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Competence, Innovative Work Behavior, and Work Engagement: A Comparison of Generation X and Millennials

Mafizatun Nurhayati[1]*, Nia Kusumawardani[1], Asep Rokhyadi Permana Saputra[2], Awan Santosa[2]

1. Business and Economic Faculty, Universitas Mercu Buana Jakarta, Indonesia
2. Business and Economic Faculty, Universitas Mercu Buana Yogyakarta, Indonesia
*corresponding author e-mail: mafizatun.nurhayati@mercubuana.ac.id

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Abstract

Purpose – This study aimed to analyze the effect of competence on innovative work behavior through work engagement by comparing Generation X and millennials during the Covid-19 pandemic.

Methodology – It was conducted on 114 employees of the Ministry of Education, Culture, Research, and Technology, at High School Directorate. The data were further analyzed using Structural Equation Model-Partial Least Square (SEM-PLS).

Findings –The results proved that competence positively affects work engagement and innovative behavior. Work engagement also mediates the effect of competence on innovative work behavior. Moreover, the effect on Generation X is higher than on Millennials. This is because Generation X dominates important positions and has a greater responsibility in public organizations. They are also more loyal and have high intrinsic motivation with high competence. Therefore, Generation X has higher work engagement and better innovative behavior due to more responsibilities.

Originality – The model built in this study uses a multi-group analysis that compares Millennials and Generation X employees. This analysis is interesting because it is relatively rare to find similar analyzes in previous studies, and it is useful to find out whether managing employees from different generations requires different policies.

1. Introduction

Creativity and innovation are important components of organizational success. This is because creativity provides ideas to develop innovative product, services, solutions, and processes (Kwon & Kim, 2019; Fetrati et al., 2022). Similarly, innovation grows and develops when the organization nurtures the idea with care and support (Kwon & Kim, 2019; Abhari & McGuckin, 2022). This rhetoric is manifested in a relentless effort to realize new ideas that lead to innovative performance behaviors. Innovation is often described as occurring in a momentary flash of inspiration. However, the actual process is messy, iterative, and often involves two steps forward for one step back and several side steps (Kwon & Kim, 2019; Anderson et al., 2014). Many

innovation efforts fail for individual and organizational reasons, including business pressures such as scepticism and burnout (Amabile et al., 2005; Abhari & McGuckin, 2022). Therefore, there is a need to examine the factors and dynamics affecting employees' innovative behavior in organizations.

Studies began to pay greater attention to the attitudinal factors that help drive innovative behavior assumed to stem from individual traits and job attitudes. One of these factors is work engagement, operationalized by vigor, dedication, and absorption (Shuck et al., 2017). This is because individuals need three times more energy to deal with difficult innovation processes. It requires exertion of vigor, dedication, and absorption in each individual, as well as indirect conditions conducive to such effort. Subsequently, every individual engaged should have competencies, including knowledge, skills, and attitudes (Tschannen et al., 2021; Minh et al., 2017).

Over the past few years, studies have widely discussed workplace changes due to the influx of workers from the Millennials generation (Gabrielova & Buchko, 2021; Espinoza & Ukleja, 2016; Kaifi et al., 2012; Stewart et al., 2017; Thompson & Gregory, 2012). Many books and articles discuss the unique organizational challenges created by millennials. Furthermore, recipes have been offered to help managers address the needs, wants, and expectations of this generation (Twenge, 2006; Zaslow, 2007; Zemke et al., 2013). Millennials born 1981-1996 constitute the largest single-generation group in the workforce in almost all countries. They surpass Baby Boomers and Generation X, born 1946-1963 and 1963-1981, respectively (Pew Research Center, 2018). Much effort has been devoted to understanding Millenials and increasing their effectiveness as workers. Therefore, it is interesting to investigate and compare the millennial generation group with Generation X. This is the originality and novelty in this study. By knowing that there are differences in perceptions, attitudes and behavior in the workplace between these generations, it will guide the organization in managing these different generations, thereby encouraging organizational effectiveness.

The public sector has broadened employee knowledge to promote innovations that address complex social problems and needs. Public organizations are under tremendous pressure to develop innovative solutions to improve service quality using limited resources (Lambert, 2013; Shaw et al., 2019). This happened in the Ministry of Education, Culture, Research, and Technology. Policymakers know those policy frameworks are for balancing existing disparities due to a lack of resources. Subsequently, a new keyword, 'innovation', is gaining popularity in public organizations (Delcampo, 2011). Innovation has become necessary for changing public sector workforce thinking and practices. Since the COVID-19 pandemic occurred, of course, studies on organizations prior to the occurrence of COVID-19 will certainly have different phenomena and will face changes in the underlying theory. During COVID-19 there were social challenges, dynamic technological developments, social inequality, and disparities in the quality of education between regions that required new studies.

