

Analysis of the structural relationship emotional regulation, academic procrastination, and academic burnout

Arbin Janu Setiyowati¹, Indriyana Rachmawati², Bambang Budi Wiyono³, Henny Indreswari¹,
Eko Pramudya Laksana¹

¹Department of Guidance and Counseling, Faculty of Education, Universitas Negeri Malang, Malang, Indonesia

²Department of Educational Psychology and Counseling, Faculty of Education, Universitas Negeri Yogyakarta, Sleman, Indonesia

³Department of Educational Administration, Faculty of Education, Universitas Negeri Malang, Malang, Indonesia

Article Info

Article history:

Received Feb 10, 2023

Revised Nov 28, 2023

Accepted Dec 4, 2023

Keywords:

Academic burnout

Academic procrastination

Emotional regulation

Guidance and counseling

Structural equation modelling

ABSTRACT

Academic burnout (AB) is a problem that many students are currently facing since the online learning policy was implemented. This research aims to analyze the structural relationship between emotional regulation (ER), academic procrastination (AP), and student AB. This research used ex post facto causal relationship explanatory design. The research subjects were 417 high school students in East Java. The sampling was cluster random sampling technique. The data analysis technique used the Rasch model and structural equation modelling (SEM). The results showed that there was a significant relationship between ER and AP and AB. The implication of findings on the school guidance and counselling program is that the counsellors must pay attention to the factors that contribute to student AB so that counselling services can be designed to prevent student AB.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Arbin Janu Setiyowati

Department of Guidance and Counseling, Faculty of Education, Universitas Negeri Malang

Jl. Semarang, No.5, Malang, 65145, Indonesia

Email: arbin.janu.fip@um.ac.id

1. INTRODUCTION

Student academic burnout (AB) does not only occur on the physical aspect, but also on the emotional aspect. The academic demands and challenges make students experience AB if they cannot manage their emotion and label it accurately, choose and use strategies to change emotion, and assess the effectiveness of the chosen strategies [1]. This statement shows that AB is related to individual emotional conditions and how an individual manages and overcomes emotions within. Rahmati [2] added that burnout is often described as a syndrome of emotional exhaustion, depersonalization, and low personal achievement. It shows that emotional exhaustion indicates burnout in individual, one of which is in terms of academics.

High academic load during the learning process causes students to experience academic stress, emotional exhaustion, depersonalization, and even low academic achievement [3]–[5]. If this condition continues, it can affect academic performance and bring negative impacts on students' psychological health because AB can occur as they go to higher grade levels. AB can occur as the grade is getting higher because it demands students to have longer time to study [6]. It shows that the higher the grade level, the more likely the risk of AB is. In addition to the grade level, ethnic diversity is also considered to affect AB. Ethnic diversity is a predictor of individual AB [7], [8]. Therefore, it can be said that individual AB is thought to be affected by the grade level and ethnicity an individual in the academic environment.

Academic burnout that is not overcome can lead to emotional exhaustion caused by individual's inability to regulate emotions. Emotions greatly affect individual's cognitive process, including attention,

learning, memory, perception, reasoning, and problem solving [1], [9]. Individuals who are flexible and can manage their emotions well, are considered to have a good emotion regulation. However, it is possible that there are individuals who cannot regulate their emotions properly, which is indicated by the inability to respond and express appropriately when experiencing emotional turmoil within themselves [10], [11]. This condition shows that individual's ability to regulate emotions can be said to be not managed optimally.

Individual's inability to optimally regulate emotions due to AB can have worse impacts with the existence of academic procrastination (AP). Academic burnout, fear of failure, low internal locus of control, low self-concept, stress, emotional exhaustion, low self-efficacy lead to procrastination behavior in completing work [1], [12]–[21]. This is because they must do the tasks as there are pressure and demand of academic assignments. A lot of studies have been conducted to overcome procrastination [22]–[27]. Siros and Pychyl [28] stated that AP is a decision taken when individuals are not able to manage their emotions well. If this behavior continues, they would not be able to achieve the expected academic achievement.

Declines in student academic achievement is caused by the procrastination behavior, not to mention that procrastination leads to a decrease in students' wellbeing because of shame and guilt [29]–[32]. It shows that procrastination has negative impacts on student academic life, as it affects their academic wellbeing in the future. However, another study shows different results that AP causes student AB. It is because students have difficulties in holding tasks and feelings [12]. This indicates the need for further research to determine the relationship model of AB, emotional regulation (ER), and student AP which may be affected by other variables, such as grade, age, and ethnicity. Therefore, the purpose of this research is to examine the structural relationship model between AB, AP and ER. The results of this research are expected to provide benefits for the development of guidance and counselling service programs in schools in preventing and overcoming student AB.

2. RESEARCH METHOD

This research used causal relationship explanatory design to determine the causal relationship between variables Figure 1. The subjects of this research were 417 high school students consisting of 132 male students and 285 female students. The sampling technique was random sampling by considering the willingness of students to be involved in the research. The instruments were ER scale, AP scale, and AB scale. Each statement in the research instrument was measured using Likert scale. This research used the Rasch model analysis technique to determine the quality of the items measured both the validity and reliability of the scale [33]–[35]. This form collected demographic information of the participants including their age, gender, grade, an ethnicity, and location their schools (1 region of Indonesian, East Java). This study used Rasch model and structural equation modelling (SEM). The analysis technique of the scale items with Rasch model used the Winsteps software. SEM for data analysis and testing relationships between variables. Meanwhile, the data obtained was analyzed using SEM with Amos software. SEM is a family of multivariate statistical analysis methods used to model a network of complex structural relationships between one or more measured variables and latent constructs.

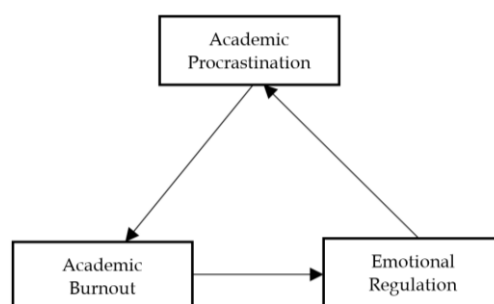


Figure 1. Causal relationship between variables

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Validity and reliability of instruments

The three instruments used in this research have met the validity and reliability requirements as data collection instruments. The three scales had good construct validity and reliability. The emotion regulation scale had a good reliability value of 0.756. The AP scale had a good reliability value of 0.867. Likewise, the AB scale also had a good reliability value of 0.886.

Convergent validity examines whether each indicator becomes one in measuring a single concept [36]. The results of the analysis showed that each construct has an average variance extracted (AVE) value above 0.5, indicating that the indicator has convergent validity [37]. Convergent validity tests that the acceptable loading factor value is above 0.6 [37]. However, with the AVE value of ER variable, which is still above 0.05, the item can be maintained. This allows for an influence on the model fit.

Discriminant validity examines whether an instrument is unrelated or distinguishable from other instruments [36]. The results of the analysis showed that the variance between AP and AB was $(0.112)^2=0.013$. This value was lower than AVE of AP (0.6074) and AB (0.76575). It proves that the AP construct can distinguish the AB construct in this model. The variance of AP and ER was the same $(-0.537)^2=0.288$. It was below AVE AP and AVE ER. Lastly, variance of AB and ER was $(-0.237)^2=0.056$. The variance value was less than the AVE value of AB and ER, respectively. Therefore, it can be concluded that the three constructs in this model can distinguish the constructs from one another

3.1.2. Normality test

Normality of the data is one of the requirements in SEM modeling. Normality test is emphasized on multivariate data by looking at the skewness value, kurtosis value, and statistically can be seen from the critical ratio (CR). If using a significance level of 5 percent, then the CR value between -2.58 to 2.58 $(-2.5 < CR < 2.58)$ is said to be normally distributed, both univariate and multivariate. So, the data with normally distributed categories will be analyzed for the next stage. Each item meets the normality test if the skew value is between -2 and +2 and the kurtosis value is between -10 and +10, so that the univariate assumption of normality is met. The three instruments (AP, AB and ER) had met these requirements and could be tested further.

