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The Moderating Role of Wisdom in Family Functioning and Anxiety amongst Indonesian Generation Z Adolescents

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ABSTRAK

Salah satu faktor yang berkontribusi adalah fungsi keluarga yang buruk, yang mengacu pada ketidakmampuan unit keluarga untuk memenuhi kebutuhan anggota keluarga melalui pemecahan masalah yang kohesif, saling peduli, dan dukungan dalam menghadapi tantangan hidup. Penelitian ini bertujuan untuk menguji hubungan antara fungsi keluarga dan kecemasan di kalangan remaja Generasi Z (Gen Z), sebagaimana dimoderasi oleh kebijaksanaan. Untuk mengurangi tingkat kecemasan yang tinggi, penelitian memposisikan kebijaksanaan sebagai moderator. Diusulkan bahwa kebijaksanaan dapat meredam dampak negatif dari fungsi keluarga yang buruk terhadap kecemasan dengan memungkinkan pengaturan emosi, pemikiran reflektif, dan strategi koping yang adaptif. Metodologi kuantitatif digunakan dengan menggunakan pengambilan sampel non-probabilitas, dengan 390 partisipan berusia 17-27 tahun di Indonesia. Data dikumpulkan melalui kuesioner daring yang terdiri dari empat skala: Generalized Anxiety Disorder-7 (GAD-7) untuk kecemasan; Family Adaptability and Cohesion Evaluation Scale II (FACES II) dan Family Communication Scale (FCS) untuk fungsi keluarga; dan Brief Self-Assessed Wisdom Scale (BSAWS) untuk kebijaksanaan. Data dianalisis menggunakan JASP 0.19, SPSS versi 27, dan Model Makro Proses 1. Hasil penelitian menunjukkan bahwa kebijaksanaan secara signifikan memoderasi hubungan antara fungsi keluarga dan kecemasan pada Gen Z. Remaja dengan tingkat kebijaksanaan yang lebih tinggi menunjukkan kecemasan yang lebih rendah, bahkan ketika menghadapi fungsi keluarga yang buruk, dengan menyoroti peran protektifnya. Temuan ini menawarkan integrasi intervensi untuk meningkatkan kebijaksanaan, untuk memperkuat ketahanan mental Gen Z terutama dalam konteks disfungsi keluarga.

ABSTRACT

One contributing factor is poor family functioning, which refers to the inability of the family unit to meet the needs of family members through cohesive problem-solving, mutual care, and support in facing life's challenges. This study aims to examine the relationship between family functioning and anxiety among Generation Z (Gen Z) adolescents, as moderated by wisdom. To mitigate high levels of anxiety, the study positions wisdom as a moderator. It is proposed that wisdom can mitigate the negative impact of poor family functioning on anxiety by enabling emotional regulation, reflective thinking, and adaptive coping strategies. A quantitative methodology was employed using non-probability sampling, with 390 participants aged 17–27 in Indonesia. Data were collected through an online questionnaire consisting of four scales: Generalized Anxiety Disorder-7 (GAD-7) for anxiety; Family Adaptability and Cohesion Evaluation Scale II (FACES II) and Family Communication Scale (FCS) for family functioning; and Brief Self-Assessed Wisdom Scale (BSAWS) for wisdom. Data were analyzed using JASP 0.19, SPSS version 27, and Macro Process Model 1. The results showed that wisdom significantly moderated the relationship between family functioning and anxiety in Gen Z. Adolescents with higher levels of wisdom showed lower anxiety, even when facing poor family functioning, highlighting its protective role. These findings offer the integration of interventions to enhance wisdom, to strengthen the mental resilience of Gen Z especially in the context of family dysfunction.

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1. INTRODUCTION

Generation Z (Gen Z) refers to individuals born between 1997 and 2012. It currently constitutes the largest population group in Indonesia, comprising 74.93 million people, or 27.94% of the total population. Unlike previous generations, Gen Z has grown up in the digital era, in which the internet, social media and technology play a central role in their daily lives (Lindner, 2023; McKinsey & Company, 2023). However, rapid changes in the digital world, coupled with the impact of the COVID-19 pandemic, have posed unique challenges to their mental health. As many as 68% of Gen Z report feeling lonely and being anxious about the future (Harari et al., 2023). Moreover, a survey revealed that Gen Z reports the poorest mental health status compared to other generations, with a global prevalence of 18%, rising to 21% in Indonesia (Lindner, 2023; McKinsey & Company, 2022). A survey highlighted several emotional experiences frequently reported by Gen Z: (a) 91% of Gen Z aged 18–23 have experienced at least one physical or emotional symptom due to stress; (b) 37% feel so overwhelmed that it interferes with their daily activities; (c) 60% feel anxious and unsettled; (d) 70% consider mental health issues as common; and (e) Gen Z is 27% more likely to experience mental health issues than other generation. These findings suggest that symptoms such as worry, unease and anxiety are prevalent among Gen Z, aligning with the criteria for anxiety disorders. This is further supported by study which reports that anxiety is the most diagnosed mental health condition among Gen Z (McKinsey & Company, 2023).

