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Diffecence in Levels of Hardiness Personality Between Generation X, Generation Y, and Generation Z

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Abstract.

This study explored generational differences in hardiness personality levels. The study used a cross-sectional method and had 128 subjects who were selected using stratified purposive sampling. Data was collected using Bartone's modified dispositional resilience (hardiness) scale. Data analysis was conducted using One-way Analysis of Variance (ANOVA) to determine whether; there is a significant difference between generations X, Y, and Z in their hardiness personality; and whether Generation X had the highest score in the Control, Challenge, and Commitment dimensions. Through analysis, it was found that there was a significant difference between generation X and Z in the Challenge dimension a significant difference between both Generation; X and Y with Z in the Commitment dimension. Meanwhile, all generations had no differences in the Control dimension. Furthermore, we also found that Generation X had the highest score on challenge and commitment dimensions, but Generation Z had the highest score on control. Based on this, support is needed according to the needs of each individual, such as making Generation X a guide to increase their control and providing space for Generation Z to make decisions independently.

Keywords: Personality Hardiness, Generation X, Millennials, Generation Z, Cross-Sectional Analysis

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1. Introduction

Generations are individuals with the same age range who have experienced the same historical events in the same period [1]. This generational grouping is not simply done but also considers what is happening in society and developments and changes in several generations that are different from before so that we can more easily see changes in human life today. Borodin, Smith, & Bush [2] stated that people from the same generation have similarities in culture, politics, economics, world events, natural disasters, and technology, and these will form the same views, values, choices, and beliefs. As a result, each generation experiences different experiences and perspectives on matters, expectations, and work attitudes, resulting in different views [2]. The difference in

opinions comes from the categorization of current generations. This can be seen from the existence of Generation X, generation Y, and Generation Z. Each generation has its own characteristics; these characteristics develop due to the similarities in the events that occur. Generation Z, which was born from 1997 to 2012, is a generation that is very closely related to technological developments and advances in science and technology.

As Generation Z, since birth, we have been exposed to technology that makes work easier and faster. This lifestyle makes this group a generation that is tossed around. A qualitative study states that Generation Z prefers online shopping because they want specific products. Simangunsong (2018) is supported by the research of Saputra, Soewarno, & Isnalita [3], who argue that Generation Z shops online due to lifestyle, buying interest, and information regardless of the quality of the service. This decision-making process makes them self that needs a clear concept. Generation Z characters tend to have a close relationship between technology dependence on the productivity and performance of Generation Z. Excessive use of social media causes disturbances in mental health and well-being [4]. Generation Z cannot be separated from gadgets and social media, so it is also called iGeneration, GenerationNet, Internet Generation, or technology generation [5]. Based on the results of research by D. Rothman 2016 explaining that the high use of technology has led to the trend of Acquired Attention Deficit Disorder (AAD), namely the inability to focus and analyze complex information and problems. This is happening to the current generation Z; besides that, the attention span of the Z generation is more limited compared to the previous generation.

Based on this, there is a stark contrast between Generation Z and the previous generation. This also then raises the question of how these differences can occur, whether psychological resilience or what can be called hardiness in each generation is different or even actually the same. Hardiness is a particular way of interpreting an experience described by control, challenge, and commitment [6]. Furthermore, [6] describes that individuals who have high hardiness tend to have a greater sense of control, are generally more open to life changes and challenges, interpret stressful experiences as everyday aspects of life, and Have a high sense of commitment to life and work. The relationship between hardiness personality and generational development is significant to know.

Due to the limited literature that discusses the comparison of personality hardiness in generations X, Y, and Z, the researcher raised research on the Exploration of Personality Hardiness Levels in Generations X, Y, and Z: Cross-Sectional Analysis. The use of exploration in this study is intended to dig deeper into the variables being measured due to limited information in previous research [7]. Then considering that the object of

this research is three generations and requires data collection simultaneously, we used a cross-sectional analysis. This study aims to discover more about the level of hardiness personality possessed by each generation X, Y, and Z through cross-sectional analysis. This research is expected to contribute scientifically and can be used as a reference for future researchers who examine relevant topics.

2. Literature Review

Generation X are those born in the early years of information and technology development, such as using personal computers, video games, cable television, and the internet. Generation X is a generation that can adapt and accept change well and has the character of being independent, loyal, upholding image, fame, money, and hardworking [8]. Generation X, born between 1961 and 1980, are the descendants of the baby boomers known to work hard to make their children happy. However, it differs from the baby boomer generation; this generation is getting to know the investment and has an entrepreneurial spirit.