3.1.3. Outlier test

The outlier assumption test was carried out using the Mahalanobis distance test which indicates to what extend the data is far from the center of a point. The criterion used was the Mahalanobis D-square (MD) value. The results of the analysis showed that the MD value was less than the chi-square value of 117.632, indicating that there is no observation that included as outliers, so that the assumptions are met.

3.1.4. Confirmatory factor analysis

There is no absolute universal rule in declaring a fit model. Some literatures provide acceptable guidelines that the fit model of the data with criteria, including comparative fit index (CFI), Tucker–Lewis index (TLI), normed fit index (NFI) and incremental fit index (IFI) is above 0.90 [36]. In addition, based on the root mean square error of approximation (RMSEA) value, the model is declared fit because the RMSEA value of 0.054 is smaller than 0.08 as shown in Table 1 [37], [38]. The initial stage of conceptual model is presented in Figure 2.

Table 1. Summary of initial stage of fit model of AB, AP, and emotion regulation variables

Fit index	Confirmatory factor analysis	Good fit criteria	Description
RMSEA	0.053	$0 \leq RMSEA \leq 0.05$	Fit
TLI/NNFI	0.896	$0.896 \leq TLI \leq 1.00$	Fit
CFI	0.913	$0.913 \leq CFI \leq 1.00$	Fit
NFI	0.852	$0.852 \leq NFI \leq 1.00$	Fit
IFI	0.914	$0.914 \leq IFI \leq 1.00$	Fit

3.1.5. Path analysis

From the results of path analysis, it can be seen that the model is fits if $\chi^2=6.340$ $df=8$, $p=0.609$, CFI=1.000, IFI=1.005, NFI=0.983, RFI=0.968, TLI=1.009, RMSEA=0.000. AIC=44.340 Figure 3. There were several demographic factors that were removed from the model because they did not have a significant relationship with the independent variables. It shows that gender, parent education, and majors have small impacts on the results of the analysis [36]. Age, class, and ethnicity show a significant effect, so they support the research findings.

3.1.6. Full structural equation modelling

Confirmatory factor analysis was conducted to test whether the model has the unidimensionality of the indicators that make up the latent variables. In this study, there are three latent variables, namely AP (three indicators), ER (three indicators), and AB (three indicators). By using the AMOS program, the results of the confirmatory factor analysis are obtained as shown in Figure 4. The model fit criteria as presented in Table 2. Maximum likelihood estimation method was used in conducting SEM analysis with 95% confidence level.

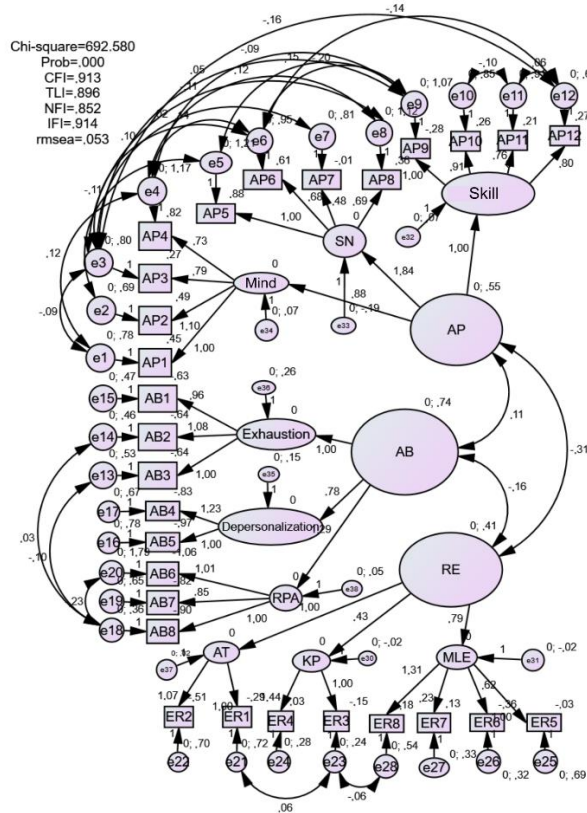


Figure 2. Initial stage of conceptual model

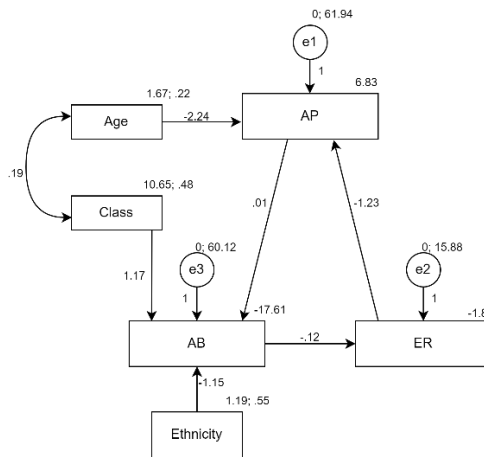


Figure 3. Path diagram of AB

The model fit criteria have been met by the model structure with the results as presented in Table 3 [36], [37]. The results of the analysis indicated that AB was negatively significant as a predictor of RE ($\beta=-0.296, Z=-3.456, p<0.001$). Meanwhile, RE was a significant negative predictor of AP ($\beta=0.653, Z=-7.727, p<0.001$). However, the result was different on AP as a predictor of AB because no significant relationship was found ($\beta=-0.006, Z=-0.073, p>0.05$). Moreover, age can be a negative significant predictor of AP ($\beta=-0.115, Z=-2.694, p<0.05$). One of the significant positive predictors in this research was grade level on AB ($\beta=0.126, Z=2.408, p>0.05$). In addition to the grade level, ethnicity factor was also a negative significant predictor of AB ($\beta=-0.136, Z=-2.596, p>0.05$). Other demographic factors of the table were excluded from the model because they did not have significant effects on the model and no significant relationship was found with any dependent variable.

From the results of calculations through confirmatory factor analysis and SEM, the model in this research is acceptable. Furthermore, the results of the analysis of direct, indirect, and total relationships are presented in Table 3. The table shows that AB was a significant and full mediator on the relationship between two variables of ethnicity and RE ($\beta=0.035, p<0.05$), grade level and RE ($\beta=-0.035, p<0.05$), ethnicity and AP ($\beta=-0.023, p<0.05$), grade level and AP ($\beta=0.023, p<0.05$). Furthermore, a positive mediator effect was found between AB and AP via RE ($\beta=0.162, p<0.05$).

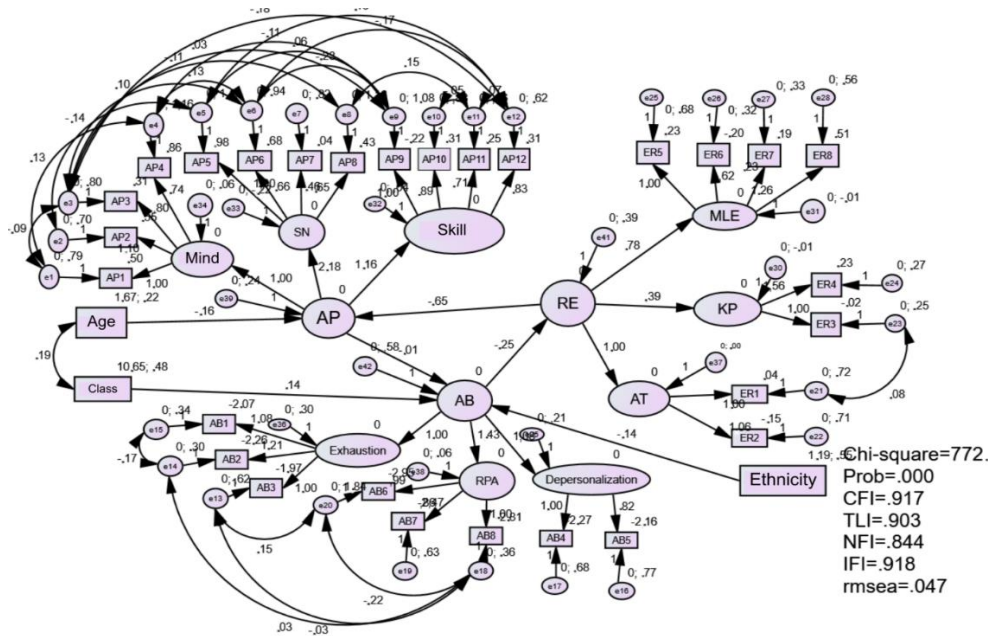


Figure 4. Conceptual model of AB

Table 2. Results of fit model test

			Standardized estimate (β)	Estimate (B)	S.E.	T-value	P
AB	→	RE	-0.296	-0.250	0.072	- 3.456	***
AP	→	AB	-0.006	-0.007	0.097	-0.073	0.942
RE	→	AP	-0.653	-0.646	0.084	-7.727	***
Age	→	AP	-0.115	-0.159	0.059	-2.694	0.007
Grade	→	AB	0.126	0.141	0.059	2.408	0.016
Ethnicity	→	AB	-0.136	-0.141	0.054	-2.596	0.009
Age	<--->	Grade		0.190	0.018	10.338	***
Squared multiple correlation (R2)							
AP				0.435			
AB				0.032			
ER				0.086			