Anxiety is a negative emotional state characterised by excessive worry about an unpredictable future and potential threats (Barlow, 2002; Marchetti et al., 2025). When persistent, it can disrupt daily functioning, leading to difficulties in concentration, withdrawal from social interaction, and a preference for safe environments (Sara, 2021; Vos et al., 2025). Unmanaged anxiety may also impact cognitive and emotional functioning, as well as interpersonal relationships (Chen et al., 2022; Zhou et al., 2024). One significant consequence of anxiety is a decline in quality of life, encompassing emotional, psychological, social and physical well-being (de Brito et al., 2025; P. Zhang et al., 2023). Furthermore, anxiety may lead to sleep disturbances, contributing to fatigue and reduced productivity. In family settings, individuals with anxiety are often less responsive to the emotional needs of their family members (Dolz-Del-Castellar & Oliver, 2021; Orbon et al., 2021).

One key factor that may influence anxiety is family functioning. According to Bowen's Family Systems Theory, the family plays a critical role in shaping members' emotions and behaviour. Family functioning is defined as a family's ability to meet the needs of its members by providing emotional support, facilitating stress adaptation, and maintaining effective communication (Chen et al., 2022; Zhou et al., 2024). A mean difference test based on family functioning in terms of three key dimensions: (a) cohesion emotional closeness among family members; (b) adaptability flexibility in responding to change and life stressors; and (c) communication a central component in maintaining balance between cohesion and adaptability. Poor family functioning, such as low cohesion and ineffective communication, can contribute to emotional issues including anxiety in children (Guo et al., 2023; Ulitua & Soetikno, 2022; Wang et al., 2021). Conversely, well-functioning families can foster emotional resilience and healthy coping strategies (Guo et al., 2023; Liu et al., 2023).

Several studies have highlighted the relationship between family functioning and anxiety. Research by also demonstrated negative correlation, indicating that higher levels of family functioning are associated with lower levels of anxiety (Guo et al., 2023). However, their study only assessed family functioning with reference to cohesion and adaptability, excluding the role of communication a factor that may be equally important. Moreover, previous studies have not examined potential mechanisms that could strengthen or weaken this relationship (Dolz-Del-Castellar & Oliver, 2021; Walsh, 2016). Therefore, this study investigates wisdom as a moderating variable in the relationship between family functioning and anxiety among Gen Z. Wisdom is a high-level cognitive and emotional capacity that enables individuals to make sound judgments in complex and uncertain situations (Ardelt & Bruya, 2021; Baltes & Staudinger, 2000). According to previous study it comprises five core dimensions: life experience, perspective-taking, self-reflection, emotional regulation, and humour (Zhao et al., 2021). Emotional regulation plays a crucial role in managing emotional responses to various situations. Individuals with high levels of wisdom tend to better regulate negative emotions, including anxiety, and demonstrate higher levels of psychological resilience (Ardelt & Jeste, 2018; Meeks & Jeste, 2009).

Recent research also supports this view shows that people with low wisdom affinity are more likely to have worse mental health outcomes and emotion regulation and psychological flexibility as resilience factors that help buffer against stress and anxiety (Muschalla, 2024; Sondhof & Muschalla, 2024). Previous studies found that family functioning influences emotional regulation, which in turn affects anxiety levels (Boyes et al., 2023; Hasking et al., 2020). Furthermore previous study found that emotional regulation is a predictor of anxiety and is indirectly influenced by wisdom (Webster, 2003; Zhao et al., 2021). Since wisdom integrates both cognitive insight and emotional regulation, it has the

potential to interact with family functioning to shape its influence on anxiety. In other words, wisdom may serve as a resilience factor that protects adolescents from the negative effects of poor family functioning (Sikka et al., 2023; Zhao et al., 2021). Therefore, wisdom may act as a protective factor that buffers the negative impact of poor family functioning on individual anxiety.

Based on theoretical frameworks and previous research, this study aims to examine the moderating role of wisdom in the relationship between family functioning and anxiety in Gen Z. By integrating wisdom as a moderator, the study seeks to provide deeper insights into the factors contributing to anxiety among Gen Z and explore how wisdom can be developed as a protective strategy against anxiety. The urgency of the study lies in the rising prevalence of anxiety among Gen Z and the critical role of the family in supporting mental health. Understanding how wisdom moderates the relationship between family functioning and anxiety can inform psychologists, parents and educational institutions in the design of more effective interventions. If wisdom is proven to serve as a protective factor, psychological interventions that cultivate it may offer effective strategies for reducing anxiety in Gen Z, including those from dysfunctional family backgrounds.