Generation Y is known as the millennial or millennial generation. According to Lyons [9], Generation Y, born in 1981-1996, has different characters depending on where he grew up, economic strata, and family social status. Generation Y's communication pattern is very open compared to previous generations. It is a fanatical social media user, and technological developments greatly influence the life of this generation. It is more open to political and economic views, so it looks reactive to changes in the environment around it. Because they were born in the era of globalization and rely on electronics and the internet, this generation tends to be tech-savvy; as a result, they tend to be consumptive, buying internet packages and even new devices.

Next is the generation that was born with increasingly advanced technology. The names of Generation Z, born from 1997 to 2012, cannot be separated from the use of technology. Even from a young age, Generation Z will surely understand smartphone use. Using the internet from an early age then made Generation Z more easily access the desired information and learn things more easily. This generation is also known for openness in social relations and prefers an environment that can provide space to increase creativity [10]. Based on these three generations, there are some differences regarding the characters possessed by each.

From the point of view of seeing things, generation Z tends to lack a sense of commitment, being happy with what they have right now and living for the moment. In contrast to the Baby Boomer generation, who tend to think in an integrated and

communal way, generation X tends to have a self-centered perspective and for the medium term interest, while Generation Y or millennials tend to be more egoistic and for short-term interest [11]. Generation Z's dependence on search engines is very high, but they can criticize the validation of the information they get. Their tendency is easily satisfied (instant gratification). In learning, Generation Z prefers to pay attention and practice, not by reading or listening to lectures. Therefore, Generation Z needs learning methods different from previous generations [12].

Laborde & Mosley [6] defines *hardiness* as one of the individual traits that can make him more resilient, stable, strong, and confident that he can deal with problems considered challenges and opportunities so that he can deal with these problems. Hardiness can be used to reduce the influence of gripping situations in life by increasing adjustment strategies, one of which can be done by using social resources in the environment that can be used as motivation, shields, and support for the situation that is the problem [6]. Several factors can affect hardiness, including (1) self-confidence accompanied by a positive self-image, (2) having the ability to make realistic plans, and (3) being able to improve communication skills accompanied by a strong commitment [6].

Hardiness personality by Bartone [6] is divided into three dimensions, including (1) the control dimension, which is described as an individual's feeling of their ability to overcome the situation before them. This sense of control also includes decision control, cognitive control, and various coping methods. (2) The feeling that the stress they face is not a crisis but a challenge. (3) Have a sense of commitment in various areas of life. The commitment in question has the following characteristics, an individual's meaning system in the situation faced can minimize the threats faced, a sense of purpose to prevent from giving up on the situation and involve oneself in positive social relations.

Research related to the three generations, X, Y, and Z, is still limited to measurements regarding comparing anxiety levels experienced [13]. Discussion about hardiness has been associated with academic stress in students whose hardiness personality negatively correlates with academic stress [14]. Hardiness is also known to have a positive correlation with emotional regulation [6], the psychological well-being of students [14], and employees [6]. As well as, hardiness in individuals who experience termination of employment can be formed at the start of the process of accepting the situation, followed by the rise of the individual, and accompanied by social support around the individual [14].

3. Method

This research uses a quantitative research type with a cross-sectional design because the variables in the research object can be measured simultaneously [15]. This design was also chosen considering the research object was taken from three societal generations: X, Y, and Z. The sampling technique in this study used a purposive sampling technique based on stratified populations. This technique was taken because the method of determining research samples prioritizes research objectives rather than population characteristics, namely focusing on sampling based on groups that have levels [7].

The criteria for respondents in this study included (1) male or female individuals, (2) born in one of the 1965-1980, 1981-1996, and 1997-2012 ranges. Data was collected by distributing questionnaires constructed by the author based on the Hardiness personality theory through social media. There were 129 subjects in this study, namely, 30 subjects for Generation X, 49 for Generation Y, and 49 for Generation Z.

A good instrument validity score was produced using Aiken's V of (.74 > .68, Sig .05, N = 25, C = 4). The reliability results also show a good score through Cronbach Alpha analysis, which is equal to (.867 > .05). Finally, data analysis was carried out through Analysis of Variance (ANOVA) which was also accompanied by an assumption test as a classic fulfillment of parametric tests such as; Shapiro-wilk normality, heteroscedasticity through the Lavene Test, and analysis of tolerance and variance inflation factors as multicollinearity tests. Data analysis revealed significant differences between generations X, Y, and Z in their hardiness personality (H1), and generation X has the highest score on the dimensions of Control, Challenge, and Commitment (H2).

4. Result and Discussion

4.1. Assumption Test

According to Field [16], data certainty is needed to meet the assumptions of normality, homoscedasticity, and multicollinearity so that the results of comparisons of variance values can be calculated accurately. Based on Table 1, it can be seen that only the Challenge dimension in Generation Y did not meet the normality assumption test. At the same time, the rest were customarily distributed because of the significance value ($p > .05$). However, based on Field [16] we can still analyze the data using ANOVA.

