



The Effectiveness of Group Hope Training on Academic Engagement and Social Adjustment in Female High School Students

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Abstract: This study examines the effectiveness of group hope training based on Snyder's theory on academic engagement and social adjustment in female high school students. The study method was a quasi-experimental pretest-posttest with a control group. The statistical population of the present study included all female high school students in Bushehr (Iran) in 2021. The research sample included 30 students selected by the accessible sampling method and randomly assigned to experimental and control groups. The Social Adjustment Scale by Kim (1999) and School Engagement Scale by Wang et al. (2011) were used to collect data. Group hope training based on Snyder's theory was performed in 9 sessions in the experimental group. The control group did not receive any intervention during this period. The results exhibited that group hope training based on Snyder's theory significantly increased the components of academic engagement (i.e., behavioral, emotional, and cognitive) and social adjustment in the experimental group. Overall, the research findings support the effectiveness of educational programs based on positive psychology on learners' motivational and emotional outputs.

Keywords: Group hope training, academic engagement, social adjustment, high school students

Introduction

The duties of educational centers are to promote moral values among students in order to provide the flourishing of students' abilities and to provide the necessary basis for their comprehensive development of personality, emotional, behavioral and intellectual (Ghadampour, Heidaryani, Kalantar, & Nasiri Hanis, 2020). The importance of high school becomes apparent after elementary school. This course is one of the most important, sensitive and effective courses in the individual and social life of students, which has similarities and differences with other courses due to the biological, social and psychological status of its students. In high school, a large number of adolescents and young adults develop special talents, their learning power reaches its peak, their curiosity finds a certain direction, and new life issues such as choosing a field, choosing a profession and occupation, managing family and religion and constructing social, economic and spiritual values. Therefore, this

course is very important in the education systems of different countries of the world and is a course that links general education to higher education ([Khodarahmi & Gholami, 2019](#)). One of the main features of this course is the need for guidance and counseling for academic success and learning developmental skills, and one of the key factors influencing the academic success of students in this course is academic engagement ([Walker & Pearce, 2014](#)).

Researchers believe that hope is one of the important requirements to deal with problems of mental health in human beings and it seems that hope in students is one of the basic components for their academic achievement and learning ([Narimani & Hedayat, 2020](#)). Group hope training based on Snyder's theory is one of the educational methods that can affect students' academic motivation and social adjustment. Snyder has conceptualized hope as a construct that is very close to optimism as a structure consisting of two components of path and agency thinking. According to this conceptualization, hope is high when it includes valuable and challenging goals and there is a possibility of achieving them in the medium term ([Wahlbeck, Kvist, & Landgren, 2018](#)). Snyder, the founder of the theory of hope and the therapy based on it, defines hope as the perceived capability to develop pathways to favorite goals, and motivate oneself via agency thinking to apply those pathways ([Snyder, 2002](#)). On the other hand, hope is a mental state and motivates man to work and activity and is one of the basic foundations of mental strength and power that determines the achievements of life. Hope therapy based on hope theory is deliberated to enhance hopeful thinking and enrich activities related to goal pursuit with two stages: the stage of encouraging hope, which seeks finding-hope and hope banding, and the stage of increasing hope, followed by hope-enhancing and hope-reminding ([Foroozanfar, 2020](#); [Rand & Cheavens, 2009](#)). Erickson defined hope as the belief that our desires can be fulfilled. Hope includes a lasting sense of assurance that we will survive despite obstacles or misery ([Erskine, 2019](#)). Miller points to the importance of interpersonal relationships, the feeling of having someone who can be trusted, especially in cases where that person is important to us personally ([Miller & Schlenker, 2011](#)). Many people equate the word hope with wish and optimism, while the three have different meanings. Hope is when you are uncertain about what will happen, feel like you have little control, but still wish for a positive outcome. In the case of optimism, you have more perceived control, and believe more in a positive outcome; while wish is usually a specific desire and almost always refers to things from which positive results are expected ([Bruininks & Malle, 2005](#)). To implement Snyder's theory of hope, people can be helped to use their abilities and talents to set meaningful goals. The three main elements of this theory include: encouraging the goal-oriented thinking, the finding the ways to succeed, and the making a change ([Samavi, Najarpourian, & Javdan, 2019](#)).

