Original Research

A Causal Model of Psychological Capital and Harmful Academic Behaviors: The Mediating Role of Emotional Regulation and Academic Self-Regulation

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Abstract:

Background:

This study aimed to present a causal model of the relationship between psychological capital and harmful academic behaviors for the mediating role of emotional regulation and academic self-regulation.

Method:

The research method was the correlational model of structural equations. The statistical population of this study consisted of all eighth-grade students in Yazd in the academic year 2010-2011, of which 300 were selected by multi-stage cluster sampling. The research instruments included the Academic Harmful Behaviors Questionnaire, the Academic Self-Regulation Questionnaire the Emotional Regulation Problems Questionnaire, and the Psychological Capital Questionnaire. Data analysis was performed by the structural equation modeling method by PLS software.

Results:

The results showed that the structure of psychological capital through the mediation of emotion regulation and academic self-regulation can predict the harmful behaviors of students.

Conclusion:

Therefore, it can be concluded that psychological capital could increase or decrease Academic destructive behavior by increasing or decreasing them in academic emotion regulation and self-regulation.

Keywords: Emotion Regulation, Academic Self-Regulation, Academic Destructive Behavior, Psychological Capital

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Introduction

Academic destructive behavior is among the behaviors that occur to students during their studies and negatively affect the academic performance and the desired outcomes of the educational system (1). Academic destructive behavior includes the components of academic procrastination, academic dishonesty, Academic Status Violations, and Academic Oppositional Defiant, which is annoying for those around, teachers, and society and disrupts the educational process of students (2).

Academic dishonesty is the second component of destructive behavior that has been increasingly seen in schools and educational institutions in recent decades. The hallmark of law behavior is a consistent pattern of repetitive behavior in which fundamental rights are ignored by socially accepted rules and regulations in or out of school (3).

Psychological capital is a set of interpersonal resources that represent a person's upbeat assessment of the situation and the likelihood of success based on these resources and consists of four constructs of hope, optimism, resilience, and self-efficacy (4). Seligman also believes that psychological capital encompasses the positive aspects of human life; therefore, psychological capital is defined as a person's self-perception, having a goal to achieve success and endurance in the face of problems (5).

On the other hand, self-regulation is a factor that plays an essential role in students 'academic adjustment, which is associated with reducing students' harmful academic behaviors.

Kashkoli et al. (2) in, their research, showed that self-regulation could be a predictor of Academic destructive behavior. Many studies have shown a strong relationship between self-regulation and procrastination, as self-regulation is negatively associated with procrastination (5,6,7). Also, the results of some researches have shown that cognitive education promotes hope and reduces students' procrastination (8,9).

Academic destructive behavior such as academic procrastination, academic dishonesty, academic status violation, and academic oppositional defiant are among the pervasive behaviors that educational systems have faced for many years and have incurred high costs, and has been suggested as an essential threat to learning, which causes poor learning, social anxiety, test anxiety, poor progress, and psychological damage.

Theories and research have shown that so far, no study has investigated the role of psychological capital on Academic destructive behavior with a mediating role of emotion regulation and academic self-regulation. The question that arises in the researcher's mind is whether emotion regulation and academic self-regulation can play a mediating role between one's psychological capital and harmful academic behaviors and be involved in explaining Academic destructive behavior?

Research Method

The present study is descriptive and correlational in terms of the data collection method because the relationships between variables in structural equations are examined. The psychological capital variable as an exogenous variable, emotion regulation and academic self-regulation as intermediate variables, and the variable of harmful academic behaviors are considered as endogenous variables of the present study.

The statistical population of the present study included eighth-grade high school students in the academic year 1399-1399, whose number was estimated to be 1154 people. The sample size was calculated using Cochran's formula with an error level of 5% of 288 people, of which 300 questionnaires were distributed among students. Sampling will be done by multi-stage cluster random sampling method. For this purpose, several schools were selected

from schools in districts 1 and 2 of Yazd city, and then a class was randomly selected from each school.

Research instruments

- Scale of Academic destructive behavior (2).

In their research, Kashkoli et al. (2016) developed and validated this scale. This scale is a 52-item questionnaire and has the components of academic procrastination, academic dishonesty, and academic confrontation disobedience.

- Psychological Capital Questionnaire (10).

This questionnaire was designed by Lutans et al. (2007) and consisted of 4 subscales of hope, optimism, resilience, and self-efficacy.

- Scale of Problems in Emotional Regulation (11).

Graz and Roemer (2004), in a study on two separate samples, examined the factor structure and validity of this scale. Factor analysis confirmed the existence of six factors: the rejection of emotional responses, difficulty in engaging in purposeful behavior, difficulty in controlling impulse, lack of emotional awareness, limited access to dynamic regulation strategies, and lack of emotional clarity (11).