Fit statistics model: $\chi^2=772.749$; $\chi^2/df=1.937$; $df=339$; $p=0.000$; $CFI=0.917$; $IFI=0.918$; $TLI=0.903$; $NFI=0.844$; $RFI=0.819$; $RMSEA=0.047$; $AIC=1028.749$

Table 3. Result of direct and indirect effects

Relationships	Direct effect	Indirect effect	Confidence interval		p-value	Conclusion
			Low	High		
Ethnicity→AB→RE	0.000	0.035	0.03	0.097	0.034	Full mediator
Grade→AB→RE	0.000	-0.035	-0.079	-0.08	0.012	Full mediator
Ethnicity→AB→AP	0.000	-0.023	-0.066	-0.002	0.035	Full mediator
Grade→AB→AP	0.000	0.023	0.005	0.056	0.013	Full mediator
AB→RE→AP	0.000	0.162	0.054	0.300	0.003	Full mediator

Note: unstandardized coefficients reported. Values in parentheses are T-values. Bootstrap sample=5.000 with replacement

3.2. Discussion

3.2.1. Relationship model

Technology development is one of the roots of AB, especially the emergence of online learning. Sophisticated technology and resources are two aspects that need to be prepared to reduce anxiety in online learning. Rapid technological changes without learning new skills and materials available cause individuals to

carry heavy workload and create emotional exhaustion, so they cannot complete their tasks and end up with procrastinate [39]–[42]. Inability of individuals to manage their emotions is manifested in the form of AB causing them to procrastinate completing school assignments or known as AP. AP is the delay of submitting academic assignments because individuals are immersed in negative emotions and thoughts, such as high standards of performance, low self-confidence, and fear of failure [43]–[45]. This means that inability of individuals to manage their emotions leads to procrastination behavior. Procrastination involves low individual self-regulation, one of which is emotion [46]–[48]. It shows that individual AP is also caused by the low regulation of individual emotions, and in the end, the individual experiences AB. Thus, it can be concluded that low ER causes AB which impacts on procrastination in completing academic tasks Figure 5.

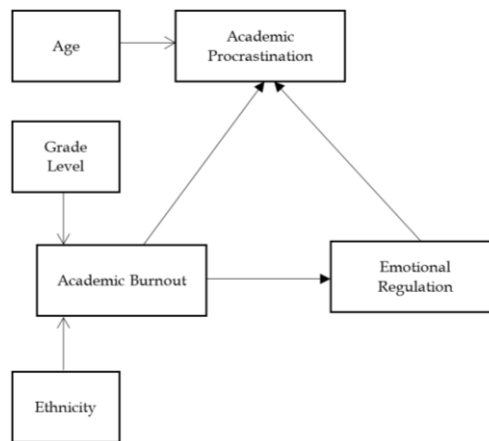


Figure 5. AB model after fit model test and relationship between constructs

3.2.2. Relationship between constructs

a. Relationship between academic burnout and emotional regulation

The results show that AB has negative effects on ER. ER has negative effects on student AB since individuals with high ER have better emotional control and sufficient knowledge to display emotions appropriately [49]–[51]. This is because students know how to overcome negative feelings caused by stress through self-reflection, so they do not experience emotional exhaustion. Individuals, who are able to do self-reflection on their stress, will continue to strive for thinking about the best academic practices and improving their academic quality. ER subscales of suppression and reassessment, have a high correlation with the burnout subscale, including emotional exhaustion, personal achievement, and depersonalization [52], [53]. It means that individuals who focus on changing how they interpret situations to reduce emotional impact and focus on the desired response to prevent inner feelings, have the ability to reduce AB. Reassessment helps individuals on the level of personal achievement towards work, while cognitive reassessment has a negative effect on AB [54], [55]. This is because individuals with good self-achievement and cognitive reassessment are considered to have high academic buoyancy and reduce maladaptive behaviors, such as burnout. Personal achievement has a high contribution to burnout, while cognitive reassessment affects individual mindset for achievement, meaning, and self-confidence so that it can prevent burnout. Therefore, it can be concluded that individuals who can manage their emotions well through suppression and reassessment, are able to reduce AB. So, they can improve their academic quality and academic practice.

b. Relationship between academic procrastination and academic burnout

The results show that there is no significant relationship between AP as a predictor of AB. Ocal states that AB is the strongest predictor of individual AP [56]. It is because heavy school workload contributes to individual AB, resulting in procrastinating behavior in completing assignments. Also, there is a strong relationship between AP and AB [12], [57]. Individuals with academic stress, maladaptive perfectionism, and fear of failure may experience higher AB. The condition occurs due to procrastination habit in completing academic tasks causing stress in the short term and burnout in the long term. This stress is caused by maladaptive attitude of perfectionism, such as avoiding mistakes and setting high standards for oneself. Individuals who experience AP have a high level of AB, and vice versa [58], [59]. This is because they experience inadequate academic involvement. Therefore, it can be said that AB is a predictor of AP, compared to the other way around. School workload causes students to be exhausted because they feel stressed, create maladaptive perfectionism, and have fear of failure.

c. Relationship between emotional regulation and academic procrastination

The results show that ER is a negative predictor of AP. Inability of individuals to tolerate aversive emotions towards academic tasks tends to choose to avoid tasks that are boring or unpleasant [60], [61]. This is because they cannot modify aversive emotions to manage their emotions, resulting in maladaptive emotions and are likely to be unable to handle tedious or unpleasant tasks. ER is related to AP due to individual's inability to regulate emotions, especially in trusting his ability to regulate unpleasant emotions, encouraging behavior to delay task completion [14], [62]. This means that when individuals are faced with tasks that are considered difficult or unpleasant, they show more negative emotions, such as anxiety, so they choose to postpone their tasks rather than pursue goals. Procrastination in an academic environment are the feelings to do better than wanting to feel worse, causing anxiety in individuals [63], [64]. The anxiety that arises in the individual is due to the inability to formulate a strategic plan to complete the task, so they experience difficulties in managing emotions. As a consequence, the individual chooses to delay completing the task. Therefore, it can be concluded that the relationship between ER and AP can be seen from individual's inability to manage emotions, avoiding boring or unpleasant academic tasks, thus choosing to procrastinate completing assignments.

d. Relationship between age and academic procrastination

The results show that age is a significant negative predictor of AP. This means that the older the age, the lower the level of AP is. Age is related to the type of procrastination, both active and passive procrastination, and younger people tend to delay completing their academic tasks [65], [66]. This occurs because avoidance of tasks is higher, believes the benefits of procrastination, lack of attention to school material, and failure to learn the materials. Bekleyen [67] suggested different results, that age was not correlated with procrastination behavior, although it was found that individuals older than 25 showed lower procrastination behavior, but this result needs to be reviewed because it does not lead to significant results. These results indicate that individual's procrastination behavior may reduce with age, meaning that the older the age, the less procrastination behavior is. It is because older individuals can socialize, release stress, and are able to work under pressure. Ugurlu [68] adds that with age, AP behavior can decrease because of individual's ability to make decisions. The improvement of individual's ability in making decisions increases the ability to think rationally, their intuition, attachment, and spontaneity. Therefore, it can be concluded that age affects the level of individual AP. The older the age, the less AP behavior is, for they are able to make decisions rationally, intuitively, utilize attachment, and spontaneity to complete academic tasks.

