

Effects of a Self-Regulation Counseling Intervention on Ego Depletion Among University Students: A Quasi-Experimental Study

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Keywords

College Students; Ego Depletion; Higher Education; Self-Regulation; Self-Regulation Counseling Approach (SRCA).

Abstract

The transition to higher education places substantial self-regulatory demands on students, which may contribute to ego depletion. Although self-regulation interventions have been widely discussed, evidence regarding counseling-based approaches specifically designed to reduce ego depletion among university students remains limited. This study evaluated the effects of the Self-Regulation Counseling Approach (SRCA) on ego depletion among university students. A quasi-experimental pretest–posttest control-group design was used. From a population of 729 students, 30 participants were selected through systematic random sampling and allocated to an experimental group ($n = 15$) and a control group ($n = 15$). Ego depletion was assessed using a 58-item researcher-developed questionnaire. The instrument demonstrated acceptable content validity ($CVI = 0.80$), satisfactory item validity based on Pearson correlation analysis, and high internal consistency (Cronbach's $\alpha = 0.955$). Posttest differences between groups were examined using analysis of covariance, with pretest scores included as a covariate. After adjustment for baseline scores, the experimental group showed a significantly greater reduction in ego depletion than the control group ($p < 0.05$). These findings provide preliminary evidence that SRCA may help reduce ego depletion among university students. However, the small sample size and quasi-experimental design limit the generalizability and causal interpretation of the results. Further studies with larger samples, stronger allocation procedures, and longer follow-up periods are needed to confirm the intervention's effects.

INTRODUCTION

The transition from secondary education to higher education is a crucial phase of development, marked by significant changes in roles, responsibilities, and social expectations. College students, who are generally in the age range of 18–22 years, are in the late adolescence to early adulthood, a period that is vulnerable to psychological dynamics and complex adaptation demands. This phase is often colored by an increase in academic demands, adjustment to a new social environment, and the need to live more independently and separately from family (Gissubel et al., 2018). Developmental psychology literature

shows that this transition period is closely related to increased vulnerability to psychological and behavioral problems, including stress, anxiety, and self-adjustment difficulties (Hurlock, 1980; Schwartz et al., 2015).

The context of higher education, students are faced with various demands that require effective self-management skills, such as managing emotions, maintaining concentration, making complex decisions, and balancing academic and social lives. Various studies show that the early stages of college are often accompanied by increased academic stress and emotional pressure that have an impact on the psychological well-being of students (Conley et al., 2014). This condition requires the involvement of sustainable self-regulation capacity, which in the long run can burden an individual's psychological resources (Stapley, 2013).

In the perspective of the strength model of self-control, self-regulation is understood as a limited psychological resource and can experience a decrease due to repeated use (Baumeister, 2018). When individuals constantly control impulses, control emotions, and persevere in dealing with demanding tasks, these capacities can be weakened. This condition is known as ego depletion, which is a temporary decrease in an individual's ability to regulate behavior, emotions, and cognition after making intense self-regulation efforts (Baumeister et al., 2018). In an academic context, ego depletion is an important conceptual framework to understand the difficulties of students in maintaining focus, motivation, and adaptive behavior under continuous pressure.

A number of studies show that ego depletion is related to various negative effects, such as decreased cognitive performance, decision-making disorders, increased impulsiveness, and decreased prosocial behavior and psychological well-being (Englert et al., 2015; Gissubel et al., 2018; Haynes et al., 2016; Osgood & Muraven, 2015). In the context of lectures, this condition is reflected in difficulty concentrating, psychological fatigue, low learning motivation, and inability to manage academic stress effectively. The results of a preliminary study on students in several universities in Indonesia also show that ego depletion is a fairly dominant phenomenon, with indications of psychological fatigue, cognitive impairment, feelings of helplessness, and a tendency to impulsive behavior.

Although studies on ego depletion have grown widely, most of the research is still dominated by a laboratory experimental approach that focuses on short-term manipulation of self-control resources. This approach has limitations in explaining the dynamics of ego depletion in the context of complex and sustainable academic life. On the other hand, research on self-regulation-based interventions is generally developed more in the field of psychological training or education, and has not been widely studied as a structured counseling approach. In addition, empirical studies on interventions to reduce ego depletion in the context of non-Western culture, especially in students in Indonesia, are still relatively limited.

