

Iranian Journal of Educational Sociology

(Interdisciplinary Journal of Education) Available online at: http://www.iase-idje.ir/ Volume 6, Number 1, May 2023

The Effectiveness of Constructionism Training on Career Decision Making Self Efficacy and Academic Field Satisfaction among University Students with Academic Burnout

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Article history:

Received date: 2020/11/10 Review date: 2023/02/20 Accepted date: 2023/05/31

keywords:

Constructionism Training, Career Decision Making Self-Efficacy, Academic Field Satisfaction, University Students **Purpose**: Decision making self-efficacy and academic field satisfaction is one of the most important variables for students. The purpose of this study was to determine the effectiveness of constructionism training on career decision making self-efficacy and academic field satisfaction among university students with academic burnout.

Methodology: The current research method was semi-experimental study which conducted with a pre-test and post-test design along with a control group with a follow-up period. The statistical population included all the students of Islamic Azad university, Isfahan (Khorasgan) branch who referred to the university counseling center in 2020. From them, 30 student were selected by convenience sampling method and then randomly assigned in the experimental group (15 people) and control group (15 people). The data were collected using Betz et al's Career Decision Making Self Efficacy Questionnaire (1996) and Ahmadi's Academic Field Satisfaction Questionnaire (2010) in the pre-test, posttest and follow-up stages. Constructionism training protocol was performed in 8 sessions (one session per week) for 75 minutes. To analyze the data, repeated measure analysis of variance and SPSS.26 software were used.

Findings: The results indicated that constructionism training was effective in enhancement of career decision making self-efficacy and academic field satisfaction of university students with academic burnout (p<0.01), and this effectiveness was permanent until the follow-up period (p<0.01).

Conclusion: It can be concluded that constructionism training is effective on increase of career decision making self-efficacy and academic field satisfaction of university students with academic burnout, therefore this training can be used for university students in university counseling centers.

Please cite this article as: Shabani M, Sadeghi A, Torkan H. (2023). The Effectiveness of Constructionism Training on Career Decision Making Self Efficacy and Academic Field Satisfaction among University Students with Academic Burnout, Iranian Journal of Educational Sociology. 6(1): 259-270.

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1. Introduction

Starting education from childhood, despite the undeniable positive consequences and developments it can bring to the path of human life, is a phenomenon mixed with stress and tension. This stress and tension continue at various levels as individuals enter university and begin their academic studies (Andrade et al., 2023). The continuity of academic stress, pressure, and anxiety are the most important factors in the phenomenon known as academic burnout (Tran et al., 2023; Gao, 2023). Academic burnout, in today's theoretical frameworks, is a phenomenon consisting of emotional burnout, deviation from the academic path, and a decline in personal progress and performance, similar to burnout in non-academic environments. When students face burnout, their motivation and emotional desire are lost, and their performance and efficiency in various academic matters are severely affected, which may even lead to expulsion and serious setbacks in their academic program, ultimately leading to the cessation of their studies (Mohammadi et al., 2023). Based on some available evidence, if the educational periods are highly stressful, there is a high probability that around 50 to 70 percent of students will experience symptoms of academic burnout (Karamati, 2022; Gao, 2023; Wang et al., 2023). Beyond the consequences of stopping education and prolonging the duration of studies, which are not very useful or desirable for individuals or training systems, academic burnout can affect significant variables that are necessary for a practical life (whether academic, professional, or social) and can confront individuals with psychological and social conditions. Two variables that can be related to academic burnout among students in many situations are self-efficacy in various academic areas, including self-efficacy in career decision-making and individuals' attitudes towards satisfaction with their studies and significance at university (Rajabian et al., 2021; Sanjari et al., 2023; Mohammadi et al., 2023).

