putnam (1995) explains that social capital serves as an adhesive for each individual, in the form of the norm, trust, and networking, so that mutual cooperation occurs to achieve common goals.

Social capital is also understood as the knowledge and understanding shared by the community, as well as the pattern of relationships that enable a group of individuals to carry out a productive activity. According to Fukuyama (1995), social capital is a set of values or norms lived by group members, which allows for cooperation among members. Furthermore, Coleman (1998) asserts social capital as a tool to understand social action theoretically, which combines sociological and economic perspectives. According to Laschinger et al. (2014), social capital encompasses three interrelated dimensions covering structure, cognitive, and relational aspects. The structural aspect refers to the formation of relationships between people in organisations. The cognitive aspect refers to the adoption of shared values and trust among people in work relationships. The relational aspect is defined as social capital, which develops as an effective form of relationship with people in the organisation (Nahapiet & Ghoshal, 1998).

Social capital is not just a numerical set of institutions or groups which support social life. The spectrum is broader, in which it functions as a social adhesive that maintains the unity of group members (Pardiman et al., 2017). Ultimately, social capital can positively or negatively influence organisational outcomes (Tsai & Hsu, 2018).

Trust

Trust is an indispensable component for effective relationship success (Adil et al., 2018). Experts have long been interested in the study of trust in organisations. Trust is often linked with individual attributions about the intentions and motives of others, which underlie their behaviour. Trust is also often linked to the willingness to be vulnerable (Mayer et al., 1995). Likewise, McKnight et al. (1998) refer to trust as belief and willingness to depend on other parties. Willingness to be vulnerable to a set of behavioural expectations allows individuals to manage the uncertainty or risk associated with their actions (Costa, 2003). Trust occurs when a person believes in the reliability and integrity of a trusted party (Morgan & Hunt, 1994). Trust in the party, which has reliability and integrity, will provide the value of trust in that party so that someone can provide trust in something.

Organisational trust is a discrete but concrete process with the behaviour of individuals in the organisational structure in feelings of accuracy, trust, commitment, and sincerity with each other. Trust in an organisation is a belief in an organisation's intentions and behaviour when an employee faces an uncertain or risky situation (Bastug et al., 2016). Meanwhile, according to Shockley-Zalabak et al. (2000), organisational trust is the willingness of an organisation, based on culture and communication behaviour in relationships and transactions, to be vulnerable to other individuals, groups, or organisations based on the belief that they are competent, open and honest, caring, reliable, and identified with the aim, norm, and value.

Knowledge Heterogeneity

Knowledge heterogeneity is a gap between team members in terms of knowledge background, knowledge structure, or cognitive style (Ni, 2010). Knowledge heterogeneity refers to the variety of knowledge and expertise that managers can access through their networks. Knowledge heterogeneity relates to surface information that can affect managerial performance (Rodan & Galunic, 2004). Knowledge heterogeneity is also considered to be a diversity of technological knowledge, skills, and expertise (Ye et al., 2016). Knowledge heterogeneity can be classified into three dimensions; professional heterogeneity, heterogeneity experience, and heterogeneity thinking (Wu et al., 2015). Meanwhile, according to the source, knowledge heterogeneity can be divided into two categories. Internal knowledge heterogeneity reflects the process of accumulation and synthesis of internal knowledge. External knowledge heterogeneity emphasises the importance of collaboration between accessing diverse knowledge possessed by partners (Ye et al., 2016).

Knowledge heterogeneity can be described as a double-edged sword (Horwitz & Horwitz, 2007). Knowledge heterogeneity can have a negative impact on innovation performance. Such assumptions are based on social classification theory, according to the 'being similar to attract'

paradigm; individuals with the same attributes tend to have higher recognition (Byrne, 1971). Therefore, knowledge heterogeneity can lead to the formation of small groups in teams because of population stratification. These conditions even cause tension between team members and ultimately weaken team members' goals and cooperation (Yue & Chen, 2016).

Organisational Commitment

Organisational commitment is considered as a bond or link between individuals and organisations. Organisational commitment is the relative strength of the identification and involvement of individuals in specific organisations (Meyer & Allen, 1991). Furthermore, Mowday et al. (2013) describe organisational commitment as the power of identification of individuals in an organisation through a strong willingness to become a member of the organisation, through ongoing involvement and work based on acceptance of organisational values and goals. Thus, it can be concluded that organisational commitment is a high sense of ownership, involvement, responsibility, and employee loyalty to their organisation.

