





Design and Effectiveness of a Choice Theory Educational Package on Academic Integration among Male High School Students in District Two of Kerman City

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ABSTRACT

This study was conducted to design and examine the effectiveness of a Choice Theory educational package on the academic integration of male students in the second cycle of secondary education in District Two of Kerman City. The study employed a quasi-experimental design with a pretest–posttest control group. The statistical population consisted of all male students in the second cycle of secondary education in District Two of Kerman City (N = 450). A multistage cluster random sampling method was used, and the sample included 60 students who were randomly assigned to an experimental group (30 participants) and a control group (30 participants). Data were collected using the Academic Integration Questionnaire developed by Terenzini and Pascarella (1980). Participants in the experimental group received the Choice Theory educational package over eight sessions, whereas the control group received no intervention. Data were analyzed using repeated-measures analysis of variance with SPSS software. The results indicated that the educational package developed based on Choice Theory had a significant effect on academic integration and its components at the posttest stage, and the continuity of this effect was also observed at the follow-up stage ($p < .01$). Therefore, the educational package developed based on Choice Theory can be considered an effective method for increasing students' academic integration.

Keywords: Educational package, Choice Theory, academic integration

1. Introduction

Academic integration is considered one of the most important indicators of students' successful adaptation to educational environments and plays a fundamental role in academic achievement, psychological well-being, educational persistence, and school engagement. Academic integration reflects the degree to which students establish meaningful cognitive, emotional, and social connections with the educational environment, peers, teachers, and institutional goals. Students who experience higher levels of academic integration typically demonstrate greater academic motivation, stronger educational commitment, more effective interpersonal relationships, and lower rates of academic failure and school dropout. In contrast, low levels of academic integration are associated with academic disengagement, reduced motivation, emotional distress, poor educational performance, and increased behavioral problems (Davidson & Wilson, 2013; Zepke et al., 2016). Contemporary educational systems increasingly recognize that educational success is not determined solely by intellectual ability, but also by the quality of students' psychological adjustment and their integration into the academic environment.

The concept of academic integration has received considerable attention in educational psychology because of its multidimensional influence on students' educational experiences. Academic integration encompasses several components, including academic progress, institutional commitment, interactions with peers and teachers, emotional belonging to the educational setting, and alignment between students' personal goals and educational objectives (Lakhal et al., 2020; Mohammadi & Ghatraei, 2015). Research findings have shown that supportive educational environments, constructive interactions with faculty members, and active participation in learning experiences contribute significantly to students' academic integration and retention (Byl et al., 2016; Dowell & Neal, 2015; Kember & Leung, 2015). Similarly, learner-centered educational approaches enhance students' feelings of belonging and responsibility, thereby increasing educational engagement and persistence (Zepke et al., 2016). Consequently, identifying psychological and educational interventions capable of strengthening academic integration among adolescents has become a major concern in educational and counseling research.

Adolescence, particularly the secondary school years, represents a critical developmental period characterized by

rapid cognitive, emotional, social, and identity-related changes. During this period, students encounter numerous educational demands and interpersonal challenges that may influence their academic adjustment and integration. Male adolescents are especially vulnerable to motivational decline, emotional dysregulation, academic disengagement, and behavioral conflicts when they lack effective coping skills and supportive educational relationships. In many educational settings, students' difficulties are often addressed through externally imposed disciplinary systems that neglect students' internal motivations, emotional needs, and sense of personal responsibility. Such approaches may weaken students' autonomy and decrease their psychological connection to school environments. Therefore, interventions emphasizing internal control, self-awareness, responsibility, and constructive interpersonal relationships may provide more sustainable outcomes in improving academic integration among adolescents (Daniel, 2014; Davidson & Wilson, 2013).