The study is a quantitative investigation involving participants from the Gen Z age group (17–27 years old). Data were collected through four self-report questionnaires: one measuring anxiety, two measuring family functioning, and one measuring wisdom. Data analysis was conducted using JASP 0.19, SPSS version 27, and PROCESS Macro Model 1. The main objective of the analysis was to test whether wisdom moderates the relationship between family functioning and anxiety. The central research question guiding the study is: Does wisdom moderate the relationship between family functioning and anxiety among Gen Z adolescents? By addressing this question, the study is expected to make both theoretical and practical contributions to the field of psychology, particularly in understanding protective factors against anxiety among younger generations.

2. METHOD

A quantitative, non-experimental research design was employed using questionnaires as the measurement tool. Data were analyzed using SPSS (version 27), JASP (version 0.19), and Hayes's PROCESS Macro Model 1 (Creswell & Creswell, 2018). The analysis included reliability testing, confirmatory factor analysis (CFA), and classical assumption tests (normality, linearity, multicollinearity, heteroscedasticity). Pearson correlation and multiple regression analyses were conducted to examine relationships among variables, followed by moderation analysis to test the moderating role of wisdom in the relationship between family functioning and anxiety. Statistical significance was set at $p < .05$. The sampling technique used was convenience sampling, allowing all available participants to complete the distributed questionnaires. The total number of participants was 390 members of Gen Z residing in DKI Jakarta area (Jabodetabek). The selection of these subjects aimed to provide a comprehensive depiction of the variables under investigation. No restrictions were imposed based on other factors such as gender, education, ethnicity or religion. All the participants provided online informed consent prior to participation, and their data confidentiality was maintained in accordance with research ethics standards.

Data collection was conducted online by distributing four types of questionnaires to the participants across the Jabodetabek area. The instrument used to measure wisdom was the Brief Self-Assessed Wisdom Scale (BSAWS) which consists of six items. The instruments were translated into Indonesian through a translation validation process and expert judgment. Table 1 summarizes the research instruments used in this study.

Table 1. Summary of Research Instruments

Variable	Instrument (Source)	Dimension/ Subscale	Items	Scale Range	Reliability (α)	Example Item
Anxiety	GAD-7	Generalized Anxiety	7	0 (Not at all) – 3 (Nearly every day)	0.89	"I could not stop or control worrying."
Family Functioning	FACES II	Cohesion, Adaptability	30	1 (Almost never) – 5 (Almost always)	0.92 (cohesion), 0.91 (adaptability)	"My family members support each other during difficult times."
	FCS	Communication	10	1 (Almost never) – 5 (Almost always)	0.90	"My family members are satisfied with the way they communicate with each other."

Variable	Instrument (Source)	Dimension/ Subscale	Items	Scale Range	Reliability (α)	Example Item
Wisdom	BSAWS	Self-assessed Wisdom	6	1 (Strongly disagree) – 5 (Strongly agree)	0.70	"I now realize that I truly appreciate the little things in life."

Note. GAD-7 = Generalized Anxiety Disorder Scale; FACES II = Family Adaptability and Cohesion Evaluation Scales II; FCS = Family Communication Scale; BSAWS = Brief Self-Assessed Wisdom Scale.

3. RESULTS AND DISCUSSION

Result

The reliability test results met the required criteria, with $p > 0.05$, indicating that the measurement instruments were reliable. The Cronbach's alpha (α) reliability coefficient for the anxiety scale was 0.89, the family functioning scale was 0.92 for the cohesion dimension, 0.91 for adaptability, and 0.90 for communication. The Cronbach's alpha (α) for the wisdom scale was 0.65. Subsequently, confirmatory factor analysis (CFA) was conducted to examine construct validity and to identify the latent variables under study. CFA was also used to assess the consistency of the items with the constructions they intended to measure, and to determine the number of factors represented in each measurement instrument. The results are shown in Table 2.