Meyer and Allen (1991) categorised the nature of these psychological states into three components: affective, normative, and sustainable. Affective commitment is a process of attitude in which individuals begin to think about their relationship with the organisation concerning values and goals. It involves employees' emotional attachment, identification, and involvement in the organisation. Normative commitment reflects the feeling of obligation in work based on the values and personal beliefs of employees. Meanwhile, ongoing commitment refers to awareness of the loss if leaving the organisation. Employees with high levels of ongoing commitment remain in the organisation for a while until they find a job that is better or more suitable for themselves. In the end, the ideal level of commitment is the average, which must cover all three; affective, normative, and ongoing commitment (Bastug et al., 2016).

Organisational Effectiveness

Organisational effectiveness is a construct that is grounded in the values and preferences of evaluators. Several models or definitions of effectiveness have emerged in the literature, including the *ideal type*, or bureaucratic model (effectiveness means matching the ideal characteristics of a bureaucratic organisation), the *goal model* (effectiveness means accomplishing goals), the *natural systems* model (effectiveness means obtaining needed resources), the *strategic constituencies* model (effectiveness means satisfying important stakeholders), the *internal processes* model (effectiveness means high-quality internal processes), the *paradox model* (effectiveness means the presence of simultaneous opposites), and the *abundance model* (effectiveness means producing flourishing and virtuousness). The criteria for evaluating effectiveness in each of these models differ, but each has a legitimate

claim to being a useful approach to assessing and producing valuable outcomes (Cameron, 2014).

Effective organisations are those that have accurate information about the expectations of strategically critical constituencies and that have adapted internal processes, goals, and values to meet constituency expectations. Proponents of the ‘strategic constituencies’ perspective view organisations as highly elastic entities in a dynamic force field of constituencies that can manipulate organisational performance (Connolly, Conlon, and Deutsch, 1980). The organisation is flexible enough to respond to the demands of powerful interest groups such as stockholders, unions, regulators, customers, and top managers. Effectiveness is linked, therefore, to concepts such as customer satisfaction, learning, adaptability, and legitimacy. The assumption is that organisations are effective if they satisfy their customers, or if they continually learn, or if they adapt to changing constituency demands, or if they acquire legitimacy with their public (Cameron, 2014).

Despite the fact that organisational effectiveness lies at the centre of all theories of organisations (i.e., all theories of the organisation ultimately rely on the fact that a guaranteed way to organise or act is more effective than other alternatives), even though organisational effectiveness is an ultimate dependent variable in organisational studies (i.e., all relationships among organisational elements assume that achieving effectiveness is an ultimate objective), and although individuals and organisations are required to continuously maintain accountability for effectiveness (i.e., individuals and organisations are regularly appraised on their performance, which assumes that one kind of performance is more effective than another), one common definition of effectiveness has remained elusive (Cameron, 2014).

Hypothesis Development

Social capital among members of the organisation increases their ability to share knowledge and transfer ideas. Also, social capital enhances the ability of businesses to gather resources that can improve their performance (Agyapong et al., 2017). Besides, social capital is also considered as an essential factor in encouraging knowledge heterogeneity of organisational members. Knowledge heterogeneity is reflected by differences among team members in terms of background knowledge, knowledge structure, or cognitive style (Ni, 2010). With high social capital, members of the organisation will have many resources (e.g., knowledge and information) from their social networks, which in turn will transfer these knowledge resources to one another and become more diverse. Tsai and Shu’s research results (2018) show that social capital is a factor that influences knowledge heterogeneity in an organisation.

The heterogeneity of information and knowledge makes new opportunities, and resources found faster (Rodan & Galunic, 2004). Knowledge heterogeneity has also been widely

recognised as driving the innovation performance of an organisation (Ye et al., 2016). Knowledge heterogeneity is proven to be a positive driver for organisational outcomes. Like the research conducted by Yue and Chen (2016), and Tsai (2017), they found that knowledge heterogeneity has proven to be an essential factor in encouraging positive organisational outcomes (performance and innovation) as a whole. Organisational effectiveness can be created from the diversity of characteristics in a team/organisation, for example, functional diversity, demographics, or knowledge (Kirkman et al., 2004; Benoliel & Somech, 2016). Following the view of cognitive resources, team members with different knowledge will form a more extensive collection of knowledge, provide more ideas, and increase cognitive resources; thus, knowledge heterogeneity tends to increase performance (Yue & Chen, 2016). This study also examines the influence of social capital on organisational effectiveness through knowledge heterogeneity as a mediator. It is expected that the existence of social capital and members of the organisation will have more knowledge heterogeneity, which in turn encourages the whole organisational effectiveness. As pointed out by Han and Li (2015) and Wu (2008), dynamic knowledge and diverse information could mediate the relationship between individual capital (intellectual and social) and positive outcomes such as innovation performance and effective competitiveness. Thus:

H1: Social capital has a positive influence on knowledge heterogeneity.

