KONSELOR

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Abstract: Resilience is important for students to rise from stressful events such as cognitive rumination. Cognitive rumination makes students trapped in contemplation about their problems, resulting in students becoming unproductive. Therefore, this study aims to see the effect of resilience on cognitive rumination of Faculty of Education and Psychology Universitas Negeri Semarang and Faculty of Teaching and Education Universitas Bengkulu students. Quantitative methods were used in this study with an ex-post facto design. The population in this study is FEP UNNES and FETT UNIB students. A total of 320 FEP UNNES students and 292 FETT UNIB students were used as samples with purposive random sampling techniques. The data collection technique used a psychological scale of resilience (24 items) and a psychological scale of cognitive rumination (27 items). Hypotheses are tested and analyzed using simple regression analysis techniques. The results of this study showed that resilience had a significant negative effect on students' cognitive rumination (R=.890, R2=.793, β=-.890, t=112.605, and p<0.001). These results mean that resilience contributes 79,3% to cognitive rumination, so students who have high resilience are not easy to get caught up in negative rumination and remain productive in carrying out their academic activities. Further implications of this research for the field of guidance and counseling studies in higher education are to provide an initial foundation for digging deeper into aspects that can increase resilience in college students through experimental research. Researchers recommend looking at other perspectives of the subjects studied. For example, by adding a gender moderator variable to see differences in levels of resilience between male and female. In addition, expanding the range of research subjects to a wider range will further increase the generalizability of research with different sampling techniques.

Key Words: Resilience; Cognitive rumination; Productivity

INTRODUCTION

Individuals, including students, are important to maintain their productivity and avoid obstacles to academic activities. One of the factors that cause individuals to be hampered by their productivity is negative rumination that can affect mood. The negative rumination is also interpreted as cognitive rumination. Cognitive rumination is vulnerable to students in college or university students (Gouw & Kartasasmita, 2016). Furthermore, Gouw & Kartasasmita (2016) stated that cognitive rumination has a negative impact on students' academic achievement. This exposure is supported by research by Yuniswara & Hartini (2022) which states that 14.2% of students experience cognitive rumination which has an impact on excessive anxiety when undergoing academic activities such as teaching and learning

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activities (KBM) and when carrying out student projects. Cognitive rumination is formed based on 4 aspects, namely problem-focused thinking, fact-rejecting thinking, repetitive thinking, and anticipatory thinking (Tanner et al., 2013).

The above presentation indicates that cognitive rumination is a vulnerable problem among college students and needs to be reduced and even resolved. This is an urgent phenomenon for counselors in higher education. Counselors in higher education have a crucial role in the development and academic achievement of students. This is in line with the function of counseling in higher education to provide therapeutic services related to the personal, social, career, and learning fields of students, by providing preventive services such as basic services (classical guidance and group guidance) as well as responsive services such as individual counseling. Counselors have the authority to reduce cognitive rumination with various approaches that are learned and can be applied (Dewajani & Yeni, 2020). This argument is supported by Mawarni (2022) in his research on the effect of Rational Emotive Behavior Therapy (REBT) counseling on adolescent cognitive rumination problems, the results show that REBT counseling is able to reduce cognitive rumination problems.

Students at Faculty of Education and Psychology in Universitas Negeri Semarang (FEP UNNES) and Faculty of Education and Teacher Training in Universitas Bengkulu (FETT UNIB) have an equal possibility of having cognitive rumination problems that result in students being hampered in their productivity, especially in the academic context. This assumption was confirmed by a preliminary study in the form of a questionnaire containing several open-ended questions. The results of the preliminary study showed that 86% of students experienced cognitive rumination problems and disrupted their academic activities. This shows that cognitive rumination is a problem that needs to be reduced and or resolved in FEP UNNES and FETT UNIB students. One of the psychological constructs that students must have to reduce cognitive rumination is the ability to rise from adversity. Individuals with cognitive rumination problems are always stuck in thoughts about their problems and do not move on to solutions, so it is important for individuals to have this ability. The ability to navigate and negotiate psychological resources to rise from adversity is interpreted as resilience (Ungar, 2013).

The argument above is the background that authors will juxtapose the psychological construct of resilience to be able to reduce the problem of cognitive rumination in students. Individuals who have the power to go through the resilience process will be able to overcome the problems of cognitive rumination experienced. Because, resilience is interpreted as a process not something that individuals are born with (Ungar, 2013). Three aspects that build resilience include personal resilience, relationships with the environment, and the context of belonging (Ungar, 2013). Ungar's (2013) conception of resilience refers more to the environment. This is based on individuals having the power to interact with their environment, so that this ability becomes a navigational tool for individuals to help them rise from the downturn that exists.

