

COGNITIVE DIVERSITY ON TEAM INNOVATION DURING THE COVID-19 PANDEMIC: DO WE NEED AN INTRINSIC MOTIVATION AS A MEDIATOR?

Devi Yulia Rahmi ^{*, a,1}, Fatma Poni Mardiah ^{b,2}, Ratni Prima Lita ^{c,3}

^{a,b,c} Management, Universitas Andalas, Padang, Indonesia

¹ deviyuliarahmi@eb.unand.ac.id ^{*}, ² fatmaponimardiah@eb.unand.ac.id ; ³ ratniprimalita@eb.unand.ac.id

Abstract

This research aims to analyze the impact of cognitive diversity on intrinsic motivation, cognitive diversity on team innovation, and the impact of intrinsic motivation, as a mediator, on cognitive diversity and team innovation. This research applied an explanatory approach to hypothesis testing. We conducted a survey in which 107 questionnaires were distributed to 33 work teams in the furniture industry in West Sumatra, Indonesia. Findings indicate that cognitive diversity had a significant positive impact on team innovation. Contrastively, cognitive diversity did not have any effect on intrinsic motivation. Besides, we also figured out that intrinsic motivation was not a mediator between cognitive diversity and team innovation. Findings indicate that cognitive diversity had a significant positive impact on team innovation. Contrastively, cognitive diversity did not have any effect on intrinsic motivation. Besides, we also figured out that intrinsic motivation was not a mediator between cognitive diversity and team innovation. The study provides a comprehensive understanding of knowledge sharing and team climate on the relationship between cognitive diversity and team innovation, missing in previous empirical studies. Then, the study is relevant because of inconclusive findings from past studies examining the relationship between cognitive diversity and team innovation.

Keywords: Cognitive Diversity, COVID-19, Intrinsic Motivation, Team Innovation.

I. INTRODUCTION

According to Woodman et al. [1] and Anderson & Potoenik [2], innovation constitutes a complex interaction between individuals and their work situation at multiple levels, individual, team, or organizational. Team innovation was one adaptation method a team would adopt and implement various solutive innovations that could escalate its performance quality [3], [4]. A team was a pivotal unit that supported creative ideas and accomplishments, particularly innovations and performances [5]. As such, innovations and performances a team decided to make were the most capable of adapting to changes in a dynamic environment [7].

Team innovation was a series of developing, adopting, and implementing new ideas by and for the team. Team innovation, West & Wallace [8] argue, posed an introduction and exertion of various new ideas, products, procedures, or work processes by a team, which were intended to give benefits for team members, the team itself, organization, or more extensive social order (the society). Besides, Janssen [7] emphasize the crucial role social interaction played in the process of innovation. In other words, team innovation constituted an outcome derived from the process of diverse social interactions in a team [9]. Based on team innovation's predate definitions, innovating is efforts made by team members to acquire benefits from all team members and any parties and social orders engaging in.

Several literature studies indicate some antecedents of team innovation. Hülshager et al. [10] figured out that structure and composition contributed to team innovation. One of the forms of structure and composition is the reliance on tasks and objectives. Additionally, team composition was deemed capable of creating team innovation [11]. We refer to team composition here as background diversity, either education or tenure, and relevant work diversity, impacting team innovation. West & Wallace [8] believe that a team climate would likely boost team innovation. Furthermore, other literature (i.e. [10]) confirms that a team composition was proffered as a factor promoting team creativeness. According to the cognitive evaluation theory [12], contextual factors contributed to intrinsic motivation only if they gave admissible information or feedbacks confirming individuals' competency feelings.

Furniture is one of the strategic industries which contribute to the economy of Indonesia. It is strategic due to its high value and global competitiveness. The competitiveness was significantly underpinned by abundant and sustainable natural materials, local pattern and design diversity, and competent human resources [13]. However, Indonesia can only contribute to the total global furniture production by 1%. Malaysia and Vietnam surpass Indonesia's wooden furniture competitiveness.

Furthermore, based on the data from Indonesian Furniture and Craft Industry Association (HIMKI) or, of 20 countries, Indonesia is ranked 17th as a country that exports its furniture products globally. Four pillars specified Indonesia's furniture product export competitiveness: materials, production processes, designs and innovations, and marketing [14]. Pujiati [15] concluded that the factors of designs/innovations were formal education and design

training, research and development, design institutions, technology, benchmarking, human resources regeneration, and legal institutions (patent).

