The Effect of Intolerance of Uncertainty on Anxiety Among Pre-Retirement Employees

Muhammad Faisal[a], Lita Ariani[b], Fikrie[c]
[a,b,c]*Department of Pshycology. Muhammadiyah University of Banjarmasin*
Corresponding Author:
[b]*arianilita@umbjm.ac.id*

ABSTRACT

The pre-retirement period is a phase full of uncertainty and often triggers anxiety in employees. This study aims to determine the effect of intolerance of uncertainty (IU) on anxiety in pre-retirement employees. This study uses a quantitative approach with a correlational design. The subjects of the study were 60 ASN employees who will enter retirement in 2026. The instruments used were the Intolerance of Uncertainty Scale–12 (IUS–12) and the State-Trait Anxiety Inventory (STAI). Data analysis was carried out using simple linear regression using JASP. The results of the analysis showed that IU had a significant effect on anxiety ($R^2 = 0.106$; $p = 0.011$). The higher the level of IU, the higher the anxiety felt by individuals approaching retirement. The conclusion of this study is that IU is one of the psychological factors that can predict anxiety in the pre-retirement period. The implication of this study is the importance of psychological intervention to help individuals prepare for retirement more adaptively.

Keywords : Anxiety, Employees, Intolerance of Uncertainty, Retirement

INRODUCTION

Retirement is a transitional phase that brings major changes to an individual's life. These changes include the loss of work routines, professional roles, and social interactions that have been established over many years, which can lead to uncertainty and psychological stress (Kastanya et al., 2022). Facing retirement has an impact on a person's identity, where individuals who were previously active in their work must then adapt to the loss of their daily routine and social interactions with colleagues that had been established over a long period of time (Dewi et al., 2022). These changes can lead to feelings of loss and unpreparedness for life after work, especially if a person feels unable to meet their needs after retirement (Astuti, 2018). (BPJS Ketenagakerjaan, 2023) explains that although retirement is considered enjoyable because individuals have more time with their families, many actually experience stress due to the loss of their work routine, financial stability, and professional roles. One real case in Indonesia is the fraudulent investment that befell retired teachers. Concerns about finances after retirement triggered anxiety, which ultimately led to hasty decisions. The victims, 76 retirees, were lured by promises of returns of up to 5 percent and even pawned their retirement certificates at banks to invest, but ultimately lost their funds (Wienanto, 2023).

A 2021 Zety survey in the United States supports these findings, with 47% of respondents agreeing that retirement is more frightening than illness or poor health, and 40% even considering retirement more frightening than death. Many individuals feel anxious about retirement, even more so than death. Retirement is often accompanied by uncertainty regarding

self-identity, financial stability, and the loss of daily routines, which are the main causes. Without careful preparation, retirement can be an emotionally challenging phase (Buffett, 2025).

Pre-retirement employees are among those vulnerable to anxiety, with a prevalence of 15-52% and anxiety disorders found in 3-15% of the adult population with chronic medical conditions (Kazeminia et al., 2020). However, at a certain level, anxiety can also serve as a trigger for individuals to prepare themselves to face new challenges (Sutrisno, dalam Aldriani & Widyastuti, 2021). In addition, anxiety has physiological, behavioral, and cognitive dimensions that can manifest in various forms, such as trembling hands, a tendency to avoid certain situations, and pessimistic thoughts. If not managed properly, anxiety can reduce focus, increase avoidance behavior, and cause other physical complaints (Nevid, dalam Aldriani & Widyastuti, 2021).

Anxiety is an emotional response that arises when individuals face situations that are perceived as threatening, whether real or imagined (Hu et al., dalam Diniprilia & Rostiana, 2024). These feelings are often characterized by discomfort, excessive worry, and physical symptoms such as heart palpitations and restlessness (Annisa & Ifdil, 2016). Hayat (dalam Dewi et al., 2022) explains that anxiety can be triggered by economic uncertainty, loss of routine, or changes in social relationships. The adverse effects of poorly managed anxiety can lead to sleep disturbances, emotional instability, and a decline in quality of life.