H2: Knowledge heterogeneity has a positive influence on organisational effectiveness.

H3: Knowledge heterogeneity mediates the relationship between social capital and organisational effectiveness.

Organisational effectiveness can also be encouraged through the mechanism of organisational trust. Trust is the willingness of individuals to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action necessary to the trustor (Mayer et al., 1995). Interpersonal trust between organisational members facilitates good cooperation (Robbins & Judge, 2007). Trust among organisational members occurs when they develop mutual trust with one another. Trust produces the basis for teamwork behaviour, which results in organisational synergy and better employee performance. Collaboration among members of an organisation can only be created when trust becomes the most important value of organisational culture because it provides an atmosphere for them to discuss mistakes, accept criticism, and freely express their feelings about any problem (Phina et al., 2018). Organisational trust is crucial in organisational success. Trust is an important issue for most organisations because it contributes many benefits for the organisation. Trust that is reflected in psychological states that provide feedback on how employees understand problems in every organisational situation will be very important to create their commitment to the organisation (Bastug et al., 2016). Research conducted by Vanhala et al. (2016) and Fard and Karimi (2015) found that trust has a vital role in encouraging organisational commitment.

Organisational commitment is widely explained in management and organisational behaviour literature as a key factor in the relationship between people and organisations (Akbar, Udin, Wahyudi, & Djastuti, 2018; Djastuti, Rahardjo, Irviana, & Udin, 2019; Hardiningsih, Udin, Masdjojo, & Srimindarti, 2020; Udin, Handayani, Yuniawan, & Rahardja, 2017). Organisational commitment can lead to useful results such as an increase in effectiveness, efficiency, and productivity and reduction in the absence of individuals and organisations (Bastug et al., 2016). Having organisational commitment, employees will work better and will try to achieve the goals set by the organisation; in the end, it will create whole organisational effectiveness. Research conducted by Zollo et al. (2018) revealed that employee organisational commitment, which was voluntarily demonstrated, would affect the effectiveness of the organisation. Ultimately, organisational trust and organisational commitment have an important meaning in keeping organisational performance high and contributing to the desired results in terms of organisation. Organisational trust and organisational commitment are the most important driving forces for organisational success (Bastug et al., 2016).

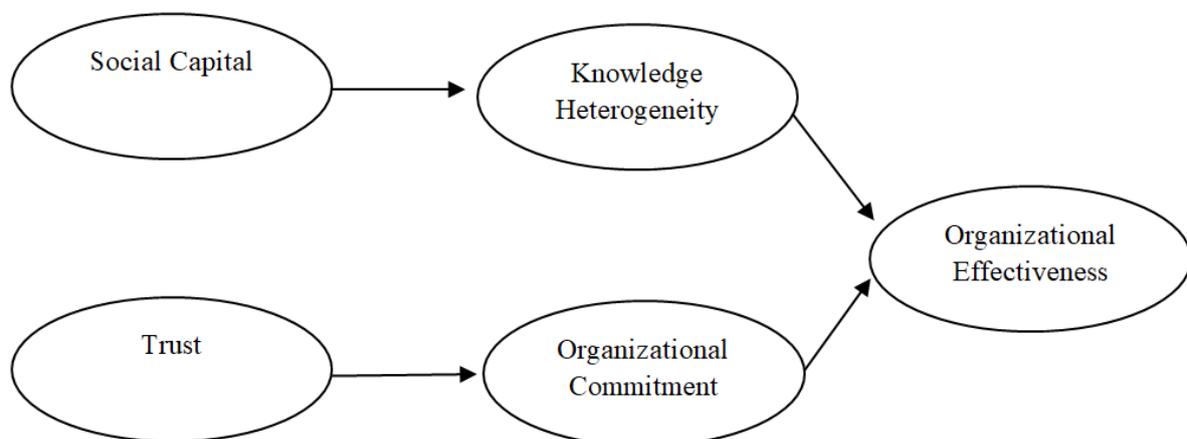
The overall goal of this study was also to examine the influence of trust on organisational effectiveness through organisational commitment as a mediator. It is expected that with high trust, members of the organisation will tend to be more committed to the organisation, which at the end of these conditions can encourage the effectiveness of the organisation as a whole. As pointed out by Allen et al. (2018), and Dowell et al. (2014), the relationship between trust and effective organisational performance could occur through a mechanism of organisational commitment as a mediator. Thus:

H4: Trust has a positive influence on organisational commitment.