TABLE 1: Normality Shapiro-Wilk (author's own work).

Sig. (> .05)	X_Generation	Y_Generation	Z_Generation
Control	.088	.084	.065
Challenge	.854	.012	.514
Commitment	.080	.271	.350

Furthermore, referring to Table 2, it can be seen that the data in the study also did not show symptoms of heteroscedasticity due to the significance value (p > .05). Meanwhile, related to multicollinearity symptoms, this also did not occur in the data of this study, due to the overall tolerance value (p > .01), as well as the value on the variance inflation factor (VIF) of (p < 10.0). Based on the entire assumption test, this can be a prerequisite for minimizing errors in hypothesis analysis.

TABLE 2: Lavene's Test (author's own work).

Variable	Sig. (> 0.5)
X Variable	.995

TABLE 3: Multicollinearity Test (author's own work).

Variable	Tolerance (> .01)	VIF (< 10.0)
Control	.595	1.681
Challenge	.595	1.679
Commitment	.493	2.027

4.2. Hypothesis Test

After testing the basic assumptions, we analyzed whether significant differences existed in each generation of the three hardiness personality dimensions. This study used Tukey HSD and Games-Howell as post-hoc analyses of ANOVA. Two types of post-hoc are used to strengthen the accuracy of the analysis results, mainly because Tukey HSD has good analytical power and control in preventing Type 1 Error, which is related to accuracy in seeing an effect on the population. Furthermore, Games-Howell is used to perform well in analyzing data without certainty that there is a balanced variation in the population (Field, 2018). Seeing the significant value in Table 4; found no significant difference in each generation in the control dimension; it was found that there was a significant difference only in the X and Z generations in the challenge dimension, and there are significant differences in generations X and Z, as well as generations Y and Z in the commitment dimension.

*(Indicates Different Significantly

TABLE 4: Post-Hoc Result (author's own work).

(Y1) Control (Sig.)	Mean Differences	Tukey HSD (< .05)	Games-Howell (< .05)
X/Y Generation	.296	.916	.912
X/Z Generation	.340	.890	.890
Y/Z Generation	.044	.997	.997
(Y2) Challenge (Sig.)	Mean Differences	Tukey HSD (< .05)	Games-Howell (< .05)
X/Y Generation	.850	.493	.526
X/Z Generation	2.300	.007*	.022*
Y/Z Generation	1.450	.071	.053
(Y3) Commitment (Sig.)	Mean Differences	Tukey HSD (< .05)	Games-Howell (< .05)
X/Y Generation	.032	.999	.999
X/Z Generation	5.029	.001*	.001*
Y /Z Generation	4.996	.001*	.001*

Furthermore, ANOVA classifies which generations have the same mean values in the subset category. Based on Table 5, it can be seen that (a) in the control dimension, both generations X, Y, and Z did not have a significant difference in the means because (Sig = .881 > .05) and the three generations were in the same subset category. Furthermore, (b) there is a significant difference between Generation X and Generation Z in the challenge dimension due to being in a different subset category. Meanwhile, Generation Y does not have a significant difference from either Generation X or Z. Finally, (c) on the commitment dimension, there is a significant difference in Generations X and Y with Generation Z because only Generation Z is in subset 1.

Based on the results of homogeneous subsets analysis, we can also answer our hypothesis: whether there are differences in generations X, Y, and Z regarding their hardiness personality. This can be done by looking at the order of the average value and its significance so that on the control dimension, the order is as follows; (a) Hypothesis 1 is rejected because Generation Z (18.69) > Generation Y (18.65) > Generation X (18.35) where the three do not have a significant difference; (b) hypothesis 1 is accepted because Generation X (22.68) > Generation Y (21.83) > Generation Z (20.38) with a significant difference between Generation X and Z in the challenge dimension; then (c) hypothesis 1 is accepted because Generation X (24.49) > Generation Y (24.46) > Generation Z (19.46) with significant differences between generations X and Y and Z on the commitment dimension. Finally, hypothesis 2 is rejected because the X dimension only has the highest mean score on the challenge and commitment dimensions, while the Z generation control dimension has the highest score.

TABLE 5: Homogenous Subsets (author's own work).