There are social challenges, such as the COVID-19 pandemic, dynamic technological developments, social inequality, and disparities in the quality of education between regions. The challenges urge public organizations such as the Ministry of Education, Culture, Research, and Technology to address this problem in new and better ways. The pandemic forces individuals to behave innovatively, making it interesting to examine the effect of competence on innovative work behavior through work engagement by comparing Generation X and Millennials during the COVID-19 pandemic.

Generation X comprises people born in 1965-1980, the early years of information and technology development, such as personal computers, video games, cable television, and the

internet. The characteristics of this generation are adaptability, acceptance of change, a difficult generation, and an independent and loyal personality. They also prioritize image, fame, money, hard work, and responsibility, helping the company achieve its goals (Gabrielova & Buchko, 2021).

The Millenial Generation, born in 1981-1995, uses many instant communication technologies such as e-mail, SMS, instant messaging, and social networks such as Facebook and Twitter. This generation grows up in the booming internet era (Gabrielova & Buchko, 2021) and is characterized by adaptability and acceptance of the change. Furthermore, it is a difficult generation with an independent and loyal personality. The Millennial generation also prioritizes image, fame, and money, is hard working and calculates the company's contribution to the work results (Gabrielova & Buchko, 2021).

Delcampo et al. (2011) found that the young generation that has just entered the world of work is Generation Z, born 1996-present. It is also known as the Generation or the Internet generation. Generation Z is similar to Generation Y, but it performs all activities simultaneously, such as running social networks using a cell phone, browsing with a computer, and listening to music from a headset. Everything performed is primarily related to cyberspace. Since childhood, this generation has been familiar with technology and sophisticated devices that indirectly affect personality.

Social change refers to life dynamics that humans should experience during their lifetime. It is a change or modification in a person's lifestyle. The modification is caused by the internal environment within and outside the community (Ichsan, 2020). Moreover, social change arises due to global disasters that force people to deal with them unusually. The people affected by the last case experience social changes in almost all aspects of their lives. They experience fundamental and comprehensive changes in the social system. If it is a catastrophe of the COVID-19 pandemic, the purpose of changing the social system is for society to experience three changes. These include 1) Changes in physical cultures, such as wearing masks when leaving home and washing hands when returning home, 2). Regulatory changes include living together while maintaining physical distance from each other and avoiding crowded, 3). Changes in value systems, such as maintaining cleanliness and caring more about the environment (Ichsan, 2020).

Innovation results from processing information and knowledge that focuses on certain areas (Ritala et al., 2015). The work innovation process comprises idea formation and idea implementation (Groselj et al., 2020). Formation refers to developing fresh ideas to address work-related problems or challenges. In comparison, implementing ideas includes adopting new processes in daily work activities.

It is important to understand the role of individuals or employees in innovative work behavior (IWB). According to de Jong and Hartog (2010), employees go beyond routine tasks to seek the latest technology, suggest new ways to achieve goals, do current work, and secure resources to support their original ideas. IWB involves high-level thinking patterns, identifying ongoing and future problems, seeking opportunities, analyzing performance gaps, and looking for current methods to overcome problems (Afsar & Umrani, 2019). Employees involved in IWB could recognize new work situations appropriately and develop original ideas for improving services and products (Afsar & Umrani, 2019). De Jong and den Hartog (2010) stated eight characteristics that indicate innovative behavior, including opportunity seeking, idea creation, idea hunting, idea transmission, idea advancement, idea winning, action, and overcoming challenges.

Competence is a psychosociological aspect that increases employee innovation (Lopez et al., 2021). It includes cognitive and interpersonal skills, willingness to discuss and solve problems, collaboration, and communication skills (Boyatzis, 2008). Innovators require competence which

includes skills, characteristics, and attitudes. Competent employees are needed to support innovation in organizations (Levenson, 2006). In this regard, competence is the accumulation of knowledge and results of research and experience quantitatively and qualitatively to produce innovations. Individuals tend to innovate in professional settings, focusing on crucial competence profiles in workplace innovation. Competence increases employee innovative work behavior [26], promoting IWB in organizations (Afsar & Umrani, 2019). However, it has a weak relationship with idea generation and development but strongly affects idea implementation (Lopez et al., 2021). The competence of managers and employees is a determinant of implementing innovation in companies. A manager should have the expertise and special competencies to be innovative. Furthermore, employee competence is an internal factor that directly or indirectly affects innovation activities (Lopez et al., 2021). Competence development on innovative work behavior in the public sector is around 33%, measured by skills, knowledge, and attributes (Chombunchoo & U-On, 2016). Different traits between generations cause differences in competence and their impact on innovative work behavior, especially during the COVID-19 pandemic [9]. Therefore, the first hypothesis was formulated as follows:

H_1: There is a difference between Generation X and Millennials during the COVID-19 pandemic that competence positively affects innovative work behavior

Kahn (1990) coined the term personal engagement to capture a psychological state in which employees invest vigor, dedication, and absorption into their work to achieve substantially different outcomes. Schaufeli et al. (2002) defined work engagement as a positive, satisfying, and work-related state of mind characterized by enthusiasm, dedication, and absorption. The terms employee and work engagement are conceptualized as an overarching construction consisting of energy vigor, dedication, and absorption manifested as devoting energy to work to make a difference (Mackay et al., 2017).

The energy synergy of vigor, dedication, and absorption indicate that work engagement is expected to trigger innovative behavior (Annamalah et al., 2022; Hakanen et al., 2008). The triple nature fits with the innovative behavior that represents change-oriented iterations of idea generation, promotion, and realization to achieve something unprecedented (Pukkeeree et al., 2020). Idea generation occurs during the early stages of brainstorming and in the cognitive processes of solving problems and taking action. Furthermore, idea promotion involves socio-psychological activities to identify potential colleagues, supporters, and sponsors and to form coalitions of supporters to help actualize nascent ideas. Idea realization refers to continuously developing prototypes, actualizing new products and services, and realizing models to provide differentiated value within and outside the organization (Pukkeeree et al., 2020).

Shuck et al. (2017) highlighted vigor, dedication, and absorption as the energy required for innovative behavior. Stakeholders use vigor, dedication, and absorption during idea generation to improve existing systems and processes (Schaufeli et al.,2019). Therefore, vigor, dedication, and absorption engagement mobilize innovative behavior by promoting employees to review knowledge structures (Pukkeeree et al., 2020). Some stakeholders may stick to routines during the idea introduction because of uncertainty and insecurity about new innovations. Therefore, they return to the status quo when faced with potential losses. This expresses scepticism and cynicism to justify the old value system (Schaufeli et al., 2019). It is emotionally difficult to persuade stakeholders with diverse interests to join new initiatives, and innovative efforts often fail due to explicit and implicit resistance. This implies that the engagement of vigor, dedication, and absorption should help employees to feel confident in the purpose and meaningfulness of innovative endeavors. They should communicate optimism to others and help promote proactive

organizational behavior (Shuck et al., 2017; Soininen et al., 2023). The involvement of vigor, dedication, and absorption should be activated at every innovation stage. This is because those involved would better manage challenges even during uncertainty to achieve something new and better (Schaufeli et al., 2019).

Based on this description, hypotheses were proposed as follows:

H_2: There is a difference between Generation X and Millennials during the COVID-19 pandemic that competence positively affects work engagement

H_3: There is a difference between Generation X and Millennials during the COVID-19 pandemic that work engagement positively affects innovative work behavior

H_4: There is a difference between Generation X and Millennials during the COVID-19 pandemic in that work engagement mediates the effect of competence on innovative work behavior

The conceptual framework of this study is shown in Figure 1:

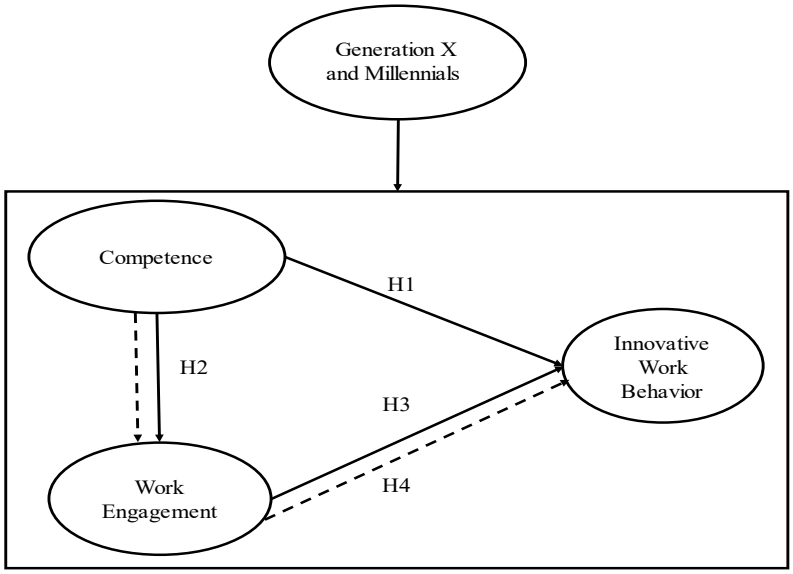

Figure 1. Conceptual Framework

2. Research Methods

This study aimed to examine the effect of competence on innovative work behavior through work engagement by comparing Generation X and Millennials during the COVID-19 pandemic. It was conducted on employees working at the Ministry of Education, Culture, Research, and Technology. The research population is 114 employees who work at the Directorate of Middle Schools of the Ministry of Education and Culture. The sample size is all members of the population, so the sampling method is population research or saturated samples. The study used a quantitative approach with an explanatory method of associative causality. The associative causality method examines the effect of one or several variables on the affected variable.

Each variable's operational definitions and measurements are as follows: Work engagement is involvement, enthusiasm, and commitment to work and the workplace. It is measured using Schaufeli et al. (2019) with vigor, dedication, and absorption dimensions. Competence refers to the motives, personal characteristics, self-concept, values, knowledge, or skills brought by an individual in the workplace. It is measured using the Chouhan & Srivastava measurement (2014) with knowledge, understanding, skills, values, and attitudes. Innovative work behavior as a process becomes sensitive to solving problems using de Jong and den Hartog's measurements (2010). It

has the dimensions of exploring opportunities, idea generation, promotion, realization, and sustainability.

Before distributing the questionnaire, trials were conducted to test the instruments on 50 student respondents working full-time at Master of Management, Universitas Mercu Buana. The sample size was obtained from all population members, known as population research or saturation. Furthermore, data processing and analysis were carried out using Structural Equation Modeling (SEM) based on variance or Partial Least Squares (PLS). Partial Least Squares analysis was performed using multi-model analysis. The model was analyzed twice, namely testing the Millennial Generation model and the Generation X model. This analysis was similar to that carried out by Chae et al. (2013), who conducted a partial least squares analysis to analyze multi-models in comparing the models of temporary and permanent teams.

3. Results and Discussions

The respondents comprised 114 civil servants at the Ministry of Education, Culture, Research, and Technology. They were categorized by age, gender, position, last education, and length of work, as shown in Table 1.

Table 1. Respondent's Profile

	Description	Frequency	Percentage
Age	21 – 30 years (Millennials)	9	7.89 %
	31 – 40 years (Millennials)	38	15.79 %
	41 – 50 years (Gen X)	37	41.23 %
	> 50 years (Gen X)	30	35.09 %
Gender	Male	65	57.02 %
	Female	49	42.98 %
Position	Certain Functional Officers	17	14.91 %
	Structural Officer	2	1.75 %
	Executor	95	83.34 %
Last Education	Senior High School	38	33.33 %
	Diploma	5	4.39 %
	Bachelor	49	42.98 %
	Master	17	14.91 %
	Doctor	5	4.39 %
Length of Work	< 5 years	11	9.65 %
	5 – 10 years	12	10.53 %
	11 – 15 years	42	36.84 %
	16 – 20 years	21	18.42 %
	> 20 years Z	28	24.56 %
	Total	**114**	**100%**

Source: processed data

Table 1 shows that 57.02% of the respondents are male, 38% were 31-40 years old with much experience, and 36.84% had worked for around 11-15 years. Employees in this age range are more likely to be stable at work because their experience is quite long, but they also tend to be bored with work routines. Furthermore, 42.98% of the respondents' last education is Bachelor's Degree, while 33.33% have a Senior High School education. Their work performance is hardly determined by education level. The table also shows that 83.34% of the respondents are executors, 14.91% have certain functional official positions, and 1.75% have official structural positions. Structural officials were only two since the elimination of echelon 3 and 4 positions in 2020.

This study used two models for millennials and generation X. The first stage was to test the validity of convergent validity. The test results are shown in Table 2 (see appendix).

The calculation showed that all measurements of each construct have a loading factor value exceeding 0.7. Only one indicator has a value less than 0.7 but greater than 0.6. This implies that each measuring tool is appropriate to measure the variable. Subsequently, convergent validity has no problem, and the analysis process could proceed to the next stage.

Convergent validity could also be analyzed using the Average Variance Extracted (AVE)(Table 2). When there is no problem with the convergent validity, the minimum AVE value is 0.6. Based on the calculation, the lowest AVE value exceeds 0.6, signifying the convergent validity is good and could be continued to the next analysis.