The Indonesia Furniture Industry and Indonesian Furniture and Craft Industry Association [16] clarified that the furniture industry confronted a more severe burden due to the Coronavirus. [14] I added that many of the furniture industry had to close their business and lay off their employees. That situation is due to order delays, even cancellations due to the COVID-19 pandemic. Consequently, industries have to face low cash flow, making them unable to pay employees. A decline in furniture export values due to the COVID-19 should be immediately detracted. As recorded by HIMKI, Indonesia's furniture export values to the US, which was US\$ 700 million, had deescalated, so had that to European and Middle East countries. The furniture industry should immediately execute the post-COVID-19 long-term recovery to survive amidst business uncertainties. Can start the recovery of the furniture industry by being a consistent innovation pioneer concerning furniture. Those who are innovation pioneers must be able to achieve and sustain competitiveness. Innovations allowed corporates to bring about outstanding performances and earn high profitability [17].

This research examined the impact of cognitive diversity on intrinsic motivation, cognitive diversity on team innovation, and intrinsic motivation, as a mediator, on cognitive diversity and team innovation. This study comprises of several stages: the first stage is an introduction, followed by the second, third, and final stage, which is a literature review and research hypothesis and model development, research methods and elaborated data and discussion, and conclusion and managerial implications respectively.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

A. *Motivational Information Processing in Groups (MIP-G) Model*

The basic assumption in the emergence of MIP-G Model [46] is the view that the team is a processor of knowledge. Team members who individually seek and process knowledge. Individual team members are integrated at the team level, influencing people to think jointly about solutions to solving team problems. This will continue until the team makes decisions relevant to the problems and goals of the team [46]. According to the motivational theory of knowledge processing, knowledge processing can be profound and shallow. This depends on the motivation of each individual in the team [46]. *Epistemic motivation* is an individual's willingness to try and achieve a thorough understanding of the tasks and decisions taken by the team [46]. Epistemic motivation is closely related to the principle of adequacy [47]. This adequacy principle shows that the willingness to process knowledge systematically depends on actual trust, namely how certain the level of need to share knowledge is. Epistemic motivation varies from low to high [47]. Low epistemic motivation will provide an easy and fast assessment of the existing knowledge of each individual. However, when the level of epistemic motivation is high, individuals in the team will engage in more profound and systematic knowledge processing to understand very complex problems related to team decisions. Meanwhile, *social motivation* is defined as an individual's preference for sharing knowledge between oneself and other team members [46]. Nijstad & De Dreu [47] divide social motivation into two types, namely pro-self (team members are only interested in results) and pro-social (team members are interested in results and fairness in the team). Pro-self and pro-social social motivations face cooperative and competitive choices. Team members may not only desire to combine all the team's interests (pro-socially motivated) but also want to be the best by maximizing personal gain (pro self-motivated).

Diverse teams tend to form categorizations within a team [48]. This is caused by different feelings between one individual and another in the team. The categorization formed within the team will interfere with the team's function to carry out affective and evaluative responses to the team, so it often causes negative results within the team [49]. MIP-G model assumes that a team that is aware of the diversity within the team, both cognitively and in terms of educational background and experience, will have high epistemic motivation [46]. Regarding team innovation, the MIP-G model says that teams will be more innovative after team members are aware of apparent differences in diversity compared to an innovation instructed by superiors [50], [51]. The theory MIP-G which forms the basis of this research. Thus, the adjustment of knowledge processing motivation theory from information processing motivation theory becomes relevant in this research.

B. *Impact of Cognitive Diversity on Intrinsic Motivation*

As suggested by many researchers, team composition was proposed as a factor that could promote team creativeness [10]. Team composition was a configuration of team attributes [18] and regarded to strongly influence both processes and outcomes [19]. Team composition was then an essential supporter of an innovation climate [10].

Team composition was more about demographic diversity and relevant work diversity [11]. Appropriate work diversity refers to team members' heterogeneity concerning the attributes of works or tasks, e.g., profession, education, knowledge, skills, or expertise. On the other hand, demographic diversity depicted a dissimilarity with no relation to tasks, i.e., age, sex, or ethnicity [45]. Relevant work diversity and demographic diversity will affect

team innovation. Additionally, appropriate work diversity would stimulate team members' cognition to innovate [20].

Meanwhile, demographic diversity appropriately courage an organization's cognition to make innovations [19] A different degree of cognitive process generated by relevant work diversity and demographic diversity implies that the first diversity is the key to team innovation. Cognitive diversity was more conceptually relevant and could enhance team innovation [21].

Cognitive diversity has a positive correlation with team intrinsic motivation. According to the cognitive evaluation theory [12] contextual factors contributed to intrinsic motivation only if they gave relevant information or feedbacks confirming individuals' competency feelings. Cognitive diversity could extend team members' skills and abilities, escalating their competencies and allowing them to analyze problems from various points of view and prompted innovative solutions [22]. Referring to the previous research, we propose:

H1: Cognitive diversity positively impacts intrinsic motivation.

