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The Relation between Educational Neglect and Cognitive Incompatibility and Learned Helplessness

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Abstract

Educational work neglect is an important issue in psychological literature and students in this scope face with a fundamental problem and recognition of related factors is a real concern. In recognition process of education neglect and cognitive incompatibility and learned helplessness among undereducated students of Azad University, Hamedan by using random clustering and multi-stage method for sampling 340 people have been chosen and suitable tools applied for evaluation of cognitive incompatibility, learned helplessness and work neglect. The results of analyze show that cognitive incompatibility variables and learned helplessness can predict educational neglect and there is a positive and significance relation between educational neglect and cognitive incompatibility and also, there is a positive significance relation between educational neglect and learned helplessness. We can conclude that one of determination factors of work neglect are cognitive incompatibility and learned helplessness.

Keywords: cognitive incompatibility, educational work neglect, learned helplessness

Introduction

As science and technology are improving and professionals are becoming more specialized, higher education becomes important and each year more students ask for continuing study in higher levels. One of educational system's concerns in each society is all possible harms that threaten students. One of these harms is educational procrastination (Akinsola, Tella, & Tella, 2007).

Procrastination means delaying tasks (Sutton, 2009), educational negligence (Lay, 1986) and referring to future. This event is very common such that all people had experienced that (Senecal, Koestner & Vallerand, 1995). Regardless of etiology this event hasn't always consider as a serious problem (Sheikhi, Fathabadi, Heydari, 2012), but because of negative excitement incomes it regards as an incompatible behavior (Wolters, 2003).

Educational negligence is the most common kind of procrastination (Jokar & Delavarpour, 2007) and described as a bad habit (Chase, 2003) with intentional delay in doing an educational task during specified time besides knowing its bad results (Steel, 2007) with sadness feeling and internal encourage (Valizade., et. al, 2014). Educational negligence also defines as intentional delay in doing tasks and educational issues and delaying task (Schouwenburg, 1995) because of fearing from mistake (Senecal, Koestner & Vallerand, 1995), hesitating from doing a task (Valizade., At el, 2014), perfectionism, illogical believes, lack of self- esteem, acquisition inability (Valizade., et. al, 2014), unsuitable time management (Valizade., et. al, 2014).

Projects that studied educational negligence found that more than 50 percent of undergraduate students in university have desire toward procrastination in doing their task (Valizade., et. al, 2014). Ferrari (Ferrari, 1992) found that 70 percent of students have delay in starting or ending their educational tasks such as preparation for exams. Onwuegbuzie & Jiao (Onwuegbuzie & Jiao, 2000) also evaluated 95 percent of procrastination.

Educational negligence will cause excitement problems (Ferrari & Pychyl, 2008), confusion (Rivait, 2007), prevention from educational improvement (Sobhi Gharamaleki, Hajlo, Babai, 2014), stress (Nasri, et. al, 2013). Psychologists presented different factors for procrastination that we can divide them in to two groups:

Internal and psycho factors i.e., harms and anomalies that related to one's own as inferiority complex, shortsightedness, expect too much of himself, low tolerance threshold, obsessive perfectionism, lack of certainty of guilt and shame, depression, anxiety (Steel, 2007., Sutton, 2009).

External and environmental factors i.e. damages that resulted from relation with others and environment. Factors such as discontent from current condition, lack of responsibility toward others, grudge with others, trying to satisfy others, procrastination, passive aggression, friendship with coworkers, tempting and fun factors, more expectation from others (Ninan, et. al, 2006).

In current researches, cognitive incompatibility recognized as one of procrastination and negligence causes. In this regard, a person tries to justify his procrastination habit with improving mind involvements and cognitive incompatibility (Festinger & Oronson, 1998). Cognitive incompatibility is a kind of incoherence and discrepancy between two cognitions that cause annoying motivational state and forces person to decrease discrepancy of his cognitions. In this mood in addition to discrepancy decreasing, person will prevent from conditions and states that may increase incompatibility (20). Festinger (Festinger & Oronson, 1998) believes that conflict between two cognitive elements inside a person from a base for