Self-efficacy is a central construct in cognitive and social theory (Sagone & Indiana, 2023). This variable has taken on a nature dependent on the field and context in various studies (such as decision-making self-efficacy and problem-solving self-efficacy) (Pordelan & Vakili, 2022). Self-efficacy in career decision-making is an individual's belief and ability to successfully perform the necessary tasks and duties for decision-making about their career path (Abdulrahim et al., 2021). In simpler terms, when an individual believes that they can make the best decision for their career path at the right time and place and move toward their goals based on that decision, they demonstrate self-efficacy in career decision-making (Buyukgoze-Kavas, 2014; Demirtaş-Zorbaz et al., 2023). Self-efficacy in decision-making is related to various variables. One reason is that the root of self-efficacy in decision-making is the career path, which involves self-awareness and making decisions based on one's characteristics in education and career choices. It is related to satisfaction with education and the chosen field of individuals (Khansari & Nilforoushan, 2020). Satisfaction with education and the chosen field can be a combination of positive behavioral, cognitive, emotional, and affective reactions that individuals experience in their field of study at university (Babajani et al., 2023). Specifically, satisfaction with education and the chosen field at university consists of positive cognitive evaluations and optimistic attitudes towards education at university, accompanied by positive emotions such as enthusiasm and inner joy while studying in the chosen field, as well as significant behavioral efforts to achieve educational and training goals (Daz, 2023). Due to the integration of satisfaction with education and the chosen field with the three domains of behavioral, cognitive, and affective states, this form of satisfaction is closely related to enthusiasm, effectiveness, progress, and performance in the field of study at the university (Urquijo & Extremera, 2017; Thomas et al., 2023). Beyond the functions and important links that self-efficacy in decision-making, career, and educational satisfaction have, the critical issue to consider is how and through which training pathways it is possible to empower students with academic burnout to make educational and career decisions and subsequently increase their satisfaction with the chosen field. A review of scientific texts in the field of human empowerment for educational and career decision-making and broader satisfaction with the chosen paths indicates that various counseling approaches based on different theoretical perspectives have been proposed and utilized in the enrichment of life paths and educational and career paths (Robertson et al., 2021; Majidi et al., 2022). Among various approaches, the constructionism approach, which focuses on career adaptability,

has shown significant and desirable capacity in previous studies for adolescents and youth (students and university students) (Khabaz Shirazi et al., 2022; Eryilmaz & Kara, 2020).

The constructionism approach, with its focus on adaptability, plays an active role in determining life narratives (both educational and career) that are aligned with individuals' personality traits, the path of engagement in education and career as a flexible and adaptable path alongside the flexibility of personal and social life narratives in efforts related to choosing an educational and career field that matches personality traits. It places them on a goal-oriented, achievable, and tangible path (Yousefi et al., 2011; Savickas, 2002; 2005). By focusing on adaptability and determining life narratives that match the capacities and personality traits of each individual, especially adolescents and youth who are in the process of shaping an effective, satisfying, and hopeful educational and career path, training and counseling based on the constructionism approach provide a platform for strengthening the career and educational path by focusing on effective coping with issues and obstacles, resolving them, and achieving coherence and continuity in academic and career goals. This approach enhances individuals' capacity for positive decision-making (Tandiauw et al., 2022; Maree, 2013). Through enhancing adaptability through constructionism training, individuals become capable of creating and constructing desired life narratives in education and career fields (Savickas, 2002). Therefore, this approach is appropriate for the needs and sensitivities of adolescence and early adulthood (Khabaz Shirazi et al., 2022). In the framework of constructionism training, individuals acquire the ability to consider various solutions as problem-solving strategies and overcome different obstacles encountered in their educational and career paths, seek help and support from others when needed, and choose an appropriate time to solve problems and overcome obstacles (Eryilmaz & Kara, 2020).