Table 2. CFA Results

Validity	Indicator	Wisdom	Anxiety	Family Functioning
Kaiser-Meyer-Olkin test (KMO)	>0.8	0.92	0.97	0.92
Chi-square test	$p < 0.001$	$p < 0.001$	$p = 0.270$	$p < 0.001$
Bartlett's Test of Sphericity	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
CFI, TLI, GFI	>0.9	GFI 0.990	CFI 0.998 TLI 0.997 GFI 0.901	GFI 0.990 CFI 0.894 TLI 0.888
RMSEA	≤ 0.08	0.022	0.057	0.022
SRMR	≤ 0.08	0.078		0.016
Factor Loading	>0.500 $p < 0.001$	0.56-0.64	0.68 – 0.78	0.52–0.74

Base on Table 2, it can be concluded that all the measurement instruments used in the study demonstrated a good model fit and satisfactory reliability and were therefore appropriate for use in the subsequent analysis. The characteristics of the participants and the available demographic data are presented in Table 3.

Table 3. Participant Characteristics

Demographic Overview	Participant (n=390)	
	Frequency	Percentage (%)
Gender		
Female	237	60.77
Male	153	39.23
Educational Background		
SMP	59	15.13
SMA/SMK	142	36.41
S1	189	48.46
Status		
University Student	144	36.92
Unemployed	8	2.05
Employed	177	45.39
High School Student	61	15.64
Marital Status		
Single/Unmarried	349	89.49
Married	41	10.51
Family Status		

Demographic Overview	Participant (n=390)	
	Frequency	Percentage (%)
Intact (Father and mother together)	274	70.26
Divorced/Separated (but good communication maintained, or separation due to death)	89	22.82
Broken Home (Parents separated or still together, but the family is no longer harmonious; e.g., domestic violence, members living separately, etc.)	27	6.92

Base on Table 3, in conclusion most Generation Z participants in this study were female, enrolled as undergraduate university students, unemployed, and still living with their parents. The following section presents an overview of the variables derived from the demographic questionnaire items. The findings indicate that Generation Z adolescents in the study experienced anxiety that affected their concentration; however, they demonstrated the ability to manage their emotions and maintain adequate communication skills. The results are shown in Table 4.

Table 4. Overview of Variables from the Short-Answer Questions

Questions	Participants (n=390)	
	Frequency	Percentage (%)
Anxiety		
- Have you been feeling anxious recently?		
Yes	363	93.1
No	27	6.9
- Has your anxiety affected your ability to concentrate?		
Yes	236	60.5
No	154	39.5
Family functioning		
- Is your family able to communicate well with one another?		
Yes	214	54.9
No	176	45.1
- Are problems in your family usually resolved smoothly or effectively?		
Yes	80	20.5
No	310	79.5
Emotion regulation		
- Do you find it difficult to manage your emotions?		
Yes	125	32.1
No	265	67.9
- Do you have specific strategies for managing your emotions?		
Yes	288	73.8
No	102	26.2

Normality Test

Normality was assessed using the One-Sample Kolmogorov-Smirnov Test on the unstandardised residuals, with the criterion of $p > 0.05$ indicating normal distribution. The results of the test showed that the data were normally distributed, with a p-value of 0.200 ($p > 0.05$). Therefore, parametric correlation analysis using Pearson correlation was applied. In the classical regression assumption test, three types of analysis were conducted: a linearity test, multicollinearity test and heteroscedasticity test. The criteria for these tests were as follows: the data must demonstrate a linear relationship between the dependent and independent variables ($p < 0.05$ for linearity); there must be no indication of multicollinearity (tolerance > 0.10 and VIF < 10.00); and there must be no signs of heteroscedasticity ($p > 0.05$). The linearity test results showed that the relationship between anxiety and all the dimensions of family functioning had $p < 0.001$, as was the case in the relationship between anxiety and wisdom ($p < 0.001$), indicating that the data exhibited linear relationships. The multicollinearity test produced a tolerance value of 0.853 and a VIF value of 1.172, indicating no multicollinearity. The heteroscedasticity test was conducted using the Glejser method, with the p-values for all the dimensions of family functioning and wisdom in relation to absolute residuals greater than 0.05, indicating the absence of heteroscedasticity. Based on these results, it can be concluded that the classical regression assumptions were met, and the data were suitable for further analysis using linear regression. The following section provides an overview of the variable

categorisations used in this study. The findings suggest that Generation Z adolescents in the study experienced elevated anxiety, had low family functioning, and possessed a moderate degree of wisdom. The results are shown in [Table 5](#).