One of the concepts that can be influenced by hope is students' academic engagement. Research on school engagement began when teachers and educators were concerned about students dropping out, poor motivation, and lack of involvement of students in school activities. Academic engagement happens when students dive deep into learning activities, when they are mentally and emotionally absorbed by the study materials, and often when interacting with peers ([Marks, 2000](#)). Researchers

have some agreement on the three-component model of academic engagement proposed by [Fredricks and McColskey \(2012\)](#). These researchers consider the structure of academic engagement to consist of three components: (1) Behavioral engagement: participation in social, educational, or other types of activities necessary to achieve good academic outcomes and to prevent dropout. (2) Emotional engagement: emotional reactions to academic activities, peers, teachers or school. And (3) cognitive engagement: the amount of attention and strategic self-regulation spent on mastering academic knowledge and competencies.

Academic engagement is one of the types of involvements that refers to the amount of energy that a learner spends to do their academic work and also to the amount of effectiveness and efficiency achieved ([Orthner, Jones-Sanpei, Akos, & Rose, 2013](#)). In other words, it includes the students' willingness to participate in daily school activities such as attending classes, doing homework and following the teacher's instructions in class ([Christenson, Reschly, & Wylie, 2012](#)). Academic engagement in school can also include participation in extracurricular activities such as sports, music, theater, and collective work organized by the school ([Ayyash-Abdo, Sanchez-Ruiz, & Barbari, 2016](#)). Students who have academic engagement pay more attention and focus on tasks, and as a result, they will have better academic performance and avoid inappropriate behaviors ([Moe, 2016](#)).

The connection with the school is one of the areas of efforts for social adjustment in students. Factors such as educational approaches, school factors, values and beliefs, peer group, family, education and personal factors are effective in forming adjustment ([Hemati, 2020](#)). Among these, what seems more important to many people in society is the role and importance of hope and the degree of social adjustment ([Hallahan, Kauffman, & Pullen, 2009](#); [Kirk, Gallagher, & Coleman, 2014](#)). Since hope improves practical and effective strategies in developing communication skills, emotional self-regulation, independence and problem-solving ability, it is likely to be closely related to individual and social adjustment ([Aminalsharieh, Rezaei, Eisanezhad Boshehri, Shams Sobhani, & Bahadori Jahromi, 2017](#)). In another definition, social adjustment is a continuous process in which a person's social learning experiences create his or her psychological needs and also enable the acquisition of abilities and skills for meeting the needs ([Scholte, van Lieshout, de Wit, & van Aken, 2005](#)). Numerous factors play a role in people's social adjustment, among which influential factors include social support, life skills training and group activities ([Golmohammad Nazhad Bahrami & Yousefi Sehzabi, 2019](#)).

Some studies have examined the effectiveness of group hope training based on Snyder's theory on a number of cognitive and emotional outputs. For instance, [Narimani and Hedayat \(2020\)](#) investigated the effectiveness of group hope training based on Snyder's theory on students' grit and educational self-efficacy. Findings showed that group hope training has increased the students' grit and educational self-efficacy. [Javanmard, Rajaei, and Khosropour \(2019\)](#) examined the effectiveness of group positive psychotherapy on compatibility of junior high school maladaptive boy students. Findings showed that positive group psychotherapy has been significantly effective on educational, social and emotional adjustment and this effect has remained stable in the follow-up phase. [Golmohammad Nazhad Bahrami and Yousefi Sehzabi \(2019\)](#) have studied the effect of teaching positive thinking skills on