Achieving each vital outcomes mentioned in the constructionism approach is related to dynamic training and counseling processes, including problem identification (listening and accessing the individual's life narrative under training and counseling and establishing a connection between the text and the narrative's margins and extracting themes), exploration of mental identities (assisting the individual under training and counseling to achieve their mental identities through expressing experiences, predicting the future, or expressing expectations and activities they want to perform in the future), developing self-observation perspectives (assisting the individual under training and counseling to view themselves as a person with high adaptability and the ability to determine different life narratives), harmonizing and adapting problems and obstacles to a new life narrative (the individual under training and counseling observes and creates a new story for themselves and ultimately commits to new identities and roles), flourishing a new educational and career identity (the individual under training and counseling learns to live in their new identity and role), and pursuing short-term and long-term goals according to the established plan and objectives (Savickas, 2005). The constructionism approach (Savickas, 2002; 2005) and related variables and approaches have been used repeatedly in various studies, and evidence has been presented for their effects and various relationships. Among various studies, the most relevant studies to the present study include the study by Bavi et al. (2009) on the effectiveness of job decision-making skills training on job decision-making self-efficacy and job indecision of students, the study by Jalali and Sadeghi (2020) on the effectiveness of career path design on career growth and academic motivation of students, the study by Kim (2022) on the design and determination of the effectiveness of the occupational adaptability counseling protocol on decision-making and occupational adaptability of students, the study by Kim and Kim (2016) on the effectiveness of career readiness training program on self-esteem, decision-making self-efficacy, and career path readiness in students, the study by Lam and Santos (2018) on the effectiveness of career intervention training program on job and academic decision-making self-efficacy, job indecision, and career decision-making difficulties in students, and the study by Park and Lee (2015) on the effectiveness of career path training program on career path self-efficacy, occupational adaptability, and occupational stress in nursing students. A review of some of the most relevant studies to the present study indicates that there is a lack of necessary and sufficient evidence in the available studies in the field of the effectiveness of the constructionism approach on job decision-making self-efficacy and satisfaction with the field of study in students with symptoms of academic burnout. There needs to be more scientific and research knowledge in this area.

In the previous theoretical and research background summary related to the subject of the present study, it is clear that the compatibility and capacity of the constructionism approach are in line with the desires and decision-making necessities for entering the appropriate educational and occupational path based on the characteristics and tendencies of students in the early years of university education. The constructivism approach allows them to manage and direct their educational and occupational path in a meaningful and purposeful way by striving to create a new identity and narrative compatible with each student's abilities and characteristics. Despite such potential, studies have yet to be conducted to investigate the use of this approach among students with academic burnout. In line with the above, it can be said that the present study is of central importance and necessity, given the increasing number of students seeking to continue their education at universities in Iran. The use of all counseling and training capacities of compatible approaches (such as the constructivism approach) with the needs of adolescents and young people in the path of choosing a field of study and continuing education in the selected field, which has an inevitable link with individuals' career path, needs to be considered in scientific studies. This will increase educational counselors' counseling and training capacity in training and development and universities. Based on this, this research was conducted to answer whether constructivism training effectively enhances the self-efficacy of occupational decision-making and satisfaction with the chosen field of study among students with academic burnout.

2. Methodology

This research was a quasi-experimental study with a pre-test and post-test design and a two-month follow-up with a control group. The study's statistical population consisted of students of Isfahan Islamic Azad University, Khorasgan Branch, who were referred to the university counseling center in 2021 due to a drop in their GPA and conditional status. From this population, students who were identified as having symptoms of academic burnout through an initial interview with the counselor about the causes of academic decline and conditional status, as well as symptoms of exhaustion, lack of motivation, and a sense of decreased energy and power, were selected through convenience sampling. The initial sample consisted of 92 students, and based on the entry criteria, 30 students who were willing to participate in the study, had not participated in any simultaneous psychological training, and were diagnosed with academic burnout through the initial interview were randomly assigned to either the experimental group (15 students) or the control group (15 students). The entry criteria included willingness and consent to participate in the study, not participating in any simultaneous psychological training, and being diagnosed with academic burnout through the initial interview. The exit criteria included diagnosing severe psychiatric disorders such as personality disorders, bipolar disorder, depression, and anxiety through clinical interviews based on DSM-IV criteria (determined through the initial diagnostic interview with each participant) and missing more than two sessions in the training process.