We added several previous studies on resilience and cognitive rumination as references and studies that will be discussed. Previous research includes Angi Liu et al. (2023) on the effect of resilience on cognitive rumination and anxiety in college students. The results of this study indicate that resilience can reduce the level of cognitive rumination in college students. Furthermore, research by Bucknell et al. (2022) on the relationship between resilience and cognitive rumination. The results show that there is a negative relationship between resilience and cognitive rumination, so it can be seen that students who have high insight and resilience will have a low level of rumination. However, contrary to these two studies, research by Isgor et al. (2022) regarding the effect of resilience on cognitive rumination and students' fear of academic activities has the opposite result. The results of the study show that resilience has a positive effect on cognitive rumination, meaning that students who have resilience abilities are unable to reduce cognitive rumination.

Based on the phenomena that occur, theoretical gaps, and gaps in the results of previous research described above. So, we are increasingly interested in further examining the effect of resilience on cognitive rumination in students at Faculty of Education and Psychology in Universitas Negeri Semarang and Faculty of Education and Teacher Training in Universitas Bengkulu. Further research on resilience and cognitive rumination in both universities can also be the basis for providing counseling service programs in higher education based on their functions in the personal, social, career, and learning fields. It aims to help students empower their potential and remain able to maintain their productivity in the academic context.

METHOD

Because there is only one data collecting attempt, this research is cross-sectional and correlational. In this work, an ex-post facto design quantitative method is used. We sought to ascertain the degree to which college students' cognitive rumination is predicted by resilience in this investigation.

Participants

The research subjects for this study come from two distinct universities' faculties. As many as 320 students attend FEP UNNES, and 292 students attend FETT UNIB. Thus, 612 students made up the entire sample in this investigation. Non-probability sampling with convenient samples is the method used in this investigation. This method is employed to find study participants who are approachable and open to taking part.

Measures

The data collection techniques used in this study used psychological scales including cognitive rumination and resilience scales. The preparation of the cognitive rumination scale is based on the building blocks of cognitive rumination by Tanner et al. (2013) including the first indicator is problem-focused thinking with one indicator statement item: I have poor academic achievement due to the problems I experience, the second indicator is fact-rejecting thinking with one of the indicator statement items: I often think why things are so hard for me, the third indicator is repetitive thinking with one of the indicator statement items: I find it difficult to think clearly, and the fourth indicator is anticipatory thinking with one of the indicator statement items: I am afraid of failure.

The resilience scale is also compiled based on the aspects of resilience building by Michael Ungar (2011) including the first indicator is personal resilience with one of the indicator statement items: I have dynamic thinking so that when depressed I can remain calm, the second indicator is the relationship with the environment with one of the indicator statement items: I am in a constructive environment, and the third indicator is the context of belonging with one of the indicator statement items: I comply with the norms that exist in society. Based on the psychological scale developed, expert testing and instrument validity tests were carried out through product moment analysis. Reliability test using Cronbach alpha analysis.

Procedures

The data collection technique used to identify each of these variables is the survey method. The survey method uses a Likert scale with a scale range of 1-5. A scale value of 1 indicates that you strongly disagree or contradict the variable, continuing to a scale value of 5 which indicates that you strongly agree with the variable. Respondents in this study were given the rights and freedom to make their choices. This means that there are no wrong or right answers to the choices. Apart from that, in this study, respondents filled out the survey voluntarily without coercion or certain rewards. Thus, it can be ensured that the independence and impartiality of respondents can be guaranteed in this research.

Data Analysis

The data collection technique used to identify each of these variables is the survey method. The survey method uses a Likert scale with a scale range of 1-5. A scale value of 1 indicates that you strongly disagree or contradict the variable, continuing to a scale value of 5 which indicates that you strongly agree with the variable. Respondents in this study were given the rights and freedom to make their choices. This means that there are no wrong or right answers to the choices. Apart from that, in this study, respondents filled out the survey voluntarily without coercion or certain rewards. Thus, it can be ensured that the independence and impartiality of respondents can be guaranteed in this research.

RESULTS

The study's findings show that FEP UNNES and FETT UNIB students have low levels of resilience (M = 63.70, SD = 25.57) based on the data that was collected. In the meantime, FEP UNNES and FETT UNIB students have significant levels of cognitive rumination (M = 91.93, SD = 27.28).