The second stage of validity testing is discriminant validity. Table 3 shows the calculation using the AVE square root or the Fornell-Larcker Criterion for both GenMillennial and GenX models. The minimum AVE square root value should exceed the correlation between latent variables. The results show that the AVE square root value meets the minimum standard. Therefore, there is no problem with discriminant validity, and the analysis could be continued.

Table 3. Fornell-Larcker Criterion (AVE Square Root)

	Competence	Work Engagement	Innovative Work Behavior
Model Gen Milenial			
Competence	0.851		
Work Engagement	0.443	0.922	
Innovative Work Behavior	0.060	0.534	0.923
Model Gen X			
Competence	0.895		
Work Engagement	0.748	0.866	
Innovative Work Behavior	0.796	0.751	0.841

Source: processed data

The next stage is reliability testing, divided into Cronbach's alpha and composite reliability. The ideal minimum reliability value is less than 0.7, denoting the measurement is consistent and accountable. The results of the reliability calculation in Table 4 indicate that all measurements have a good value above the minimum limit. This implies the measurements used are precise, consistent, and accountable.

Table 4. Reliability Test Value

Variables	Cronbach's Alpha	Composite Reliability
Model Gen Milennial		
Competence	0.972	0.975
Work Engagement	0.978	0.981
Innovative Work Behavior	0.981	0.983
Model GenX		
Competence	0.952	0.960
Work Engagement	0.923	0.933
Innovative Work Behavior	0.958	0.964

Source: processed data

The inner model accuracy was tested in several stages. The first stage tested the coefficient of determination (R square). The calculation results are shown in Table 5. The R square criterion consists of the R square values of 0.67, 0.33, and 0.19 as strong, moderate, and weak. Change in

the R square indicate the substantive effect of exogenous latent variables on endogenous latent variables. The calculation shows that the R square value in the Millennial Generation model is lower at 0.394. This value is moderate compared to the model in Generation X with 0.921. The coefficient of determination (R square) is also used to determine the ability of endogenous variables to explain the diversity of exogenous variables. The Millennial Generation model contains dominant factors that affect innovative work behavior.

Table 5. Determination Coefficient Value

	R Square	R Square Adjusted
Model Gen Milennial		
Work Engagement	0.196	0.182
Innovative Work Behavior	0.394	0.372
Model Gen X		
Work Engagement	0.559	0.551
Innovative Work Behavior	0.921	0.918

Source: processed data

The next stage was to test the Effect Size (f^2) used to determine the variance of the exogenous variables to the endogenous variables. The f^2 values of 0.02, 0.15, and 0.35 imply the latent variable predictor's small, moderate, or large effect on the structural model. The calculation shows that Generation X's effect size value is greater than the Millennial model. This signifies that the explanatory variables of competence and work engagement in the Generation X model are more important in increasing innovative work behavior. Table 5 shows that the R square value in the Generation X model is greater, implying the affecting variables explain the larger affected variable. Based on Table 6, the f^2 value in the Generation X model exceeds the value in the Millennials. This denotes the role of the affecting variables in the Generation X model is greater than in Millennials.

Table 6. Effect Size

	Work Engagement	Innovative Work Behavior
Model Gen Milennial		
Competence	0.244	0.180
Work Engagement		0.645
Model Gen X		
Competence	1.267	0.208
Work Engagement		3.624

Source: processed data

The last stage was hypothesis testing to compare the t-statistic with the critical value of 1.645 at alpha 0.05 on one tiled. When the value of the t-statistic exceeds 1.645, the hypothesis is accepted. Alternatively, the hypothesis is confirmed when the P-value is smaller or equal to alpha 0.05.