Table 5. Variable Categorization

Variable/Dimension	Categorization	Frequency	Percentage (%)
Anxiety	Low	81	20.8
	Moderate	124	31.8
	High	185	47.4
Family Functioning	Low	190	48.7
	Moderate	152	39
	High	48	12.3
FF-Cohesion	Low	181	46.4
	Moderate	172	44.1
	High	37	9.5
FF-Adaptation	Low	177	45.4
	Moderate	166	42.6
	High	47	12.1
FF-Communication	Low	161	41.3
	Moderate	178	45.6
	High	51	13.1
Wisdom	Low	123	31.5
	Moderate	233	59.7
	High	34	8.7

Base on [Table 5](#), the mean for each variable and the dimensions that participants exhibited high levels of anxiety ($M = 1.789$, $SD = 0.668$), with scores ranging from 0.000 to 3.000. In contrast, overall family functioning (FF) was categorised as low ($M = 2.626$, $SD = 0.696$), with its subdimensions of cohesion ($M = 2.616$) and adaptation ($M = 2.611$) also falling into the low category, while communication ($M = 2.656$) was rated medium. Wisdom showed a medium mean score ($M = 2.782$, $SD = 0.596$). These results suggest pronounced anxiety among the participants and in general low family functioning, except for communication, which showed moderate levels, alongside moderate perceived wisdom. The results are shown in [Table 6](#).

Table 6. Descriptive Statistics of Variables

Variable	Mean	Std. Deviation	Minimum	Maximum	Categorisation
Anxiety	1.789	0.668	0.000	3.000	High
Family Functioning (FF)	2.626	0.696	1.325	4.625	Low
FF-Cohesion	2.616	0.701	1.438	4.563	Low
FF-Adaptation	2.611	0.727	1.214	4.643	Low
FF-Communication	2.656	0.745	1.100	5.000	Medium
Wisdom	2.782	0.596	1.670	4.330	Medium

The findings from the correlation analysis revealed that all dimensions and variables under investigation were significantly correlated at the 0.01 level ($p < 0.01$). Increased family functioning was associated with decreased anxiety, and likewise, greater levels of wisdom in adolescents were related to lower levels of anxiety. The results are shown in [Table 7](#).

Table 7. Correlation Test

No.	Variable	Mean	Std	1	2	3	4	5	6
1	Anxiety	1.789	0.668	-					
2	FF	2.626	0.696	-0.425	-				
3	FF-Cohesion	2.616	0.701	-0.431	0.972	-			
4	FF-Adaptation	2.611	0.727	-0.409	0.973	0.918	-		
5	FF-Communication	2.656	0.745	-0.379	0.943	0.873	0.886	-	
6	Wisdom	2.782	0.596	-0.491	0.383	0.377	0.375	0.350	-

Note: FF = Family Functioning; () Correlation is significant at the 0.01 level (2-tailed).

Base on Table 7, the regression results show that family functioning ($\beta = -0.425$, $p < 0.001$) and wisdom ($\beta = -0.491$, $p < 0.001$) had significant effects in explaining anxiety. Therefore, they both play important roles in reducing anxiety. Wisdom made the strongest contribution, accounting for 24.1% of the variance, while overall family functioning accounted for 17.8%. This indicates that wisdom has a stronger influence on reducing anxiety compared to overall family functioning. Among the dimensions of family functioning, cohesion made the highest contribution, suggesting that emotional closeness within the family is essential in helping to reduce anxiety. The results are shown in Table 8.

Table 8. Regression Analysis

Variable/Dimensions	R ²	β	Std. Error	Sig.	Note
Family Functioning	0.180	- 0.425	0.044	<0.001	Plays a role
FF-Cohesion	0.186	- 0.431	0.044	<0.001	Plays a role
FF-Adaptation	0.167	- 0.409	0.043	<0.001	Plays a role
FF-Communication	0.143	- 0.379	0.042	<0.001	Plays a role
Wisdom	0.241	- 0.491	0.050	<0.001	Plays a role

Base on Table 8, the results of the moderation analysis indicate that wisdom significantly moderates the relationship between all dimensions of family functioning and anxiety, as evidenced by significant interaction terms ($p < 0.05$). This moderating effect suggests that wisdom can weaken the impact of low family functioning on anxiety. Specifically, it significantly moderates the relationship between overall family functioning and anxiety ($\beta = -0.341$, $p < 0.001$). The moderation was also significant across all dimensions of family functioning, including cohesion, adaptability and communication, with β values ranging from -0.294 to -0.346 ($p < 0.001$). However, such a moderating effect of wisdom was significant only among individuals with moderate to high levels of wisdom, but not among those with low levels. The results are shown in Table 9.

Table 9. Moderation Analysis Results

Moderation	β	t	p	95% CI	
				Low	Up
FF*W	-0.341	-5.087	0.000	-0.472	-0.209
FFC*W	-0.346	-5.155	0.000	-0.478	-0.214
FFA*W	-0.294	-4.599	0.000	-0.420	-0.168
FFCom*W	-0.327	-5.176	0.000	-0.451	-0.203

Note: FF = Family functioning; FFC = Family functioning (Cohesion); FFA = Family functioning (Adaptation); FFCom = Family functioning (Communication); W = Wisdom.