H5: Organisational commitment has a positive influence on organisational effectiveness.

H6: Organisational commitment mediates the relationship between trust and organisational effectiveness.

Figure 1. Research Model



Research Methods

The number of samples in this study were 267 respondents of employees at State University in Central Java, Indonesia. Purposive sampling technique was used as the sampling technique. The data collection method employed a Likert scale 1-5 questionnaire for the research respondents. The instrument utilised a convergent validity test with the loading factor ≥ 0.70 and discriminant validity by comparing the loading factor $>$ cross-loading. Reliability test with composite reliability coefficient > 0.70 and Cronbach alpha coefficient > 0.70 is said to be reliable. Based on the instrument test of 27 question items, it was declared valid. While in the reliability test, all items were stated that the questions were reliable. Hypothesis testing used path coefficient values and was done by t-test via SmartPLS 3.0.

Measurement

Social capital was measured using eight-question items. Following are some examples of the questions: “My leader treats me well and full of consideration”, “My leader shows concern for my rights as an employee,” and “People in the work unit cooperate with each other to help in developing and implementing new ideas”.

Trust was calculated using eight-question items also. Here are a few examples of the questions: “Management in my organisation is sincere in its efforts to meet the employee's point of view”, “Management in my workplace does efficient work”, and “Having full confidence in the skills of my co-workers”.

Knowledge heterogeneity was measured employing seven-question items. Here are some examples of the question items: “The educational background of the members of the organisation where I work is highly varied”, “Each member has some skills related to the assignment”, and “The opinions of the members of the organisation are very different”.

Organisational commitment was determined using nine-question items. Here are a few examples of the questions: “Even if the organisation I work for does not have good finance, I will be reluctant to switch to another organisation”, and “Being offered a little more money from other organisations will not make me think of changing jobs”.

Organisational effectiveness was measured using six-question items. Here are some examples of the question items: “The organisation where I work has improved service quality over the past three years”, “The organisation where I work has increased the interest of prospective students over the past three years”, and “The organisation where I work can manage the level of publication for lecturers in scientific journals”.

Results and Discussion

The respondents' backgrounds were dominated by men (51.7%) aged between 36-42 years old (28%). The majority of them worked as education staff (71.5%), and 37.2% of respondents had 8-15 years working period. The mean, standard deviation, and correlation for each variable are in Table 1. The correlation between organisational effectiveness and other variables ranged from 0.419 to 0.527 (all $\rho < 0.01$), with a value for organisational effectiveness ($M = 24.25$), and social capital style with a scale of the highest value ($M = 32.70$). The result might be that social capital obtained the highest value. Other variables, such as knowledge heterogeneity, were valuing ($M = 26.87$). Then, trust variable with value of ($M = 32.03$) and organisational commitment with value of ($M = 31.21$). It means that the structural equation model test could be continued.

Table 1: Mean, Standard Deviation, and Correlation

Variable	Mean	S.D.	EO	MS	K	KP	KO
Organisational Effectiveness	24.25	3.32	1				
Knowledge Heterogeneity	26.87	3.41	0.419	1			
Trust	32.03	4.08	0.485	0.561	1		
Organisational Commitment	31.21	4.70	0.527	0.382	0.508	1	
Social Capital	32.70	4.07	0.472	0.527	0.777	0.462	1

Table 2: Outer Model

	EO	KP	K	KO	MS
OE1	0.719	0.318	0.471	0.489	0.410
OE2	0.811	0.276	0.339	0.424	0.338
OE3	0.851	0.394	0.385	0.422	0.393
OE4	0.846	0.411	0.387	0.443	0.368
OE5	0.784	0.299	0.355	0.367	0.364
OE6	0.773	0.283	0.372	0.356	0.380
KH1	0.380	0.459	0.806	0.446	0.649
KH2	0.343	0.360	0.773	0.368	0.589
KH3	0.421	0.439	0.815	0.400	0.600
KH4	0.383	0.447	0.774	0.458	0.565
KH5	0.402	0.465	0.803	0.340	0.658
KH6	0.387	0.438	0.842	0.444	0.676
KH7	0.365	0.466	0.824	0.380	0.656
KH8	0.409	0.497	0.718	0.364	0.547
OC5	0.477	0.314	0.523	0.898	0.464
OC6	0.502	0.366	0.406	0.872	0.366