One of the theoretical approaches that has increasingly attracted attention in educational and counseling contexts is Glasser's Choice Theory. Choice Theory is based on the assumption that human behavior is internally motivated and directed toward satisfying five genetically determined basic needs: survival, love and belonging, power, freedom, and fun (Glasser, 2017). According to this perspective, individuals are responsible for their choices and behaviors, and psychological problems largely emerge when individuals fail to satisfy their basic needs in effective and responsible ways. Choice Theory emphasizes internal control, self-evaluation, responsibility-taking, effective relationships, and the development of realistic and need-satisfying behaviors. In educational settings, this theory highlights the importance of creating environments in which students feel respected, connected, autonomous, and capable of meaningful participation in learning processes (Sahebi, 2017).

Educational interventions based on Choice Theory and Reality Therapy have demonstrated considerable effectiveness in improving various psychological and educational outcomes. Previous studies have reported that Choice Theory training increases students' cognitive learning strategies, academic motivation, self-efficacy, hopefulness, responsibility, and emotional regulation skills (Alizadeh Fard & Mahpouya, 2017; Samadian et al., 2019; Yadollahi Saber et al., 2019). Choice Theory-based interventions have also been associated with enhanced academic performance and positive educational emotions

among students (Nurjanah et al., 2020; Rabban Pourloklai & Emadian, 2020). Since academic integration is strongly influenced by students' sense of responsibility, interpersonal belonging, self-regulation, and educational motivation, Choice Theory appears theoretically compatible with interventions designed to improve academic integration.

Reality Therapy, which operationalizes the principles of Choice Theory, focuses on helping individuals evaluate their current behaviors, recognize ineffective behavioral patterns, and develop more adaptive strategies for satisfying their psychological needs. This therapeutic approach encourages individuals to accept responsibility for their behaviors and strengthen their internal locus of control. Studies have shown that Reality Therapy improves psychological adjustment, happiness, interpersonal functioning, self-esteem, and emotional resilience across different populations (Abdollahi Mehraban et al., 2014; Bhargava, 2013; Nematzadeh & Mari, 2014). Furthermore, research has demonstrated the effectiveness of Reality Therapy in reducing identity crises, increasing intimacy, improving psychological capital, and decreasing parent-child conflicts among adolescents and adults (Darbai, 2015; Kakia, 2014; Shariati Pour et al., 2019; Sohrabnejad et al., 2015). These findings suggest that interventions derived from Choice Theory may strengthen students' emotional and social adaptation within educational settings.

Several investigations have specifically examined the role of Choice Theory in educational contexts. Mason (2016) reported that school counseling programs grounded in Reality Therapy contributed to reducing academic achievement gaps and improving students' educational adjustment (Mason, 2016). Kianipour and Hoseini (2012) found that training teachers in Choice Theory improved students' academic qualification and educational functioning (Kianipour & Hoseini, 2012). Similarly, Dortaj et al. (2022) demonstrated that a classroom management package based on Choice Theory significantly enhanced teachers' management styles and students' responsibility levels (Dortaj et al., 2022). In another study, Pourhossein Malayousefi et al. (2020) reported that communication skills training and motivational self-regulation strategies improved academic self-efficacy among gifted students (Pourhossein Malayousefi et al., 2020). These findings collectively indicate that interventions emphasizing responsibility, internal motivation, interpersonal understanding, and self-regulation may positively influence students' educational functioning and integration.

The effectiveness of Choice Theory interventions has also been supported in broader psychological domains. Studies have demonstrated that Reality Therapy improves distress tolerance, emotional adjustment, life meaning, irrational beliefs, cognitive avoidance, anger management, and psychological well-being (Gundogdu, 2018; Shahsavari et al., 2025; Toope et al., 2025; Yousefi et al., 2025; Zahed et al., 2025). Law and Guo (2015) further showed that Choice Theory-based interventions strengthened hope and recovery among women convicted of drug-related offenses (Law & Guo, 2015). These findings highlight the broad applicability of Choice Theory in enhancing adaptive functioning and psychological resilience. Given that academic integration is influenced by emotional regulation, hopefulness, interpersonal competence, and self-awareness, the psychological mechanisms emphasized within Choice Theory may substantially contribute to improving students' academic integration.