Base on Table 9, the conditional effect analysis examined the moderating role of wisdom at three levels: low (-1 SD), moderate (Mean), and high (+1 SD). The results indicate that when individuals have low levels of wisdom, the moderating effect is not significant ($p > 0.05$), suggesting that wisdom does not function as a moderator at this level. However, for individuals with moderate and high levels, the moderating effect was significant ($p < 0.05$), indicating that wisdom effectively moderated the relationship between family functioning and anxiety at these levels. The results are shown in Table 10.

Table 10. Conditional Moderation Effects

Variable	Wisdom	Effect	SE	t	p	95% CI	
						Low	Up
Family Functioning	-1 SD	-0.026	0.064	-0.416	0.677	-0.151	0.098
	Mean	-0.230	0.043	-5.316	0.000	-0.315	0.145
	+1 SD	-0.433	0.054	-8.049	0.000	-0.539	-0.327
FF-Cohesion	-1 SD	-0.031	0.063	-0.492	0.623	-0.155	0.093
	Mean	-0.237	0.043	-5.576	0.000	-0.321	-0.154
	+1 SD	-0.444	0.053	-8.304	0.000	-0.549	-0.339
FF-Adaptation	-1 SD	-0.035	0.061	-0.580	0.563	-0.154	0.084
	Mean	-0.211	0.042	-5.067	0.000	-0.292	-0.129
	+1 SD	-0.386	0.052	-7.442	0.000	-0.488	-0.284
FF-Communication	-1 SD	0.012	0.059	0.208	0.835	-0.103	0.127
	Mean	-0.183	0.040	-4.563	0.000	-0.262	-0.104
	+1 SD	-0.378	0.051	-7.395	0.000	-0.478	-0.277

In the visualization in Table 10, the top line represents low levels of wisdom, the middle line represents moderate levels, and the bottom line represents high levels of wisdom. The figure demonstrates that as individuals' wisdom increases, its moderating effect becomes stronger, as indicated by the increasingly downward slope of the line. This suggests that at higher levels of wisdom represented by the bottom line the relationship between anxiety and family functioning, across all dimensions, is significantly weakened. Therefore, wisdom at a high level effectively buffers the negative impact of low family functioning on anxiety. The results are shown in Figure 1.

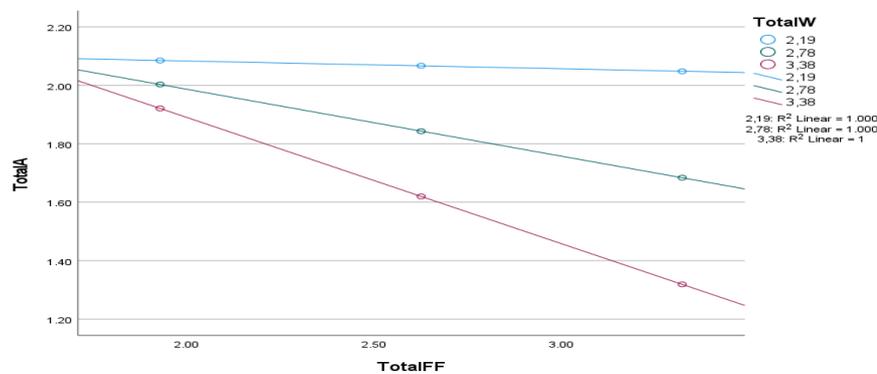


Figure 1. Moderating Effect of Wisdom on the Relationship Between Family Functioning and Anxiety

Additional Analysis: Mean Difference Test

An independent samples t-test was conducted to examine gender differences in relation to levels of anxiety, family functioning and wisdom. The results showed no significant differences between female and male participants across all three variables, as indicated by $p > 0.05$. A mean difference test based on educational background in the form of a one-way ANOVA was conducted to compare levels of anxiety, family functioning and wisdom across different educational groups, as the comparison involved more than two groups. The descriptive results indicated no significant differences between the groups for any of the variables, with $p > 0.05$. Therefore, educational background had no significant effect on anxiety, family functioning or wisdom. A mean difference test based on marital status in the form of an independent samples t-test was conducted to examine whether there were differences in anxiety, family functioning and wisdom based on marital status, as this variable consisted of only two categories. The results indicate no significant differences across any of the variables, with $p > 0.05$. Therefore, marital status did not significantly affect anxiety, family functioning or wisdom. The results of the mean difference test based on occupational status indicate no significant differences in anxiety, family functioning or wisdom across different occupational groups.