OC7	0.344	0.291	0.343	0.767	0.330
T3	0.361	0.844	0.459	0.253	0.398
T4	0.353	0.840	0.533	0.404	0.538
T5	0.286	0.713	0.322	0.231	0.286
SC1	0.335	0.356	0.573	0.380	0.742
SC2	0.421	0.451	0.673	0.441	0.832
SC4	0.385	0.427	0.561	0.358	0.796
SC5	0.351	0.410	0.646	0.351	0.839
SC6	0.286	0.435	0.570	0.233	0.755
SC7	0.407	0.464	0.633	0.335	0.793
SC8	0.418	0.326	0.621	0.479	0.742

Table 3: Composite Reliability and Cronbach's Alpha

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Organisational Effectiveness	0.886	0.890	0.913	0.638
Knowledge Heterogeneity	0.725	0.757	0.842	0.642
Trust	0.917	0.920	0.932	0.632
Organisational Commitment	0.805	0.833	0.884	0.719
Social Capital	0.897	0.902	0.919	0.618

Table 2 shows the results of the convergent and discriminant validity testing of the variable statement items. There were six question items from organisational commitment variables, four question items from knowledge heterogeneity, and one question item from social capital that were declared invalid because of the loading factor was ≤ 0.70 . Thus, they were eliminated because they were already represented by other statement items that were considered to be able to represent each of the dimensions of these variables. Re-validity testing was performed to obtain valid results according to the convergent validity criteria. After re-validity testing, all items have met the discriminant validity criteria; loading factor > cross-loading. Therefore, the statement was said to be able to measure the problems that occurred in this study and fitted with the actual conditions. Reliability testing could provide a consistent measurement of concepts without bias with Composite reliability and Cronbach's alpha criteria above 0.5. The results in Table 3 show that the instruments in this study have met the reliability test requirements. Thus, the instrument used has been declared valid and reliable. Thereby, hypothesis testing could be performed.

Hypothesis Testing

This study used the calculation of SmartPLS 3.0. The results of this study are as follows:

Table 4: Hypothesis Testing

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Knowledge Heterogeneity → Organisational Effectiveness	0.255	0.256	0.056	4.518	0.000
Trust → Organisational Commitment	0.508	0.515	0.065	7.784	0.000
Organisational Commitment → Organisational Effectiveness	0.430	0.436	0.065	6.647	0.000
Social Capital → Knowledge Heterogeneity	0.527	0.535	0.049	10.788	0.000
Trust → Organisational Commitment → Organisational Effectiveness	0.219	0.225	0.044	5.006	0.000
Social Capital → Knowledge Heterogeneity → Organisational Effectiveness	0.134	0.137	0.035	3.886	0.000

Table 4 shows the direct influence of social capital on knowledge heterogeneity ($\beta = 0.527$, $p < 0.001$) was positive and significant (H1 was accepted). Then, it can also be seen that the direct influence of knowledge heterogeneity on organisational effectiveness ($\beta = 0.255$, $p < 0.001$) was positive and significant (H2 was accepted). While social capital mediation analysis on organisational effectiveness through knowledge heterogeneity ($\beta = 0.134$, $p < 0.001$) was positive and significant, meaning that knowledge heterogeneity could mediate the relationship between social capital and organisational effectiveness (H3 was accepted). The results also indicated that the direct influence of trust on organisational commitment ($\beta = 0.508$, $p < 0.001$) was positive and significant (H4 was accepted). This study also exhibited that organisational commitment to organisational effectiveness ($\beta = 0.430$, $p < 0.001$) was positive and significant (H5 was accepted). While trust mediation analysis on organisational effectiveness through organisational commitment ($\beta = 0.219$, $p < 0.001$) was positive and significant, meaning that organisational commitment could mediate the relationship of trust and organisational effectiveness (H6 was accepted). The results of this study are supported by some relevant previous literature.