Another important aspect of Choice Theory is its emphasis on interpersonal relationships and quality interactions. According to Glasser, satisfying the need for love and belonging constitutes one of the central determinants of psychological health and adaptive functioning (Glasser, 2017). Educational environments that fail to establish supportive relationships often contribute to students' disengagement and academic alienation. Research indicates that peer learning, faculty interaction, constructive feedback, and supportive educational climates significantly promote students' social and academic integration (Bojruklund et al., 2012; Byl et al., 2016; Lakhali et al., 2020). Therefore, interventions that teach students communication skills, empathy, emotional awareness, and responsibility-taking may foster stronger academic connections and educational belonging.

Despite the growing body of evidence supporting the effectiveness of Choice Theory interventions, relatively limited research has directly investigated the development of structured educational packages based on Choice Theory specifically aimed at enhancing academic integration among high school students. Most previous studies have focused on isolated psychological outcomes such as self-esteem, happiness, academic motivation, or emotional regulation, while fewer studies have examined the multidimensional construct of academic integration in adolescent educational contexts (Nematzadeh & Mari, 2014; Nurjanah et al., 2020; Samadian et al., 2019). Furthermore, cultural and educational differences may influence the applicability and effectiveness of psychological interventions across societies.

Consequently, there is a need for culturally adapted educational packages that address the specific developmental and educational needs of Iranian adolescents.

The current educational climate increasingly requires interventions that move beyond traditional instructional approaches and address students' emotional, motivational, and relational needs simultaneously. Choice Theory provides a comprehensive framework for achieving this objective because it integrates cognitive, emotional, behavioral, and interpersonal dimensions within a coherent theoretical model. By emphasizing self-awareness, responsible behavior, need satisfaction, emotional management, and constructive relationships, Choice Theory-based educational programs may create conditions that facilitate stronger academic integration among students. In addition, educational interventions grounded in Choice Theory may contribute to long-term educational adjustment by encouraging students to actively participate in their learning processes and assume responsibility for their academic behaviors.

Given the theoretical significance of academic integration in educational success, the increasing psychological challenges experienced by adolescents, and the growing evidence supporting the effectiveness of Choice Theory interventions, designing and evaluating an educational package based on Choice Theory appears both theoretically and practically important. Therefore, the present study aimed to design and examine the effectiveness of a Choice Theory educational package on academic integration among male students in the second cycle of secondary education in District Two of Kerman City.

2. Methods and Materials

2.1. Study Design and Participants

The present study was conducted in two phases. In the first phase, a qualitative content analysis approach was employed to develop a preliminary educational package based on Choice Theory aimed at improving students' academic integration. During this phase, all theoretical frameworks related to Choice Theory, the concept of academic integration, and previous studies conducted both in Iran and internationally were comprehensively reviewed. Based on the identified theoretical foundations and empirical findings, the main component of the study, namely the development of the educational package, was designed through the systematic organization of instructional techniques intended to ensure the internal coherence of the

intervention program. After the educational package, instructional assignments, and related protocols were developed, the package was subjected to content validation. For this purpose, the developed package was provided to eight faculty members specializing in educational psychology, clinical psychology, and counseling in order to evaluate its content validity.

In the second phase, the effectiveness of the developed educational package was examined using a quantitative experimental approach with a pretest–posttest control group design. In this stage, the experimental group received interventions based on Choice Theory, whereas the control group remained on a waiting list and received no intervention during the study period. Both groups completed the pretest and posttest simultaneously. In addition, a follow-up assessment was conducted two months after the completion of the intervention through the re-administration of the posttest to participants in the experimental group. Therefore, the present study was considered an applied experimental study using a pretest–posttest design with a control group and follow-up phase.