e. Relationship between grade level and academic burnout

The results show that grade level is a significant positive predictor of AB. AB in individuals does not differ significantly according to students' grade level [69]. It means that AB is experienced by student on each grade level. AB appears at certain school grade and is influenced by the burden of learning time [6]. The higher the grade level, the higher the AB due to the learning time; direct, independent, and practical learning. Long study hours, both daily and weekly, the number of students in class and the fulfillment of needs and school management provide impacts on student AB [70], [71]. This is caused by the increase in the risk of student academic stress and pressure because of lack of monitoring from the school. Therefore, it can be concluded that AB is experienced by individuals at all grade levels due to the long study time load, student learning needs that have not been fully met, and demands from schools causing academic stress on students. This academic stress causes students to experience AB because they are not able to meet the academic demands optimally.

f. Relationship between ethnicity and academic burnout

The results show that ethnicity is a significant negative predictor of AB. There is a significant relationship between AB and ethnicity [72]–[74]. This is because of the influence of culture in managing the level of depression and Hispanic background, so it can trigger AB. Ethnic diversity contributes to one of the indicators of AB, which is emotional exhaustion, thus requiring individual involvement and responsiveness [7], [8]. Emotional exhaustion is related to the school context, school characteristics, and teacher perceptions of students which have an impact on exhaustion. The study of the relationship between ethnicity and AB needs to pay attention to differences in social context, the history of life experiences, intersectionality problems, structural and systemic barriers that risk the existence of neglected individuals [75], [76]. These problems need to be considered by educational institutions to understand the extent to which life experiences of each individual affects the emergence of AB. Therefore, it can be concluded that ethnicity affects AB in terms of life experiences, intersectionality problems, and issues experienced at school, causing academic pressure within individuals, reducing engagement and responsiveness, and eventually impacts on the increase of AB.

g. Relationship between ethnicity and emotional regulation moderated by academic burnout

The results show that AB is a predictor of the relationship between ethnicity and ER. Ethnicity affects individual's ER on his ability to accept, reflect, and the tendency to blame others which has an impact on

emotional exhaustion [77], [78]. Emotional exhaustion is an indicator of AB, an individual's inability to accept, reflect, and the tendency to blame others has an impact on his ability to manage his emotions. Ethnic heterogeneity in a working group is positively related to ER [79]. It means that diverse ethnic groups help individuals in managing their inner emotions to avoid being discriminatory or prejudiced against other ethnic groups. The ethnic groups scrutinized in this research include Javanese, Sundanese, Madurese, and Chinese. A study by Wu *et al.* [80] state that individuals from ethnic groups, one of which is Chinese, are able to reassess the conflicts they experience and have an impact on AB. It means that individual's ability to manage the conflict with the task being completed, has an impact on reducing the AB in Chinese ethnic group. The ethnicity variable contributes to an individual's ability to manage emotions and overcome AB [81], [82]. Individuals from certain ethnic groups who do a lot of emotional suppression will experience AB and have an impact on personal achievement. Therefore, it can be concluded that heterogeneous ethnicity affects individual ER which also affects AB. Individuals with suppressing emotions or reassessing habits experienced issues by accepting, reflecting, and avoiding the tendency to blame others, will reduce AB.

h. Relationship between grade level and emotional regulation moderated by academic burnout

The results show that AB is a moderator of the relationship between grade level and ER. Individuals with high ER abilities at certain grade levels can predict situations that cause AB [49], [83], [84]. Individuals with high ER are shown to be able to contribute to the establishment of warm and caring relationships, dealing with problems effectively, creating a relaxed classroom atmosphere, so as to increase positive emotions and prevent AB. Furthermore, the classroom climate also needs to be considered in preventing the emergence of AB. Some study show that individual's ability to manage negative emotions to create a positive classroom climate promotes future improvement in life over AB [85]–[87]. A positive classroom climate can be established with positive social interactions, good learning dynamics for students, and delivery of subject matter to achieve better goals, so that students are willing to be involved in academic activities, are diligent, and do not get tired easily. Therefore, it can be concluded that grade level is related to individual ER to help prevent the AB. Individuals with positive ER, for instance, individuals who are able to build warm and caring relationships, cope with problems, and supported by an adequate classroom climate, can reduce AB.

i. Relationship between ethnicity and academic procrastination moderated by academic burnout

The results show that AB is a mediator of the relationship between ethnicity and AP. Demographic conditions, one of which is ethnicity, determines procrastination behavior in individuals due to AB [88], [89]. This condition encourages schools to learn about the behavioral patterns of procrastinating academic assignments caused by AB. Although demographics, such as ethnicity, have an impact on procrastination in completing academic assignments, personal and environmental factors also need to be considered because they can affect procrastination behavior [90]. These results indicate that ethnicity is not a determining factor for the emergence of procrastinating behavior. However, personal and environmental conditions that cause procrastination behavior needs to be considered as well. Furthermore, Beutel *et al.* [91] state that demographic conditions (e.g., ethnicity) are related to procrastination behavior when individuals are faced with pressure or stressful situations, and this situation is experienced by individuals aged 14 to 29 years-old. It means that procrastination behavior is carried out by individuals who are still young due to the pressure and stress. This pressure and stress causes individuals to experience AB and choose to procrastinate completing their academic tasks. Therefore, it can be concluded that ethnicity is not the main factor in procrastination behavior. It is necessary to pay attention to personal and environmental conditions that can lead to academic stress and pressure, causing individuals to experience AB and choose to procrastinate completing assignments.

j. Relationship between grade level and academic procrastination moderated by academic burnout

The results show that AB is a mediator of grade level and AP. Compared to class retention, changes in student learning pace leads to academic stress, so students chose to procrastinate in completing assignments [57]. This is because students choose to procrastinate during the last time of completion and are reluctant to be oriented to academic success because it creates feelings of intense fear of failure. This procrastination behavior is shown by forgetting about academic assignments [92]. Students choose to skip class, do not take notes of homework, leave assignments at the last minute in order to forget about academic assignments. Student involvement in class is able to reduce AP behavior [18]. This can be done by building interactive classroom environment so that they are able to handle situations, have a sense of belonging, and strive for achieving goals. This interactive classroom environment in turn is able to reduce individual maladaptive behavior to delay their academic assignments. Furthermore, Saracaloğlu *et al.* [93] review procrastination based on gender that male students tended to display procrastination behavior compared to female students. This was because of the anxiety and stress experienced by individuals, causing AB, and consequently choosing to postpone, although in this gender study, it did not have a significant impact. Therefore, it can be concluded that procrastination behavior is an individual choice because of

anxiety and academic stress as a result of changes in learning pace, resulting in higher feeling of fear of failure and choosing to leave assignments, skip classes or not taking notes of homework.

k. Relationship between academic burnout and academic procrastination moderated by emotional regulation

The results show that ER is a mediator between AB and AP. The lack of clarity of emotions in individuals and emotional exhaustion are indicators of AB predicting AP [94], [95]. Individuals who have inadequate emotional awareness experience emotional exhaustion, pessimism, and low academic self-confidence, display procrastinating behavior in academic assignments. Cognitive ER has a negative effect on AB and increases positive engagement [96]. It shows that individual's ability to regulate emotions has an impact on reducing AB and procrastination behavior because they choose to be positively involved in academic activities. Individuals with good emotional intelligence tend to be able to manage emotions, so they do not experience AB and procrastination [97]–[99]. Individuals exhibit procrastination behavior because of their inability to deal with stressful situations, resulting in emotional exhaustion and avoidance. Stress, emotional exhaustion, and avoidance are manifestations of AB. Therefore, it can be concluded that individual's inability to manage emotions has an impact on emotional exhaustion, stress, pessimism, low self-confidence, so they choose to avoid doing academic tasks by procrastinating.

