

The Roles of the Brooding and Reflective Subtypes of Rumination on Psychological Distress in First-Year Undergraduates at the Universitas Indonesia

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ABSTRACT

First-year undergraduate university students can experience psychological distress as they transition to a new life with high levels of academic, social, and emotional pressures. Longitudinal studies have found that psychological distress in the first year of college life can lead to continued distress throughout the student's university career. Increased psychological distress can occur when individuals use rumination as a cognitive coping strategy. During rumination, individuals continually think about the causes and consequences of events that have occurred in the past. Rumination has two subtypes: brooding and reflective. Studies have not agreed on whether the brooding and reflective subtypes have equal roles in causing psychological distress; therefore, we addressed this question by studying a group of 403 first-year undergraduate students at the Universitas Indonesia. Psychological distress was measured using the Self-Reporting Questionnaire, and the brooding and reflective subtypes of rumination were measured using the short version of the Ruminative Response Scale. The results of the binary logistic regression analysis showed that the brooding subtype of rumination is a significant predictor of psychological distress ($b = 0.306$; $p < 0.05$), but the reflective subtype is not a significant predictor of psychological distress ($b = 0.073$; $p > 0.05$).

Keywords: *psychological distress, rumination, brooding, reflective, first-year undergraduate students.*

1. INTRODUCTION

“Being a student at the Universitas Indonesia (UI) makes me proud. However, being in a very demanding, competitive environment sometimes makes me anxious and insecure, and I become depressed. [I also face] the expectations of other people [who are not at UI] who assume that UI's students are the best.”

(Survey results from the research team on psychological distress in first-year undergraduate students at the Universitas Indonesia, 2019).

The Universitas Indonesia has high academic standards and an active extracurricular culture, and its graduates excel at the national and global levels. The University is ranked as the 57th tertiary institution in Asia and 292nd worldwide (Quacquarelli Symonds World University Ranking, 2019). The students work hard to meet the rigorous academic demands through a busy schedule of lectures, assignments, and exams; at the same time, they have many extracurricular activities, including student organizations,

committees, and national and international competitions.

Santrock (2013) found that students felt especially pressured during the transition from high school to the first year of college. These findings were echoed by Messarra (2005), who described the social challenges of first-year students as they leave home, live independently, adjust to new academic standards, and develop relationships with classmates from diverse ethnic backgrounds. In 2018–2019, a team of psychologists researched distress in first-year students at the Universitas Indonesia and found that these students had difficulties in many facets of their university lives: managing time, understanding lecture material, choosing study methods, adjusting to a heavy workload, managing finances, building relationships with new friends, using foreign languages, and adjusting to the overall college environment.

College students are *emerging adults* and search for identities as they explore career possibilities, interpersonal relationships, and worldviews (Arnett, 2000). First-year students are stressed and feel unstable as they learn to make decisions independently, explore their self-identity, build a foundation for their adult lives, pursue romantic relationships, and face demands to become financially independent (Arnett, 2015).

The ongoing challenges faced by first-year students can cause psychological distress (Siregar, 2012) and physiological complaints (Selye, 1974 in Kupriyanov & Zhdanov, 2014). Mirowsky and Ross (2003) explain that psychological distress has two components: depression (sadness, loss of enthusiasm, loneliness, and despair)

and anxiety (tension, agitation, worry, and fear).

In a 2008 study, Bayram and Bilgel found that college students in Turkey had a higher level of psychological distress than the general population. Studies of Indonesian college students by Utama (2010) and Ramadhani (2017) found that 39% and 71.85%, respectively, reported high levels of psychological distress.

The high prevalence of psychological distress among college students can have a negative impact on their mental health, as seen in a 2019 survey at the Universitas Indonesia: first-year students reported feeling tired, facing sleep problems, suffering from eating disorders, experiencing anxiety, feeling unmotivated, having poor academic performance, and withdrawing from other people. Brackney & Karabenick (1995) suggested that psychological distress affects academic performance, and Cvetkovski, Jorm, & Mackinnon (2017) saw many of these same results as well as a high dropout rate. The mental health of first-year students can also affect their later college years (Guthrie et al., 1998; Saipanish, 2003; Lyubomirsky & Tkach, 2004) and throughout the period of emerging adulthood (Morrison & O'connor, 2005; Luyckx et al., 2013).

Even though many first-year students suffer from psychological distress, DeLongis and Holtzman (2015) showed that an individual's coping processes could affect how they deal with these acute mental challenges. Lazarus and Folkman (1984) define coping as cognitive and behavioral efforts used to manage psychological distress. Miles (2017) saw that positive cognitive processes could

benefit a first-year student's transition to college, and several studies show these strategies can help students overcome challenges and have a better academic performance (Busscher & Spinhoven, 2016; Van Rooij et al. in Miles, 2017).