The statistical population of the study consisted of all male students enrolled in the second cycle of secondary education in District Two of Kerman City ($N = 450$). A multistage cluster random sampling method was used to select participants. Initially, four boys' high schools were randomly selected from among the secondary schools in District Two of Kerman City. Subsequently, two classes were randomly selected from each school, and 30 students were selected from each class, resulting in a total of 240 students. In the next stage, the selected students completed the Academic Integration Questionnaire, and students who obtained scores below the mean were identified. Among these students, 60 individuals who expressed willingness to participate in the educational program were selected as the final sample. The participants were then randomly assigned to either the experimental group ($n = 30$) or the control group ($n = 30$). To ensure the adequacy of random assignment, an independent-samples *t*-test was conducted based on the students' previous semester grade point averages. The scores obtained during the initial assessment process were considered as the pretest scores for the study.

2.2. Measures

Data were collected using the Academic Integration Questionnaire developed by Terenzini and Pascarella (1980). This instrument consists of 29 items and measures

five dimensions, including peer-group interaction (7 items), interaction with faculty members (4 items), faculty concern regarding student development and teaching quality (5 items), academic and intellectual development (7 items), and institutional and goal commitment (6 items). The questionnaire is scored on a five-point Likert scale ranging from 1 (very low) to 5 (very high). Terenzini and Pascarella (1980) confirmed the divergent validity of the instrument through its association with measures of academic motivation and reported a Cronbach's alpha coefficient of .78 for the total scale. In a Persian validation study conducted by Mohammadi and Ghatraei (2015), Cronbach's alpha coefficients for the dimensions of the questionnaire were reported as .60 for peer-group interaction, .92 for interaction with faculty members, .73 for faculty concern regarding student development and teaching, .61 for academic and intellectual development, and .75 for institutional and goal commitment. Furthermore, the reported validity coefficients for the subscales indicated acceptable construct validity for the questionnaire.

2.3. Intervention

The development of the educational package was carried out in three major stages, including the preliminary phase, the package design phase, and the final validation phase. During the preliminary phase, the relevant literature and previous studies related to Choice Theory and academic integration were systematically reviewed to ensure the originality of the research topic and to identify effective educational components. In addition, consultation with educational specialists, researchers, school counselors, teachers, and school administrators was conducted to facilitate the planning and implementation of the intervention program. During the package design phase, the theoretical foundations of Choice Theory were examined in relation to improving the educational environment and promoting academic integration. Problem formulation from the perspective of Choice Theory was developed through clinical observations of students with academic difficulties who had referred to the counseling center where the researcher was employed. Furthermore, Glasser's needs assessment framework and researcher-developed worksheets based on the core concepts of Choice Theory were used to identify educational needs and intervention strategies. Based on these foundations, the educational objectives, session structure, and intervention content were designed in such a way that each session complemented the

previous session and served as a prerequisite for the following one. The final intervention package consisted of an instructor's guidebook, a student workbook, behavior cards, competency cards, and "Little Bears' World" cards designed to facilitate emotional expression, self-awareness, responsibility, and behavioral regulation.

The educational protocol was implemented in eight 90-minute sessions for participants in the experimental group, while the control group remained on a waiting list. The first session focused on establishing rapport, increasing motivation, explaining the overall objectives of the program, and encouraging participants' cooperation. The second session introduced the five basic human needs proposed in Choice Theory, including survival, love and belonging, power, freedom, and fun, while emphasizing the relationship between unmet needs and maladaptive behaviors. The third session addressed the concept of the "quality world" and highlighted the importance of respecting individual preferences and values in interpersonal relationships. The fourth session focused on the perceptual world and the role of individual interpretations in shaping behavior and interpersonal expectations. In the fifth session, students learned strategies for emotional management through behavioral change using emotional cards, worksheets, and experiential activities. The sixth session introduced the concept of the "behavior car" and its components, emphasizing self-control and responsibility for one's overall behavior. The seventh session focused on responsibility-taking and introduced the WDEP system as a core reality therapy strategy for self-evaluation and behavioral regulation. Finally, the eighth session emphasized self-awareness through structured activities involving emotional cards, drawing exercises, behavioral worksheets, and reflection on personal desires, behaviors, and consequences.