C. Impact of Cognitive Diversity on Team Innovation

Concerning the perspective of value in diversity, Williams & O'Reilly [23] convey that cognitive diversity could trigger team creativeness with extensive perspective exposures and encourage team members to create more innovative ideas. The information and decision-making theory [24] signify that cognitive diversity carried knowledge, skills, abilities, and ideas to a different team. Knowledge sharing will increase the opportunity of proposing various options, new ideas, and new product development. Each group member possessed a different paradigm when appraising a particular environment and processing information to produce new alternatives [25]. Accordingly, in high cognitive diversity, a team was expected to make better and more innovative decisions [26], [2]. Referring to the previous research, we propose:

H2: Cognitive diversity has a significant positive impact on team innovation.

D. Intrinsic Motivation as a Mediating Variable between Cognitive Diversity and Team Innovation

Being motivated is being prompted to do something. Amabile et al. [22] explains that innovation was collated by motivation, resources, and some technical aspects. Intrinsic and extrinsic motivation, as well as their differences, has been broadly studied. Intrinsic motivation remained crucial to reflect humans' tendency to learn and assimilate [27]. Intrinsic motivation constituted the motivation to finish a task or find a solution to a problem, stimulated by the thought that the task or problem was appealing, challenging, and satisfying [21]. A specific psychologic state about intrinsic motivation can improve self-competence perception. A previous study linked diversity to team creativeness. It focused on the activity that allowed a team member to be a mediator and translated cognitive diversity into team innovation, such as information elaboration, team climate [28], [29], [30] team learning [31] and team reflection [32]. The research assumes that team members should be motivated to engage in activities relevant to their tasks.

The notable assumption is that team members should be motivated to engage in activities relevant to their tasks. Nevertheless, that team motivation could mediate was not a favorite research topic in diversity [33], [21]. Based on the theory of effecting motivation, intrinsic motivation effectively minimized innovation uncertainties [34]. Referring to the previous research, we propose:

H3: As a mediator, team intrinsic motivation impacts cognitive diversity and team innovation.

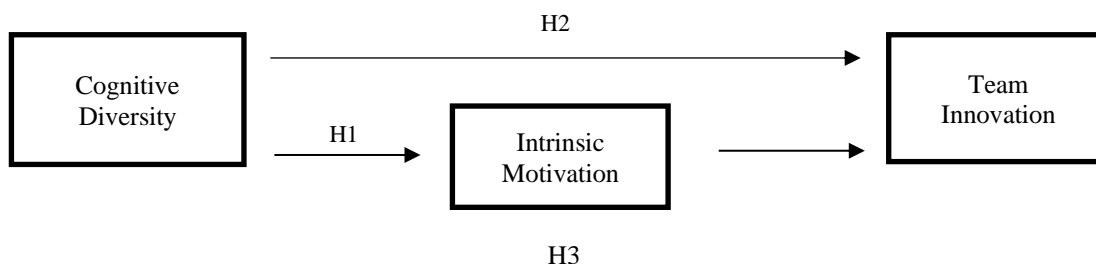


Figure 1. Research Model

III. RESEARCH METHODS

A. Research Design and Variables

This research used an explanatory approach to testing hypotheses between variables through survey data collection. We took samples from a determined population using questionnaires. The investigation type was causality, purposively chosen to define the relationship between variables. Meanwhile, the time horizon was cross-

sectional, reflecting a synchronic state in 2020. The analyzed unit was a team in the furniture industry. Three variables used in this research were cognitive diversity (the dependent variable), team innovation (the dependent variable), and intrinsic motivation (the mediating variable). The operationalization of research variables is described in Table I. All variables were measured using a Likert scale with 1-5 (1 = strongly disagree, 5 = strongly agree). To ensure all instruments were used, we did a reliability test using construct reliability. Table I indicates that all variables had a CR value of more than 0.7. The construct reliability score acceptable should not be less than 0.6 [35].

B. Data Collection Technique and Sampling Strategy

This study uses primary data. The target research population was the furniture industry in West Sumatra. The sampling technique used was purposive sampling. The sampling criteria was furniture industry at least who have two or more employee, another one is furniture industry that has been established for at least 5 years. Questionnaires were directly distributed to respondents or 33 work teams (107 individuals) who worked in the furniture industry.

TABLE I. VARIABLE MEASUREMENT

Variable	Items	Source	Construct Reliability (CR)
Cognitive Diversity	Thinking in a different way	[44]	0.849
	Different knowledge and skills		
	Argued view of the world		
Intrinsic Motivation	Beliefs about what is right and wrong are different	[36]	0.874
	Find solutions to complex problems		
	Enjoy finding new ideas for a product		
	Often engage in more analytical thinking		
	Creating new procedures for work assignments was enjoy		
Team Innovation	When there is an increase in the process and product, the individual will enjoy it well	[37]	0.946
	New procedures and methods were initiated.		
	Innovative ways of accomplishing work targets/objectives were developed.		
	New skills to foster innovation are developed.		
	Started improved teaching strategies and methods.		