3.2.3. Implications on guidance counselling services in school

School counselors need to pay attention to the factors that contribute to student AB by designing counseling services. Counselor needs to do an appropriate assessment to find out the condition of the student's AB with the AB scale [100]. Assessing AB is important because it can help prevent problems from escalating, provide tailored support, improve academic performance, mental health, and reduce drop-out rates. Assessing AB can be used for designing counseling services for students. By designing counseling services that are specific to the student's level and type of burnout, the counselor can provide more effective support that addresses the root causes of the problem. This can help the student manage their stress and improve their overall academic performance and wellbeing. Counselors need to provide intervention services that are beneficial for developing positive strengths in students and coping with academic stress [101]. It will help students in dealing with AB and procrastination behavior in completing academic assignments. Counselors can also provide interventions in the form of strategies to overcome or manage stress and pressure on academic assignments [102], [103]. This intervention can improve individual academic quality, improves psychological condition, and reduce AB. Furthermore, in the era of online learning today, it is expected that school stakeholders will strive for increasing student motivation and readiness in online learning, teachers present more structured learning materials, guide students, and monitor student learning loads and assignments [104].

4. CONCLUSION

The research findings show that first, there is a significant relationship between emotional regulation, academic procrastination, and academic burnout. First, the individual's ability to regulate emotions affects the level of AB which eventually has an impact on procrastination behavior in completing academic tasks. Second, the direct relationship between ER and AB variables is found to be significant and negative. It means that individual's ability to suppress and reassess situation through positive meaning and self-confidence, can reduce AB. Third, the direct relationship between AP and AB is found to be significant and positive. Individuals with high workloads, maladaptive perfectionism behavior, and fear of failure lead to AB. The implication of the findings of this research on guidance and counseling services in schools is that it is important for counselors to pay attention to the factors that contribute to AB so that they can design guidance and counseling services that prevent of AB.

REFERENCES




- [1] G. S. Seibert, K. N. Bauer, R. W. May, and F. D. Fincham, "Emotion regulation and academic underperformance: The role of school burnout," *Learning and Individual Differences*, vol. 60, pp. 1–9, Dec. 2017, doi: 10.1016/j.lindif.2017.10.001.
- [2] Z. Rahmati, "The study of academic burnout in students with high and low level of self-efficacy," *Procedia-Social and Behavioral Sciences*, vol. 171, pp. 49–55, Jan. 2015, doi: 10.1016/j.sbspro.2015.01.087.
- [3] A. Nikodijevic, J. Andjelkovic-Labrovic, and A. Djokovic, "Academic burnout among students at faculty of organizational sciences," *Management-Journal for Theory and Practice of Management*, vol. 17, no. 64, pp. 47–54, Sep. 2012, doi: 10.7595/management.fon.2012.0019.
- [4] S.-H. Lin and Y.-C. Huang, "Life stress and academic burnout," *Active Learning in Higher Education*, vol. 15, no. 1, pp. 77–90, Mar. 2014, doi: 10.1177/1469787413514651.
- [5] S. Atik and O. T. Çelik, "Analysis of the relationships between academic motivation, engagement, burnout and academic achievement with structural equation modelling," *International Journal of Contemporary Educational Research*, vol. 8, no. 2, pp. 118–130, Oct. 2022, doi: 10.33200/ijcer.826088.
- [6] F. López-Alegría, J. C. Oyanedel, and G. Rivera-López, "Burnout syndrome in Chilean midwifery students," *SAGE Open*, vol. 10,

- no. 1, pp. 1–10, Jan. 2020, doi: 10.1177/2158244020902090.
- [7] H. Bang and T. G. Reio Jr, "Examining the role of cynicism in the relationships between burnout and employee behavior," *Revista de Psicología del Trabajo y de las Organizaciones*, vol. 33, no. 3, pp. 217–228, 2017, doi: 10.1016/j.rpto.2017.07.002.
 - [8] A. Amitai, R. Vervaeet, and M. van Houtte, "When teachers experience burnout: Does a multi-ethnic student population put out or spark teachers' fire?" *Pedagogische studiën*, vol. 97, no. 2, pp. 125–145, 2020.
 - [9] A. Fonseca, F. Monteiro, and M. C. Canavaro, "Dysfunctional beliefs towards motherhood and postpartum depressive and anxiety symptoms: Uncovering the role of experiential avoidance," *Journal of Clinical Psychology*, vol. 74, no. 12, pp. 2134–2144, Dec. 2018, doi: 10.1002/jclp.22649.
 - [10] J. J. Gross, "Emotion regulation: Affective, cognitive, and social consequences," *Psychophysiology*, vol. 39, no. 3, pp. 281–291, May 2002, doi: 10.1017/S0048577201393198.
 - [11] D. Li, D. Li, N. Wu, and Z. Wang, "Intergenerational transmission of emotion regulation through parents' reactions to children's negative emotions: Tests of unique, actor, partner, and mediating effects," *Children and Youth Services Review*, vol. 101, pp. 113–122, Jun. 2019, doi: 10.1016/j.childyouth.2019.03.038.
 - [12] M. Balkis, "The relationship between academic procrastination and students' burnout," *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, vol. 28, no. 28–1, pp. 68–78, 2018.
 - [13] D. N. Asri and A. Kadafi, "Effects of self-instruction and time management techniques in group counseling to reduce academic procrastination," *Jurnal Kajian Bimbingan dan Konseling*, vol. 5, no. 3, pp. 112–121, Sep. 2020, doi: 10.17977/um001v5i32020p112.
 - [14] J. M. Bytamar, O. Saed, and S. Khakpoor, "Emotion regulation difficulties and academic procrastination," *Frontiers in Psychology*, vol. 11, p. 2922, Nov. 2020, doi: 10.3389/fpsyg.2020.524588.
 - [15] R. Khotimah, C. Radjah, and D. Handarini, "Relationship between academic self-concept, academic self-efficacy, self-esteem and academic procrastination in public junior high school students in Malang," (in Indonesian), *Jurnal Kajian Bimbingan dan Konseling*, vol. 1, no. 2, pp. 60–67, Jun. 2016, doi: 10.17977/um001v1i22016p060.
 - [16] M. Abbasi, S. Dargahi, and A. Mehrabi, "The role of student stressors in predicting procrastination and academic burnout among nursing students," *Iranian Journal of medical education*, vol. 15, pp. 293–303, 2015.
 - [17] W. L. Sari and F. Fakhruddiana, "Internal locus of control, social support and academic procrastination among students in completing the thesis," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 8, no. 2, pp. 363–368, Jun. 2019, doi: 10.11591/ijere.v8i2.17043.
 - [18] Y. L. Hui *et al.*, "In everlasting fight against academic procrastination: The roles of classroom engagement and internal locus of control," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 8, no. 4, pp. 647–653, Dec. 2019, doi: 10.11591/ijere.v8i4.20265.
 - [19] E. W.-Y. Tan and K. D. Prihadi, "Fear of failure and academic procrastination among university students: The role of achievement expectancy and year of study," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 11, no. 1, pp. 69–77, Mar. 2022, doi: 10.11591/ijere.v11i1.22201.
 - [20] H. C. Yeoh, S. P. L. Hong, and K. D. Prihadi, "Efficacy, expectancy, or the sense of mattering? Academic procrastination in online study," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 11, no. 3, pp. 1311–1317, Sep. 2022, doi: 10.11591/ijere.v11i3.22964.
 - [21] K. Prihadi *et al.*, "Mediation role of locus of control on the relationship of learned-helplessness and academic procrastination among college students in Penang, Malaysia," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 7, no. 2, pp. 87–93, Jun. 2018, doi: 10.11591/ijere.v7i2.12597.
 - [22] R. O. Febriani, M. Ramli, and N. Hidayah, "The effectiveness of cognitive behavior modification to reduce academic procrastination of high school students," (in Indonesian), *Jurnal Kajian Bimbingan dan Konseling*, vol. 5, no. 3, pp. 132–141, Sep. 2020, doi: 10.17977/um001v5i32020p132.
 - [23] W. C. Dinata, D. H. Rahman, and H. Indreswari, "Development of educational cinema guidelines with a blended learning model to reduce the academic procrastination of high school students," (in Indonesian), *Buletin Konseling Inovatif*, vol. 1, no. 2, pp. 83–89, Dec. 2021, doi: 10.17977/um059v1i22021p83-89.
 - [24] P. E. Johnson, C. J. Perrin, A. Salo, E. Deschaine, and B. Johnson, "Use of an explicit rule decreases procrastination in university students," *Journal of Applied Behavior Analysis*, vol. 49, no. 2, pp. 346–358, Jun. 2016, doi: 10.1002/jaba.287.
 - [25] A. Unda-López, G. Osejo-Taco, A. Vinueza-Cabezas, C. Paz, and P. Hidalgo-Andrade, "Procrastination during the COVID-19 pandemic: A scoping review," *Behavioral Sciences*, vol. 12, no. 2, p.38, Feb. 2022, doi: 10.3390/bs12020038.
 - [26] O. Kosheleva, V. Kreinovich, and C. Servin, "Motivations do not decrease procrastination, so what can we do?" Departmental Technical Reports, 2022. [Online]. Available: https://scholarworks.utep.edu/cs_techrep/1656/
 - [27] E. DeBarge, "Utilizing acceptance and commitment therapy to decrease student procrastination: An investigation of procrastination as a function of delay discounting." The Chicago School of Professional Psychology, 2022.
 - [28] F. M. Sirois and T. A. Pychyl, *Procrastination, health, and well-being*. Academic Press, 2016, doi: 10.1016/C2014-0-03741-0.
 - [29] R. L. Fee and J. P. Tangney, "Procrastination: A means of avoiding shame or guilt?" *Journal of Social Behavior and Personality*, vol. 15, no. 5; SPI, pp. 167–184, 2000.
 - [30] W. van Eerde, "A meta-analytically derived nomological network of procrastination," *Personality and Individual Differences*, vol. 35, no. 6, pp. 1401–1418, Oct. 2003, doi: 10.1016/S0191-8869(02)00358-6.
 - [31] P. Steel, "The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure," *Psychological Bulletin*, vol. 133, no. 1, pp. 65–94, Jan. 2007, doi: 10.1037/0033-2909.133.1.65.
 - [32] H. Ucar, A. Bozkurt, and O. Zawacki-Richter, "Academic procrastination and performance in distance education: a causal-comparative study in an online learning environment," *Turkish Online Journal of Distance Education*, vol. 22, no. 4, pp. 13–23, Sep. 2021, doi: 10.17718/tojde.1002726.
 - [33] S. N. T. M. Yasin, M. F. M. Yunus, and I. Ismail, "The use of Rasch measurement model for the validity and reliability," *Journal of Counseling and Educational Technology*, vol. 1, no. 2, pp. 22–27, Dec. 2018, doi: 10.32698/0111.
 - [34] G. Hamdu, F. N. Fuadi, A. Yulianto, and Y. S. Akhirani, "Items quality analysis using Rasch model to measure elementary school students' critical thinking skill on stem learning," *JPI (Jurnal Pendidikan Indonesia)*, vol. 9, no. 1, pp. 61–74, Mar. 2020, doi: 10.23887/jpi-undiksha.v9i1.20884.
 - [35] W. Rahayu, M. D. K. Putra, Y. Rahmawati, B. Hayat, and R. B. Koul, "Validating an Indonesian version of the what is happening in this class? (WHIC) questionnaire using a multidimensional Rasch model," *International Journal of Instruction*, vol. 14, no. 2, pp. 919–934, 2021.
 - [36] J. E. Collier, *Applied structural equation modeling using AMOS*. Routledge, 2020, doi: 10.4324/9781003018414.
 - [37] Z. Awang, *A Handbook on SEM Structural Equation Modelling: SEM Using AMOS Graphic*, 5th ed. Kota Baru: Universiti Teknologi Mara Kelantan, 2012.