Materials

1. The Career Decision-Making Self-Efficacy Scale by Betz, Klein, and Taylor (1996): A 25-item questionnaire was used to measure career decision-making self-efficacy, which covers five appropriate evaluation domains of self, job information gathering, goal selection, planning and future planning, and problem-solving. The response scale of this questionnaire is based on a 5-point Likert scale ranging from no confidence (1) to very high confidence (5), with a score range of 25 to 125. An increase in scores on this questionnaire indicates an increase in career and academic decision-making self-efficacy (Betz et al., 1996). Betz et al. (1996) reported a significant and positive correlation between the scores obtained from the Career Decision-Making Self-Efficacy Scale and, the Career Decision-Making Scale and the Vocational and Professional Identity Scale as evidence of the convergent validity of this questionnaire. In the study by

Buyukgoze-Kavas (2014), in addition to the necessary documentation for the structural validity of this questionnaire, through confirmatory factor analysis, a significant and positive correlation (r=0.65) was reported between the scores obtained from this scale and the General Self-Efficacy Scale. The Cronbach's alpha coefficient was obtained as 0.92. Sadeghi (2015) used this questionnaire in his study on students and showed that this questionnaire has convergent validity based on a significant and positive correlation with self-efficacy, self-esteem, and family support and reported the Cronbach's alpha coefficient of this questionnaire as 0.89. In the present study, this questionnaire's Cronbach's alpha coefficient was obtained as 0.91.

- 2. Ahmadi's (2009) satisfaction questionnaire: To measure satisfaction with the chosen field of study, an 8-item questionnaire introduced by Ahmadi (2009) was used, which covers satisfaction with the chosen field of study and studying in that field. The response scale of this questionnaire is based on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5), with a score range of 8 to 40. Higher scores on this questionnaire indicate higher satisfaction with the chosen field of study (Ahmadi, 2009). Ahmadi (2009) used principal component analysis with orthogonal varimax rotation to examine the questionnaire's factor structure (structural validity), and the results showed that the questionnaire has a desirable structure. The Cronbach's alpha coefficient for this questionnaire was reported as 0.73 (Ahmadi, 2009). This questionnaire has also been used in various studies, including Ahmadi and Sheikh al-Islam (2011), who found significant and positive relationships between satisfaction with the chosen field of study and academic achievement and reported a Cronbach's alpha coefficient of 0.80 for this questionnaire. In the present study, the Cronbach's alpha coefficient for this questionnaire was 0.80.
- 3. Constructivism approach training: The constructivism approach training was conducted based on a training package introduced by Khabaz Shirazi et al. (2022), which has been validated for content validity. The content of the training sessions was presented in Table 1.

Table 1. Constructionism training protocol taken from Khabaz Shirazi et al. (2022)

	Content
Session	
1	Objective: Establishing communication with youth and familiarizing participants with the
	course
	Content: Familiarizing participants with the importance of career and educational choices,
	factors affecting these choices, and the role of optimal choices in academic satisfaction
	Task: Reviewing past and present life experiences to answer three important questions: Who
	am I? Why did I choose this field? How can I manage my choices?
	Objective: Familiarizing youth with the concept of educational and career personality and
	identity
	Content: Awareness of the impact of educational and career personality on life path choices
2	(focusing on personality types in this area, weaknesses and strengths of each type, and how
	these weaknesses and strengths affect life decisions)
	Task: Completing a worksheet on how to complement my career and educational personality
	weaknesses with my strengths
	Objective: Familiarizing youth with the reasons for choosing their field of study, with an
	emphasis on understanding mental identities
3	Content: Awareness of mental identities and their role in shaping life narratives, the role of
	the dominant narrative in decision-making self-efficacy and academic satisfaction or
	dissatisfaction
	Task: Completing a worksheet on discovering my identities and life narrative; what is the
	name of my life narrative?