TABLE II. WITHIN-GROUP AGREEMENTS (RWG(J))

Team	Cognitive Diversity	Intrinsic Motivation	Team Innovation
Team 1	0.90	0.95	0.83
Team 2	0.97	0.94	0.88
Team 3	0.95	0.93	0.75
Team 4	0.98	0.98	0.95
Team 5	0.98	0.97	0.95
Team 6	0.92	0.94	0.75
Team 7	1.00	1.00	0.99
Team 8	0.89	0.94	1.00
Team 9	0.97	0.72	0.92
Team 10	0.97	0.95	0.76
Team 11	0.87	0.78	0.97
Team 12	0.98	0.95	1.00
Team 13	0.97	0.98	0.87
Team 14	1.00	0.93	0.90
Team 15	0.95	1.00	0.92
Team 16	0.79	0.92	0.99
Team 17	0.95	1.00	0.96
Team 18	1.00	0.90	1.00
Team 19	1.00	1.00	1.00
Team 20	1.00	1.00	1.00
Team 21	0.92	0.95	0.90
Team 22	0.92	0.96	0.94
Team 23	1.00	0.96	1.00
Team 24	1.00	0.95	1.00
Team 25	0.90	0.99	1.00
Team 26	0.83	0.90	0.80
Team 27	0.97	0.96	0.81
Team 28	0.98	0.95	0.93
Team 29	1.00	0.97	1.00
Team 30	0.98	0.97	0.98
Team 31	1.00	0.96	0.94
Team 32	0.99	0.85	0.75
Team 33	1.00	0.98	0.99

C. Data Analysis at the Team Level

This research used a team analysis unit. A mean was used to calculate team scores [38]. The process of data aggregation from the individual level to team data was also called. This aggregation exerted a homogeneity concept within the team and a variance concept between teams. The variance homogeneity within a team was analyzed using $rwg(j)$. The suggested value was at least 0.7 to indicate a consensus among team members. Homogeneity within a team was entailed to ensure that the data collected at an individual level could represent those at a team level. The $rwg(j)$ quantification was implemented in each of the teams for the respective variables. Table II shows that the furniture industry's 33 work teams had fulfilled the standard score determined, in which the cut-off score was > 0.7 . As such, all teams had been considered qualified, and hence we could test and to proceed analysis.

The second aggregation testing was to observe team differences. Team differences were presented using an intraclass correlation coefficient or ICC (ICC1 and ICC2) [39], [40], [41]. The score engendered from the ICC(1) testing should be equal to or more than 0.12, which implied that the variance between teams was higher than the variance within the team. The ICC(2) score of < 0.4 was weak, 0.4-0.75 was good, and 0.75 was excellent [42]. Table III indicates the ICC(1) quantification to the variable cognitive diversity, intrinsic motivation, and team innovation used in this research. The ICC(1) score for each variable was > 0.12 . Additionally, the estimated ICC(2) score had also fulfilled the minimum standard score of 0.7.

To test hypotheses, we used the hierarchical regression analysis method. Moreover, to analyze mediating and moderating effects, we used Hayes' PROCESS concept [43]. As presented in Table IV, internal meetings were frequently held. Most teams (29 in number or 88%) arranged more than nine internal meetings (monthly). Besides, face-to-face discussion media were the most desirable (97%). 42.3% of teams conducted product innovation. The furniture industry made product innovations that wanted to stylize their products to the latest fashion or trend. A product design should be made corresponding to the market demand. Additional features in the form of different materials might be added. Other forms of innovation added to a product were, e.g., sofa buttons and others.

D. Statistic Descriptive of Research Data

Statistic descriptive presents the mean and standard deviation. In Table V, it shows that the mean of the variables used in this research was in the range of 3.67-3.87. The range implies that the degree of the mean score from respondents was "medium"¹ Concerning answering items. Besides, we can also see that the three variables used in this research had varied standard deviations at a range of 0.53-0.77. They signified a variant distribution of the data sample to the mean.