- Academic self-regulatory questionnaire

To study academic self-regulation, the 19-item academic self-regulation questionnaire of Bofard, Boysworth, Rezio, and LaRoche (1995) was used.

Results

In this section, first descriptive findings related to research variables and then. The results of research model testing are presented. Table 1 shows the indicators associated with the descriptive statistics of research variables, including the mean and standard deviation.

Measurement model evaluation (external model)

In examining the external research model, first, the factor load of questions (indicators) of analysis is reviewed. Then the reliability and subsequently the validity of the internal model are discussed. Factor loads are calculated by calculating the correlation value of the characteristics of a structure with that structure, which should be equal to or greater than 0.4 (Holland, 1999). The burden of research questionnaire questions is as shown in Figure1. As can be seen, the factor load in most research indicators is more than 0.4. Still, in the structure of emotional regulation, the dimension of emotional awareness has a weak factor burden that must be removed from the analysis. The results of model modification are shown in Figure 2.

The results in this figure indicate the number of factor loads in latent structures and the relationships between these structures, expressed as R2.

Internal model reliability

To evaluate the reliability of the internal model, Cronbach's alpha coefficient and combined reliability (CR) were used. The results showed that Cronbach's alpha coefficient and combined reliability for all variables except academic self-regulation is higher than 0.7, which indicates the appropriate reliability of the model. Of course, the academic self-regulatory structure in the combined reliability is higher than 0.7, which means the reasonable reliability of this model structure.

The second criterion for examining the fit of measurement models is convergent validity. The results of the analysis showed that the convergence validity values (AVE) are acceptable for research structures that are greater than 0.5; Therefore, for facilities where this number is less than 0.5, the convergent validity is considered weak.

In this research, Fornell and Larker methods have been used to investigate the divergent validity of the external model of the study. The

convergent validity results showed that the convergent validity square of each construct is larger than the correlation values between other structures, so the research model is approved in terms of divergent validity according to Fornell and Larker's methods.

The values of R2 for academic self-regulation (R2=0.325 (adjusted)) and destructive academic behaviors (R2 = 0.348 (adjusted)) are at an appropriate level, which indicates a more significant impact on the model. Still, these values are in a weaker position for the emotional regulation variable (R2=0.055 (adjusted)).

Criterion (Q2) determines the predictive power of the model. Thus, the value of measure (Q2) belonging to the variables of emotional regulation. Academic destructive behaviors are more significant than 0.15, so they have a moderate to high status. Emotional regulation has a low value (Q2).

According to the research findings, in connection with the hypothesis that psychological capital predicts academic destructive behaviors among high school students, the value (T-Value) is equal to 0.044, which is less than 1.96; therefore, this hypothesis has not been accepted, and there is no significant relationship between psychological capital and academic destructive behaviors.

According to the research findings, in connection with the hypothesis that emotion regulation predicts academic destructive behaviors among high school students, the value (T-Value) is equal to 6.150, which is greater than 1.96; Therefore, the hypothesis that emotion regulation predicts educationally academic destructive behaviors high school students have been accepted and there is a negative relationship between emotion regulation and academically destructive behaviors, ie, increasing emotion regulation reduces academically destructive behaviors.

In connection with the hypothesis that psychological capital predicts emotion regulation among high school students, the value (T-Value) is equal to 3.60, which is greater than 1.96; therefore, this hypothesis has also been accepted, and there is a positive relationship between psychological capital and emotion regulation.

Concerning the hypothesis that psychological capital predicts academic self-regulation among high school students, the value (T-value) is equal to 5.480, greater than 1.96; Therefore, this hypothesis has also been accepted and there is a positive relationship between psychological capital and academic self-regulation,that is, increasing psychological capital increases academic self-regulation.

According to the research findings, in connection with the hypothesis that emotion regulation has a mediating role in predicting academic destructive behaviors through psychological capital among high school students, the value (T-value) is equal to 3.283, which is greater than 1.96. Therefore, the research hypothesis on the mediating role of emotion regulation in the relationship between psychological capital and academic destructive behaviors in this structural model is confirmed. In a way, it can be said that psychological capital can increase or decrease academic destructive behaviors by increasing or decreasing the regulation of emotion.

According to the research findings, in connection with the hypothesis that emotional regulation and academic self-regulation play a mediating role in predicting academic destructive behaviors through psychological capital among high school students, the value (T-Value) is equal to 2,670, which is greater than 1.96; Therefore, the central hypothesis of the research on the mediating role of emotion regulation and academic self-regulation in the relationship between psychological capital and academic destructive behaviors is confirmed in this structural model. In a way, it can be said

that psychological capital can increase or decrease academic destructive behaviors by increasing or dropping it in the regulation of academic excitement and self-regulation.