2.4. Data Analysis

Data analysis was conducted using SPSS statistical software. Descriptive statistics, including means and standard deviations, were calculated for the study variables. To evaluate the effectiveness of the Choice Theory educational package on academic integration and its components across the pretest, posttest, and follow-up stages, repeated-measures analysis of variance (ANOVA) was employed. This statistical procedure was used to examine both within-group and between-group differences over time. The significance level for all statistical analyses was set at $p < .01$.

3. Findings and Results

Table 1 presents the means and standard deviations of the research variables across the assessment stages and study groups.

Table 1

Descriptive Statistics for Academic Integration and Its Components by Group and Assessment Stage

Variable	Assessment Stage	Experimental Group Mean	Experimental Group SD	Control Group Mean	Control Group SD
Academic Progress	Pretest	15.46	3.33	16.23	2.40
	Posttest	25.40	4.51	16.00	2.63
	Follow-up	26.26	4.63	15.70	2.60
Goal Commitment	Pretest	11.13	2.94	11.60	2.98
	Posttest	21.83	4.77	11.58	2.91
	Follow-up	22.73	5.00	11.50	2.80
Academic Integration	Pretest	26.60	4.63	27.83	2.85
	Posttest	47.23	8.03	27.60	2.77
	Follow-up	49.00	8.60	27.20	3.08

As shown in Table 1, the scores of participants in the experimental group demonstrated noticeable changes in academic integration and its components during the posttest and follow-up stages. To determine whether these observed changes were statistically significant, repeated-measures analysis of variance (ANOVA) was conducted. The application of this statistical test required several assumptions to be examined beforehand, including normality of score distribution and homogeneity of variances. The Shapiro–Wilk test was used to assess the normality assumption. Since the values obtained from the Shapiro–Wilk test were not statistically significant in any assessment stage ($p > .05$), it was concluded that the score distributions were normal. Levene’s test was employed to examine the homogeneity of variances, and the results indicated that the Levene statistic was not statistically

significant across the three assessment stages ($p > .05$), confirming the assumption of equality of variances. Furthermore, Box’s M test supported the assumption of homogeneity of variance–covariance matrices ($p > .05$). In addition, outlier analysis conducted through SPSS Explore indicated the absence of outlier data. Therefore, all assumptions required for repeated-measures ANOVA were satisfied.

The results of Mauchly’s test of sphericity, which represents one of the assumptions of repeated-measures ANOVA, indicated that the significance level was lower than .05, suggesting that the assumption of sphericity had been violated. Consequently, because Mauchly’s test was statistically significant, the Greenhouse–Geisser correction was used to interpret the within-subject effects for academic integration. The results are presented in Table 2.

Table 2

Results of Within-Group Effects for Academic Integration Variables

Variable	Effect	Sum of Squares	df	Mean Square	F	Sig.	Effect Size
Academic Progress	Sphericity Assumed	1165.833	2	582.917	157.586	.001	.731
	Greenhouse–Geisser	1165.833	1.129	1032.907	157.586	.001	.731
Goal Commitment	Sphericity Assumed	1261.900	2	630.950	203.381	.001	.778
	Greenhouse–Geisser	1261.900	1.113	1133.851	203.381	.001	.778
Academic Integration	Sphericity Assumed	4853.233	2	2426.617	207.736	.001	.782
	Greenhouse–Geisser	4853.233	1.093	4439.443	207.736	.001	.782

As indicated in Table 2, the multivariate repeated-measures ANOVA demonstrated that the effect of time in both the Greenhouse–Geisser correction and the sphericity-assumed condition was statistically significant ($p < .001$).

This finding indicates significant differences in participants’ academic integration scores across the pretest, posttest, and follow-up stages.

The between-group effects for the academic integration variables are presented in Table 3.

Table 3

Results of Between-Group Effects for Academic Integration Variables

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.	Effect Size
Academic Progress	Group	1843.200	1	1843.200	63.820	.001	.524
	Error	1675.111	58	28.881			
Goal Commitment	Group	2205.000	1	2205.000	63.515	.001	.523
	Error	2013.533	58	34.716			
Academic Integration	Group	8080.200	1	8080.200	116.530	.001	.668
	Error	4021.711	58	69.340			

As shown in Table 3, a statistically significant difference was observed between the experimental and control groups ($p < .05$). In other words, the educational package developed based on Choice Theory had a significant effect on academic integration and its components.