E. Measurement of Validity

CFA (confirmatory factor analysis) was used to measure the construct validity (a model fit with DF 2.319, RMR 0.014, GFI 0.854, RSMA 0.112). Two types of construct validities used were discriminant validity and convergent validity. The first type of validity used a comparison between a latent variable correlation and squared root of average variance extracted. Meanwhile, the criteria used should refer to the estimated loading value and the average variance extracted (AVE) value to observe the latter validity in construct validity. Table VI presents the convergent validity and discriminant validity of the measurement item used in this research. The estimated loading value was for each of the indicators. In Table VI, it is observed that not all measurement items had an estimated loading value of more than 0.5. One indicator (MI1) could not proceed to the subsequent analysis as it had an estimated loading value of > 0.5 . The respective variables had an AVE value of more than 0.5 [35], so we inferred that the variables used were valid (convergent). Table VI also shows the discriminant validity, in which the square root of AVE was higher than the latent variable. As such, the variables were valid (discriminant) [35].

F. Hypothesis Testing Technique

Data collected were processed using the hierarchical regression analysis to test a hypothesis, following Hayes (2018) mediation and moderation standard procedures [43]. The particular method was chosen to identify the relationship between mediated variables in research [35]. The testing result of the Hypothesis is indicated in Table VII. Hypothesis 1 stated that cognitive diversity had a positive impact on intrinsic motivation. Model 1 in Table VII demonstrates that cognitive diversity had an insignificant negative impact on intrinsic motivation (coeff. -0.300, p-value > 0.05). Accordingly, Hypothesis 1 was rejected. Subsequently, Hypothesis 2 stated that cognitive diversity had a significant positive impact on team innovation. Hypothesis 2, in Table VII, is represented in Model 2, which shows that cognitive diversity had a significant negative impact on team innovation (coeff. -0.520, p-value < 0.05). In other words, Hypothesis 2 was accepted in this research.

Lastly, Hypothesis 3 stated that intrinsic motivation had a mediating impact on cognitive diversity and team innovation, as reported in Model 3 in Table VII. Hayes [43] recommended that mediation testing took indirect paths into account using the bootstrap confidence interval based on 500 bootstrap samples. As seen in Model 3, cognitive

¹ The categorization was based on the following quantification: High = Mean $>$ (Median + 1SD), Medium = (Median - 1SD) $<$ Mean $<$ (Median + 1SD), Low = Mean $<$ (Median - 1SD).

diversity had an insignificant indirect impact on team innovation (coeff. = 0.156, 95%CI = -0.679-0.724). Therefore, intrinsic motivation was not a mediator between cognitive diversity and team innovation.

TABLE III. INTRACLASS CORRELATION COEFFICIENTS (ICC)

Variable	Intraclass Correlation Coefficients		
	ICC(1)	ICC(2)	Exp.
Cognitive diversity	0.671	0.891	Excellence
Intrinsic motivation	0.750	0.923	Excellence
Team innovation	0.897	0.972	Excellence

TABLE IV. PROFILE OF RESPONDENTS

Profile of Respondents (N = 107)	Total	%
Gender		
Male	93	86.9
Female	14	13.1
Age		
< 20 years old	1	0.9
20-25 years old	22	20.6
26-30 years old	19	17.8
31-35 years old	10	9.3
36-40 years old	9	8.4
> 40 years old	46	43
Marital Status		
Single	27	25.2
Married	80	74.8
Educational Background		
Elementary school	17	15.9
Junior high School	20	18.7
Senior high School	63	58.9
Non-degree diploma qualification	2	1.9
Bachelor's degree	5	4.7
Team Tenure		
< 1 year	13	12.1
2-5 years	42	39.3
6-10 years	22	20.6
11-15 years	10	9.3
16-20 years	10	9.3
> 20 years	10	9.3
Scope of Team		
General administration	5	4.7
Management	27	25.2
Finance administration	4	3.7
Production	49	45.8
Quality control	5	4.7
Technical	7	6.5
Marketing	10	9.3
Profile of Respondents Team (N = 33)		
Internal Meeting (Monthly)		
1-3 times	1	3
4-6 times	2	6
7-9 times	1	3
> 9 times	29	88
Discussion Media		
Face-to-face	32	97
Technology-based (video conference, chatting)	0	0
Face-to-face integrated with technology-based (video conference, chatting)	1	3
Type of Innovation Made		
Product innovation	14	42.3
Process innovation	0	0
Product and process innovation	7	21.1
Others	12	36.6

TABLE V. STATISTIC DESCRIPTIVE

Variable	Mean	Standard Deviation
Cognitive Diversity	3.87	0.53
Intrinsic Motivation	3.76	0.64
Team Innovation	3.67	0.77

N = 33 teams

TABLE VI. MEASUREMENT OF VALIDITY

Variable	Estimated Loading		
	Cognitive Diversity	Intrinsic Motivation	Team Innovation
Cognitive Diversity	KK1	0.752	
	KK2	0.582	
	KK3	0.810	
	KK4	0.897	
Intrinsic Motivation	MI2	0.712	
	MI3	0.775	
	MI4	0.935	
	MI5	0.757	
Team Innovation	IT1		0.760
	IT2		0.933
	IT3		0.970
	IT4		0.940
AVE	0.591	0.638	0.818
The square root of AVE	0.768	0.799	0.904