Self-regulation is a core psychological capacity that allows individuals to manage thoughts, emotions, and behaviors adaptively in achieving goals (Zimmerman, 2010, 2013). In the framework of Social-Cognitive Theory, self-regulation is seen as an active process involving three main mechanisms, namely self-observation, judgmental process, and self-reaction (Bandura, 1991; Bandura, 2001). Individuals with good self-regulation skills tend to have higher psychological resilience, are able to deal with stress adaptively, and show stronger academic persistence (Duckworth & Gross, 2014; Hofmann et al., 2012). Furthermore, self-regulation is not a static ability, but can be developed through systematic and sustainable intervention (Muraven, 2012; Muraven & Baumeister, 2000).

Based on this theoretical foundation, Self-Regulation Counseling Approach (SRCA) is developed as a counseling approach that focuses on strengthening individual self-regulation capacity. SRCA integrates the principles of Social-Cognitive Theory in a systematic counseling process, with an emphasis on the development of self-awareness, behavior evaluation based on internal standards, and the implementation of adaptive behavior change. Unlike the approach that is only oriented towards symptom

relief, SRCA combines curative, preventive, and developmental functions, allowing individuals to not only overcome the problems experienced but also develop sustainable self-regulation skills.

However, empirical evidence regarding the effectiveness of SRCA in reducing ego depletion in college students is still limited. Most previous studies have not examined SRCA as a structured counseling intervention model based on cognitive social theory in the context of higher education. Therefore, this study positions itself to fill the gap by testing the effectiveness of SRCA in reducing ego depletion in students.

This research offers a scientific contribution through the integration of the strength model of self-control and Social-Cognitive Theory in the framework of counseling intervention. The novelty of this research lies in the empirical testing of SRCA as a counseling approach that specifically targets the mechanism of self-regulation in reducing ego depletion. In addition, this research also provides practical contributions in the form of contextual and applicative counseling intervention models in higher education settings, especially in supporting psychological resilience and academic functioning of students.

Based on the description, this study aims to describe the ego depletion profile in students and test the effectiveness of the Self-Regulation Counseling Approach (SRCA) in reducing ego depletion. Thus, this research is expected to provide theoretical and practical contributions to the development of guidance and counseling services in universities, especially in strengthening the self-regulation capacity of students in facing academic and social demands.

METHODS

This research uses a quasi-experimental design with a non-equivalent control group design approach (Campbell et al., 1963). This design was chosen because of the limitations in randomizing the subjects (random assignment) into experimental and control groups, so that researchers use existing groups (intact groups) in higher education settings (Creswell, 2012; Creswell & Creswell, 2017). Although it does not involve random assignment, this study still strives to control external variables through several strategies, including equalization of initial group characteristics, the use of pre-test, and the implementation of standardized treatment procedures. Thus, this design still makes it possible to test a limited causal relationship between the intervention and the changes that occur in the research subjects.

The research participants are students from several universities in Cirebon totaling 729 students, who were selected using the systematic random sampling technique to ensure the representativeness of the sample from the population. The selected sample is then grouped into an experimental group and a control group based on an existing class or group. The determination of the number of counselors in the experimental group and the control group is based on the provisions of the number of counselors in the group counseling service, which is 15 people. Therefore, the total research sample is 30 students, as shown in the following table.

Table 1. <Research Sample (Experimental Group and Control Group)>

No.	Sample of the Research	Total
1	Experimental Group	15
2	Control Group	15
	Total	30

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To minimize the potential for bias, a baseline equivalence test is carried out through a pre-test score on the ego depletion variable. The test results showed that there was no significant difference between the experimental group and the control group before the treatment was given (pre-test). Based on the t-test calculation for equality of means, a Sig. (2-tailed) value of 0,061 > 0,05 indicated initial equality.