Table 1. Level of Resilience and Cognitive Rumination of College Students (N=612)

Variable	M	SD	Category
Resilience	63.70	25.57	Low
Cognitive Rumination	91.39	27.28	High

Table 1 shows descriptive statistical calculations with details of the level of resilience in the low category and the level of cognitive rumination in the high category. The details of the level of resilience and cognitive rumination are as follows.
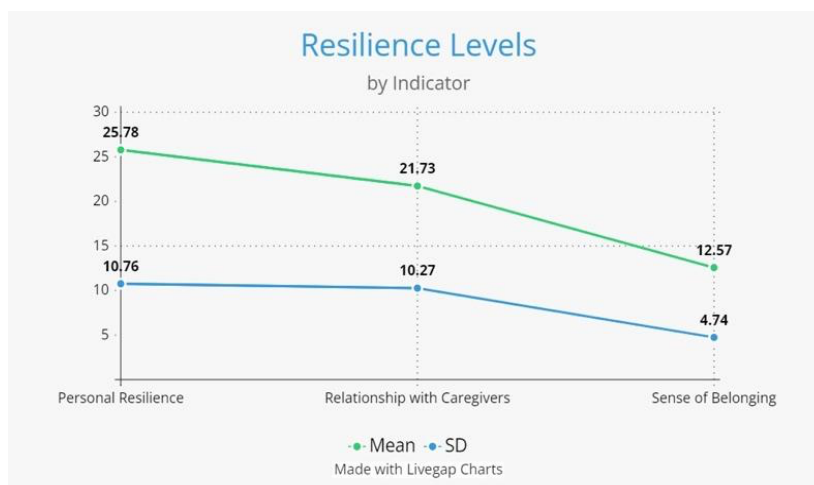
Figure 1 Resilience Levels by Indicators

Figure 1 of the level of resilience by indicator shows that the personal resilience indicator (M=25.78, SD=10.76) is in the low category. While the indicators of relationships with the environment (M = 21.73, SD = 10.27) and the context of a sense of belonging (M = 12.75, SD = 4.74) are in the very low category. The resilience level data per indicator shows the inability of FEP UNNES and FETT UNIB students to navigate and negotiate environmental resources to maintain psychological health after stressful events.
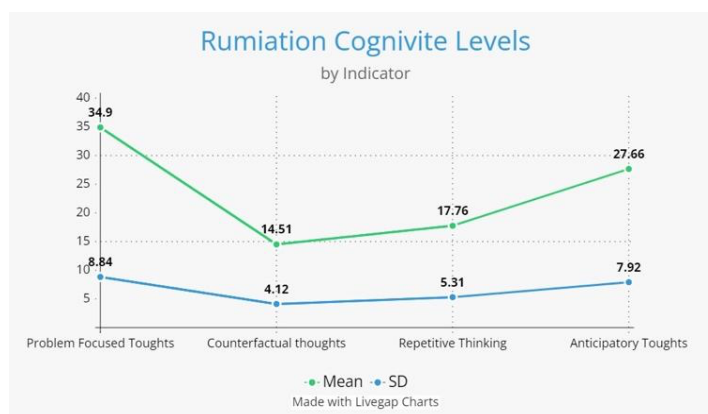
Figure 2 Rumination Cognitive Levels by Indicators

Figure 2 of the level of cognitive rumination per-indicator above shows that all indicators of cognitive rumination are in the high and very high categories, with details of problem-focused thinking (M = 24.9, SD = 8.84), fact-rejecting thinking (M = 14.51, SD = 4.12), repetitive thinking (M = 17.76, SD = 5.31), and anticipatory thinking (M = 27.66, SD = 7.92). The data on the level of cognitive rumination per-indicator means that FEP UNNES and FETT UNIB students experience rumination that negatively affects their feelings so that it hinders daily activities, especially academic activities.

The results of this research, as shown in Table 1 and Figure 1, indicate that the resilience level of students falls into the low category. The high and low levels of resilience are formed by several factors influenced by various factors (Wahyudi & Partini, 2017). Some factors influencing resilience include: 1) Individual interpersonal relationships with others. The better the interpersonal relationships, the more support individuals receive in facing problems. Moral and physical assistance can help reduce individual tension when facing issues. The presence of people around, such as family, friends, and loved ones, is a crucial factor in reducing anxiety, tension, and mental burdens when individuals are in trouble (Barbara et al., 2011); 2) Self-confidence to cope with situations and conditions is a supportive aspect for individuals to strengthen resilience. Self-confidence can emerge when individuals have strategies that align with their abilities to achieve goals (Barbara et al., 2011); 3) Optimism also influences resilience. Optimistic individuals tend to view things positively. When faced with problems, people often get stuck with negative thoughts, but optimistic individuals will use their potential to unravel their issues (Greene & Graham, 2009; Harris, 2008); 4) Spirituality also affects resilience. In the Islamic view, spirituality guides individuals toward piety and belief in Allah. This belief will help strengthen the conviction of each person that the trials given to humans follow their capabilities. That belief will strengthen someone's confidence in facing problems (Barbara et al., 2011; Lassi, & Mugnaini, 2017); and 5) Thought patterns can also influence an individual's resilience level. Rasyid et al.'s (2023) research reveals that individuals with open-minded thinking are more capable of facing challenging conditions. Conversely, closed-minded thinking will trap someone in negative thoughts when confronted with problems.