TABLE VII. HYPOTHESIS TESTING

Variable	Dependent Variable				Indirect Effect (Mediation)
	Intrinsic Motivation		Team Innovation		
	Model 1		Model 2		Model 3
	Coeff.	SE	Coeff.	SE	
Cognitive Diversity	-0.300	0.211	-0.520**	0.244	
Bootstrap indirect effect of cognitive diversity > intrinsic motivation > team innovation					0.156
Coeff.					-0.679 ^a
LL 95% CI					0.724 ^a
UL 95% CI					
F	2.021		4.546**		27.240
R ²	0.24		0.35		0.80

Notes: N = 33, unstandardized regression coefficients are reported, **p < 0.05 (two-tailed test), a = bootstrap sample size = 5000, CI confidence interval, LL lower limit, UL upper limit

IV. RESULTS AND DISCUSSION

This research provided three empirical attestations about the impact of cognitive diversity on intrinsic motivation, cognitive diversity on team innovation, and the role of intrinsic motivation as a mediator between cognitive diversity and team innovation. The first empirical finding led us to the inference that cognitive diversity did not significantly impact the intrinsic motivation of work teams in the furniture industry in West Sumatra. This research's findings were not aligned with the previous study's findings [22], [21]. According to Deci & Ryan [12] contextual factors contributed to intrinsic motivation only if they gave relevant information or feedbacks confirming individuals' competency feeling. The work teams in the furniture industry were heterogeneous teams whose members came from various spheres. Communication and feedback expected by the respective team members did not appear from the teams themselves, hindering intrinsic motivation generation therein. As such, cognitive diversity did not have any significant impact on intrinsic motivation.

The second empirical finding clarified that cognitive diversity had a significant positive impact on team innovation in the work teams in West Sumatra's furniture industry. Each team member's unique value was collaborated with that of other team members, increasing knowledge between team members [24]. Each team member had different paradigms in appraising the environment and processing information to generate several new alternatives [25]. The creation of innovative ideas would be stimulated when knowledge-sharing ran smoothly. Kurtzberg [26] and Anderson & Potoenik [2] argue that a team would likely make a better and more innovative decision when high cognitive diversity. Accordingly, knowledge-sharing positively impacted team innovation in

the work teams of the furniture industry in West Sumatra. Furthermore, the third empirical finding pertained to intrinsic motivation's mediating impact on cognitive diversity and team innovation. This research is not in line with previous research [28], [29], [30] [31] and [32]. However, we did not find any of the effects. In other words, the last finding was not in line with the results of previous research [6]. Diverse team members do not have to be motivated in advance to engage in innovation-related activities within the team, because the diversity felt by the team is enough to make the team do innovative tasks.

V. IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH AGENDA

This research empirically attested that cognitive diversity had a positive impact on team innovation. On the other hand, cognitive diversity did not have any effect on intrinsic motivation. Similarly, intrinsic motivation did not have any mediating impact on cognitive diversity and team innovation. Therefore, based on this research, we suggest the furniture industry elevate team member diversity, especially cognitive diversity. Hence, their knowledge and apprehension will be extensive, allowing them to make creative and innovative ideas. This attempt is pivotal, considering the COVID-19 transmission and its impact on SMEs/industries/other business types. For instance, the purchase level of furniture products had declined by almost 50-90%. To mitigate this havoc, the furniture industry should be persistent in making innovations.