Based on research conducted by (Shihata et al., 2017) Intolerance of uncertainty (IU) plays a role in various anxiety disorders, with trait IU and disorder-specific IU contributing differently to anxiety symptoms. This study aims to determine the effect of intolerance of uncertainty on anxiety levels in pre-retirement employees. This study is expected to contribute theoretically by enriching the literature on the influence of intolerance of uncertainty on anxiety, particularly among pre-retirement employees. Practically, the results of this study can be useful for organizations or related institutions in developing mentoring and training programs for employees who are about to retire, so that they are better prepared to face major changes in their lives.

Theoretical Basis

Spielberger defines anxiety as a complex condition involving physiological, cognitive, emotional, and behavioral aspects in response to situations that are perceived as threatening. Physiologically, anxiety is characterized by increased heart rate, excessive sweating, and breathing difficulties. Cognitively, there are worries and negative assessments of the situation, while emotionally, individuals feel afraid or nervous, and behaviorally, this manifests in avoidance or difficulty concentrating. Anxiety distinguishes anxiety into two constructs: state anxiety (temporary situational anxiety) and trait anxiety (a dispositional tendency to view situations as threatening). State anxiety arises as an emotional response when individuals face evaluative tasks, while trait anxiety reflects a general vulnerability to stress (Fitriani et al., 2025). Factors causing anxiety can originate from external stimuli, cognitively processed perceptions of threats, interpersonal relationship pressures, and even the influence of social and cultural norms that shape expectations of individuals.

Carleton defines intolerance of uncertainty (IU) as a person's tendency to be unable to tolerate negative emotional responses that arise when faced with conditions where there is insufficient information. In his view, IU describes an individual's inability to accept and endure unpredictable situations, because the absence of important information is considered threatening or dangerous. Carleton emphasizes that IU is a fundamental form of "fear of the unknown." IU consists of two main dimensions, namely prospective IU and inhibitory IU. Prospective IU refers to an individual's tendency to seek information, certainty, and predictions about the future in order to reduce uncertainty. In contrast, inhibitory IU describes a condition in which uncertainty causes a person to experience obstacles in acting, confusion, or even stop doing certain activities because they feel unable to face unpredictable consequences. These two aspects form the basis for understanding how individuals react cognitively and emotionally to uncertainty (Shihata et al., 2016).

METHODS

This study uses a quantitative approach with a correlational design that aims to determine the effect of intolerance of uncertainty on anxiety among pre-retirement employees. A correlational design was chosen because it is suitable for analyzing the relationship between two variables through numerically processed data that is statistically analyzed (Azwar, 2017). The population in this study consisted of 219 civil servants who will retire in 2026. The sampling technique used stratified random sampling, resulting in a total of 60 respondents, consisting of 17 men (28%) and 43 women (72%). The instruments used consisted of the Intolerance of Uncertainty Scale – 12 (IUS-12) and the State Trait Anxiety Inventory (STAI), which focused on state anxiety. The IUS-12 had 12 items compiled by Carleton, Norton, dan Asmundson, and has been adapted by (Istiqomah et al., 2022) which are divided into two dimensions, with reliability scores of 0.820 and 0.843, respectively. This scale was developed by (Zsido et al., 2020) with a short version based on Spielberger's theory and adapted byh (Putri & Ariana, 2022), with a reliability of 0.958. Both scales use the Likert scale as a measuring tool.

The research was conducted in several stages, beginning with the process of obtaining permission to use the adapted instruments. Next, a reliability test was conducted on 45 respondents using Cronbach's alpha method to ensure the reliability of the instrument. After that, data collection was carried out online through Google Forms and offline by distributing printed instruments. The data obtained was then analyzed using simple linear regression to test the hypothesis, with the help of JASP software version 18.3.