happiness and social adjustment of female high school students. The results showed that these trainings increase the level of happiness and social adjustment of students. In another study, [Ghadampour, Radmehr, and Yousefvand \(2017\)](#) studied the effect of group hope training based on Snyder's theory on the academic engagement and hardiness of girl students in first grade. The results showed that hope training is significantly effective in increasing academic engagement and hardiness and this effect was maintained in the follow-up phase. [Chehri, Sadeghi, and Veiskarami \(2017\)](#) investigated the impact of hope training on cognitive engagement and academic achievement in exceptional girl students (mental retardation). The results revealed that hope training has been effective on academic engagement and its components in female students with mental retardation. [Long et al. \(2020\)](#) examined the relation between baseline hope and a wide range of outcomes that included indicators of: physical health, health behaviors, and psychosocial well-being in older adults using an outcome-wide approach. The results indicated a greater sense of hope was associated with: better physical health and health behavior outcomes on some indicators (e.g., reduced risk of all cause-mortality, fewer number of chronic conditions, lower risk of cancer, and fewer sleep problems), higher psychological well-being (e.g., increased positive affect, life satisfaction, and purpose in life), lower psychological distress, and better social well-being. A secondary analysis explored antecedents of hope and identified several potentially modifiable factors that may lead to increased hope. These results may have important population-level implications for increasing hope and improving the physical, psychological, and social well-being of our growing older adult population. [Chen, Huebner, and Tian \(2020\)](#) showed that hope affects students' behavioral interaction and academic achievement. [Marques and Gallagher \(2017\)](#) also showed that hope has an effect on adolescents' academic stability. According to the results of research on the effects of hope training and other positive psychotherapies on cognitive and motivational outcomes in students, in the present study, an attempt was made to evaluate the effectiveness of group hope training based on Snyder's theory on academic engagement and social adjustment in female high school students in Bushehr city (Iran).

Material and Methods

The study method was a quasi-experimental pretest-posttest with a control group. The statistical population included all female high school students in Bushehr (Iran) in 2021. Participants included 30 students selected by the accessible sampling method and randomly assigned to experimental and control groups (15 students in each group). Participants were reassured that the questionnaire questions were purely research-based, did not require a first and last name, and that they could leave the training sessions whenever they wished. Also, the attending the study was voluntary. Inclusion criteria included: 1- No acute mental and personality disorders (based on personality test) 2- No physical or psychological illness 3- Motivation of the student to attend meetings regularly. Exclusion criteria also included: 1- not attending more than two consecutive sessions 2- requesting non-attending by the individual 3- lack of motivation to perform activities. The participants in the experimental group underwent hope group training based on Snyder's theory for nine sessions, but the control group

did not receive any intervention. School engagement questionnaire and social adjustment questionnaire were used to collect data, which are introduced as follow.

1. School Engagement Questionnaire: The School engagement questionnaire was introduced by [Wang, Willett, and Eccles \(2011\)](#). This questionnaire has 23 questions and includes three sub scales of behavioral, emotional and cognitive academic engagement. Scores range from 23 to 115. The higher the subject's score, the higher the academic engagement. [Wang et al. \(2011\)](#) reported the reliability of the questionnaire using Cronbach's alpha coefficient of .86. In the present study, the reliability of this questionnaire was obtained using Cronbach's alpha coefficient of .86. [Wang et al. \(2011\)](#) reported the satisfactory validity of the questionnaire in their research using factor analysis.

2. Social Adjustment Questionnaire: [Kim et al. \(1999\)](#) Social Adjustment Questionnaire has 18 items with a five-point Likert scale from strongly agree to strongly disagree and the score ranges between 18 and 90. [Kim et al. \(1999\)](#) reported the validity of the questionnaire through construct validity of .86. The reliability of this questionnaire in the present study was obtained using Cronbach's alpha coefficient of .84. [Kim et al. \(1999\)](#) reported the reliability of the questionnaire as .85 through Cronbach's alpha coefficient.