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REFERENCES

- [1] Woodman, Richard W., John E. Sawyer, and R. W. Griffin. (1998). "Toward a Theory of Organizational Creativity." *Academy of Management Review* 18 (2):293–321.
- [2] Anderson, Neil, and Kristina Potoenik. (2014). "Innovation and Creativity in Organizations: a State-of-the-Science Review, Prospective Commentary, and Guiding Framework" 40 (5):1297–1333.
- [3] Tushman, Michael L., and Charles A. O'Reilly. (2002). *Winning through Innovation: a Practical Guide to Leading Organizational Change and Renewal*. England: Harvard Business School Press.
- [4] Yuan, Feirong, and Richard W. Woodman. (2010). "Innovative behavior in the workplace: The role of performance and image outcome expectations." *Academy of Management Journal*, 53 (2):323-42.
- [5] Sutton, Robert I., and Andrew Hargadon. (1996). "Brainstorming Groups in Context: Effectiveness in a Product Design Firm." *Administrative Science Quarterly* 41 (4):685-718.
- [6] Fernandes, Adji A.R., and Solimun. (2017). "Moderating effects orientation and innovation strategy on the effect of uncertainty on the performance of business environment," *International Journal of Law and Management*, Vol. 59 No. 6, pp. 1211-1219.
- [7] Janssen, Onne, Evert van de Vliert, and Michael West. (2016). "The Bright and Dark Sides of Individual and Group Innovation: a Special Issue Introduction." *Journal of Organizational Behavior* 25 (2):129-45.
- [8] West, Michael A., and Michaela Wallace. (1991). "Innovation in Health Care Teams." *European Journal of Social Psychology* 21 (4):303–15.
- [9] Desivilya, Helena S., Anit Somech, and Helena Lidgoster. (2010). "Innovation and Conflict Management in Work Teams: the Effects of Team Identification and Task and Relationship Conflict." *Negotiation and Conflict Management Research* 3 (1):28–48.
- [10] Hülsheger, Ute R., Neil Anderson, and Jesus F. Salgado. (2009). "Team-level Predictors of Innovation at Work: a Comprehensive Meta-analysis Spanning Three Decades of Research." *The Journal of Applied Psychology* 94 (5):1128–45.
- [11] Shalley, Christina E., Lucy L. Gilson, and Terry C. Blum. (2009). "Interactive Effects of Growth Need Strength, Work Context, and Job Complexity on Self-Reported Creative Performance." *Academy of Management Journal* 52 (3):489–505.
- [12] Deci, E. L., and Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- [13] Munadi, Ernawati. (2017). Book Chapter. *Info Komoditi Furnitur*. Badan Pengkajian dan Pengembangan Perdagangan Kementerian Perdagangan Republik Indonesia: Jakarta.
- [14] Asosiasi Mebel dan Kerajinan Indonesia (AMKRI). (2015). *Roadmap Industri Mebel dan Kerajinan Indonesia* "Target Pencapaian Ekspor 5 Milyar USD". Jakarta.
- [15] Pujiati, Riska. 2017. Book Chapter. *Info Komoditi Furnitur*. Badan Pengkajian dan Pengembangan Perdagangan Kementerian Perdagangan Republik Indonesia: Jakarta.
- [16] HIMKI. (2020), "Sejumlah Perusahaan Furnitur dan Kerajinan Telah Mulai Merumahkan Karyawan Akibat Dampak COVID-19", retrieved from <https://www.himki-indonesia.com/post/view/194-id-sejumlah-perusahaan-furnitur-dan-kerajinan-telah-mulai-rumahkan-karyawan-akibat-dampak-covid19> .
- [17] Chen, Yu Shan. (2008). "The Driver of Green Innovation and Green Image - Green Core Competence." *Journal of Business Ethics* 81 (3): 531–43.
- [18] Levine, J M, and R L Moreland. 1990. "Progress in Small Groups Research." *Annual Review of Psychology* 41 (1982):585–634.
- [19] Kozlowski, Steve W. J., and Bradford S. Bell. (2001). "Work Groups and Teams in Organizations Work Groups and Teams in Organizations." *ILR Collection*, no. 2003:1-70.