Table 2. <Independent Sample T-Test Experimental Group and Control Group in Pre-Test>

Variable	Group	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Ego Depletion (Pre-Test)	Experimental	15	143,40	18,027	-2,144	28	0,061
	Control	15	156,93	16,516			

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Instrument testing in this study begins with a content validity test through an expert judgment procedure to ensure that each item in the instrument represents the ego depletion construct comprehensively. The instrument was developed based on five main aspects of ego depletion, namely psychological fatigue, physical fatigue, helplessness, cognitive impairment, and other behavioral disorders (Baumeister et al., 2018; Muraven, 2012).

The validation process involves three experts in the field of guidance and counseling as well as psychology. Experts are asked to assess the suitability, clarity, and relevance of each item to the construct indicators. The assessment results are analyzed using the Content Validity Index (CVI) at the item level (I-CVI) and scale (S-CVI). The item is declared valid in the Good category because it has an I-CVI value > 0,80. The analysis results showed that 51 items met the content validity criteria, with some minor revisions to increase editorial clarity on the other 13 items.

Construct validity is tested through item-total correlation analysis using the Pearson Product Moment formula. An item is declared valid if it has a correlation coefficient value (r) greater than the r table at a significance level of $\alpha = 0,05$, or practically has a value of > 0,349. The results of the analysis showed that as many as 58 items had correlation values that met the criteria, so they were declared valid. Items that do not meet the criteria, as many as 6 items, are eliminated to improve the quality of the instrument.

Table 3. <The Results of Validity Testing of Ego Depletion Instruments>

Criteria	Number of Items	Total
Valid	2, 3, 4, 6, 7, 8, 10, 11, 12, 13, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60, 61, 63, 64	58
In-Valid	1, 5, 14, 45, 54, 62	6

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In addition, a reliability test was also carried out to measure the internal consistency of the Ego Depletion Instrument using the Cronbach's Alpha coefficient. Testing is carried out on all instrument items that are declared valid. Based on the results of the reliability test, a score of 0,955 was obtained, indicating a very high degree of reliability. This can be interpreted as the Ego Depletion Instrument can be trusted as a data collection tool in increasing the ego depletion of students.

Table 4. <The Reliability of the Ego Depletion Instruments>

Cronbach's Alpha	N of Items
0,955	58

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The data analysis in this study was carried out to test the effectiveness of the Self-Regulation Counseling Approach (SRCA) in reducing the ego depletion of students by using a non-equivalent control group design. The stages of data analysis in this study are carried out systematically to ensure the fulfillment of statistical assumptions and obtain valid results. First, a normality test is carried out to find

out whether the data is normally distributed. By comparing the significance value, if it is greater than 0,05, then the data is declared to be normally distributed. Second, the variance homogeneity test is carried out to ensure that the variance between the experimental group and the control group comes from a homogeneous population, with homogeneous data criteria if the significance value is greater than 0,05. Third, a baseline equivalence test was carried out using the independent samples t-test against the pre-test score between the experimental and control groups. This test aims to ensure that there are no significant differences between the two groups before the treatment is given. Fourth, before the main analysis is carried out, a homogeneity of regression slopes assumption test is carried out as a prerequisite for the use of ANCOVA. This test is carried out by testing the interaction between covariates (pre-test scores) and group variables (experiments and controls), where if the interaction results show a significance value greater than 0,05, then the assumption is fulfilled and the ANCOVA analysis can be continued. Fifth, to test the effectiveness of the intervention more accurately, Analysis of Covariance (ANCOVA) is used with post-test scores as dependent variables, groups (experiments and controls) as independent variables, and pre-test scores as covariates. This analysis is used to test the difference in post-test scores between groups by controlling the difference in initial conditions (pre-test), thus providing a more accurate estimate of the intervention effect.

In addition to the analysis of the total ego depletion score, the analysis is also carried out in each dimension, namely psychological fatigue, physical fatigue, helplessness, cognitive impairment, and other behavioral disorders. This per-dimensional analysis is carried out as a follow-up analysis to provide a more detailed picture of the effects of the intervention. To anticipate the potential bias due to multiple statistical tests (multiple comparisons), the interpretation of the results in the analysis per dimension is carried out carefully by considering the consistency of the result pattern and statistical significance. The entire analysis was carried out with a significance level of $\alpha = 0,05$.