In this study, group hope training based on Snyder's theory of hope was presented to the students in the experimental group in nine sessions based on the book of positive psychology interventions ([Magyar-Moe, 2009](#)).

Table 1. Hope group training protocol sessions based on Snyder theory

Session	Content
First	Run the pre-test, introducing members to each other, the structure of the meetings, the goals of the training program based on the theory of hope.
Second	Expressing the researcher's goals of thanking and holding educational sessions, as well as presenting basic educational concepts in Snyder's theory of hope, explaining how hope grows and the necessity of its existence.
Third	Identify the purpose and its types to students and identify the correct way to choose positive goals, each student to tell his life story. The purpose of this meeting is to help members find hope.
Fourth	Identifying the ways of thinking to reach the goal and teaching how to choose the right path to reach the goal.
Fifth	Recognizing the obstacles in the way of achieving the goals and removing the obstacles and solvable problems, presenting a list of current events and important aspects of life, and determining the level of people's satisfaction with each of these events.
Sixth	Encouraging the people to choose the right goals and introduce the characteristics of the right goals. So that members can increase it after finding it.
Seventh	Teaching hope in the real and academic life of students and creating a sense of commitment to hope through collaboration between researchers and students, in this session, the goal is maintaining hope in students.
Eighth	Raising hopeful thinking in students, teaching students how to self-review hopeful thinking, and teaching students how to use hope-enhancing techniques.
Ninth	Summarize of training sessions, review of members' comments about the sessions and their achievement of their goals, run the post-test

Results

Table 2 presents the results of the Kolmogorov - Smirnov test for data normality. According to Table 2, since the significance level for the variables of academic engagement and social adjustment is more

than .05, so the K-S value is not significant and the distribution of variables is normal. In order to perform the multivariate analysis of variance test, it was necessary to test the assumptions of this test, which according to the findings, all the assumptions were confirmed. Table 3 presents the descriptive indicators of the components of academic engagement and social adjustment.

Table 2. Results of Kolmogorov-Smirnov test for assuming normal distribution

Variable	Group	Value	<i>p</i>
Academic engagement	Experimental	.12	.2
	Control	.197	.123
Social adjustment	Experimental	.162	.2
	Control	.217	.055

Table 3. Mean and standard deviation of components of academic engagement and social adjustment in experimental and control groups in post-test and pre-test

Variable	Experimental group		Control group	
	Mean	SD	Mean	SD
Behavioral engagement	30.63	.32	27.82	.38
Emotional engagement	22.09	.23	19.57	.28
Cognitive engagement	6.98	.176	5.41	.198
Social adjustment	46.15	.431	41.51	.485

According to Table 3, the mean of each of the components of academic engagement, namely behavioral, emotional and cognitive, and social adjustment in the experimental group in the post-test is higher than the mean of control group. To investigate the observed differences, multivariate analysis of covariance was performed on the post-test scores of each of the components of academic engagement by controlling the pre-test score. The results of this test are presented in Table 4.

Table 4. Summary of the results of multivariate analysis of covariance on post-test scores of academic engagement components

Effect	Test	Value	F	Hypothesis DF	Error DF	<i>p</i>	Eta
Group	Pillai's trace	.752	23.25	3	23	.0001	.752
	Wilks' lambda	.248	23.25	3	23	.0001	.752
	Hotelling's trace	3.03	23.25	3	23	.0001	.752
	Roy's largest root	3.03	23.25	3	23	.0001	.752

According to Table 4, there is a significant difference between the experimental and control groups in terms of at least one of the components of academic engagement. For the precise testing of differences, the one-way analysis of covariance embedded in MANCOVA was done on post-test scores by controlling the pre-test score of academic engagement components. The results of this analysis are presented in Table 5.