- [38] M. W. Browne and R. Cudeck, "Alternative ways of assessing model fit," *Sociological Methods & Research*, vol. 21, no. 2, pp. 230–258, Nov. 1992, doi: 10.1177/0049124192021002005.
- [39] C. Maslach and M. P. Leiter, *The truth about burnout: How organizations cause personal stress and what to do about it*. John Wiley & Sons, 2008.
- [40] I. S. Jones and D. C. Blankenship, "Year two: Effect of procrastination on academic performance of undergraduate online students," *Research in Higher Education Journal*, vol. 39, pp. 1–11, 2021.
- [41] E. Sagone and M. L. Indiana, "Are decision-making styles, locus of control, and average grades in exams correlated with procrastination in university students?" *Education Sciences*, vol. 11, no. 6, p. 300, Jun. 2021, doi: 10.3390/educsci11060300.
- [42] Y. K. Turel and O. Dokumaci, "Use of media and technology, academic procrastination, and academic achievement in adolescence," *Participatory Educational Research*, vol. 9, no. 2, pp. 481–497, Mar. 2022, doi: 10.17275/per.22.50.9.2.
- [43] E. H. Özberk and T. T. Kurtça, "Profiles of academic procrastination in higher education: A cross-cultural study using latent profile analysis," *International Journal of Psychology and Educational Studies*, vol. 8, no. 3, pp. 150–160, Oct. 2022, doi: 10.52380/ijpes.2021.8.3.465.
- [44] I. W. Santyasa, K. Agustini, and N. W. E. Pratiwi, "Project based e-learning and academic procrastination of students in learning chemistry," *International Journal of Instruction*, vol. 14, no. 3, pp. 909–928, Jul. 2021, doi: 10.29333/iji.2021.14353a.
- [45] M. Sarid, Y. Peled, and V. Vaknin-Nusbaum, "The relationship between second language college students' perceptions of online feedback on draft-writing and academic procrastination," *Reading and Writing*, vol. 34, no. 5, pp. 1247–1271, May 2021, doi: 10.1007/s11145-020-10111-8.
- [46] E. M. Peixoto, A. C. Pallini, R. J. Vallerand, S. Rahimi, and M. V. Silva, "The role of passion for studies on academic procrastination and mental health during the COVID-19 pandemic," *Social Psychology of Education*, vol. 24, no. 3, pp. 877–893, Jun. 2021, doi: 10.1007/s11218-021-09636-9.
- [47] T. Hailikari, N. Katajavuori, and H. Asikainen, "Understanding procrastination: A case of a study skills course," *Social Psychology of Education*, vol. 24, no. 2, pp. 589–606, Apr. 2021, doi: 10.1007/s11218-021-09621-2.
- [48] T. Akinci, "Determination of predictive relationships between problematic smartphone use, self-regulation, academic procrastination and academic stress through modelling," *International Journal of Progressive Education*, vol. 17, no. 1, pp. 35–53, Feb. 2021, doi: 10.29329/ijpe.2021.329.3.
- [49] M. A. Brackett, R. Palomera, J. Mojsa-Kaja, M. R. Reyes, and P. Salovey, "Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers," *Psychology in the Schools*, vol. 47, no. 4, pp. 406–417, 2010, doi: 10.1002/pits.20478.
- [50] K. Preston and R. Spooner-Lane, "'Making space': A study into the use of mindfulness for alternative school teachers," *Journal of Psychologists and Counsellors in Schools*, vol. 29, no. 2, pp. 108–129, Dec. 2019, doi: 10.1017/jgc.2019.4.
- [51] J. Fathi, V. Greenier, and A. Derakhshan, "Self-efficacy, reflection, and burnout among Iranian EFL teachers: The mediating role of emotion regulation," *Iranian Journal of Language Teaching Research*, vol. 9, no. 2, pp. 13–37, 2021.
- [52] G. Kinman, S. Wray, and C. Strange, "Emotional labour, burnout and job satisfaction in UK teachers: The role of workplace social support," *Educational Psychology*, vol. 31, no. 7, pp. 843–856, Dec. 2011, doi: 10.1080/01443410.2011.608650.
- [53] A. Ghanizadeh and N. Royaei, "Emotional facet of language teaching: Emotion regulation and emotional labor strategies as predictors of teacher burnout," *International Journal of Pedagogies and Learning*, vol. 10, no. 2, pp. 139–150, May 2015, doi: 10.1080/22040552.2015.1113847.
- [54] T. L. Newton, J. H. Ohrt, J. D. Guest, and B. Wymer, "Influence of mindfulness, emotion regulation, and perceived social support on burnout," *Counselor Education and Supervision*, vol. 59, no. 4, pp. 252–266, Dec. 2020, doi: 10.1002/ceas.12187.
- [55] K. Vinter, "Examining academic burnout: Profiles and coping patterns among Estonian middle school students," *Educational Studies*, vol. 47, no. 1, pp. 1–18, Jan. 2021, doi: 10.1080/03055698.2019.1702510.
- [56] K. Ocal, "Predictors of academic procrastination and university life satisfaction among Turkish sport schools students," *Educational Research and Reviews*, vol. 11, no. 7, pp. 482–490, Apr. 2016, doi: 10.5897/ERR2016.2645.
- [57] Z. Çam and S. Ögülmüş, "Testing of a model on the school burnout among high school students and exploring the model's prediction level of grade retention," *International Journal of Curriculum and Instruction*, vol. 13, no. 2, pp. 950–985, 2021.
- [58] S. Çakır, F. Akça, A. F. Kodaz, and S. Tülgarer, "The survey of academic procrastination on high school students with in terms of school burn-out and learning styles," *Procedia-Social and Behavioral Sciences*, vol. 114, pp. 654–662, Feb. 2014, doi: 10.1016/j.sbspro.2013.12.763.
- [59] B. Çaprı, B. Gündüz, and S. E. Akbay, "Utrecht work engagement scale-student forms' (UWES-SF) adaptation to Turkish, validity and reliability studies, and the mediator role of work engagement between academic procrastination and academic responsibility," *Educational Sciences: Theory & Practice*, vol. 17, no. 2, pp. 411–435, 2017, doi: 10.12738/estp.2017.2.0518.
- [60] M. Eckert, D. D. Ebert, D. Lehr, B. Sieland, and M. Berking, "Overcome procrastination: Enhancing emotion regulation skills reduce procrastination," *Learning and Individual Differences*, vol. 52, pp. 10–18, Dec. 2016, doi: 10.1016/j.lindif.2016.10.001.
- [61] S. Rahimi and R. J. Vallerand, "The role of passion and emotions in academic procrastination during a pandemic (COVID-19)," *Personality and Individual Differences*, vol. 179, p. 110852, Sep. 2021, doi: 10.1016/j.paid.2021.110852.
- [62] J. G. Myrick, "Emotion regulation, procrastination, and watching cat videos online: Who watches Internet cats, why, and to what effect?" *Computers in Human Behavior*, vol. 52, pp. 168–176, Nov. 2015, doi: 10.1016/j.chb.2015.06.001.
- [63] M. Afffi, "Cross sectional study on lifelong learning's determinants among medical students in RAK Medical & Health Sciences University, UAE," *JPMA. The Journal of the Pakistan Medical Association*, vol. 68, no. 3, pp. 394–399, 2018.
- [64] L. Wartberg, R. Thomasius, and K. Paschke, "The relevance of emotion regulation, procrastination, and perceived stress for problematic social media use in a representative sample of children and adolescents," *Computers in Human Behavior*, vol. 121, Aug. 2021, doi: 10.1016/j.chb.2021.106788.
- [65] F. Dietz, M. Hofer, and S. Fries, "Individual values, learning routines and academic procrastination," *British Journal of Educational Psychology*, vol. 77, no. 4, pp. 893–906, Dec. 2007, doi: 10.1348/000709906X169076.
- [66] L. Cao, "Differences in procrastination and motivation between undergraduate and graduate students," *Journal of the Scholarship of Teaching and Learning*, pp. 39–64, Jun. 2012, doi: 10.14434/josotl.v12i2.2018.
- [67] N. Bekleyen, "Understanding the academic procrastination attitude of language learners in Turkish universities," *Educational Research and Reviews*, vol. 12, no. 3, pp. 108–115, Feb. 2017, doi: 10.5897/ERR2016.3122.
- [68] C. T. Ugurlu, "Effects of decision-making styles of school administrators on general procrastination behaviors," *Eurasian Journal of Educational Research*, vol. 51, pp. 253–272, 2013.
- [69] A. Akkaya and H. Serin, "The investigation of the relationship between academics' person-organization fit and burnout levels," *International Journal of Progressive Education*, vol. 16, no. 4, pp. 27–44, Aug. 2020, doi: 10.29329/ijpe.2020.268.3.
- [70] F. E. Z. Al-Adwan and M. M. Al-Khayat, "Psychological burnout in early childhood teachers: Levels and reasons," *International Education Studies*, vol. 10, no. 1, p. 179, Dec. 2016, doi: 10.5539/ies.v10n1p179.