4	Objective: Familiarizing youth with how to identify the main issues in their educational life and their role in academic satisfaction or dissatisfaction Content: Familiarity with identifying the main issues in educational life and distinguishing between peripheral and main issues in this area using strategies to identify important issues and prioritize career and educational life, emphasizing the fulfillment and identity of successful students Task: Completing a worksheet on the limitations and damages of my current and new identity				
	Objective: Familiarizing youth with ways to observe themselves to understand their current				
	problematic identity and acquire new effective identities				
	Content: Familiarizing participants with the concept of self-observation, familiarizing them				
5	with the strategy of looking from the outside in to discover current weaknesses and find				
	potential in the environment				
	Task: Completing a worksheet on my opportunities and threats in my current and new				
	identity				
	Objective: Determining a new identity and new roles				
	Content: Familiarizing participants with ways to place problems and issues in a new narrative,				
6	observing themselves in a new story, committing to new identities and roles				
	Task: Completing a worksheet on my roles, responsibilities, and duties in my new identity				
	and narrative				
	Objective: Familiarizing youth with how to successfully achieve a new identity				
7	Content: Familiarizing participants with how to set long-term and short-term goals and plan				
	to achieve these goals				
	Task: Completing a worksheet on my long-term and short-term goals in my new life narrative				
	Objective: Familiarizing youth with obstacles to achieving goals related to their new identity				
0	Content: Training on ways to adhere to goals through commitment to the plan, controlling				
8	impulses, and self-management				
	Task: Completing a worksheet on how I plan to manage obstacles in my new life narrative.				

Implementation

Ethical criteria: The participants were informed about the confidentiality of the results and that the data would be used solely for research purposes. There was no coercion from the researcher towards the participants, who were informed that participation was voluntary. After completing the research, the control group received the training sessions in a condensed format. The data were analyzed using repeated measures analysis of variance and Bonferroni post-hoc test using SPSS version 26.

3. Findings

Table 2 presents the results of comparing the two research groups in demographic variables.

Table 2. Demographic characteristics frequencies and chi-square test

	0 1	1 1				
Variables	Constructionism training group	Control group	Chi-square			
v ai iables	(Frequency %)	(Frequency %)	(possibility value)			
Age						
18 to 20	9 (60)	7 (46.67)	0.526 (0.95)			
21 and higher	6 (40)	8 (53.33)	- 0.536 (p=0.85)			
Number of children						
1	5 (33.33)	8 (53.33)	1 22 (n=0 25)			
2 or more	10 (66.67)	7 (46.67)	— 1.22 (p=0.25)			

Birth order						
First child	7 (46.67)	9 (60)	0.536 (p=0.84)			
Second child or latter	8 (53.33)	6 (40)				
	Field of s	tudy				
Technical and Engineering	5 (33.33)	5 (33.33)	0.18 (p=0.96)			
Science	5 (33.33)	4 (26.67)				
Humanities	5 (33.33)	6 (40)				
	Marriage s	status				
Single	10(67.66(13 (86.67)	1.66 (p=0.18)			
Married	5 (33.33)	2 (13.33)				

As shown in Table 2, the two research groups did not differ significantly in age, number of siblings, birth order, academic preference, and marital status, as indicated by the chi-square test. Table 3 presents the means and standard deviations of academic self-efficacy and satisfaction with the chosen field of study separately for the pre-test, post-test, and follow-up stages.

Table 3. Mean and standard deviation of decision-making self-efficacy and satisfaction with academic field in two research groups in three stages

 Variable	Stage	Constructionism training group		Control group		
v ariable	Stage -	Mean	SD	Mean	SD	
_	Pre-test	87.65	38.7	40.61	50.8	
Decision-making self-efficacy1	Post-test	73.92	87.5	27.65	27.7	
sen-enreacy i	Follow-up	33.94	83.4	80.66	28.6	
	Pre-test	13.17	54.3	40.19	22.3	
Satisfaction with the field of study	Post-test	32.29	29.3	27.20	99.2	
are nera or seady	Follow-up	80.17	83.2	93.17	34.2	

As shown in Table 3, comparing means for academic self-efficacy and satisfaction with the chosen field of study indicates that the constructivism approach training showed greater changes in the post-test and follow-up stages compared to the control group. Before conducting the covariance analysis, this analysis's statistical assumptions were examined. The Shapiro-Wilk test results indicated the normal distribution of these two variables ($p \le 0.05$), and Levene's test indicated equality of variances between the study groups ($p \le 0.05$). The Box's M test indicated equality of covariance matrices. Mauchly's sphericity test indicated insignificance for academic self-efficacy but significance for satisfaction with the chosen field of study. Therefore, the results for satisfaction with the chosen field of study were reported based on the epsilon-adjusted degrees of freedom and Greenhouse-Geisser statistic. Table 4 presents the results of repeated measures analysis of variance.