A one-way ANOVA mean difference test based on family status was conducted to examine differences in anxiety, family functioning and wisdom based on family status, which consisted of three groups. The results show no significant differences in anxiety and family functioning ($p > 0.05$). However, a significant difference was found in the wisdom variable. Specifically, Generation Z adolescents from broken home families demonstrated higher levels of wisdom compared to those from intact or divorced families, as shown in Table 11.

Table 11. Mean Differences in Variables Based on Family Status

Variable	Family Status	N	Mean	Std. Deviation	Std. Error	Sig.	Note
Anxiety	Intact	274	1.79	0.66	0.03	0.33	No
	Divorced	89	1.81	0.65	0.06		Significant
	Broken Home	27	1.61	0.83	0.15		Difference
Family Functioning	Intact	274	2.64	0.72	0.04	0.44	No
	Divorced	89	2.54	0.62	0.07		Significant
	Broken Home	27	2.68	0.70	0.13		Difference
Wisdom	Intact	274	2.78	0.58	0.03	<0.001	Significant
	Divorced	89	2.65	0.58	0.06		Difference
	Broken Home	27	3.15	0.59	0.11		

Discussion

The purpose of this study was to examine whether family functioning is associated with anxiety among Generation Z adolescents, with wisdom introduced as a moderating variable. The results reveal that family functioning, including all its dimensions, was significantly and negatively correlated with anxiety. Furthermore, wisdom was found to moderate the relationship between family functioning and anxiety. The results indicate that Generation Z adolescents exhibited a high level of anxiety ($M = 1.789$). This finding aligns with studies which reported that 47% of Gen Z often or always feel anxious (Lindner, 2023; McKinsey & Company, 2023). Various factors may contribute to this, one of which is the transitional phase that the generation is currently experiencing, marked by rapid technological advances, academic pressures, economic uncertainty, and the challenges of graduation and entering the workforce (McKinsey & Company, 2023; Zenith Behavioral health, 2024). Many other factors may also influence the mental health of Gen Z, particularly anxiety. The study focused on family functioning as a contributing factor, based on previous research that identified this factor as a predictor of mental health and anxiety (Guo et al., 2023; Huang et al., 2023; Yun et al., 2021).

The findings support which posits that family functioning plays a key role in individual emotional well-being (Walsh, 2016). Among the dimensions of family functioning, cohesion was found to have the strongest effect on anxiety, which is consistent with studies who emphasized that emotional support from family can reduce anxiety (Angelina et al., 2025; Boyes et al., 2023; Liu et al., 2023). This study found that Gen Z adolescents had low levels of family functioning ($M = 2.626$), based on the short-answer responses in the questionnaire, which showed that 54.9% of participants believed that their families did not communicate well, and 79.5% felt that problems within the family were not always resolved effectively. These responses suggest that participants generally perceived their family as poor. One possible explanation is the unequal distribution of roles and responsibilities among family members (Olson & Gorall, 2006; Walsh, 2016). Considering that the participants are from Indonesia, a collectivist culture that prioritizes group needs and emphasizes parental expectations (Heine, 2015; L. Zhang et al., 2023), such cultural factors may contribute to the pressure to fulfil family expectations and obligations. This pressure could lead adolescents to perceive their families as being less functional. Low family functioning can impact mental health by fostering loneliness (Pan et al., 2021; Wang et al., 2021), a result of poor communication, ineffective problem-solving, and a lack of close interpersonal relationships within the family. According to other studies family relationship patterns tend to be repeated across generations (Walsh, 2016). For example, unresolved trauma in a family, such as domestic violence, may be passed down through parenting styles, communication patterns, and family dynamics. Therefore, families must reflect on whether their current functioning supports the emotional needs of all members to prevent the transmission of negative patterns to future generations.

The correlation analysis revealed a significant negative relationship between family functioning and anxiety ($r = -0.425$, $p < 0.01$). This negative correlation was supported by participant responses indicating poor family functioning and high anxiety. These findings are consistent with studies who also found a negative relationship between family functioning and anxiety (Dolz-Del-Castellar & Oliver, 2021; Guo et al., 2023). Moreover, family functioning was found to predict 18.9% of the variance in anxiety, indicating that it is a contributing factor to anxiety levels. Higher family functioning appears to reduce the likelihood of anxiety, while lower levels may increase it. Therefore, it is essential to evaluate and improve family functioning and develop interventions to address it effectively. The results also show that wisdom has a significant negative relationship with anxiety ($r = -0.491$, $p < 0.01$), suggesting that higher levels of wisdom are associated with lower levels of anxiety. Conversely, individuals with lower levels of wisdom tended to report higher anxiety. Although not directly focused on anxiety, (Greeson, 2009; Meeks & Jeste, 2009) connected wisdom with mindfulness practices that help individuals develop a wise and acceptable relationship with their internal experiences, including fear and anxiety. Similarly, some research found that individuals with higher wisdom levels tended to have better mental health and fewer serious psychological symptoms (Ardelt & Bruya, 2021; Ardel & Jeste, 2018; Zadworna, 2023). These findings support the role of wisdom as a protective factor against psychological stress, which often includes anxiety.