Huey & Palaganas (2020) add that resilience is influenced by four things, namely: 1) factors originating from the individual, such as character or individual personality, the level of expectations and life goals, and self-motivation; 2) factors originating from the environment, such as support from those around and workplace culture; 3) social factors, specifically in how individuals interact with others (protecting oneself from blame or open self-reflection for change); and 4) self-development through training enhances resilience.

Cognitive rumination found in this study refers to Table 1 and Figure 2 in high and very high conditions. High levels of cognitive rumination may be influenced by several factors, including responses to cognitive challenges, negative self-blame statements, and longer puzzle-solving times are associated with higher levels of rumination (Gentzler et al., 2013); individual differences in cognitive processes, where some individuals openly find solutions when faced with problems, while others do the opposite. Rumination is associated with difficulty updating working memory and disengaging from irrelevant information (Whitmer & Gotlib, 2013) and the presence of depressive symptoms (Joormann et al., 2006).

There is another perspective that states cognitive rumination is influenced by several conditions, such as neuroticism, perfectionism, excessive focus on adverse conditions, difficulty managing emotions, lack of self-awareness, the presence of stressors, and social support (Denis & Luminet, 2018; LoSavio et al., 2017; Moberly & Watkins, 2008). Neuroticism is a personality trait characterized by a tendency to experience negative emotions such as anxiety, sadness, and anger. Research suggests that neuroticism is a strong predictor of rumination. Individuals with high neuroticism tend to be more

sensitive to negative emotions and prone to dwelling on them (Denis & Luminet, 2018). Perfectionism is a personality trait characterized by a striving for perfection and a fear of making mistakes. Research suggests perfectionism is associated with rumination, especially after experiencing failure or making mistakes. The fear of not meeting high standards can lead to repetitive negative thinking (LoSavio et al., 2017). Negative attentional bias is a cognitive bias that leads individuals to focus on negative information. Individuals prone to rumination often exhibit a bias towards negative information. They focus on negative aspects of situations and experiences, further fueling ruminative thoughts (Denis & Luminet, 2018; Moberly & Watkins, 2008).

Difficulty managing negative emotions can lead individuals to ruminate as a way to cope with discomfort. They may get stuck in repetitive thinking cycles instead of engaging in healthy coping mechanisms (LoSavio et al., 2017). Lack of mindfulness is the inability to be aware of one's thoughts and feelings in the present moment. Mindfulness practices, like meditation, can help individuals become more aware of their thoughts and choose not to engage in rumination. Studies show a negative correlation between mindfulness and rumination levels (Denis & Luminet, 2018). Stressful life events are events that can cause significant emotional and psychological distress. Experiencing stressful life events can trigger rumination as individuals attempt to make sense of the situation and cope with negative emotions (LoSavio et al., 2017). Social support is the support that individuals receive from their social network. Strong social support networks can buffer against the adverse effects of stress and rumination. Social connections can provide individuals emotional support and alternative perspectives, reducing the need to ruminate alone (Denis & Luminet, 2018).

Hypothesis testing was conducted to determine the significance and type of influence of resilience on cognitive rumination using a simple linear regression test after going through the classical assumption test and the data was declared normal, linear, and did not show symptoms of heteroscedasticity. The results of the test include the following.

Table 2. Simple Linear Regression Test Results

Variable	B	73,9% CI	β	t	p
(Constant)	151.909	1.349		112.605	0.000
Resilience	-0.950	0.020	0.890	-48.328	0.000

Table 2 shown the results of simple regression tests show that resilience overall predicts cognitive rumination in FEP UNNES and FETT UNIB students (β = 0.890; t = -48.328; p < 0.05; 73.9% CI of B -0.950) (hypothesis accepted). Resilience is also able to significantly explain the large changes in the proportion of cognitive rumination of FEP UNNES and FETT UNIB students, $R2 = 0.793$; F = 2335.627; p < 0.05. Resilience has a negative regression coefficient on cognitive rumination. This means that the greater the resilience score, the smaller the cognitive rumination and vice versa.