Subsequently, pairwise comparisons of the adjusted means across the assessment stages (pretest, posttest, and follow-up) for academic integration were conducted using the Bonferroni post hoc test. The results are presented in Table 4.

Table 4

Results of the Bonferroni Post Hoc Test for Academic Integration Across Assessment Stages

Variable	Comparison of Stages	Mean Difference	Sig.
Academic Progress	Pretest–Posttest (Intervention Effect)	-4.850*	.001
	Pretest–Follow-up (Time Effect)	-5.133*	.001
	Posttest–Follow-up (Intervention Stability)	-0.283	.113
Goal Commitment	Pretest–Posttest (Intervention Effect)	-5.350*	.001
	Pretest–Follow-up (Time Effect)	-5.750*	.001
	Posttest–Follow-up (Intervention Stability)	-0.400*	.001
Academic Integration	Pretest–Posttest (Intervention Effect)	-10.200*	.001
	Pretest–Follow-up (Time Effect)	-10.883*	.001
	Posttest–Follow-up (Intervention Stability)	-0.683*	.004

The results presented in Table 4 demonstrate that the educational package developed based on Choice Theory had a statistically significant effect on academic integration during both the posttest and follow-up stages. Furthermore, the differences between pretest and posttest scores, as well as between pretest and follow-up scores, were larger and more statistically significant than the differences between posttest and follow-up scores. These findings indicate that the educational package based on Choice Theory significantly improved academic integration and its components during the posttest stage, and that the effectiveness of the intervention was maintained during the follow-up stage.

4. Discussion

The present study aimed to design and evaluate the effectiveness of a Choice Theory educational package on

academic integration among male students in the second cycle of secondary education in District Two of Kerman City. The findings demonstrated that the educational package developed based on Choice Theory significantly improved academic integration and its components, including academic progress and goal commitment, in the experimental group compared with the control group. Furthermore, the results indicated that the positive effects of the intervention remained stable during the follow-up stage, suggesting the relative durability of the intervention outcomes over time. These findings support the effectiveness of Choice Theory-based educational interventions in promoting students’ psychological and educational adjustment and highlight the importance of addressing students’ emotional, motivational, and relational needs within educational settings.

One of the major findings of the study was the significant increase in overall academic integration among students who

participated in the Choice Theory educational program. This finding can be explained through the theoretical principles of Choice Theory, which emphasize internal motivation, responsibility-taking, interpersonal belonging, and effective need satisfaction. According to Glasser, students who perceive themselves as capable of making meaningful choices and satisfying their psychological needs within educational environments are more likely to establish stronger emotional and academic connections with school (Glasser, 2017). The intervention implemented in the present study encouraged students to become more aware of their behaviors, needs, goals, and interpersonal relationships, thereby facilitating a stronger sense of educational belonging and engagement. The findings are consistent with the learner-centered perspective proposed by Zepke et al. (2016), who argued that educational environments promoting autonomy, active participation, and supportive relationships enhance students' retention and integration (Zepke et al., 2016).

The significant improvement in academic progress observed among the experimental group participants may be attributed to the intervention's emphasis on self-regulation, responsibility, and internal control. Choice Theory assumes that individuals are responsible for selecting behaviors that satisfy their needs effectively and realistically. During the intervention sessions, students were trained to evaluate their behaviors, identify ineffective patterns, and adopt more adaptive strategies for achieving educational goals. Such processes may have strengthened students' academic self-management and learning engagement, ultimately contributing to improved academic functioning. These findings align with the results reported by Alizadeh Fard and Mahpouya (2017), who found that Choice Theory training enhanced students' cognitive learning strategies (Alizadeh Fard & Mahpouya, 2017). Similarly, Samadian et al. (2019) demonstrated that Choice Theory interventions improved self-efficacy, academic motivation, and goal orientation among students (Samadian et al., 2019). Since academic progress is strongly influenced by motivational and self-regulatory factors, it is reasonable that interventions promoting responsibility and self-awareness would positively influence academic performance and integration.