Table 5. Results of one-way analysis of covariance embedded in MANCOVA

Source	Variable	SS	DF	MS	F	<i>p</i>	Eta
Group	Behavioral engagement	50.6	1	50.6	24.9	.0001	.499
	Emotional engagement	40.8	1	40.8	37.5	.0001	.60
	Cognitive engagement	15.8	1	15.8	29.08	.0001	.538

The results of one-way analysis of covariance in Table 5, show that in terms of behavioral component ($F = 24.9$ and $P < .0001$), emotional component ($F = 37.5$ and $P < .0001$) and cognitive component ($F = 29.08$ and $P < .0001$), there is a significant difference between the experimental and control groups. In other words, group hope training based on Snyder theory has increased each of the components of academic engagement in the experimental group compared to the control group. Also, to investigate the differences between the two groups in social adjustment, one-variable analysis of covariance was performed on post-test scores of social adjustment with control of pre-test scores. The results of this test are presented in Table 6.

Table 6. Results of one-way analysis of covariance on post-test scores by controlling the pre-test score of social adjustment

Source	SS	DF	MS	F	<i>p</i>	Eta
Pretest	31.97	1	31.97	9.32	.005	.257
Group	153.01	1	153.01	44.53	.001	.623
Error	92.56	27	3.42	-	-	-
Total	579.63	30	-	-	-	-

According to Table 6, the calculated F is 44.53 which is significant at the level .0001. Therefore, group hope training based on Snyder theory has increased academic adjustment in the experimental group compared to the control group. Considering the Eta value, it can be said that the effect of the intervention on social adjustment is equal to .623, which means that it explains 62.3% of the variance of social adjustment.

Discussion

The aim of this study was to investigate the effect of group hope training based on Snyder's theory on academic engagement and social adjustment of female high school students. The results indicated that after group hope training, the mean score of academic engagement and social adjustment of the experimental group increased significantly compared to the control group. According to the research findings, it is inferred that group hope training causes students to show more academic engagement, including spending time, sufficient effort in homework and studying. As a result, group hope training increased academic engagement and its components (behavioral, emotional, and cognitive) in the experimental group compared to the control group. Therefore, the first hypothesis of the research was confirmed. The findings of the present study are consistent with the findings of [Chehri et al. \(2017\)](#),

[Ghadampour et al. \(2017\)](#), [Chen et al. \(2020\)](#). Hope involves thinking about goal, along with the desire to move towards the goal as well as the ways to achieve that goal, so it has a direct relationship with students' academic achievement. Hope in students can affect their efforts and progress; hopeful students feel energized, plan to achieve their goals, and figure out how to achieve them. All of these things make students perform better in learning.

Also, our findings revealed that group hope training based on the theory of hope has been effective on students' social adjustment. As a result, the intervention has increased the social adjustment of the experiment group compared to the control group. Therefore, the second hypothesis of the research was confirmed. This finding is consistent with the results of the research of [Narimani and Hedayat \(2020\)](#), [Javanmard et al. \(2019\)](#), [Golmohammad Nazhad Bahrami and Yousefi Sehzabi \(2019\)](#), [Marques and Gallagher \(2017\)](#) and [Long et al. \(2020\)](#). The effect of hope on social adjustment from childhood in the family environment and then in school is one of the most important factors in socializing in the life of each person. Students' incompatibility with the conditions has irreparable consequences for societies and a socially developed human being will be more adaptable to others and as a result his success and satisfaction in life will be higher. The more hopeful a person's assessment of themselves and their self-esteem is, the healthier and more socially adaptable they will be ([Barnum, Snyder, Rapoff, Mani, & Thompson, 1998](#)).

Undoubtedly, each study has its limitations and the present study also has its limitations. Variables such as parents' literacy level, intelligence, family environment, etc. can affect the internal validity of the research. Lack of control over these variables has been one of the important limitations of the present study. Conducting research on female high school students in Bushehr restricts the generalization of results to other educational levels in other cities as well as to male students. Therefore, it is suggested that in future studies, the present study be repeated in other samples.