Table 4. The results of repeated measures variance	e analysis for decision-making self-efficacy and
satisfaction with the	academic field.

	Source	SS	Df	MS	F	Sig.	Eta ²	Power
		Decisio	n-making	g self-efficac	y			
337:41 :	Time*Group	27.5253	2	63.2626	66.351	001.0	93.0	1
Within-	Error (time)	69.2652	2	34.1326	62.182	001.0	87.0	1
group -	Group	71.406	56	14.8	-	-	-	-
Between-	Error	71.8840	1	71.8840	33.71	001.0	72.0	1
group	Time*Group	22.3470	28	94.123	-	-	-	-
		Satisfactio	n with th	e field of st	udy			
Within-	Time	07.661	29.1	99.511	97.89	001.0	76.0	1
	Time*Group	20.259	29.1	75.200	28.35	001.0	56.0	1
group -	Error (time)	73.205	15.36	69.5	-	-	-	-
Between-	Group	640	1	640	81.27	001.0	50.0	99.0
group	Error	40.644	28	01.23	-	-	-	-

Based on the results related to the hypotheses mentioned, as seen in Table 4, in the self-efficacy variable of decision-making, in the within-group effect, in the time factor (F = 351.66, df = 2 and p<0.01) and the interaction of time and group (F=182.62, df= 2 and p<0.01), the results show that there is a significant difference (p<0.01) in the self-efficacy variable of decision-making between pre-test, post-test, and followup and the interaction of time with the group (three research groups). In Table 4, the group factor is significant in the between-group effect for decision-making self-efficacy (F= 71.33, df= 2 and p<0.01), meaning there is a significant difference between the experimental and control groups. Also, in Table 4, in the satisfaction variable with the field of study, in the within-group effect, in the time factor (F=89.97, df= 1.29 and p<0.01) and the interaction of time and group (F=38.25, df=1.29 and p<0.01), the results show that there is a significant difference (01/0 p>) in the satisfaction variable with the field of study between pretest, post-test, and follow-up and the interaction of time with the group (three research groups). In Table 4, in the between-group effect for satisfaction with the field of study (F=27.81, df = 2 and p>0.05), the group factor is also significant, meaning that there is a significant difference between the experimental and control groups. The results of the Bonferroni follow-up test showed a significant difference (01/0> p) between pretest, post-test, and follow-up for both variables of decision-making self-efficacy and satisfaction with the field of study, as well as between post-test and follow-up. This means that decision-making self-efficacy in the career path and satisfaction with the field of study has increased compared to the pre-test due to the constructivism training in the post-test and follow-up, and this increase has been stable until the follow-up stage.

4. Conclusion

This study was conducted to determine the effectiveness of constructivism training on decision-making self-efficacy in the career path and satisfaction with the field of study of students with academic burnout. The results showed that constructivism training effectively increases decision-making self-efficacy in the career path and satisfaction with the field of study of students with academic burnout.

The searches conducted did not provide access to a study that specifically addressed the effectiveness of constructivism training on decision-making self-efficacy in the career path and satisfaction with the field of study of students with academic burnout. However, some studies, such as the study by Bavi et al. (2009) on the effectiveness of job decision-making skills training on job decision-making self-efficacy and indecision of students, Kim's (2022) study on the effectiveness of job adaptability counseling protocol on career decision-making of students, Kim and Kim's (2016) study on the effectiveness of career readiness training program on