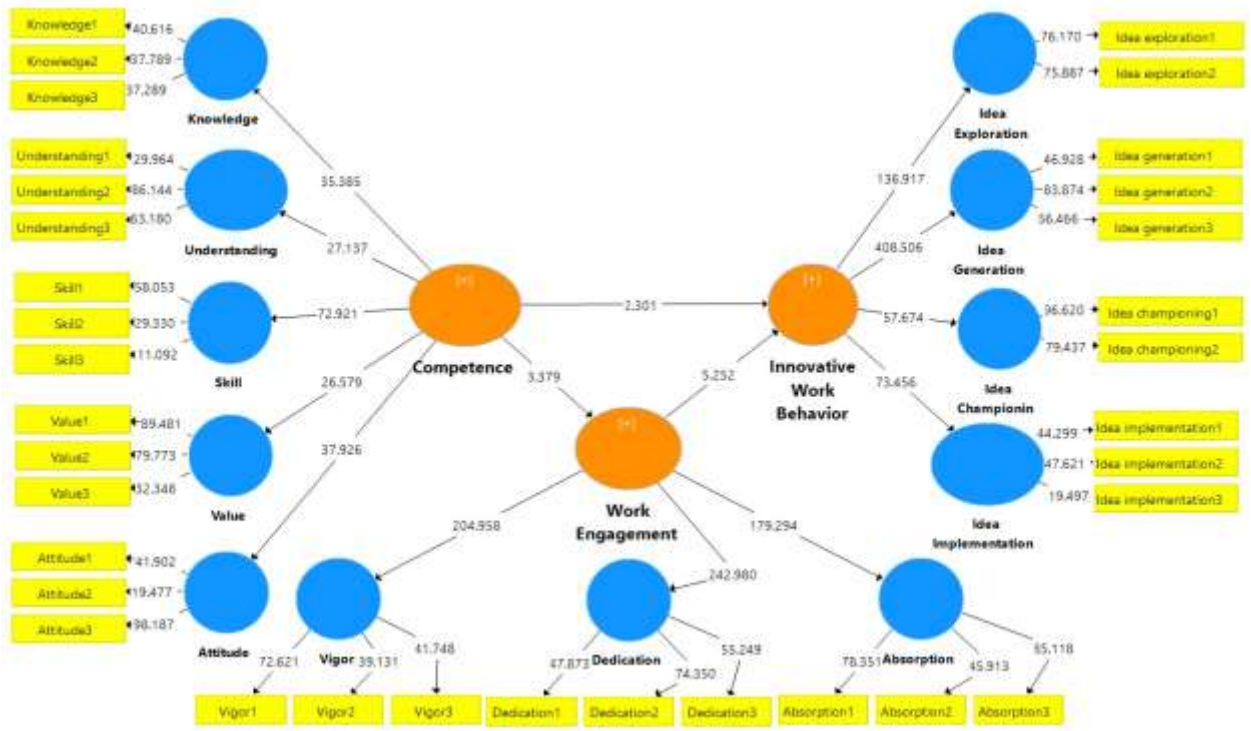

Figure 2. Bootstrapping for Millennial Generation Model

Partial least squares analysis was carried out using multi-model analysis. The model was analyzed twice, namely testing the Millennial Generation model and the Generation X model. Figure 2 shows the bootstrapping results that analyze hypothesis testing for the millennial generation. Figure 3 shows the bootstrapping results analyzing the hypothesis testing for Generation X.