According to the findings, teaching hope increases students' academic engagement and social adjustment. School psychologists and counselors are encouraged to use positive psychology-based interventions, such as hope training, to enhance students' cognitive, emotional, behavioral, and social outcomes.

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References

- Aminalsharieh, S., Rezaei, S., Eisanezhad Boshehri, S., Shams Sobhani, S., & Bahadori Jahromi, S. (2017). Prediction of life expectancy based on self-efficacy and affective, social and instructional compatibility among high school slow paced students. *Empowering Exceptional Children*, 8(4), 35-46. doi:10.22034/ceciranj.2017.70916
- Ayyash-Abdo, H., Sanchez-Ruiz, M.-J., & Barbari, M. L. (2016). Resiliency predicts academic performance of Lebanese adolescents over demographic variables and hope. *Learning and Individual Differences*, 48, 9-16.
- Barnum, D. D., Snyder, C., Rapoff, M. A., Mani, M. M., & Thompson, R. (1998). Hope and social support in psychological adjustment of children who have survived burn injuries and their matched controls. *Children's Health Care*, 27(1), 15-30.
- Bruininks, P., & Malle, B. F. (2005). Distinguishing hope from optimism and related affective states. *Motivation and emotion*, 29(4), 324-352.
- Chehri, P., Sadeghi, M., & Veiskarami, H. (2017). Investigating the Effects of Hope training on cognitive engagement and Academic Achievement of Exceptional Girl Students (mental retardation) of Khoramaabad Second Level of Middle School. *Middle Eastern Journal of Disability Studies*, 7(0), 86-86.
- Chen, J., Huebner, E. S., & Tian, L. (2020). Longitudinal relations between hope and academic achievement in elementary school students: Behavioral engagement as a mediator. *Learning and Individual Differences*, 78, 101824.
- Christenson, S., Reschly, A. L., & Wylie, C. (2012). *Handbook of research on student engagement* (Vol. 840): Springer.
- Erskine, R. G. (2019). Child development in integrative psychotherapy: Erik Erikson's first three stages. *International Journal of Integrative Psychotherapy*, 10, 11-34.
- Foroozanfar, A. (2020). Positive Psychology and the Qur'an: A Comparative Study of the Constructs of Hope, Resilience, and Forgiveness. *Iranian Evolutionary and Educational Psychology*, 2(3), 208-224. doi:10.29252/ieepj.2.3.208
- Fredricks, J. A., & McColskey, W. (2012). The measurement of student engagement: A comparative analysis of various methods and student self-report instruments. In *Handbook of research on student engagement* (pp. 763-782): Springer.
- Ghadampour, E., Heidaryani, L., Kalantar, J., & Nasiri Hanis, G. (2020). The effect of teaching ethical intelligence in storytelling on academic, social, and emotional adjustment of students. *Research in Teaching*, 8(2), 54-37. doi:<https://doi.org/10.34785/J012.2020.803>
- Ghadampour, E., Radmehr, P., & Yousefvand, L. (2017). The effect of group training based on Schneider hope theory on level academic engagement and hardiness girl students in first grade. 3(33), 1-14. doi:10.18869/acadpub.erj.3.33.1
- Golmohammad Nazhad Bahrami, G., & Yousefi Sehzabi, M. (2019). The effectiveness of positive thinking skills training on high school girl students happiness and social adaptation in Mehraban