Another important finding of the study was the improvement in students' goal commitment following participation in the educational program. Goal commitment reflects the degree to which students identify with educational objectives and persist in pursuing academic goals despite difficulties. Choice Theory emphasizes

purposeful behavior and encourages individuals to evaluate whether their actions effectively lead to need satisfaction and personal success. Through activities such as self-evaluation, emotional awareness exercises, and discussions regarding personal goals and behavioral consequences, students learned to align their behaviors with long-term educational objectives. This process may have increased their sense of personal agency and strengthened their commitment to academic achievement. These findings are congruent with previous studies indicating that Choice Theory-based interventions increase hopefulness, responsibility, and motivation among students (Nurjanah et al., 2020; Yadollahi Saber et al., 2019). In addition, the findings support the results of Rabban Pouroloklaei and Emadian (2020), who found that life skills training based on Choice Theory improved academic emotions and academic performance among female students (Rabban Pouroloklaei & Emadian, 2020).

The maintenance of intervention effects during the follow-up phase represents another important finding of the study. The persistence of gains in academic integration suggests that the intervention not only produced temporary behavioral changes but also facilitated deeper cognitive and emotional modifications among participants. Choice Theory interventions emphasize internal behavioral control rather than external reinforcement or punishment. Consequently, students gradually develop sustainable self-regulation skills and internal responsibility that continue to influence their behaviors even after the intervention has ended. The enduring effects observed in this study may also reflect the practical and experiential nature of the intervention activities, such as emotional cards, behavioral worksheets, group discussions, and self-awareness exercises, which enabled students to internalize the learned concepts. Similar findings regarding the long-term effectiveness of Reality Therapy and Choice Theory interventions have been reported in studies examining emotional adjustment, distress tolerance, and psychological functioning (Toope et al., 2025; Yousefi et al., 2025; Zahed et al., 2025).

The findings of the present study can also be interpreted in light of social and interpersonal dimensions of academic integration. One of the core assumptions of Choice Theory is that the need for love and belonging constitutes a central determinant of adaptive functioning. Educational environments characterized by supportive interactions and mutual respect contribute significantly to students' emotional security and educational engagement. During the intervention, students were encouraged to recognize

differences in others' "quality worlds," improve empathy, and establish more constructive relationships with peers and authority figures. Such processes may have enhanced students' interpersonal functioning and strengthened their sense of inclusion within the educational environment. These findings correspond with previous studies demonstrating the importance of peer interaction, faculty support, and collaborative learning in promoting academic and social integration (Bojrukland et al., 2012; Byl et al., 2016; Lakhali et al., 2020). Davidson and Wilson (2013) also emphasized that students' retention and adjustment are strongly influenced by their academic and social integration within educational institutions (Davidson & Wilson, 2013).

The effectiveness of the intervention may additionally be explained through its emphasis on emotional awareness and emotional regulation. Many students experiencing low academic integration struggle with negative emotions such as anxiety, frustration, hopelessness, and anger, which interfere with educational engagement and academic performance. The intervention sessions specifically targeted emotional management through behavioral change and self-awareness activities. Students learned to identify emotional experiences, recognize the relationship between emotions and behaviors, and adopt more adaptive behavioral responses. Previous studies have shown that Choice Theory and Reality Therapy interventions improve emotional adjustment, anger management, and psychological capital (Gundogdu, 2018; Shariati Pour et al., 2019). Consequently, the reduction of emotional distress and enhancement of emotional competence may have contributed indirectly to improved academic integration among participants.