DISCUSSION

Based on the results of the research that has been analyzed, it shows that there is a negative relationship between resilience and cognitive rumination in FEP UNNES and FETT UNIB students. The percentage of influence is 79.3% between resilience variables and cognitive rumination. There is a negative influence between resilience variables and cognitive rumination. The higher the level of resilience, the lower the cognitive rumination and vice versa the lower the level of resilience, the higher the cognitive rumination. This is in line with the results of research conducted by Bucknell et al. (2022). The results of his research show that there is a negative relationship between resilience and cognitive rumination. Cognitive rumination can affect individual mental well-being due to a sense of loneliness

so that individuals begin to ruminate and ruminate negatively then affect mental well-being in individuals (Yun, Fardghassemi & Joffe, 2023). Rumination and worry have the potential to lead individuals to psychological disorders (Weaver, O'Shannessy & Donovan, 2020) and cognitive rumination is associated with high suicide attempts (Dauverman et al, 2023).

To be able to deal with cognitive rumination that continues to appear, individuals need strong resilience so that it can help themselves develop optimally. Resilience is one of the factors that can affect cognitive rumination. Based on previous research that resilience negatively affects cognitive rumination. Previous research by Angi Liu et al. (2023) regarding the effect of resilience on cognitive rumination and anxiety in students found that the higher the resilience, the less cognitive rumination performed by students. This is because high resilience will help reduce rumination and anxiety in students. This study is different from previous research by Ocalan & Uzar-Ozcetin (2021) which found that resilience is positively related to rumination, but deliberate rumination. Meanwhile, this study found a negative effect where the higher the resilience, the less cognitive rumination by students.

Based on the results of a literature analysis study conducted by Fahmi & Wiwin (2022), it was identified that rumination is a form of individual maladaptive reflection. Rumination allows a person to experience problems in making decisions (problem solving) caused by disturbances in the cognitive structure, which causes the productivity of the individual's activities in living his life. In line with these results, Chen & Li (2013) showed that there is a significant correlation between rumination and depression. In addition, there are significant genetic influences, shared environmental and non-shared environmental factors.

Watkins (2020) in his study found that depressive rumination could increase due to a history of emotional abuse. A person will be more susceptible to rumination when he or she has past experiences of emotionally painful things caused by emotional abuse or sexual harassment. A person's experience of being a victim of violence and experiencing stressful experiences can be one of the causes of increased rumination such as excessive vigilance towards threats and feelings of helplessness (Watkins, 2020). Mc Guirk (2018) confirms from another perspective that rumination is also influenced by socio-cultural expectations that place extreme values on happiness and which emphasize the importance of not feeling negative emotional states (rejection).

Rumination can result in dysphoria, anxiety, and worst of all, suicidal ideation. This happens because there is a tendency for a person to get caught up in repetitive thinking (Erickson, et al 2020). Rumination in research by Hou & Ng, 2014) states that rumination is positively correlated with anxiety. Because rumination is considered a maladaptive way of thinking and forms a negative feedback cycle that connects rumination with anxious thoughts and emotions, and symptoms of anxiety. These results are consistent with the findings of Aldao & Nolen-Hoeksema (2010), namely that ruminative thoughts often increase the severity of negative feelings and are associated with increased levels of anxiety.

The effect of rumination on the indirect relationship between intolerance and uncertainty and anxiety is known based on the correlation coefficient of the indirect effect, namely 0.049 ($p = 0.016$). The magnitude of the indirect effect in this research is different when compared to research by Yook et al., (2010). When the rumination mechanism is involved in a coping strategy in individuals with a tendency to be intolerant of uncertainty, the risk of experiencing psychological disorders such as anxiety will increase. When faced with unpleasant conditions, such as ambiguity and uncertainty, the tendency to ruminate will develop greater.

Mondini et al (2017) in their research stated that threatening situations and fear of negative evaluation will dominate and encourage the emergence of rumination. In this condition, the individual's focus will shift to negative thoughts about themselves. This is what is called a mental representation that contains negative cognitive biases and incorrect cognitive processes in anxiety sufferers. Individuals may believe that by doing rumination, they will gain understanding about disappointments and

unpleasant things in the past. Rumination can keep individuals mentally occupied, thereby avoiding the need to engage with tasks that are considered unpleasant. In addition, when someone engages in rumination, they mentally collect evidence that the situation at hand is hopeless, increase certainty that problem-solving efforts are futile, justify their passive actions, avoid taking action, and give up on goals (Nolen-Hoeksema et al. al., 2008).