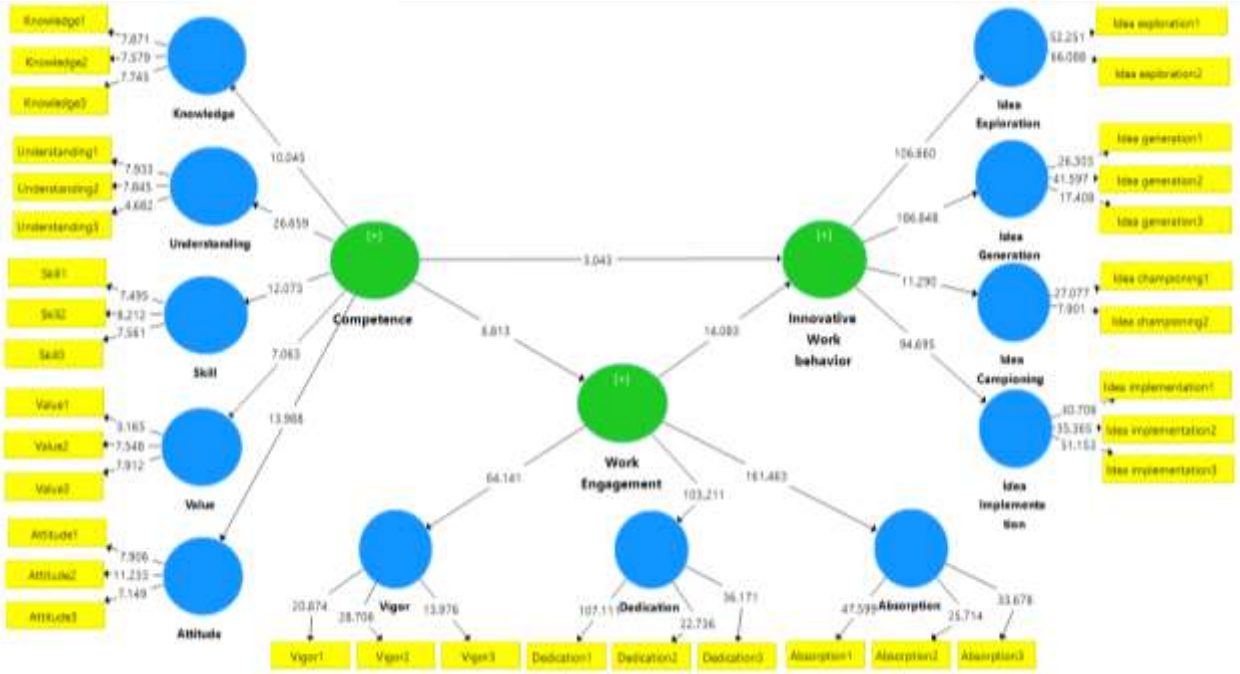

Figure 3. Bootstrapping for Generation X Model

To predict the association between the independent as well as dependent variables (Cohen et al., 1998), the measurement was performed by assessing the effect size (f^2). According to Chin (1998), the measurement f^2 had three size categories namely 0.02-0.15 (weak), 0.15-0.35 (medium), and > 0.35 (strong). Based on Table 6, the sample average value was 0.369, indicating a pattern of strong mediating relationships.

Table 7 show that hypothesis testing is accepted. This indicates that competence positively affects work engagement and innovative work behavior. Similarly, work engagement has a positive influence on innovative work behavior. Competence also has a positive impact on innovative work behavior through work engagement. However, there is no difference when comparing millennials and generation X. This implies that each hypothesis has a statistically significant effect. According to the effect size or t-statistic, the Generation X model has a greater effect than the Millennials. Therefore, each variable has a greater effect on the affected variable.

Table 7. Hypothesis Testing

Hypothesis	Gen Milenial Model			Gen X Model			Conclusion
	Original Sample	T-Statistic	P-Value	Original Sample	T-Statistic	P-Value	
H_1: Competence → Innovative Work Behavior	0.368	2.301	0.011	0.193	3.043	0.001	H_2 accepted
H_2: Competence → Work Engagement	0.443	3.379	0.000	0.748	6.813	0.000	H_1 accepted
H_3: Work Engagement → Innovative Work Behavior	0.697	5.252	0.000	0.807	14.083	0.000	H_3 accepted
H_4: Competence → Work Engagement → Innovative Work Behavior	0.309	2.310	0.005	0.603	6.429	0.000	H_4 accepted

Source: processed data

The results showed that competence positively effects innovative work behavior. The effect of competence on innovative work behavior in Generation X is higher than in Millennial Generation. The skills of Millennial Generation employees reflect the strongest competencies, while the understanding of Generation X employees reflects the strongest competencies. This result supports Lopez et al. (2021) that employee competence is an internal factor affecting an organization's innovation. The different traits between generations cause differences in competence and their impact on innovative work behavior, especially during the Covid-19 pandemic (Gabrielova & Buchko, 2021). Generation X has the ability to adapt and accept change, as well as face difficult times. It has an indepenentr and loyal personality and prioritizes image, fame, and money. Furthermore, this generation is hard-working and responsible, contributing to the company to achieve goals (Gabrielova & Buchko, 2021). A pandemic is a difficult time that requires a generation that is easy to deal with change. Since generation X deals with these changes easily, they hold many important positions in public organizations. This becomes the generation with strong competence, an independent and loyal personality, and a high responsibility as the basis for high engagement with the organization.

The results also showed that competence positively affects work engagement. The competence of Generation X has a greater effect on work engagement than Millennial Generation. In public organizations, Generation X is relatively more than the Millennial Generation, with greater responsibility. The reason is that the generation occupies a higher position in the organizational structure. This has an impact on increasing competence in responsibility and work

engagement. Similarly, AON (Aon Benefit & Trends Survey, 2018) found that Generation X has higher work engagement than Millennials.

Work engagement positively affects innovative work behavior in both Generation X and Millennials. Millennial Generation employee vigor reflects the strongest competency, while Generation X employee absorption reflects the strongest competency. However, the effect size is greater in Generation X due to greater competence and responsibility. In public organizations, Generation X still occupies important positions. During a pandemic, they seek, plan, and implement innovative ideas for the sustainability of their organizations. Therefore, innovative work behavior is also a characteristic of this generation. The idea generation reflects the most dominant innovative work behavior in both Millennial Generation employees and Generation X employees.