Wisdom was shown to function as a protective factor, supporting theory, which highlights its role in emotional regulation and coping (Webster, 2003; Webster et al., 2014). The conditional effect analysis conducted in this study demonstrated that individuals with high levels of wisdom were more capable of managing anxiety. This moderating role reinforces theory that wisdom serves as a psychological strength that helps individuals regulate emotions and respond to stress (Ardelt & Bruya, 2021; Webster, 2003). The findings are also in line with Boyes et al. (2023), who found that emotional regulation associated with wisdom contributed to reduced anxiety levels. The moderation effect showed that individuals with high levels of wisdom were able to buffer the negative effects of low family functioning on anxiety. This suggests that psychological interventions aimed at increasing wisdom may be effective in addressing

anxiety or stress (Ardelt & Bruya, 2021; Meeks & Jeste, 2009).

The findings from the mean difference analysis revealed no significant differences in anxiety based on gender, educational background, marital status, family status, or occupational status ($p > 0.05$). All demographic groups reported similar levels of anxiety, suggesting that anxiety can affect individuals across various demographic backgrounds. As previous study note, individuals are likely to experience anxiety across their lifespan. In childhood, this may manifest itself as social anxiety or phobias, and if left unaddressed, it may persist and develop into more serious mental health issues in adulthood (Barlow, 2002; Lenze & Wetherell, 2011). The mean difference test also found no significant variation in family functioning across demographic variables ($p > 0.05$), indicating that individual background factors do not necessarily determine family functioning. According to study internal family dynamics, such as communication and emotional support, play a more critical role in determining family functioning than external factors such as income or education. This study also found that the level of wisdom was higher in adolescents who came from broken homes, which is in accordance with the results of research showing that difficult life experiences, even facing illness or death, can shape individuals into wiser people (Ardelt & Bruya, 2021; Ardel & Jeste, 2018; Sahrani et al., 2014).

This research also contributes to the advancement of counseling and developmental psychology by extending Bowen's Family Systems Theory with wisdom as a moderating factor. It also enriches cross-cultural research on wisdom by providing empirical evidence from an Indonesian collectivist context (Heine, 2015; Sahrani et al., 2025). Furthermore, the application of the Brief Self-Assessed Wisdom Scale (BSAWS) in this study strengthens measurement practices and encourages further validation in non-Western populations (Sahrani et al., 2014, Sahrani 2025). However, it has several strengths and limitations. A major strength is its focus on understanding anxiety among Gen Z in Indonesia, a population that has received limited attention in this context. Additionally, the study assesses family functioning through three dimensions, cohesion, adaptability and communication, whereas previous studies have focused only on two (Dolz-Del-Castellar & Oliver, 2021; Yun et al., 2021). However, the study also has limitations. First, it only represents Generation Z and cannot be generalized to other generational groups. Moreover, it does not explore cultural or contextual factors in depth, which may influence the results. Another limitation is the use of convenience sampling, which may restrict the generalizability of the findings. Future studies are encouraged to use more representative sampling methods and to explore additional variables such as emotional regulation and social support as potential mediators or moderators.

Recommendations for future research include the addition of other variables, such as emotional regulation and social support, as potential moderators. Researchers are also encouraged to adopt longitudinal methods to examine the long-term effects of family functioning and wisdom on anxiety. Practical recommendations include encouraging parents and family members to improve family communication in order to strengthen overall family functioning. Psychologists and counselors could consider developing wisdom-enhancement programmes to help individuals manage anxiety more effectively. Schools could also implement psychological education programmes aimed at promoting wisdom through self-reflection activities. Furthermore, personalised approaches in wisdom-based anxiety interventions should be considered by mental health professionals to better address individual needs.

4. CONCLUSION

It has been found that family functioning has a significant negative relationship with anxiety, indicating that individuals with lower levels of family functioning tend to experience higher levels of anxiety. Additionally, wisdom has been shown to play a moderating role in the relationship between family functioning and anxiety, with a stronger protective effect observed among individuals with moderate to high levels of wisdom. All dimensions of family functioning—cohesion, adaptability and communication—contribute to anxiety, with cohesion having the strongest influence. Therefore, developing wisdom may serve as an effective protective strategy in mitigating anxiety resulting from low family functioning.

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