Discussion

This study aimed to present a causal model of the relationship between psychological capital and academic destructive behaviors according to the mediating role of emotion regulation and academic self-regulation of eighth-grade students.

The first finding of this research is a significant relationship between psychological capital and academic self-regulation. This finding is consistent with Sava, Lisan, Rasen, and Saburipour (2016) (7); Yang et al. (2018) (6) found that there is a positive relationship between self-efficacy (one of the dimensions of psychological capital) and self-regulation. Based on this, it can be said that students with high self-efficacy use effective learning strategies, manage time effectively, and are better at monitoring their efforts than others. Self-efficacy beliefs affect a person's decisions about doing a task, the levels of effort required to do that task, and perseverance and perseverance in completing that task (12).

Other findings of this study are the relationship between self-regulation and the academic destructive behaviors of students. This finding is consistent with the of research results of Pertabavoshi, Borjali, and Kiamanesh (2018) (14). Also, Hong et al. (2015)(13). concluded in their research that improving self-regulatory skills play a role in reducing procrastination and that self-regulatory learning strategies had a negative and significant relationship with academic procrastination. In explaining this, it can be said that self-regulated learning pays attention to the role of the individual in the learning process and includes strategies that students use to adjust their cognition (14).

The present study indicates the relationship between psychological capital and emotion regulation. This part of the finding is consistent with the research of Sitin, Brit, Savoni, and Kit (2018) (15) and Daumiller and Jank (2019)(16). Psychological capital includes a set of positive traits and abilities of individuals that can be considered a potent source in the growth and development of the individual. In such a way that they can affect their psychological well-being and interact with each other in an interconnected system, reinforcing each other and creating a shield resistant to stressors.

Findings showed that emotion regulation predicts academic destructive behaviors among high school students, and there is a negative relationship between emotion regulation and academic destructive behaviors. The results of this part of the research findings are consistent with some researches, such as (17).

Explaining this part of the findings, it should be said that emotions help us to be able to respond adaptively to the problems and opportunities we face in life.

As the research findings showed, the central hypothesis of the research on the mediating role of emotion regulation and academic self-regulation in the relationship between psychological capital and harmful academic behaviors was confirmed in this structural model. It can be said that psychological capital can lead to an increase or decrease in harmful academic behaviors by regulating academic excitement and self-regulation. This part of the findings of the present study with the foreign research of Adel, Amir, and Ghias (2019) (5); Doumiller and Junk (2019)(16); Dartaj and Mehr Alian (2018) (8) are similar.

In explaining this research finding, it should be said that psychological capital is one of the psychological and individual factors so that it is effective on harmful behaviors in educational environments. Psychological capital has the characteristics of believing in one's abilities to achieve success in performing tasks, creating positive documents about the present and future situations, having perseverance in

pursuing goals, and pursuing ways to achieve success. People with high psychological capital have characteristics such as belief in their ability to succeed in performing tasks and assignments. These beliefs can lead to a reduction in harmful academic behaviors.

Conclusion

Therefore, according to the present study, students who have a higher level of self-efficacy tend to choose challenging tasks and use their efforts and motivational resources to achieve their goals and resist in the face of obstacles and difficulties. Students continue to work harder when faced with problems and even successes and work hard to achieve success. Students with higher psychological capital, who use learning and resource management strategies and have high self-regulation, monitor their learning. They withstand hardships, have high resilience, do not give up, and look for new ways to solve problems and take advantage of opportunities. Therefore, they do not engage in harmful educational behaviors. Also, students with psychological capital such as hope, optimism, and resilience by using emotions and expressing emotions, especially positive emotions in academic situations, reduce their negative emotions, reducing the amount of harmful academic behaviors such as procrastination. Discipline, procrastination, and academic inefficiency will be reduced in them.