The study also found that the effect of competence on innovative work behavior greater when organizational members have good work engagement. This denotes that the better competence of employees promotes innovative work behavior. The effect is even greater when the employee's competence promotes work engagement. Moreover, competence increases employee innovative work behavior (Lopez et al., 2021). The presence of competent individuals facilitates IWB in organizations (Afsar & Umrani, 2019). However, competence has a weak relationship with idea generation and development but strongly affects idea implementation (Lopez et al., 2021). This effect is greater in Generation X than in the Millennial Generation. The reason is that Generation X dominates important positions in public organizations due to greater responsibility, loyalty, intrinsic motivation, and competence that promote work engagement. Therefore, innovative behavior at work also increases because of the high responsibilities.

4. Conclusions

Based on the results, the study concluded that competence positively affects innovative work behavior. The effect is higher in Generation X than in the Millennial Generation. Furthermore, competence positively affects work engagement, with the impact being greater in Generation X than Millennial Generation. Work engagement positively affects innovative work behavior, equally significant for both Generation X and the Millennial Generation. However, the effect size is greater in Generation X. Competence has a greater effect on innovative work behavior when organizational members have good work engagement. This signifies that the better competence of employees encourages innovative work behavior. However, the effect is even greater when the employee's competency promotes work engagement.

The most dominant implication for the Millennial Generation is that it is important to improve skills to improve competence by prioritizing the implementation of training related to attitudes and behavior in the workplace. Meanwhile, Generation X employees need training to deepen more advanced material so that their understanding related to work is stronger. In the Millennial Generation, efforts to increase vigor are a priority, while Generation X is more dominant in increasing absorption. The efforts above will have the same impact on innovative work behavior, especially on idea generation.

The limitations of this study could be used to provide suggestions for future studies. First, the study was only within the scope of one part of an organization, meaning the results are relatively limited for generations. Subsequently, further studies could expand the scope of public organizations in a government to obtain more generalized results. Second, the coefficient of determination was relatively low, especially in the Millennial Generation model. The results are interesting because all hypotheses were accepted, though the coefficient of determination is low.

This implies certain dominant variables were not included in the study. Therefore, further studies on the Millennial Generation could include other variables, such as human capital, leader-member exchange (LMX), or career development.

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APPENDIX

Table 2. Mean and Convergent Validity

Variable	Dimension	Indicator	Mean		Loading Factor		AVE	
			Millennial	Gen X	Model Millennial	Model Gen X	Model Millennial	Model Gen X
Innovative Work Behavior	Idea Exploration	Idea exploration1	3,491	3.816	0.965	0.940	0.853	0.750
		Idea exploration2	3,491	3.746	0.965	0.947		
	Idea Generation	Idea generation1	3,737	3.789	0.937	0.874		
		Idea generation2	3,737	3.789	0.967	0.908		
		Idea generation3	3,772	3.658	0.955	0.864		
	Idea Championing	Idea Campioning1	3,772	3.702	0.970	0.898		
		Idea Campioning2	3,281	3.614	0.968	0.806		
	Idea Implementation	Idea Implementation1	3,281	3.737	0.938	0.917		
		Idea Implementation2	3,333	3.667	0.929	0.904		
		Idea Implementation3	3,333	3.772	0.882	0.944		
Work engagement	Vigor	Vigor1	3,088	3.719	0.955	0.874	0.850	0.683
		Vigor2	3,088	3.667	0.933	0.913		
		Vigor3	3,579	3.658	0.919	0.824		
	Dedication	Dedication1	3,579	3.763	0.925	0.955		
		Dedication2	3,684	3.693	0.956	0.861		
		Dedication3	3,684	3.860	0.937	0.901		
	Absorption	Absorption1	3,754	3.912	0.945	0.915		
		Absorption2	3,754	3.930	0.924	0.895		
		Absorption3	3,842	4.009	0.962	0.919		
Competence	Knowledge	Knowledge1	3,842	3.947	0.932	0.899	0.723	0.708
		Knowledge 2	3,456	3.754	0.922	0.856		
		Knowledge 3	3,456	3.921	0.916	0.932		
	Understanding	Understanding1	3,702	3.868	0.884	0.841		
		Understanding2	3,702	3.851	0.952	0.856		
		Understanding3	3,702	3.874	0.936	0.626		
	Skill	Skill1	3,702	3.684	0.937	0.875		
		Skill2	3,632	3.711	0.869	0.912		
		Skill3	3,632	3.693	0.840	0.850		
	Value	Value1	3,789	3.561	0.970	0.917		
		Value2	3,789	3.561	0.961	0.896		
		Value3	3,860	3.702	0.924	0.968		
	Attitude	Attitude1	3,860	3.544	0.925	0.891		
		Attitude2	3,702	3.632	0.841	0.758		
		Attitude3	3,702	3.711	0.955	0.851		

Source: processed data