Resilience is a very important part for a student to have when he experiences stressful conditions. The importance of resilience for students who experience rumination is strengthened by research conducted by Yulanda (2017) that obstacles from individual internal factors in completing final assignments include perseverance, tenacity in facing difficulties and having an interest in completing a thesis which has an influential contribution of 64.38%. However, it was further explained that it is not only students who are working on their theses who experience problems in dealing with pressing conditions that cause stress. This pressure causes a student to need high resilience. Mallick and Kaur (2016) stated that academic resilience is a student's ability to overcome difficulties (pressing conditions) and stress experienced in their academic context. Students who have a high level of resilience are characterized as individuals who are free, independent, have above average intelligence, a positive attitude, are optimistic, have strong self-awareness, and are involved in social activities (Jacelon, 1997).

When someone experiences a state of low resilience in more depth (Reisnick, et. al, 2011) states that spirituality is one of the factors that can increase resilience in individuals. This is in line with research conducted by (Jurjewicz, 2016) which states that spirituality and resilience are factors that influence one another. Furthermore, according to Reivich and Shatte (2002) self-efficacy is one of the factors that influences a person's ability to be resilient. Cassidy (2015) conducted research on 435 students, namely building resilience with the role of academic self-efficacy. Self-efficacy is related to a person's perception of the abilities they have.

Resilience is one of the psychological constructs that influences cognitive rumination. This happens if resilience can be raised or improved in students, then students' cognitive rumination will be reduced. This study, confirming the statement, based on the results that have been obtained, resilience predicts the level of cognitive rumination. As has been presented in the results table, student resilience is in the low category, while student cognitive rumination is in the high category. This means that students with low ability to rise from pressure by navigating their psychological resources from the environment, have a tendency to get stuck in high negative thinking that affects mood and productivity. The results of this study confirm some previous research on resilience and rumination.

This research confirms and supports research by Angi Liu et al. (2023) on the effect of resilience on cognitive rumination and anxiety in college students, Bucknell et al. (2022) on the relationship between resilience and cognitive rumination. The results of this study indicate that resilience can reduce the level of cognitive rumination in college students. However, this research is in contrast to research by Isgor et al. (2022) regarding the effect of resilience on cognitive rumination and students' fear of academic activities has the opposite result. The results of the study show that resilience has a positive effect on cognitive rumination, meaning that students who have resilience abilities are unable to reduce cognitive rumination. This means that research by Isgor et al. (2022) has a contradiction with this research.

CONCLUSION

Based on the results of this study, we found that resilience negatively affects cognitive rumination where the higher the level of resilience, the lower the cognitive rumination and vice versa the lower the level of resilience, the higher the cognitive rumination so that counselors in higher education can use this research in an effort to increase resilience in students to minimize cognitive rumination. Further implications of this research for the field of guidance and counseling studies in higher education are to

provide an initial foundation for digging deeper into aspects that can increase resilience in college students through experimental research. Researchers recommend looking at other perspectives of the subjects studied. For example, by adding a gender moderator variable to see differences in levels of resilience between men and women. In addition, expanding the range of research subjects to a wider range will further increase the generalizability of research with different sampling techniques

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REFERENCES

Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotion regulation strategies: A transdiagnostic examination. Behaviour Research and Therapy, 48(10), 974–983. https://doi.org/10.1016/j.brat.2010.06.002

Anqi Liu, Yaxun Yu, Shengtao Sun. (2023). How is the Big Five related to college students' anxiety: The role of rumination and resilience, Personality and Individual Differences (Vol. 200 (111901) ISSN 0191-8869, https://doi.org/10.1016/j.paid.2022.111901. (https://www.sciencedirect.com/science/article/pii/S0191886922004068).

Barbara, R., Lisa, P. G. & Karen, A. R. (2011). Resilience In Aging: Concepts, Research, and Outcomes. New York: Springer.

Bucknell, K. J., Kangas, M., & Crane, M. F. (2022). Adaptive self-reflection and resilience: The moderating effects of rumination on insight as a mediator. Personality and Individual Differences, 185(August 2021), 111234. https://doi.org/10.1016/j.paid.2021.111234.

Cassidy, S. (2015). Resilience building in students: The role of academic self efficacy. Frontiiers inPsychology, 6 :1781, 1-14. Doi:10.3389/fpsyg.2015.01781.

Chen, J., & Li, X. Y. (2013). Genetic and environmental influences on adolescent rumination and its association with depressive symptoms. Journal of Abnormal Child Psychology, 41(8), 1289–1298

Dauvermann, Schamaal, Colic, Velzen, Bellow, Ford, Suckling, Goodyer, Impact Consortium, Blumberg & Harmelen. (2023). Elevated cognitive rumination and adverse life events are associated with lower cortical surface area and suicidal ideation in adolescents with major depressive disorder. Journal of Affective Disorders, 325 (2023) 93–101. https://doi.org/10.1016/j.jad.2022.12.087

Denis, A., & Luminet, O. (2018). Cognitive factors and post-partum depression: What is the influence of general personality traits, rumination, maternal self-esteem, and alexithymia?. Clinical psychology & psychotherapy, 25(2), 359–367. https://doi.org/10.1002/cpp.2168

Dewajani, J. S., & Karneli, Y. (2020). Analisis permasalahan ruminasi dan implikasinya terhadap layanan bimbingan dan konseling. Jurnal Bimbingan Dan Konseling, 4(2), 339–344. https://doi.org/10.26539/teraputik.42415.