RESULTS

Simple linear regression analysis in this study began with testing the assumptions of normality and linearity of the residual data. The normality test was conducted to ensure that the distribution of residual data did not deviate significantly from the normal distribution. The Kolmogorov-Smirnov test results show that the residual data is normally distributed (KS = 0.059; p = 0.975). The results of visualization through a Q-Q Plot graph, where the data points appear to follow the diagonal line well, indicate that there is no significant deviation from the normal distribution and that the linearity of the two variables is fulfilled.

Table 1. Model Summary - STAI

Model	R	R^2	Adjusted R^2	RMSE
M_0	0.000	0.000	0.000	0.709
M_1	0.325	0.106	0.091	0.677

Note. M_1 includes IUS

Table 1. ANOVA

Model		Sum of Squares	Df	Mean Square	F	p
M_1	Regression	3.145	1	3.145	6.871	0.011
	Residual	26.545	58	0.458		
	Total	29.690	59			

Note. M_1 includes IUS

Note. The intercept model is omitted, as no meaningful information can be shown.
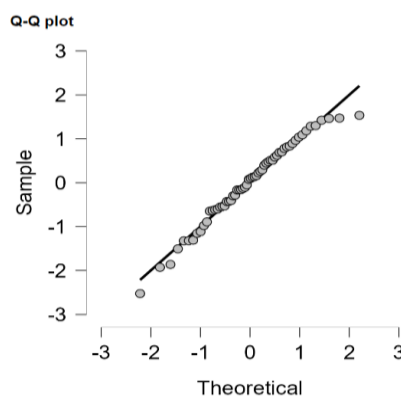

Figure 1. Normality Test Graph

The results of simple linear regression analysis show that intolerance of uncertainty can explain 10.6% of the variation in anxiety levels among pre-retirement employees ($R2 = 0.106$; $F(1.58) = 6.871$; $p = 0.011$). Statistically, the variable intolerance of uncertainty has a significant positive effect on anxiety ($b = 0.120$; $p = 0.011$). This shows that the higher the level of intolerance of uncertainty, the higher the level of anxiety felt by pre-retirement employees. Thus, the hypothesis in this study is accepted.

DISCUSSION

The results of this study indicate that intolerance of uncertainty (IU) has a significant effect on anxiety among pre-retirement employees. Individuals with high levels of IU tend to experience greater anxiety as they approach retirement. Pre-retirement is a period of transition filled with uncertainty regarding social roles, income, and self-identity. The inability to accept and manage uncertainty is what drives psychological pressure in the form of anxiety. These findings are reinforced by the results of the study. Alarape & Obano (2024), which found that retirement anxiety is influenced by psychological conditions such as well-being and the organizational support that individuals feel. When individuals feel they do not have enough support and face financial pressure, anxiety about retirement will increase.

In the context of pre-retirement anxiety, (Nkiruka, 2023) emphasizes that anxiety prior to retirement significantly affects anxiety about the aging process. This shows that the period prior to retirement is a psychologically critical phase, which is prone to various forms of distress if not dealt with adequately. In addition, (Reyes et al., 2022) highlights that high psychological well-being is negatively correlated with retirement anxiety. The dimensions of positive emotions and meaning in life are important protectors against anxiety. These findings suggest that even with high IU, individuals with a strong sense of meaning in life may have lower anxiety. Based on personality characteristics, (Ogunsemi et al., 2023) shows that personality traits such as neuroticism are associated with increased retirement anxiety, while openness and responsibility contribute to better preparedness. This reinforces the understanding that responses to uncertainty are also influenced by an individual's personality profile.

IU appears to be an important factor that increases individuals' sensitivity to change in the final phase of their careers. The higher the IU, the more likely individuals are to view the future as a worrying threat, thereby triggering symptoms of anxiety. These results are consistent with findings (Novita & Rahayu, 2023), which shows that IU is closely related to increased psychological distress in situations that require adaptation. IU prevents individuals from focusing on problem solving and instead amplifies negative emotional responses to uncertainty. More specifically, IU contributes to increased anxiety due to a low ability to cope with new or changing situations. When individuals fail to tolerate uncertainty, they experience a decrease in self-control and an increase in negative thoughts about the future. These findings are supported by research results (Aldriani & Widyastuti, 2021) which shows that individuals with a high adversity quotient tend to have lower anxiety levels. Resilience in facing difficult situations such as retirement can protect individuals from the negative effects of IU.