- [71] S. Salgado and M. Au-Yong-Oliveira, "Student burnout: A case study about a Portuguese Public University," *Education Sciences*, vol. 11, no. 1, p. 31, Jan. 2021, doi: 10.3390/educsci11010031.
- [72] C. Young, D. Fang, S. Golshan, C. Moutier, and S. Zisook, "Burnout in premedical undergraduate students," *Academic Psychiatry*, vol. 36, no. 1, pp. 11–16, Jan. 2012, doi: 10.1176/appi.ap.10080125.
- [73] L. C. Garcia *et al.*, "Burnout, depression, career satisfaction, and work-life integration by physician race/ethnicity," *JAMA Network Open*, vol. 3, no. 8, p. e2012762, Aug. 2020, doi: 10.1001/jamanetworkopen.2020.12762.
- [74] J. A. Cantor and D. M. Mouzon, "Are hispanic, black, and asian physicians truly less burned out than white physicians?" *JAMA Network Open*, vol. 3, no. 8, p. e2013099, Aug. 2020, doi: 10.1001/jamanetworkopen.2020.13099.
- [75] R. Capasso, M. Zurlo, and A. Smith, "Ethnicity and stress at work: A literature review and suggestions for future research," *British Journal of Education, Society & Behavioural Science*, vol. 15, no. 1, pp. 1–20, Jan. 2016, doi: 10.9734/BJESBS/2016/24340.
- [76] J. A. Lawrence, B. A. Davis, T. Corbette, E. V. Hill, D. R. Williams, and J. Y. Reede, "Racial/ethnic differences in burnout: A systematic review," *Journal of Racial and Ethnic Health Disparities*, vol. 9, no. 1, pp. 257–269, Feb. 2022, doi: 10.1007/s40615-020-00950-0.
- [77] P. M. Bamonti, A. Smith, and H. M. Smith, "Cognitive emotion regulation strategies predict burnout in geriatric nursing staff," *Clinical Gerontologist*, vol. 45, no. 5, pp. 1236–1244, Oct. 2022, doi: 10.1080/07317115.2020.1829230.
- [78] P. Bamonti *et al.*, "Coping, cognitive emotion regulation, and burnout in long-term care nursing staff: A preliminary study," *Journal of Applied Gerontology*, vol. 38, no. 1, pp. 92–111, Jan. 2019, doi: 10.1177/0733464817716970.
- [79] E. Kim, D. P. Bhawe, and T. M. Glomb, "Emotion regulation in workgroups: The roles of demographic diversity and relational work context," *Personnel Psychology*, vol. 66, no. 3, pp. 613–644, Sep. 2013, doi: 10.1111/peps.12028.
- [80] T.-J. Wu, K.-S. Yuan, D. C. Yen, and T. Xu, "Building up resources in the relationship between work–family conflict and burnout among firefighters: Moderators of guanxi and emotion regulation strategies," *European Journal of Work and Organizational Psychology*, vol. 28, no. 3, pp. 430–441, May 2019, doi: 10.1080/1359432X.2019.1596081.
- [81] R. Martín-Brufau, A. Martín-Gorgojo, C. Suso-Ribera, E. Estrada, M.-E. Capriles-Ovalles, and S. Romero-Brufau, "Emotion regulation strategies, workload conditions, and burnout in healthcare residents," *International Journal of Environmental Research and Public Health*, vol. 17, no. 21, p. 7816, Oct. 2020, doi: 10.3390/ijerph17217816.
- [82] K. Schoeps, A. Tamarit, M. Peris-Hernández, and I. Montoya-Castilla, "Impact of emotional intelligence on burnout among Spanish teachers: A mediation study," *Psicología Educativa*, vol. 27, no. 2, pp. 135–143, May 2021, doi: 10.5093/psed2021a10.
- [83] S. Bikar, A. Marziyeh, and A. Pourghaz, "Affective structures among students and its relationship with academic burnout with emphasis on gender," *International Journal of Instruction*, vol. 11, no. 1, pp. 183–194, Jan. 2018, doi: 10.12973/iji.2018.11113a.
- [84] J.-L. Zhao, X.-H. Li, and J. Shields, "Managing job burnout: The effects of emotion-regulation ability, emotional labor, and positive and negative affect at work," *International Journal of Stress Management*, vol. 26, no. 3, pp. 315–320, Aug. 2019, doi: 10.1037/str0000101.
- [85] R. Chacón-Cuberos, A. Martínez-Martínez, M. García-Garnica, M. D. Pistón-Rodríguez, and J. Expósito-López, "The relationship between emotional regulation and school burnout: Structural equation model according to dedication to tutoring," *International Journal of Environmental Research and Public Health*, vol. 16, no. 23, p. 4703, Nov. 2019, doi: 10.3390/ijerph16234703.
- [86] S. J. Johnson, S. Machowski, L. Holdsworth, M. Kern, and D. Zapf, "Age, emotion regulation strategies, burnout, and engagement in the service sector: Advantages of older workers," *Revista de Psicología del Trabajo y de las Organizaciones*, vol. 33, no. 3, pp. 205–216, 2017, doi: 10.1016/j.rpto.2017.09.001.
- [87] K. F. Wijaya, "Investigating EFL teachers' emotional regulation strategies in second language classroom contexts," *ELT Worldwide: Journal of English Language Teaching*, vol. 8, no. 1, pp. 97–108, Apr. 2021, doi: 10.26858/eltww.v8i1.18032.
- [88] N. C. Hall, S. Y. Lee, and S. Rahimi, "Self-efficacy, procrastination, and burnout in post-secondary faculty: An international longitudinal analysis," *PLOS ONE*, vol. 14, no. 12, p. e0226716, Dec. 2019, doi: 10.1371/journal.pone.0226716.
- [89] J. M. R. Asio and E. R. de Dios, "Demographic profiles and procrastination of employees: Relationships and determinants," *International Journal of Humanities, Arts and Social Sciences*, vol. 7, no. 1, pp. 36–46, Mar. 2021, doi: 10.20469/ijhss.7.20004-1.
- [90] M. Balkis and E. Duru, "Prevalence of academic procrastination behavior among preservice teachers, and its relationships with demographics and individual preferences," *Journal of Theory and Practice in Education*, vol. 5, no. 1, pp. 18–32, 2009.
- [91] M. E. Beutel *et al.*, "Procrastination, distress and life satisfaction across the age range – a German representative community study," *PLOS ONE*, vol. 11, no. 2, p. e0148054, Feb. 2016, doi: 10.1371/journal.pone.0148054.
- [92] A. A. Ojo, "The impact of procrastination on students' academic performance in secondary schools," *International Journal of Sociology and Anthropology Research*, vol. 5, no. 1, pp. 17–22, 2019.
- [93] A. S. Saracaloğlu, B. Dinçer, and C. S. Gerçeker, "The relationship between music teacher candidates' academic and general procrastination tendencies and test anxiety," *Journal of Education and Training Studies*, vol. 6, no. 9, pp. 174–183, Aug. 2018, doi: 10.11114/jets.v6i9.3456.
- [94] S. A. Zarrin, E. Gracia, and M. P. Paixão, "Prediction of academic procrastination by fear of failure and self-regulation," *Educational Sciences: Theory & Practice*, vol. 20, no. 3, pp. 34–43, 2020.
- [95] K. Bozğün and K. Baytemir, "Academic self efficacy and dispositional hope as predictors of academic procrastination: The mediating effect of academic intrinsic motivation," *Participatory Educational Research*, vol. 9, no. 3, pp. 296–314, May 2022, doi: 10.17275/per.22.67.9.3.
- [96] E. Castellano, R. Muñoz-Navarro, M. S. Toledo, C. Spontón, and L. A. Medrano, "Cognitive processes of emotional regulation, burnout and work engagement," *Psicothema*, vol. 31, no. 1, pp. 73–80, 2019.
- [97] F. Sheybani, B. Gharræe, M. Bakhshizadeh, and S. Tamanaeefar, "Decisional procrastination: Prevalence among students and relationship with emotional intelligence and big five-factor model of personality," *Life*, vol. 50, p. 26, 2017.
- [98] S. Laybourn, A. C. Frenzel, and T. Fenzl, "Teacher procrastination, emotions, and stress: A qualitative study," *Frontiers in Psychology*, vol. 10, p. 2325, Oct. 2019, doi: 10.3389/fpsyg.2019.02325.
- [99] Z. Birknerová and B. N. Čigarská, "Analysis of the links between burnout syndrome and coping strategies in trade managers," *International Journal of Organizational Leadership*, vol. 10, no. 2, pp. 140–154, May 2021, doi: 10.33844/ijol.2021.60522.
- [100] A. J. Setiyowati, I. Rachmawati, and R. Prihatiningsih, "Validation of the academic burnout scale with the Rasch model," *Cypriot Journal of Educational Sciences*, vol. 17, no. 8, pp. 2888–2898, Aug. 2022, doi: 10.18844/cjes.v17i8.7844.
- [101] W. Zhang, H. Li, Y. Gong, and M. Ungar, "Stressful events and depression among Chinese adolescents: The mitigating role of protective factors," *School Psychology International*, vol. 34, no. 5, pp. 501–513, Oct. 2013, doi: 10.1177/0143034312472760.
- [102] N. Kim and G. W. Lambie, "Burnout and implications for professional school counselors," *The Professional Counselor*, vol. 8, no. 3, pp. 277–294, Sep. 2018, doi: 10.15241/nk.8.3.277.
- [103] P. R. Mullen and D. Gutierrez, "Burnout, stress and direct student services among school counselors," *The Professional Counselor*, vol. 6, no. 4, pp. 344–359, Oct. 2016, doi: 10.15241/pm.6.4.344.
- [104] S. Sunawan, Z. N. Amin, A. Hafina, and M. I. Kholili, "The differences of students' burnout from level of education and duration daily online learning during COVID-19 pandemics," in *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2021, pp. 3723–3729.