RESULTS AND DISCUSSIONS

The student ego depletion profile obtained through the Ego Depletion Instrument against 729 student respondents from four universities in the Cirebon region obtained the following results.

Table 5. <Frequency Distribution Ego Depletion Profile Student>

No.	Category	f	%	Ego Depletion Level
1	High	237	32,51	52,085
2	Medium	492	67,49	
3	Low	0	0	
	Total	729	100	

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Based on the table above, the general profile of student ego depletion is generally in the medium category with 492 people (67,49%), followed by the high category with 237 people (32,51%). Based on the frequency distribution, the student's ego depletion level is in the Medium category with an ego depletion level score of 52,085. In this category, student ego depletion is described as a condition where students are still able to resist the urge and act with a fairly good consideration. The emotional state of students is relatively controlled and still has the desire to achieve goals. Students in this category also show a sufficient sense of responsibility, although they tend to be passive and less responsive to the surrounding environment. The quality of student performance is still quite good and still has hope and ability to concentrate. The rationality of students is quite good, with adequate ability to solve problems and do not experience significant physical fatigue.

To better understand ego depletion thoroughly, the general profile of student ego depletion can be seen based on each aspect as presented in the following graph.

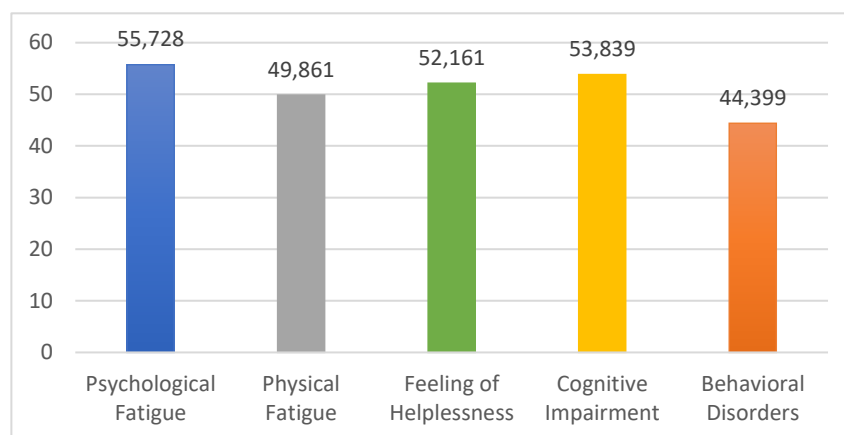


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Figure 1. <Ego Depletion Level based on Aspects>

Overall, students experience ego depletion with a medium level in every aspect, but the aspects of psychological fatigue and cognitive impairment have the biggest contribution to the depletion of students' ego. The aspect of psychological fatigue has a score of 55,728 or the highest among other aspects, which shows that students feel mentally and emotionally tired due to the depletion of resources, resulting in difficulty in controlling themselves and emotions, and loss of motivation. The next highest aspect is the aspect of cognitive impairment with a score of 53,839, this shows the condition of impaired thinking ability caused by a decrease in energy in students' thinking so that it affects the ability to concentrate, think rationally, and problem-solving ability. The aspect of feeling helpless has an ego depletion rate of 52,161, this shows that students do not have the energy to do something and are unable to overcome problems that have an impact on passive and hopeless behavior shown by students. The aspect of physical fatigue has an ego depletion rate of 49,861 which shows that the decline in students' physical ability is characterized by the appearance of symptoms of fatigue, fatigue, headache, and psychism. The aspect with the lowest level of ego depletion is the aspect of other behavioral disorders that got a score of 44,399 which shows that the depletion of student ego is characterized by the emergence of negative reactions in the form of impulsive behavior and interpersonal problems.

From a total of 729 students, as many as 30 students were selected as research subjects for experimental studies, consisting of 15 students in the experimental group and 15 students in the control group. The student's ego depletion profile in the experimental group during the pre-test obtained a score of 50,184, while the control group obtained a score of 54,851. The ego depletion profile in both groups is in the medium category, as shown in the following table.