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Tables & Figures

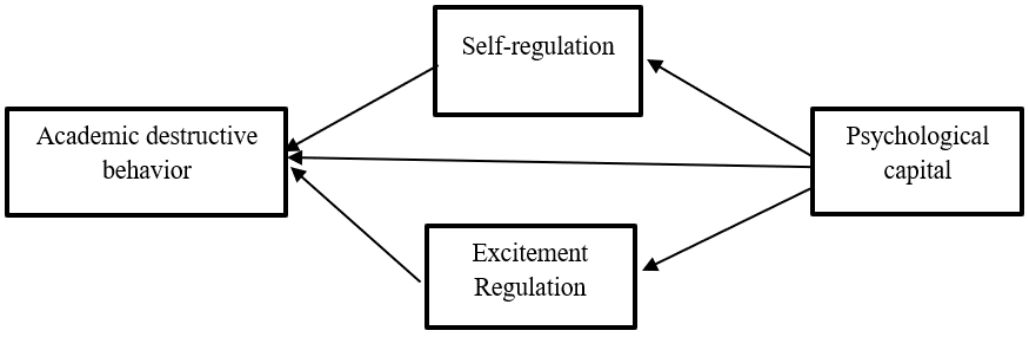

Figure 1. Conceptual model of research

Table 1. Results of descriptive analysis of research variables

Variable	Standard deviation	Average	Qty
The total score of self-regulation	12.56	57.48	300
The metacognitive dimension	6.68	25.37	300
Cognitive Component	3.80	13.35	300
Motivational Component	4.16	12.29	300
Total Excitement Adjustment Score	21.65	122.59	300
Acceptance of Excitement	6.00	21.66	300
Purposeful behavior	4.54	15.39	300
Impulse control	3.42	18.73	300
Excitement resolution	2.69	11.64	300
Consciousness	4.59	21.28	300
Strategy	4.33	17.76	300
The total score of destructive behavior	25.58	122.79	300
Dishonesty	6.462	22.91	300
Status violations	7.088	22.43	300
Oppositional defiant	6.274	27.40	300
Procrastination	10.07	51.30	300
The total score of psychological capital	20.51	99.40	300
Self-efficacy	6.83	30.56	300
Hope	5.556	26.05	300
Resistance	5.46	22.98	300
Optimism	4.79	25.08	300

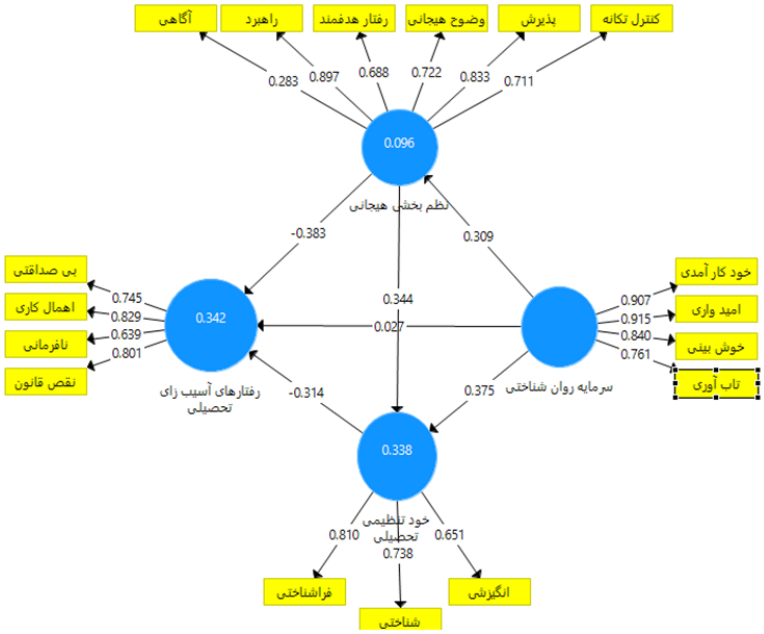

Figure 1. Factor load and path coefficients before model modification

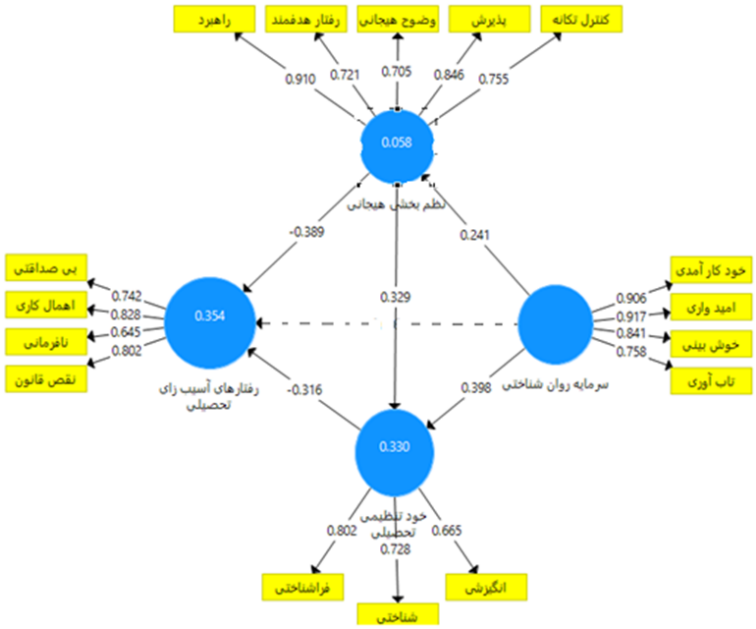

Figure 2. Factor load of modified structures