Control (Y1)	N	Subset 1	Subset 2
X Generation (X1)	30	18.35	-
Y Generation (X2)	49	18.65	-
Z Generation (X3)	49	18.69	-
Sig.		.881	-
Challenge (Y2)	N	Subset 1	Subset 2
X Generation (X1)	30		22.68
Y Generation (X2)	49	21.83	21.83
Z Generation (X3)	49	20.38	
Sig.		.111	.464
Commitment (Y3)	N	Subset 1	Subset 2
X Generation (X1)	30		24.49
Y Generation (X2)	49		24.46
Z Generation (X3)	49	19.46	
Sig.		1.00	.999

4.3. Discussion

Based on the research results described, there is a significant difference between Generation Z and Generation X on the challenge dimension. Meanwhile, Generation Z significantly differs from Generation X and Y on the commitment dimension. However, in the control dimension, it can be seen from the three generations that there is no significant difference. So based on the sequence, generation X occupies the highest position on the challenge and commitment dimensions. Meanwhile, generation Y occupies the second position on all three dimensions, and lastly, generation Z occupies the highest position on the control dimension but the lowest position on other dimensions. However, if we sort the X, Y, and Z generations as a whole for the three dimensions of hardiness, the differences between each are not significantly different. This indicates that even though there are differences in each generation in each dimension, this is not too large, so each generation has equivalent hardiness strength.

In explaining the underlying reasons for Generation Z having the lowest level of challenge and commitment, this can be due to (1) a period of searching for identity; (2) there are broad opportunities; and (3) the existence of an external buffer. Based on their age range when this study occurred, many Z generation subjects were 19-22 years old, classified as emerging adulthood [11]. If we look at the current context, emerging adults have felt many changes, such as marrying longer, having higher education, and having more work and recreational opportunities. This shows how flexible Generation Z is in choosing life decisions (e.g., romance, career, and other things), reducing the

need to commit directly to one choice [11]. However, according to Zhong & Arnett [17], in emerging adulthood in Asian countries, identity exploration is often oriented towards helping their families and parents, so this could be a factor why lower commitment and challenges were found in Generation Z in this study.

However, if we look at Malkin et al. [18] research, it was found that Generation Z, which focuses on athletic activities, has a high level of commitment. In contrast, Generation Z, which focuses on academic activities, has a higher level of challenge. Furthermore, a competitive environment that focuses on achievement and results will affect the hardiness level of adolescents, and the environment and academic activities are proven to have a fairly high influence on the development of control and challenges in adolescents. Even though this research focuses more on comparisons between Generation Z than across generations, it can further support how the current situation of emerging adults plays a role in describing their hardiness, which also explains why the level of hardiness in different generations with different situations will vary.

Apart from that, explaining why Generation Z has the highest control possible because Generation Z tends to seek social support, especially seeking help related to mental health (Garnham, 2022). In addition, according to Parker & Igelnik [19], generation Z is the generation that will leave behind a strong economy and less unemployment, unlike previous generations, have better access to education, and students rarely drop out. Apart from that, because the millennial generation also gets good quality education compared to Generation X, this will impact Generation Z, who have parents with higher education. Looking at the broader opportunities for the z generation in terms of education, employment, and parental support, they see life as controllable because of support from various parties. This also supports why in the end, Generation Z has lower commitments and challenges due to the less independence expected of them. Interestingly, previous research also found that college students (Generation Z) with a low economic level have a fairly high hardiness level, which correlates negatively with social anxiety [14]. The finding is likely to occur mainly because of the challenges that students must face with a larger economic background, where this can also be a justification for why the control dimension is the greatest even in Generation Z.

Switching to Generation X, which has the highest challenge and commitment, can be caused by (1) experience; (2) Satisfaction; (3) Uncertainty. Based on this study, the subjects were between 40 and 50 years old and classified as middle adulthood [11]. When we look at intelligence, it appears that middle adulthood has the highest performance in crystalized intelligence – namely, the accumulation of knowledge related to culture, language, and social dynamics [20]. This shows that Generation X individuals have

better life navigation experience than the generation above, thus making them believe that failure is a learning opportunity. Apart from that, due to their adequate experience, many X-generation individuals may already have satisfaction with what they do or have, so they see it as something meaningful [21]. Another reason why commitment is high in individual X is that their expectations and goals are not too high, and they are already satisfied with their achievements [16]. Even so, this also does not rule out the possibility that many of the individuals of Generation X experience job loss either voluntarily or involuntarily, a fear of death, and many changes in times occur (e.g., technology) so that this can be the reason why control looks low in Generation X.

If we examine the previous discussion, the characteristics of each age range are unique. These findings indicate that every individual will experience the fluctuation of hardiness, especially because of the situation they experienced as a generation and individual, but this needs to be confirmed further. Even so, this research can become a perspective for academics, practitioners, and the community regarding the differences in generations X, Y, and Y concerning their level of control, challenge, and commitment. Based on this research, it is suggested to provide support according to the needs of each generation, such as in generations X and Y being given a place as a mentor for the younger generation so that the uncertainty that arises and a sense of generativity can be better[11] Lastly, Generation Z is given a space to try something with minimum assistance. Also, giving a competitive environment that strives for acquired achievement can be a recommendation for increasing the hardiness of Generation Z.

Acknowledge, Funding & Ethics Policies

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