Table 6. <Ego Depletion Profile of Experimental and Control Groups (Pre-Test)>

No.	Group	Frequency			Ego Depletion Level	Category
		High	Medium	Low		
1	Experimental	2	13	0	50,184	Medium
2	Control	9	6	0	54,851	Medium

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Based on the post-test or after giving the self-regulation counseling approach (SRCA) intervention, a decrease in the level of ego depletion was obtained. The level of ego depletion of the experimental group and the control group in the post-test can be seen in the following graph.

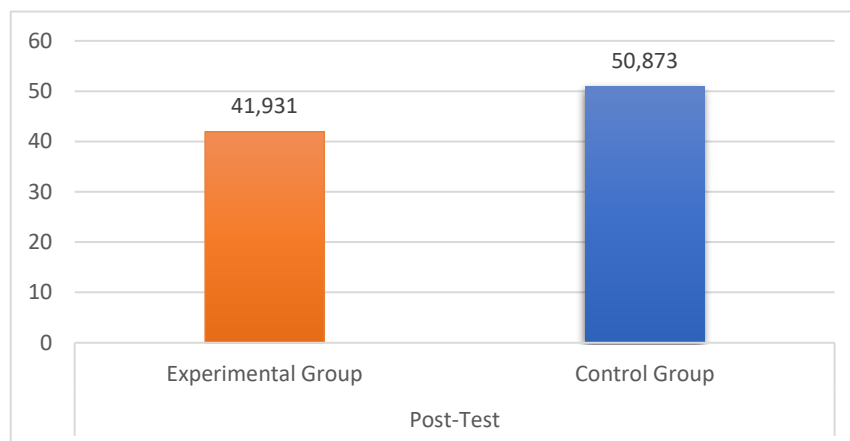


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Figure 2. Ego Depletion Level of Experimental and Control Groups in Post-Test

Based on the post-test results, the level of ego depletion in the experimental group experienced a significant decrease of 41,931. Meanwhile, the ego depletion rate in the control group was 50,873. The level of ego depletion of the students in the experimental and control groups in the post-test both experienced a decrease. The experimental group showed a greater decrease than the control group. The decrease in the level of ego depletion in the control group may be caused by natural adaptation or other environmental factors, without the direct effect of intervention. This indicates that without special intervention, the decrease in ego depletion tends to be more limited, although other factors such as natural adaptation or environmental conditions can still contribute.

Before conducting the main analysis using ANCOVA, the homogeneity of regression slopes assumption test is first carried out by testing the interaction between the pre-test score and the group (experiment and control). The test results show that the interaction is not significant with Sig. 0,067 greater than $\alpha = 0,05$, so the assumption is fulfilled and the ANCOVA analysis can be continued.

Table 7. <Tests of Homogeneity of Regression Slopes>

Dependent Variable		: Post_Test	
F	df1	ff2	Sig.
5,479	1	28	0,067

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Furthermore, the results of ANCOVA analysis showed that there was a significant influence of the group on the post-test score after controlling for the pre-test score. This finding indicates that the self-regulation counseling approach (SRCA) intervention contributes to the decrease in student ego depletion.

Table 8. <Tests of Between-Subjects Effects>

Dependent Variable		: Post_Test				
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Effect Size
Pre_Test	394,773	1	394,773	1,305	0,263	0,046
Groups	3308,256	1	3308,256	10,940	0,003	0,288

a. R Squared = 0,394 (Adjusted R Squared = 0,349)

Dependent Variable		: Post_Test				
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Effect Size

b. Computen Using $\alpha = 0,05$

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Based on ANCOVA calculations on the between-subjects effects, the Sig value was obtained. 0,003 smaller than $\alpha = 0,05$ which shows that there is a significant difference in the level of ego depletion when post-test in the experimental group and the control group. Then, if you look at the pre-test covariate relationship with the dependent variable post-test, showing a result of 0,263 greater than $\alpha = 0,05$ which means that the pre-test score did not significantly predict the post-test score. In addition, based on the effect size, we obtained a score of 0,288, which shows that it is in the large effect category because it is more than 0,14.