BIOGRAPHIES OF AUTHORS

Arbin Janu Setiyowati    is a Guidance and Counseling lecturer at Universitas Negeri Malang (UM) since 2006. She is a senior lecturer with guidance and counseling expertise. She is a 2017 graduate of the Guidance and Counseling Doctoral Program at Universitas Negeri Malang. Her research interests in the counselor education, mental health, and guidance and counseling assessment. She can be contacted at email arbin.janu.fip@um.ac.id.






Indriyana Rachmawati    is a Guidance and Counseling lecturer at Universitas Negeri Yogyakarta (UNY). She has been a lecturer at UNY since 2022 with guidance and research expertise. She is a 2019 graduate of the Guidance and Counseling Doctoral Program at Universitas Negeri Malang and very interested in conducting scientific research in the Guidance and Counseling field. She can be contacted at email indriyanarachmawati@uny.ac.id.






Bambang Budi Wiyono    is an educational management lecturer at Universitas Negeri Malang (UM). He is professor at UM with expertise in the field of management and leadership. He is a 2007 graduate of the doctoral program at Universitas Negeri Yogyakarta. His research interest in the instrument development, educational planning, integrated quality management, supervision, monitoring and evaluation of education. He can be contacted at email: bambang.budi.fip@um.ac.id.



Henny Indreswari    is a senior lecturer at the Department of Guidance and Counseling–Faculty of Education–Universitas Negeri Malang. Appointed as a lecturer in 1986. Obtained her bachelor's degree from IKIP Malang in 1984. Her Master's degree (2002) and Doctoral degree (2016) from Universitas Negeri Malang. In the Guidance and Counseling Department, she teaches the Analysis and Behavior Change, Behavior Counseling and Humanistic Counseling, Research and Development Methods, and several other courses. She always tries to improve the quality of his learning, in order to help students develop themselves optimally. Her research interests are skills development and development of empathy for prospective counselors, counseling skills, and behavior modification and development. She can be contacted at email: henny.indreswari.fip@um.ac.id.



Eko Pramudya Laksana    is a staff at Research Institute and Community Service Universitas Negeri Malang. His research interest are educational guidance and counseling. He can be contacted at email: eko.pramudya@um.ac.id.