The result of the study has stressed that creating knowledge heterogeneity can be achieved through social capital. As can be seen from the statistical results, the influence of social capital on knowledge heterogeneity was positive and significant. It means that if the institutional party wants to encourage the knowledge heterogeneity of its employees, it is essential to increase or stimulate their social capital. The results of this study are in line with some relevant previous literature. Tsai and Shu (2018) showed a strong relationship between social capital and the dimensions of a diversity of knowledge.

The results also showed that the influence of knowledge heterogeneity on organisational effectiveness proved to be positive and significant. Organisations will be more effective organisationally if the knowledge heterogeneity of its members is also improving. Some previous literature has shown that knowledge heterogeneity is a very important aspect for an organisation to have. Rodan and Galunzi (2004) explained that the more diverse a network and knowledge, the more it will improve the performance and innovation of an organisation as a whole. The diversity of knowledge within an organisation has proven to be an essential factor in driving overall positive organisational outcomes (performance and innovation) (Ye et al., 2016; Yue & Chen, 2016; Tsai, 2017). Regarding effectiveness, research conducted by Kirkman et al. (2004) and Benoliel and Somech (2016) indicated that effectiveness could be created by the diversity of characteristics within a team/organisation; for example, functional diversity, demographics, or knowledge.

Furthermore, the influence of organisational commitment on organisational effectiveness also proved to be positive and significant. It indicates that high employee commitment would be able to create high organisational effectiveness as well. The vital role of organisational commitment has been reviewed in several previous works of literature. Zollo et al. (2018) demonstrated that employee organisational commitment that was voluntarily demonstrated would affect the effectiveness of the organisation.

The results disclosed that knowledge heterogeneity was proven to mediate the relationship between social capital and organisational effectiveness. The higher the social capital employees have, the more diverse their knowledge will be. In the end, the knowledge heterogeneity has an impact on the effectiveness of the organisation as a whole. Indeed, no study to date has supported precisely the relationship between social capital mediation and organisational effectiveness through knowledge heterogeneity. However, regarding the extent that positive outcomes (organisational effectiveness) are a function of individual capital (social or intellectual capital) to create diverse knowledge, some literature is considered relevant to the results of our research. Han & Li (2015) found that dynamic knowledge was proven to mediate the relationship between individual (intellectual) capital and positive outcomes, such as effective innovation performance. Wu (2008) also showed that the influence of social capital



in encouraging positive outcomes, such as increasing effective competitiveness, can occur through mediation mechanisms, one of which is the process of sharing diverse information.

Lastly, the results of mediation testing also indicated that organisational commitment was proven to mediate the relationship between trust and organisational effectiveness. That is, when employee confidence in the organisation is high, the commitment shown by them is also high. Ultimately, this commitment will have an impact on the effectiveness of the organisation as a whole. Some previous studies are very relevant to our findings. Allen et al. (2018) found that organisational commitment proved to mediate the relationship between trust and organisational performance. Additionally, Dowell et al. (2014) discovered that organisational commitment proved to mediate the relationship between trust and positive organisational outcomes, such as more effective performance.

Conclusion

The conclusion of this study showed that organisational effectiveness was determined by the existence of social capital and employee confidence in the organisation. Knowledge heterogeneity was proven to explain the mediating mechanism of social capital and organisational effectiveness. Organisational commitment also proved to be explanatory of the mediating mechanism of trust in organisational effectiveness.

The results of this study have made several key contributions to the fields of organisational practices, especially in a higher education setting. The university should continue to maintain and increase social capital and employee confidence in the organisation. Theoretically, this research is expected to contribute to the literature related to social capital and organisational trust and effectiveness. Also, this research is expected to open up avenues of research in the realm of higher education (non-profit organisations).

In the end, it will be beneficial if further research examines the mechanism of social capital and trust in organisational effectiveness with a longitudinal approach. Future studies also need to take different types and numbers of research samples to get more generalised results. Future studies can also consider the role of moderation that can strengthen or inhibit the influence of these mechanisms.