Table 9. <Pairwise Comparisons>

Dependent Variable		: Post_Test		
(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig. ^b
Experiment	Control	-22,661	6,851	0,003
Control	Experiment	22,661	6,851	0,003

Adjusment for multiple comparisons: Bonferroni

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Based on the table above, the comparison of the Mean Difference (I-J) value of the experimental group to the control group has a negative value of (-22,661), which indicates that the respondents in the experimental group had a lower level of ego depletion than the respondents in the control group. This can also be seen from the results of Sig. As much as 0,003, which is less than $\alpha = 0,05$ which indicates the significance of the difference in the level of ego depletion of the experimental group and the control group.

The ANCOVA test was also carried out to test the significance level of each aspect of students' ego depletion. To find out the significance level of the ego depletion aspect after being given the self-regulation counseling approach (SRCA) intervention, you can see the following table.

Table 10. <Pairwise Comparisons Aspects of Ego Depletion>

Dependent Variable			: Post_Test			
(I) Groups	(J) Groups	Ego Depletion Aspects	Mean Difference (I-J)	Std. Error	Sig. ^b	Description
Experiment	Control	Psychological Fatigue	-4,770	1,490	0,003	Significant
		Physical Fatigue	-2,597	2,429	0,029	Significant
		Feelings of Helplessness	-7,339	2,030	0,001	Significant
		Cognitive Impairment	-3,532	1,642	0,041	Significant
		Behavioral Disorders	-5,671	1,173	0,001	Significant

Adjusment for multiple comparisons: Bonferroni

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Based on the table above, the Mean Difference (I-J) value of the experimental group to the control group has a negative value, which indicates that every aspect of the experimental group's ego depletion is lower than the control group. In addition, based on the value of Sig., each aspect of ego depletion is less than $\alpha = 0,05$ which shows significance in every aspect of ego depletion. This can be interpreted as the provision of a self-regulation counseling approach (SRCA) intervention showing an indication of

effectiveness in reducing ego depletion in various aspects. This finding is in line with the results of the ANCOVA analysis, which shows a significant difference between the experimental group and the control after controlling the initial condition.

This research aims to describe the ego depletion profile of students and test the effectiveness of the Self-Regulation Counseling Approach (SRCA) in reducing ego depletion. The research results show that in general, the ego depletion of students is in the medium category, with psychological fatigue and cognitive disorders as the most dominant aspects. In addition, the main findings of this study show that SRCA intervention contributes to reducing student ego depletion, both as a whole and in every aspect. This finding provides empirical support for the theoretical framework of ego depletion and Social-Cognitive Theory, although it still needs to be studied further in a broader context.

The findings reveal that the majority of students are at a medium category ego depletion level, in line with the results of a systematic study conducted by ([Gissubel et al., 2018](#)), which shows that students tend to experience depletion of self-regulation resources due to continuous academic and social demands. The condition of moderate ego depletion reflects a situation where students are still able to control themselves and maintain their academic functions, but with a considerable psychological cost. This shows that students are in a vulnerable condition, where failure of self-regulation can easily occur when demands increase or psychological support decreases.

The dominance of the aspect of psychological fatigue and cognitive impairment strengthens the findings of previous research stating that ego depletion first impacts mental and cognitive functions before manifesting in the form of maladaptive behavior and decreased performance ([Englert et al., 2015](#); [Hofmann et al., 2012](#); [Yan et al., 2025](#)). Psychological fatigue reflects the depletion of mental energy due to the continuous use of self-regulation, while cognitive impairment indicates a decrease in the capacity of attention, concentration, and problem-solving. In an academic context, this condition is very relevant because students are required to maintain focus and rational decision-making for a long period of time.

This finding also supports the view of ([Baumeister et al., 2018](#)) that ego depletion is not just physical fatigue, but a complex psychological condition that involves affective, cognitive, and motivational aspects. Thus, the student ego depletion profile found in this study strengthens the evidence that ego depletion can be understood as a relevant phenomenon in the context of students' academic life, especially in the early adult development phase.