Garnefski et al. (2001), however, saw that some students use the coping strategy of *rumination* in the face of challenges. As defined by Nolen-Hoeksema (1991), rumination is an individual's response that involves thinking about the symptoms of distress and about the causes and consequences of past events. Ramadhani's research (2017) found that 15.8% of Indonesian college students ruminate, and a survey among 42 first-year Universitas Indonesia students showed that 49% ruminated.

Treynor, Gonzalez, & Nolen-Hoeksema (2003) described two subtypes of rumination: *brooding* and *reflective*. The reflective subtype is described as adaptive, with individuals having the ability to gain understanding, insight, and serenity around a past event, while the brooding subtype is maladaptive, with repetitive and passive thoughts about a past event (Nolen-Hoeksema, 1991; Saffrey & Ehrenberg, 2007). Burwell and Shirk (2007) found the brooding subtype to be a predictor of psychological distress, while the reflective subtype is not. Ramadhani's 2017 research found that psychological distress can be caused by both the brooding and reflective subtypes, although the latter might have some benefits as an adaptive strategy.

There is a debate about whether the reflective subtype is an adaptive form of rumination (Wyer in Treynor et al., 2003). A 2003 longitudinal study by Treynor et

al. found that the reflective subtype could be related to higher psychological distress in the short term, but, over the long term, this subtype of rumination can reduce the negative impact because it leads to effective problem-solving. But Surrence et al. (2009) found that the reflective subtype was associated with higher suicidal thoughts in individuals with a history of suicide attempts. While the problem-solving aspect of the reflective subtype can be adaptive, it can also trap individuals in negative cycles of thinking and increase negative emotions (Nolen-Hoeksema, 1996; Thomsen et al., 2013).

This present study was undertaken to further comprehend whether the brooding and reflective subtypes have equal roles in causing psychological distress, since this question is still under debate (Nolen-Hoeksema, 1996; Treynor et al. 2003; Burwell & Shirk, 2007; Thomsen et al., 2013). Therefore, we look at a group of Universitas Indonesia first-year undergraduate students to prove our hypothesis that the brooding subtype is a predictor of psychological distress, while the reflective subtype is not.

Based on the description above, this study addressed the following research question: "Will the application of ACT group therapy reduce social anxiety symptoms and increase self-esteem in college students with social anxiety problems?" This study hypothesizes that the application of ACT in groups can reduce social anxiety symptoms and increase self-esteem in college students with social anxiety problems. Furthermore, ACT is expected to help participants accept thoughts or experiences related to anxiety as part of themselves and choose to do something in line with their values.

Therefore, this study aimed to determine whether the application of ACT group therapy can reduce social anxiety symptoms and increase self-esteem in

2. METHODS

This was a non-experimental study because there was no manipulation of the data. It was a retrospective study based on the criteria of Kumar (2011) to investigate phenomena, situations, or problems that have occurred in the past. We used a quantitative research strategy, measuring psychological distress variables and obtaining numerical scores from respondents, which were processed using statistical analysis (Gravetter & Forzano, 2012); binary logistic regression analysis determined the roles of the brooding and reflective subtypes in predicting psychological distress.

Participants in this study were first-year undergraduates at the Universitas Indonesia in the vulnerable ages of emerging adulthood: 18 to 25 years (Arnett, 2000), and they were recruited by convenience sampling, based on the availability and willingness of individuals to participate as respondents (Gravetter & Forzano, 2012).

2.1. Procedure

The researcher formulated the ideas, chose research variables, and discussed the project and data-processing methods with the lecturer. After approval, the researcher compiled and disseminated the preliminary to identify the variables of rumination and psychological distress among first-year undergraduate students at the Universitas Indonesia, and to begin the preparation of a research proposal. After the research proposals were collected, the researchers

college students with social anxiety problems.

then determine the measurement tools appropriate for this research.

The researchers obtained permission to collect data at the Universitas Indonesia. Questionnaires were given directly to participants, and data collection was carried out from March 13 to April 11, 2019. Data were obtained from 414 participants. The researchers determined if the questionnaires had been correctly filled out under predetermined standards, and responses from 403 students were used in the final data pool. The researchers processed the data using Microsoft Excel and the IBM SPSS statistics programs. A *p* value below 0.05 was considered statistically significant.

2.2. Measurements

2.2.1. Self-Reporting Questionnaire (SRQ-20)

Psychological distress was measured using the World Health Organization's (WHO) Self-Reporting Questionnaire (SRQ-20, $\alpha = 0.857$), which uses a dichotomous scale with 20 *yes* or *no* questions about neurotic symptoms (WHO, 1994). A score of 1 or 0 is given if a symptom has been present or not present, respectively, in the last 30 days. Respondents who answered *yes* to six or more items were identified as having psychological distress. The cut-off point in this study was developed according to the criteria of the Indonesian Basic Health Research Survey (RISKEDAS, 2014).