The results of this study indicate that emotional aspects also reinforce the influence of IU on anxiety. Individuals who are unable to recognize and manage their emotions are at higher risk of experiencing tension when facing transitional periods. This study is also in line with the findings of (Kim & Kwon, 2020) which shows that IU has a significant influence on retirement anxiety in middle-aged men. In addition, IU also reduces an individual's ability to understand emotions and adapt to career changes, two aspects that are key to coping with retirement psychologically.

Research conducted by (Korte et al., 2022), shows that IU increases health-related anxiety through the mechanisms of excessive threat interpretation and avoidance of uncertainty. Individuals who are intolerant of uncertainty tend to constantly seek certainty and become more alert to potential risks, even if they are not necessarily real. Thus, based on the results of this study, IU can trigger negative thinking patterns such as catastrophizing, rumination, and excessive anticipation of threats. This exacerbates anxiety, especially when individuals do not have adaptive strategies to calm themselves in the face of an uncertain future.

The results of this study also show that IU can be understood as a predisposing factor that increases the likelihood of anxiety when individuals face major changes such as retirement. IU encourages an exaggerated perception of threat and creates sustained psychological pressure. This is in line with the findings (Osmanağaoğlu et al., 2018), which shows that IU has a strong correlation with anxiety and worry, explaining more than 35% of the variation in anxiety

symptoms. This indicates that IU is a strong predictor of the emergence of emotional disorders when individuals face situations full of uncertainty.

This study also shows that IU is not only influential in a clinical context, but also in normative life transitions such as approaching retirement. IU encourages negative thinking patterns and a tendency to feel unprepared for the future. The results of this study are also in line with a systematic review. (Morriss et al., 2025), which concludes that IU is closely related to psychotic symptoms because IU reinforces negative responses to ambiguity and uncertain situations. IU plays a role in exacerbating distress through maladaptive cognitive processes.

Spiritually-based intervention approaches are also beginning to be considered as alternatives, as research shows. (Seo & Shon, 2023) tested the Templestay program for pre-retirees and found that although it did not directly reduce anxiety, the program improved social readiness for retirement. This suggests that engaging religious or spiritual aspects can be a complementary component in assisting individuals facing the uncertainty of retirement.

CONCLUSION

The conclusion of this study is that intolerance of uncertainty (IU) has a significant positive effect on anxiety among pre-retirement employees. The higher an individual's level of IU, the higher the level of anxiety felt approaching retirement. This shows that the inability to cope with and accept uncertainty contributes directly to the emergence of anxiety in the transition phase approaching retirement. These findings confirm that IU is an important psychological factor in explaining the dynamics of anxiety in individuals who are about to enter retirement.

This study has important implications both theoretically and practically. Theoretically, these results reinforce previous literature on the role of IU as a predictor of anxiety and expand its context to include pre-retirement employees. Practically, the results of this study can be used as a basis for relevant organizations or institutions to develop psychological assistance programs that focus on strengthening individuals' capacity to deal with uncertainty, such as stress management training, self-acceptance training, and psychological resilience development. This is expected to help employees prepare for retirement in a more adaptive and emotionally secure manner.

LIMITATION

This study has several limitations that may affect the completeness and generalization of the findings. The main data collection was conducted within a limited time frame and was constrained by holidays, school exams, and other external conditions, resulting in a sample size of only 60 respondents from the initial target of 100 respondents.

Future research should involve a larger and more geographically diverse sample to improve the generalizability of the results. In addition, during the research process, the researchers found indications that religious values play a role in helping to reduce anxiety prior to retirement. However, this finding is non-statistical and emerged from field observations. Therefore, future research needs to consider other variables. Given that field findings indicate the important role of religious values in reducing anxiety, future research is recommended to explore the role of religion as a moderator or mediator variable that may influence the relationship between IU and anxiety during pre-retirement.

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