REFERENCES

- Adil, M. S., Owais, M., & Qamar, A. (2018). Impact of occupational stress, interpersonal trust, and organisational commitment on valence, OCB and job satisfaction: A variance-based sem analysis. *Journal of Management Sciences*, 5(1): 38-61.
- Agyapong, F. O., Agyapong, A., & Poku, K. (2017). Nexus between social capital and performance of micro and small firms in an emerging economy: The mediating role of innovation. *Cogent Business & Management*, 4(1), 1309784.
- Akbar, A. B., Udin, Wahyudi, S., & Djastuti, I. (2018). Spiritual leadership and employee performance: mediating role of organisational commitment in Indonesian public university. *Journal of Engineering and Applied Sciences*, 13(12), 4344-4352.
- Akintimehin, O. O., Eniola, A. A., Alabi, O. J., Eluyela, D. F., Okere, W., & Ozordi, E. (2019). Social capital and its effect on business performance in the Nigeria informal sector. *Heliyon*, 5(7), e02024.
- Allen, M. R., Georgea, B. A., & Davis, J. H. (2018). A model for the role of trust in firm level performance: The case of family businesses. *Journal of Business Research*, 84: 34–45.
- Baştuğ, G., Pala1, A., Kumartaşli, M., Günel, I., & Duyan, M. (2016). Investigation of the relationship between organisational trust and organisational commitment. *Universal Journal of Educational Research*, 4(6): 1418-1425.
- Benoiel, P., & Somech, A. (2016). Functional heterogeneity and senior management team effectiveness: The mediating role of school leadership. *Journal of Educational Administration*, 54 (4), 492-512.
- Byrne, D. E. (1971). *The attraction paradigm*. New York: Academic Press.
- Cameron, K. (2014). Organisational effectiveness in *Wiley Encyclopedia of Management*, edited by Sir Cary L Cooper. John Wiley & Sons, Ltd.
- Channar, Z. A., Talreja, S., & Bai, M. (2015). Impact of human capital variables on the effectiveness of the organisations. *Pakistan Journal of Commerce and Social Sciences*, 9(1):228-240.
- Connolly, T., Conlon, E. and Deutsch, S. (1980) Organisational effectiveness: A Multiple-constituency View. *Academy of Management Review*, 5(2), 211–217.
- Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review*, 32 (5): 605-622.

- Djastuti, I., Rahardjo, S., Irviana, L., & Udin, U. (2019). Fun at work and employee performance: the roles of job satisfaction and organisational commitment in manufacturing companies. *WSEAS Transactions on Business and Economics*, 16, 153-162.
- Dowell, D., Morrison, M., & Heffernan, T. (2014). The changing importance of affective trust and cognitive trust across the relationship lifecycle: A study of business-to-business relationships. *Industrial Marketing Management*, 44:119-130
- Fard, P. G., & Karimi, F. (2015). The Relationship between organisational trust and organisational silence with job satisfaction and organisational commitment of the employees of university. *International Education Studies*, 8 (11): 219-227.
- Fredette, C., & Bradshaw, P. (2012). Social capital and nonprofit governance effectiveness. *Nonprofit Management & Leadership*, 22 (4): 391-409.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: The Free Press.
- Han, L., & Li, D. (2015). Effects of intellectual capital on innovative performance the role of knowledge-based dynamic capability. *Management Decision*, 53 (1): 40-56.
- Hardiningsih, P., Udin, U., Masdjojo, G. N., & Srimindarti, C. (2020). Does competency, commitment, and internal control influence accountability? *Journal of Asian Finance, Economics and Business*, 7(4), 223-233.
- Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management*, 33(6): 987-1015.
- Jyoti, J., & Bhau, S. (2015). Impact of transformational leadership on job performance: Mediating role of leader–member exchange and relational identification. *SAGE Open*, 15 (4):1-13
- Khoiruddin, M., Martono, S., Wulansari, N. A., Ridloah, S. (2019). Examining the excellence in higher education (ehe) program in the disruptive era. *International Journal of Innovation, Creativity and Change*, 7(11): 274-287.
- Kirkman, B. L., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. B. (2009). individual power distance orientation and follower reactions to transformational leaders: a cross-level, cross-cultural examination. *Academy of Management Journal*, 52 (4): 744-764.
- Kirkman, B. L., Tesluk, P. E., & Rosen, B. (2004). The impact of demographic heterogeneity and team leader–team member demographic fit on team empowerment and effectiveness.