2.2.2. Short Version Ruminative Response Scale (RRS-Short Version)

The brooding and reflective rumination subtypes were measured using the short version of the Ruminative Response Scale

(RRS-SV, $\alpha = 0.805$) modified by Treynor et al. (2003). The RRS-SV uses 10 questions and a Likert scale to measure rumination in respondents: five questions for brooding and five for reflective.

3. RESULTS

Participants in this study were 403 Universitas Indonesia first-year undergraduate students between 18 to 21 years old.

Tabel 1. Participant Demographic Overview (N = 403)

Participant Characteristics	N	%
Sex		
Male	155	38.5
Female	248	61.5
Curriculum		
Social sciences and humanities	237	58.8
Science and technology	115	28.5
Health sciences	50	12.4
Origin		
Jabodetabek*	268	66.5
Not Jabodetabek	135	33.5

Jakarta, Bogor, Depok, Tangerang, and Bekasi

Binary logistic regression analysis showed that 22.8% of psychological distress could be attributed to the brooding and reflective subtypes of rumination, while 77.2% could be explained by other factors (Nagelkerke $R^2 = 0.228$). The results of the binary logistic regression

analysis showed that the brooding subtype is a significant predictor of psychological distress ($b = 0.306$; $p < 0.05$); whereas, the reflective rumination subtype is not a significant predictor of psychological distress ($b = 0.073$; $p > 0.05$).

Tabel 2. Result of binary logistic regression analysis

Predictor	b	S.E.	Wald	Exp (B)	p
Constant	-4.152	0.604	47.241	0.016	0.000
Reflective	0.073	0.40	3.314	1.076	0.069
Brooding	0.06	0.051	35.918	1.358	0.000

*p < 0,05, Nagelkerke R² = 0,228

4. DISCUSSION

The results of this study indicate that the brooding subtype of rumination is predictive of psychological distress; this conclusion is supported by the findings of Burwell and Shirk (2007). They found that individuals with the brooding subtype think of past events in detail and repetitively, cannot adjust the difference between the current and desired state, and have excessive regret and negative emotions, causing the individual to attach to the stressor and experience psychological distress (Carver & Scheier, 1981; Treynor et al., 2003; Burwell & Shirk, 2007).

This study found that the reflective subtype is not a predictor of psychological distress, in line with the findings of Schoofs, Hermans, & Raes (2010). An individual with the reflective subtype analyzes the stressor and gains insight so the problem can be solved and anxiety about the event can be reduced (Nolen-Hoeksema, 1991; Treynor et al., 2003; Saffrey & Ehrenberg, 2007). Studies have found the reflective subtype to be adaptive (Nolen-Hoeksema, 1996; Wyer in Treynor et al., 2003; Surrence et al., 2009; Thomsen et al., 2013). Individuals with reflective subtypes can distinguish between situations that can be changed (such as failing a test) and those that must

be accepted (loss of family members or occurrence of cancer) (Thomsen et al., 2013). Watkins (2008) explained that the reflective subtype is adaptive because of the individual's mood and self-schema.

In a 2011 study, Boyraz and Efstathiou found that time intervals (brief or several years) between the time an event occurred and when the individual was questioned about it also influenced how much the individual had adapted. Researchers have used the Self-Reporting Questionnaire (SRQ-20) to measure psychological distress experienced by the participants within the last 30 days.

Future research could measure psychological distress variables at longer time intervals to determine the adaptive nature of the reflective subtype. Future studies could also balance the genders of the participants since women have been shown to be more likely to ruminate and experience higher psychological distress compared to men (Nolen-Hoeksema, Girgus, & Seligman, 1991; Mirowsky & Ross, 2003).

When looking at the student's field of academic study as a variable, most of the participants (n = 237; 58.8%) came from the social sciences and humanities, followed by science and technology (n = 115; 28.5%), and health sciences (n = 50;

12.4%). The largest number of participants (268, 66.5%) came from Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi) while 135 (33.5%) were from other areas. Therefore, a future study could look at these diverse characteristics to understand how a student's region of origin and field of academic study could influence the occurrence of the brooding and reflective subtypes and psychological distress in students.

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5. CONCLUSION

The findings of this study show that a higher level of the brooding subtype predicts a higher level of psychological distress, while a higher level of the reflective subtype will predict lower psychological distress in first-year undergraduate students at the Universitas Indonesia. The results could help these students develop the adaptive skills of the reflective subtype to reduce psychological distress.

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