decision-making self-efficacy related to career decision-making in students, Lam and Santos' (2018) study on the effectiveness of career intervention training program on career and academic decision-making selfefficacy, career indecision, and decision-making difficulty in students, and Park and Lee's (2015) study on the effectiveness of career path training program on career decision-making self-efficacy in nursing students, have been documented. With a look at the mentioned studies and considering the use of constructivism training in these studies, as well as the variables of self-efficacy and decision-making, it can be said that the effectiveness of constructivism training on self-efficacy in career decision-making of students with job burnout in the present study is consistent with the results of the mentioned studies. The reason for this consistency is that students need career-oriented training to enhance their self-efficacy in career decision-making. Despite this consistency, the necessary distinction of the present study from previous studies is that it focused on students with academic burnout who have yet to be extensively studied in previous studies. In explaining the effectiveness of the constructivism approach on self-efficacy in career decision-making, it can be said that since the constructivism approach focuses on the six-stage process of problem identification (to achieve the individual's life narrative and establish a connection between the text and the narrative margins), exploration of mental identities (assisting individuals in achieving their specific mental identities), developing perspectives on oneself as an individual who has a high capacity for adaptation and determining different life narratives; harmonization and adaptation of issues and obstacles with the new life narrative, flourishing new academic and career identities, and pursuing short-term and long-term goals according to the established plan and objectives, it focuses practically and actively in counseling sessions and training. Therefore, it increases students' decision-making capacity in the first step and strengthens their belief that they can successfully manage their academic and career decisions. The result of this strengthening is an increase in career decisionmaking self-efficacy.

In the field of the effectiveness of constructivism training on satisfaction with the chosen field of study, another part of the results of the present study showed that constructivism training is practical. This result is relatively consistent with the results of Jalali and Sadeghi's (2020) research on the effectiveness of career path design on career growth and academic motivation of students, which both have a relationship with satisfaction, and with the results of Park and Lee's (2015) research on the effectiveness of career path training program on career stress in nursing students, which has a negative relationship with satisfaction. In explaining the effectiveness of the constructivism approach on satisfaction with the chosen field of study in the present study, it can be said that considering the increase in the level of self-efficacy in career decision-making through constructivism training in the present study, and considering the existence of a relationship between self-efficacy in career decision-making and satisfaction with education (Khansari & Nilforoushan, 2020), it can be said that one of the paths that constructivism training is capable of enhancing the level of satisfaction with the chosen field of study is through enhancing self-efficacy in career decision-making. In a nutshell, when students with academic burnout learn decision-making skills, identity, and new narratives about their academic and career life through constructivism training (Kim, 2022; Kim & Kim, 2016), they will initially have greater satisfaction with themselves and their field of study due to the prevention of worsening academic burnout conditions. This is because they feel that they now have a better understanding of the realistic aspects and potential of their academic and career path, which can be managed better. Furthermore, the six-step constructivism training process enhances the adaptability of students with academic burnout to academic stressors and challenges, reinforcing their perception and understanding that they are on the right path to achieving their academic goals and new identity. Feeling a sense of movement towards their academic goals logically strengthens their satisfaction with their field of study. Additionally, strengthening their sense of capability resulting from enhancing their self-efficacy for coping with academic difficulties provides a critical opportunity for burnt-out students to gradually cope with academic stress and pressure while balancing their academic and other social activities (Sawicki, 2021). This balance can greatly enhance satisfaction with their field of study.

In conclusion, the evidence from this study indicates that constructivism training is an effective counseling and training approach for enhancing the self-efficacy of career decision-making and satisfaction with the field of study in students with academic burnout. Although the use of constructivism training for burnt-out students has not been as widely used and studied as it should be in previous studies, the results and generalization of the study's findings should be considered in the context of its limitations. The first limitation is that this study was conducted on students with academic burnout, so caution should be exercised in generalizing the results to other populations or educational levels. The second limitation is that this study was conducted in a quasi-experimental design, so caution should be exercised in concluding based on full experimental studies. To address the limitations mentioned in future studies, similar studies should be conducted separately on high school and college students or male and female students, if necessary, in a full experimental design to obtain more comparative information on the effectiveness of constructivism training and other career and academic counseling approaches for essential variables such as self-efficacy for career decision-making and satisfaction with the field of study in students with academic burnout. Finally, given the effectiveness of constructivism training on self-efficacy for career decision-making and satisfaction with the field of study in students with academic burnout in this study, it is recommended that universities use constructivism training as a practical training approach for burnt-out students through academic and career counselors in university counseling centers.

Acknowledgments

We would like to sincerely thank all school administrators and students who provided the opportunity for this study through their cooperation and participation.

Authors' Contributions

All authors contributed equally to the preparation and writing of this article.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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