- city. *Knowledge & Research in Applied Psychology*, 20(4), 113-122. doi:10.30486/jsrp.2019.561849.1197
- Hallahan, D., Kauffman, J., & Pullen, P. (2009). *Exceptional learners: An introduction to special education*. 11 th Editon. In: Upper Saddle River NJ: Pearson International.
- Hemati, B. (2020). The role of educational emotions, autonomy protection cognition and school dependency in predicting the educational – social adaptation of headless students. *Journal of School Psychology*, 9(1), 208-229. doi:10.22098/jsp.2020.912
- Javanmard, J., Rajaei, A., & Khosropour, F. (2019). Effectiveness of Group Positive Psychotherapy on social, emotional and educational adaptability *Journal of Applied Psychology*, 13(2), 209-227. doi:10.29252/apsy.13.2.209
- Khodarahmi, S., & Gholami, K. (2019). The effect of group academic counseling training on increasing academic skills and academic achievement of female high school students in Ilam. *New Achievements in Humanities Studies*, 2(12), 89-100.
- Kim, C.-K., Seo, J.-M., Kim, S.-S., Cho, J.-S., Ha, J.-S., Kim, J.-O., & Byun, W.-T. (1999). Development of the Korean Version of the Social Adjustment Scale in the schizophrenics: a study on the reliability and validity. *Journal of Korean Neuropsychiatric Association*, 1351-1364.
- Kirk, S., Gallagher, J. J., & Coleman, M. R. (2014). *Educating exceptional children*: Cengage Learning.
- Long, K. N., Kim, E. S., Chen, Y., Wilson, M. F., Worthington Jr, E. L., & VanderWeele, T. J. (2020). The role of hope in subsequent health and well-being for older adults: An outcome-wide longitudinal approach. *Global Epidemiology*, 2, 100018.
- Magyar-Moe, J. L. (2009). *Therapist's guide to positive psychological interventions*: Academic press.
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American educational research journal*, 37(1), 153-184.
- Marques, S. C., & Gallagher, M. W. (2017). Age differences and short-term stability in hope: Results from a sample aged 15 to 80. *Journal of Applied Developmental Psychology*, 53, 120-126.
- Miller, M. L., & Schlenker, B. R. (2011). Integrity and identity: Moral identity differences and preferred interpersonal reactions. *European Journal of Personality*, 25(1), 2-15.
- Moe, A. (2016). Harmonious passion and its relationship with teacher well-being. *Teaching and Teacher Education*, 59, 431-437.
- Narimani, M., & Hedayat, S. (2020). The impact of group education on students' grit and educational self-efficacy based on Snyder's hope theory. *Shenakht Journal of Psychology and Psychiatry*, 7(3), 112-123. doi:10.52547/shenakht.7.3.112
- Orthner, D. K., Jones-Sanpei, H., Akos, P., & Rose, R. A. (2013). Improving middle school student engagement through career-relevant instruction in the core curriculum. *The Journal of Educational Research*, 106(1), 27-38.
- Rand, K. L., & Cheavens, J. S. (2009). Hope theory. *Oxford handbook of positive psychology*, 2, 323-333.

- Samavi, S. A., Najarpourian, S., & Javdan, M. (2019). The effectiveness of group Hope therapy in labor pain and mental health of pregnant women. *Psychological reports*, 122(6), 2063-2073.
- Scholte, R. H., van Lieshout, C. F., de Wit, C. A., & van Aken, M. A. (2005). Adolescent personality types and subtypes and their psychosocial adjustment. *Merrill-Palmer Quarterly (1982-)*, 258-286.
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological inquiry*, 13(4), 249-275.
- Wahlbeck, H., Kvist, L. J., & Landgren, K. (2018). Gaining hope and self-confidence—An interview study of women's experience of treatment by art therapy for severe fear of childbirth. *Women and Birth*, 31(4), 299-306.
- Walker, K. W., & Pearce, M. (2014). Student engagement in one-shot library instruction. *The Journal of Academic Librarianship*, 40(3-4), 281-290.
- Wang, M.-T., Willett, J. B., & Eccles, J. S. (2011). The assessment of school engagement: Examining dimensionality and measurement invariance by gender and race/ethnicity. *Journal of School Psychology*, 49(4), 465-480.



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