The results of the study are also consistent with research indicating that educational interventions grounded in Choice Theory improve responsibility-taking and self-efficacy. Students with higher levels of self-efficacy and personal responsibility are more likely to participate actively in learning activities, persist when encountering academic difficulties, and maintain positive attitudes toward educational goals. The present intervention emphasized that individuals are responsible for managing their own "behavior cars" and making effective choices in response to life situations. Such training may have enhanced students' perceived competence and control over educational outcomes. Similar findings were reported by Kianipour and Hoseini (2012), who found that Choice Theory training improved students' academic qualification (Kianipour & Hoseini, 2012). Furthermore, Dortaj et al. (2022) demonstrated that educational programs based on Choice

Theory increased students' responsibility and improved classroom functioning (Dortaj et al., 2022). These findings suggest that strengthening students' sense of personal agency represents an important mechanism through which Choice Theory interventions influence academic integration.

Another noteworthy aspect of the findings is the applicability of Choice Theory interventions within school counseling and educational settings. Many traditional educational interventions focus primarily on academic content and neglect students' emotional and relational experiences. In contrast, Choice Theory adopts a holistic approach that simultaneously addresses cognitive, emotional, interpersonal, and behavioral dimensions of functioning. The educational package developed in the present study integrated these dimensions through structured activities designed to improve self-awareness, emotional understanding, interpersonal relationships, and responsible behavior. This comprehensive approach may explain the substantial effect sizes observed in the study. Similar conclusions have been reported by Mason (2016), who suggested that Reality Therapy-based school counseling interventions effectively reduce educational achievement gaps and improve students' adjustment (Mason, 2016). Therefore, the integration of Choice Theory principles into educational counseling programs may represent a valuable strategy for promoting students' educational well-being and academic engagement.

5. Conclusion

The present findings further support the broader psychological literature demonstrating the effectiveness of Reality Therapy interventions across diverse populations and psychological difficulties. Previous studies have documented positive outcomes of Reality Therapy for self-esteem, happiness, interpersonal relationships, psychological adjustment, and identity development (Abdollahi Mehraban et al., 2014; Kakia, 2014; Nematzadeh & Mari, 2014). The consistency between these findings and the results of the current study suggests that the fundamental principles of Choice Theory may influence multiple dimensions of psychological and educational functioning through common underlying mechanisms, including increased self-awareness, responsibility-taking, need satisfaction, and emotional regulation.

Despite the positive findings of the present study, several limitations should be considered. The study was conducted exclusively among male students in the second cycle of

secondary education in one educational district of Kerman City, which may limit the generalizability of the findings to female students, other educational levels, or different cultural and geographical contexts. In addition, the sample size was relatively limited, and the study relied on self-report questionnaires, which may be influenced by response biases and social desirability effects. Another limitation was the relatively short follow-up period, which restricted the evaluation of the long-term sustainability of intervention effects. Furthermore, variables such as family functioning, socioeconomic status, personality characteristics, and school climate were not controlled and may have influenced students' academic integration.

Future studies are recommended to examine the effectiveness of Choice Theory educational programs among different age groups, educational levels, and cultural settings in order to enhance the external validity of the findings. Researchers may also investigate the comparative effectiveness of Choice Theory interventions relative to other psychological and educational approaches, such as cognitive-behavioral interventions, acceptance and commitment therapy, or social-emotional learning programs. Conducting longitudinal studies with longer follow-up periods would provide a more comprehensive understanding of the durability of intervention outcomes. In addition, future research could explore the mediating roles of self-efficacy, emotional regulation, academic motivation, and interpersonal functioning in explaining the relationship between Choice Theory interventions and academic integration.

The findings of the present study have important practical implications for educational systems, school counselors, and mental health professionals. Educational authorities may benefit from integrating Choice Theory principles into school counseling services, classroom management programs, and student support interventions. Teachers and school counselors can utilize Choice Theory-based strategies to promote students' responsibility, emotional awareness, interpersonal skills, and educational engagement. Developing structured educational workshops for students, parents, and teachers may also contribute to creating more supportive and psychologically responsive educational environments. Moreover, implementing preventive interventions grounded in Choice Theory during adolescence may help reduce academic disengagement, improve educational adjustment, and strengthen students' long-term academic and psychological well-being.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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