The effectiveness of SRCA intervention in reducing student ego depletion, showed that students who followed SRCA intervention experienced a significant decrease in ego depletion compared to the control group. This finding supports the assumption that self-regulation is a capacity that can be developed through systematic intervention ([Muraven, 2012](#); [Muraven & Baumeister, 2000](#)). SRCA which emphasizes the process of self-observation, judgmental process, and self-reaction allows students to actively monitor their internal conditions, evaluate behavior based on internal standards, and develop adaptive responses to academic and social pressures. Thus, SRCA not only reduces the symptoms of ego depletion, but also strengthens the capacity of self-regulation as a long-term skill.

A significant decrease in ego depletion in the experimental group showed that SRCA not only had the potential to help students manage psychological fatigue, but could also contribute to the strengthening of self-regulation capacity more sustainably. This finding is in line with the research of ([Frieze et al., 2019](#)) which asserts that self-regulation interventions that target self-awareness and behavior evaluation can reduce the negative impact of ego depletion. On the other hand, a relatively small decrease in ego depletion in the control group indicates that natural adaptation or environmental factors alone are not enough to optimally reduce ego depletion. This reinforces the argument that ego depletion requires structured and deliberate psychological intervention, rather than simply relying on passive recovery or the passage of time.

SRCA shows a tendency to contribute to reducing various aspects of ego depletion, although the level of influence varies between dimensions. The decrease in the aspect of psychological fatigue and cognitive impairment indicates that SRCA has the potential to contribute to reducing mental fatigue and supporting the cognitive function of students. This is in line with the view of (Hofmann et al., 2012) that strengthening self-regulation function directly contributes to improving executive control and emotional stability.

The effectiveness of SRCA on the aspect of feeling helpless indicates that this approach has the potential to increase the sense of agency of students. In the framework of Social-Cognitive Theory, agency strengthening is a key element in self-regulation, because individuals who feel able to control their behavior will be more motivated to face challenges (Bandura, 2006; 2020). This finding is also in line with the study of Duckworth and Gross (2014) which shows that individuals with strong self-regulation tend to have higher psychological resilience. The decrease in other behavioral disorders, such as impulsiveness and interpersonal problems, shows that strengthening self-regulation through SRCA not only has an impact on internal aspects, but also on external behavioral manifestations. This supports the findings of Osgood and Muraven (2015), that the failure of self-regulation due to ego depletion often leads to impulsive behavior and a decrease in the quality of social relationships.

Theoretically, this study provides an early contribution in integrating the concept of ego depletion into the framework of counseling interventions based on Social Cognitive Theory. This study shows that ego depletion cannot only be understood as a short-term experimental phenomenon, but also as a psychological condition that can be addressed through a systematic and continuous counseling approach. Thus, this research bridges the gap between the ego depletion theory and the practice of counseling in higher education.

As for practically, SRCA has the potential to be developed as one of the application intervention models for guidance and counseling services in universities. This approach is relevant to be developed as a preventive and developmental service, especially in helping students face high academic demands and maintain psychological well-being. SRCA also has the potential to be integrated into student development programs, life skills training, and campus mental health services.

Although this study shows promising results, there are several limitations that need to be considered. First, the sample size is relatively small, so the generalization of the findings needs to be done carefully. Second, this study uses a quasi-experimental design in a small group context, so further research with longitudinal design and larger samples is highly recommended. Third, further research can explore the effectiveness of SRCA on other populations, such as lecturers or students with high academic stress levels, as well as test the integration of SRCA with other counseling approaches.

CONCLUSIONS

This research aims to describe the student's ego depletion profile and test the contribution of the Self-Regulation Counseling Approach (SRCA) in reducing it. The research results show that in general, the ego depletion of students is in the medium category, with psychological fatigue and cognitive disorders as the most dominant aspects. The analysis showed that the experimental group that obtained SRCA intervention experienced a greater decrease in ego depletion than the control group, and this finding was supported by the ANCOVA results which indicated a significant difference after controlling the initial condition. This result shows that SRCA has the potential to contribute to reducing psychological fatigue and supporting the cognitive function of students. Practically, this approach can be considered as one of the alternative interventions in guidance and counseling services in universities. However, the limitations of quasi-experimental design and the scope of the sample require the interpretation of the results to be carried out carefully and open up opportunities for further research with a stronger design and a wider scope.

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AUTHOR CONTRIBUTION STATEMENT

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