Group & Organisation Management, 29 (3): 334-368

- Laschinger, H. K. S., Read, E., Wilk, P., & Finegan, J. (2014). The Influence of nursing unit empowerment and social capital on unit effectiveness and nurse perceptions of patient care quality. *The Journal of Nursing Administration*, 44 (6):347-352.
- Laski, S. A., & Moosavi, S. J. (2016). The relationship between organisational trust, ocb and performance of faculty of physical education. *International Journal of Humanities And Cultural Studies*, 1(1): 1280-1287.
- Leana, C.R. and Van Buren, H.J. (1999). Organisational social capital and employment practices. *Academy of Management Review*, 24(1): 538-555.
- Lin, N. (2001). Building a network theory of social capital. In N. Lin, K. Cook, & R. S. Burt (Eds.), *Social Capital: Theory and Research* (pp. 3–29). New York: Aldine de Gruyter.
- Mayer, R.C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organisational trust. *Academy of Management Review*, 20 (3): 709-34.
- McKnight, D. H., Cummings, L. L., & Cherany, N. L. (1998). Initial trust formation in new organisational relationships. *Academy of Management Review*, 23 (3): 473-90.
- Meyer, J. P., & Allen, N. (1991). A Three-component conceptualisation of organisational commitment. *Human Resource Management Review*, 1 (1): 61–89.
- Mowday, R.T., Porter, L.W., Steers, R.M. (2013), *Employee-organisation linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Nahapiet, J., & Ghoshal, S. (1988). Social capital, intellectual capital and the organisational advantage. *Academy of Management Review*, 23(2), 242–266.
- Ni, X. (2010). The mechanism of knowledge heterogeneity on team innovation (In Chinese). *Enterprise Economy*, 8(1): 57-63.
- Oh, H., Chung, M. H., & Labianca, G. (2004). Group social capital and group effectiveness: The role of informal socialising ties. *Academy of Management Journal*, 47 (6): 860–875.
- Pardiman. Sudiro, A., Troena, E. A., & Rofiq, A. (2017). The mediating role of social capital in islamic work ethic, organisational commitment, and lecturer's performance. *International Review of Management and Marketing*, 7(5), 113-123.
- Phina, O. Y., Arinze, A. S., Chidi, O. F., & Chukwuma, E. D. (2018). The effect of teamwork on employee performance: A study of medium scale industries in Anambra State.



International Journal of Contemporary Applied Researches, 5 (2) , 174-194.

- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6 (1), 65-78.
- Putri, V. W., & Yuniawan, A. (2016). Organisational effectiveness: Social capital and competitive advantage approach. *Jurnal Dinamika Manajemen*, 7 (1), 76-90.
- Robbins, S.P. and Judge, T.A. (2007). *Organisational behaviour*, Twelfth edition, New Jersey Pearson Educational Inc.
- Rodan, S., And Galunic, C. (2004). More Than Network Structure: How knowledge heterogeneity influences managerial performance and innovativeness. *Strategic Management Journal*, 25 (6): 541–562
- Tsai, F-S. (2017). Knowledge Heterogeneity, Social Capital, and Organisational Innovation. *Journal of Organisational Change Management*, 31 (2): 304-322.
- Tsai, F-S., & Hsu, I-C. (2018). The effects of social capital on knowledge heterogeneity. *Management Decision*, 57 (5): 1237-1253.
- Udin, Handayani, S., Yuniawan, A., & Rahardja, E. (2017). Antecedents and consequences of affective commitment among indonesian engineers working in automobile sector: An investigation of affecting variables for improvement in engineers Role. *International Journal of Civil Engineering and Technology*, 8(10), 70–79.
- Vanhala, M., Heilmann, P., & Salminen, H. (2016). Organisational trust dimensions as antecedents of organisational commitment. *Knowledge and Process Management*, 23 (1): 46–61
- Wu, D. (2015). Knowledge Heterogeneity and Team Knowledge Sharing as Moderated by Internal Social Capital. *Social Behavior and Personality*, 43(3): 423-436.
- Wu, W. P. (2008). Dimensions of social capital and firm competitiveness improvement: The mediating role of information sharing. *Journal of management studies*, 45(1), 122-146.
- Ye, J., Hao, B., & Patel, P. C. (2016). Orchestrating heterogeneous knowledge: The effects of internal and external knowledge heterogeneity on innovation performance. *IEEE Transactions on Engineering Management*, 63(2), 165-176.
- Yue, D., & Chen, W. (2016). The Relationship between the Knowledge Heterogeneity and Innovation Performances of the Innovation Teams of College Students. *Asian Social Science*, 12 (12). 124-132.



Zollo, L., Laudano, M. C., Boccardi, A., & Ciappei, C. (2018). From Governance to Organisational Effectiveness: The Role of Organisational Identity and Volunteers' commitment. *Journal of Management and Governance*, 23(1): 111-137.