- [20] Perry Smith, Jill E. (2006). "Social Yet Creative: The Role of Social Relationships in Facilitating Individual Creativity." *Academy of Management Journal* 49 (1):85-101.
- [21] Wang, Xiao-Hua (Frank), Tae-Yeol Kim, and Deog-Ro Lee. (2016). "Cognitive Diversity and Team Creativity: Effects of Team Intrinsic Motivation and Transformational Leadership." *Journal of Business Research* 69 (9):3231-39.
- [22] Amabile, Teresa M., Regina Conti, Heather Coon, Jeffrey Lazenby, and Michael Herron. (1996). "Assessing the Work Environment for Creativity Assessing the Work Environment for Creativity University of Michigan University of Southern California" 39 (5):1154-84.
- [23] Williams, Katherine Y., and Charles A. O'Reilly. (1998). "Demography and Diversity in Organizations: a Review of 40 Years of Research." *Research In Organizational Behavior*, 20:77-140.
- [24] De Dreu, Carsten K. W., dan Michael A. West. 2001. "Minority Dissent and Team Innovation: The Importance of Participation in Decision Making." *Journal of Applied Psychology* 86 (6): 1191-1201.
- [25] Gilson, L. L., Lim, H. S., Luciano, M. M., & Choi, J. N. (2013). Unpacking the cross-level effects of tenure diversity, explicit knowledge, and knowledge sharing on individual creativity. *Journal of Occupational and Organizational Psychology*, 86(2), 203-222.
- [26] Kurtzberg, Terri R. (2005). "Feeling Creative, Being Creative: an Empirical Study of Diversity and Creativity in Teams." *Creativity Research Journal* 17 (1):51-65.
- [27] Ryan, Richard M., and Edward L. Deci. (2000). "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions." *Contemporary Educational Psychology* 25 (1):54-67.
- [28] Rahmi, D.Y., and Indarti, N. (2019). Examining the Relationship among Cognitive Diversity, Knowledge Sharing and Team Climate in Team Innovation. *Team Performance Management*, Vol. 25 No. 5/6, pp. 299-317.
- [29] Hoever, Inga J., Daan van Knippenberg, Wendy P. van Ginkel, and Harry G. Barkema. (2012). "Fostering Team Creativity: Perspective Taking as Key to Unlocking Diversity's Potential." *Journal of Applied Psychology* 97 (5):982-96.
- [30] Kearney, E., and Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. *Journal of Applied Psychology*, 94(1), 77-89.
- [31] Van der Vegt, G. S., and Bunderson, J. S. (2005). Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal*, 48(3), 532-547.
- [32] Somech, Anit. (2006). "The Effects of Leadership Style and Team Process on Performance and Innovation in Functionally Heterogeneous Teams." *Journal of Management* 32 (1):132-57.
- [33] Knippenberg, Daan van, and Michaëla C. Schippers. (2007). "Work Group Diversity." *Annual Review of Psychology* 58 (1):515-41.
- [34] Bhaduri, Saradindu, and Hemant Kumar. 2011. "Extrinsic and Intrinsic Motivations to Innovate: Tracing the Motivation of 'Grassroot' Innovators in India." *Mind and Society* 10 (1): 27-55.
- [35] Hair, Joseph F., William C. Black, Barry J. Babin, and & Rolph E. Anderson. (2014). *Multivariate Data Analysis*. Seventh Ed. Vectors: Prentice-Hall.
- [36] Tierney, P., Farmer, S. M., and Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52(3), 591-620.
- [37] Zahavy, D. A and Anit Somech. (2001). "Understanding Team Innovation: The Role of Team Processes and Structures." *Group Dynamics: Theory, Research, and Practice* 5 (2):111-23.
- [38] Hitt, M.A., Beamish, P.W., Jackson, S.E., and Mathieu, J.E. (2007), "Buiding theoretical and empirical bridges across levels: Multilevel research in management," *Academy of Management Journal*, Vol. 50 No. 6, pp. 1385-1399.
- [39] James, Lawrence R. (1982). Aggregation Bias in Estimates of Perceptual Agreement. *Journal of Applied Psychology*, 67(2):219-29.
- [40] Bliese, Paul D., and Ronald R. Halverson. (1998). "Group Size and Measures of Group-level Properties: an Examination of Eta-squared and ICC Values." *Journal of Management* 24 (2):157-72.
- [41] Bliese, Paul D. (2000). "Within-group Agreement, Non-independence, and Reliability: Implications for Data Aggregation and Analysis." *Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions*.
- [42] Fleiss, J. (1986). *The Design and Analysis of Clinical Experiments*. Wiley, New York.
- [43] Hayes, Andrew F., (2018), *Introduction to Mediation, Moderation, and Conditional Process Analysis A Regression-Based Approach*. Second Edition. New York: The Guilford Press.
- [44] Vegt, der Van and Onne Janssen. (2003). "Joint Impact of Interdependen and Group Diversity on Innovation." *Journal of Management* 29 (6):801-30.
- [45] Webber, S. S., and Donahue, L. M. (2001). The impact of highly and less job-related diversity on workgroup cohesion and performance: A meta-analysis. *Journal of Management*, 27, 141-162.
- [46] De Dreu, Carsten K. W., Bernard A. Nijstad, dan Daan van Knippenberg. (2008). "Motivated Information Processing in Group Judgment and Decision Making." *Personality and Social Psychology Review: An Official Journal of the Society for Personality and Social Psychology, Inc* 12 (1): 22-49.
- [47] Nijstad, Bernard A., dan Carsten K.W. De Dreu. (2012). "Motivated Information Processing in Organizational Teams: Progress, Puzzles, and Prospects." *Research in Organizational Behavior* 32: 87-111.
- [48] Reid, Fraser. (1987). "Rediscovering the Social Group: A Self-Categorization Theory." *British Journal of Social Psychology* 26 (4): 347-48.
- [49] Knippenberg, Daan van, dan Michaëla C. Schippers. (2007). "Work Group Diversity." *Annual Review of Psychology* 58 (1): 515-41.
- [50] Goncalo, Jack A., dan Barry M. Staw. 2006. "Individualism-Collectivism and Group Creativity." *Organizational Behavior and Human Decision Processes* 100 (1): 96-109.
- [51] Goncalo, Jack A., dan Michelle M. Duguid. (2012). "Follow the Crowd in A New Direction: When Conformity Pressure Facilitates Group Creativity (and when it does not)." *Organizational Behavior and Human Decision Processes* 118 (1): 14-23.