Erickson, T, M., Newman, M. G., & Tingey, J. L. (2020). Worry and Rumination. In J. S. Abramowitz & S. M. Blakey (Eds.), Clinical handbook of fear and anxiety: Maintenance processes and treatment mechanisms (p. 148–166). American Psychological Association. doi:10.1037/0000150-003.

Fadhilah, R., & Hendriani, W. (2022). Faktor Lingkungan dan Biologis dari Ruminasi. Jurnal Muara Medika dan Psikologi Klinis, 2(1), 1-6.

Gaow, E., & Kartasasmita, S. (2016). Pengaruh Rumination Terhadap Academic Achievement Pada Mahasiswa Tingkat Sarjana. Provitae Jurnal Psikologi Pendidikan, 7(1), 55–76.

Gentzler, A. L., Wheat, A. L., Palmer, C. A., & Burwell, R. A. (2013). Children's responses to cognitive

challenge and links to self-reported rumination. Cognition and Emotion, 27(2), 305–317. https://doi.org/10.1080/02699931.2012.716394

Greene, R. R., & Graham, S. A. (2009). Role of resilience among Nazi Holocaust survivors: a strength-based paradigm for understanding survivorship. Family & community health, 32(1 Suppl), S75–S82. https://doi.org/10.1097/01.FCH.0000342842.51348.83

Harris P. B. (2008). Another wrinkle in the debate about successful aging: the undervalued concept of resilience and the lived experience of dementia. International journal of aging & human development, 67(1), 43–61. https://doi.org/10.2190/AG.67.1.c

Hou, W. K., & Ng, S. M. (2014). Emotion-focused positive rumination and relationship satisfaction as the underlying mechanisms between resilience and psychiatric symptoms. Personality and Individual Differences, 71, 159–164. https://doi.org/10.1016/j.paid.2014.07.032

Huey, C. W. T., & Palaganas, J. C. (2020). What are the factors affecting resilience in health professionals? A synthesis of systematic reviews. Medical teacher, 42(5), 550–560. https://doi.org/10.1080/0142159X.2020.1714020

İşgör, İ. Y., Yılmaz, Y., & Laçin, B. G. D. (2022). The Prediction of Psychological Resilience by Fear of Happiness and Ruminative Thoughts. Education Quarterly Reviews, 5(3), 195–206. https://doi.org/10.31014/aior.1993.05.03.538.

Jacelon, C.S. 1997. The Trait and Process of Resillience. Journal of Advanced Nursing, 25 (1), 123-129

Joormann, J., Dkane, M., & Gotlib, I. H. (2006). Adaptive and maladaptive components of rumination? Diagnostic specificity and relation to depressive biases. Behavior therapy, 37(3), 269–280. https://doi.org/10.1016/j.beth.2006.01.002

Jurjewicz, H. (2016). How spirituality leads to resilience a case study of immigrants. European Journal of Science and Theology, 12 (4), 17-25.

Lassi, S., & Mugnaini, D. (2015). Role of Religion and Spirituality on Mental Health and Resilience: There is Enough Evidence. International Journal of Emergency Mental Health and Human Resilience, 17(3), 661-663. https://doi.org/10.4172/1522-4821.1000273

Liu, J., Peh, C., Simard, S., Griva, K., & Mahendran, R. (2018). Beyond the fear that lingers: The interaction between fear of cancer recurrence and rumination in relation to depression and anxiety symptoms. Journal of Psychosomatic Research, 111(March), 120–126. https://doi.org/10.1016/j.jpsychores.2018.06.004

LoSavio, S. T., Dillon, K. H., & Resick, P. A. (2017). Cognitive factors in the development, maintenance, and treatment of post-traumatic stress disorder. Current Opinion in Psychology, 14, 18–22. https://doi.org/10.1016/j.copsyc.2016.09.006

Mallick, Mihir K & Kaur, Simranjit. 2006. Academic Resilience Among Senior Secondary School Students: Influence of Learning Environment, 8 (2) (pp. 20-27).

Mawarni, Iga. (2022). Therapy rational emotive behavior untuk mengatasi overthinking remaja akibat disharmoni keluarga di Desa Seruni Gedangan Sidoarjo. Undergraduate thesis: UIN Sunan Ampel Surabaya.

McGuirk, L., Kuppens, P., Kingston, R., & Bastian, B. (2018). Does a culture of happiness increase rumination over failure? Emotion, 18(5), 755–764. https://doi.org/10.1037/ emo0000322.

Moberly, N. J., & Watkins, E. R. (2008). Ruminative self-focus and negative affect: an experience sampling study. Journal of abnormal psychology, 117(2), 314–323. https://doi.org/10.1037/0021-843X.117.2.314

Modini, M., Abbott, M. J., Modini, M., & Abbott, M. J. (2017). SC. Journal of Behavior Therapy and Experimental Psychiatry. https://doi.org/10.1016/j.jbtep.2016.12.002

Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking Rumination. Perspectives on Psychological Science, 3(5), 400–424. https://doi.org/10.1111/j.1745- 6924.2008.00088.x

Ocalan & Uzar-Ozcetin (2021). The relationship between rumination, fatigue and psychological resilience among cancer survivors. Journal Clinical Nursing. 2022;31:3595–3604. DOI: 10.1111/jocn.16187

Rasyid, M., Suhesty, A., Rahayu, D. (2023). Growth Your Mindset to Increase Resilience in College Students. Indonesian Journal Of Educational Research And Review, 6(2), 322-329. https://doi.org/10.23887/ijerr.v6i2.60194 322-329

Reisnick, B., Gwyther, L. P., & Roberto, K. (Eds.). (2011). Resilience in Aging: Concepts,research, and

outcomes. Springer Science & Business Media.

Reivich, K., & Shatte, A. (2002). The resilience factor: 7 essential skills for overcoming life'sinevitable obstacle. New York: Broadway Books.

Tanner, D., McLaughlin, J., Herschensohn, J., & Osterhout, L. (2013). Individual differences reveal stages of L2 grammatical acquisition: ERP evidence. Bilingualism: Language and Cognition, 16, 367–382. DOI: 10.1017/S1366728912000302

Ungar, M. (Ed.). (2011). The Social Ecology of Resilience: a Handbook of Theory and Practice. Springer Science & Business Media.

Ungar, M., Ghazinour, M., & Richter, J. (2013). Annual research review: What is resilience within the social ecology of human development? Journal of Child Psychology and Psychiatry and Allied Disciplines, 54(4), 348–366. https://doi.org/10.1111/jcpp.12025

Ungar, M., Connelly, G., Liebenberg, L., & Theron, L. (2019). How Schools Enhance the Development of Young People's Resilience. Social Indicators Research, 145(2), 615–627. https://doi.org/10.1007/s11205-017-1728-8.

Wahyuni, A. & Partini, S. (2017). Factors Affecting Indivudual Resilience. Advances in Social Science, Education, and Humanities Research, 173, 21-22. https://doi.org/10.2991/icei-17.2018.6

Watkins, Edward R. & Henrietta Roberts. (2020). Reflecting on rumination: Consequences, causes, mechanisms and treatment of rumination. Behaviour Research and Therapy, 127, 103573

Weaver, S., O'Shannessy, D., & Donovan, C. (2020). Rumination and Worry. Encyclopedia of Child and Adolescent Development, 1–11. doi:10.1002/9781119171492.wecad164

Whitmer, A. J., & Gotlib, I. H. (2013). An attentional scope model of rumination. Psychological Bulletin, 139(5), 1036–1061. https://doi.org/10.1037/a0030923

Yook, K., Kim, K., Suh, S. Y., & Lee, K. S. (2010). Journal of Anxiety Disorders Intolerance of uncertainty , worry , and rumination in major depressive disorder and generalized anxiety disorder. Journal of Anxiety Disorders, 24(6), 623–628. https://doi.org/10.1016/j.janxdis.2010.04.003

Yulanda, B. 2017. The Effect of Academic Resilience on Academic Achievement in a Study of Students Class of 2012, Undergraduate Management Study Program, Faculty of Economics, Parahyangan Catholic University.

Yun, R.C., Fardghassemi, S., & Joffe, H. (2023). Thinking too much: How young people experience rumination in equitable contexts . Journal of Community & Applied Social Psychology, 33 (1), 102 – 122 . https://doi.org/10.1002/casp.2635

Yuniswara, E. O., & Hartini, N. (2022). Lyric Analysis Intervention: Overcoming Cognitive Rumination of Late-Adolescent Females with Song Lyrics from. INSAN: Jurnal Psikologi dan Kesehatan Mental. https://doi.org/10.20473/jpkm.v7i12022.68-97.