attitude change. These two elements are inconsistent when accepting one will cause rejecting other. General basis of modern hypotheses is that behavior for inconsistency should be incompatible with a person. There are three comments about the function of character and people's cognitions in cognitive inconsistency. Self-consistency model of dissonance, people recognition about themselves are some bases for individuals' expectations (Arsonson & Carlsmith, 1963). According to this comment when there is a difference or inconsistency between behavior and cognition, cognitive incompatibility will happen (Stone & Cooper, 2001). The second view is in contrast with this one. Base on self-affirmation theory (Steele, et. al, 1993) positive recognition of character causes less cognitive incompatibility. According to this the aim of less consistency is recovering moral integrity as a whole not a separate part of self. Third view that is called new look expresses that cognitive inconsistency happens when behaviors impinge from social norms (Cooper, 1992). Researchers who investigated cognitive inconsistency referred to inconsistency after making a decision. Cognitive inconsistency causes tension and ambivalence and as a result that person lost his choice and act power, therefore he won't be successful in educational tasks. We can say that one of the effective factors on educational improvement is learned helplessness that results from frequent failures during education. Learned helplessness means recognition of uncontrollable events. Selligman (Seligman, et.al, 1996) referred learned helplessness as a learning mood that believes events are not under its dominance and control. Helplessness appears when others can't understand what you said, they don't pay attention to you or you can't achieve to your goals and aims. In most of cases the reason of helplessness is that you don't know your wishes and goals correctly, therefore you are always trying and determining different works and issues and at last you find that you are not satisfied yet (Sobhi Gharamaleki, et. al, 2014).

Learned helplessness in education environment is the most negative mood of yourself and refers to learners who don't relate improvement with effort. These learners believe that whatever they do they won't be successful. Students who try for improvement expect that apply their results, and if they fail they will stop their efforts, especially when this failure repeats. So person will lose his self-confidence and expresses his inabilities and can't improve anymore. If a person generalizes this false belief and think that he doesn't have any skill in life, he may become depressed. In educational environments in addition to knowing these variables, there should be some practical measures to fix them and sometimes identify the causes.

Identification of predicative variables for educational negligence will increase prevention from educational failure consequences and cause more pleasant environmental outcomes and on the other side will help to have a better approach base on applied priorities. Since cognitive inconsistency effects on educational negligence hadn't studies enough, in this research we try to investigate the relation between cognitive inconsistency and learned helplessness with educational negligence among undergraduate students. Since undergraduate is a new level and play an important role on educational progress, recognition causative factors for procrastination will make it possible to control failure's reasons and improve educational performance. But the contribution of cognitive inconsistency and learned helplessness in procrastination anticipation is one step forward understanding the causes of this event and if these factors have effect, we can design cognitive plans for its refinement.

Materials and Method

Methodology: This research is an applied study and its data collection method is from descriptive researches and correlation method.

Population, sample and sampling method: the population concludes all undergraduate students of Azad University, Hamedan during educational year 2013- 2014 that is 12742 people. The sample was selected based on Morgan table 340. The sampling method was multi-stage cluster sampling (initially Azad University - the department - classroom - students) through questionnaires distributed randomly among students of Azad University of Hamadan and according to number of samples questionnaires were distributed and collected.

Gathering information tool: Educational Procrastination questionnaire of Solomon and Ras Bloom (1984): The questionnaire contains 27 questions that scored based on Likert scale 4 degrees. 21 questions evaluate the amount of procrastination and 6 questions measure discomfort value. 54 is the cut-off point questionnaire that people who score higher than 54 assign in procrastination group that is work negligence class. The reliability of the questionnaire using Cronbach's alpha is equal to 86/0. Through internal consistency reliability of this scale in research by Solomon and Rasblum (1984) was a Cronbach's alpha coefficient equal to 64/0. Also, the researchers obtained the validity of this scale using internal consistency, equal to 84/0. in Iran and among students' population the reliability of this scale using Cronbach's alpha coefficient for the total scale is 91/0 and its validity using Kairez Mirolkin in factor analysis obtain 88/0 (Jokar & Delavarpour, 2007). Silgman 's learned helplessness questionnaire (1975): The questionnaire includes 13 questions that will be in the range of 5 degree scores, where 1 means not at all and 5 is considered as absolutely correct. The reliability of the questionnaire using Cronbach's alpha is 92/0. Harmon Jones's cognitive inconsistency questionnaire (2009): The questionnaire has 28 questions and is set in a 5-point Likert scale. If the score of the students has to be higher than 50%, they have cognitive incompatibility. Safarinia and Zandi (Safarinia & Zandi, 2010) test the validity of this scale on 528 students from the Payam Noor University of Tehran. The results have confirmed the reliability and validity of scale and Cronbach's alpha coefficient was 827/0.

Findings

Table 1. Description of research variables and their sub- scales

Standard deviation	average	maximum	minimum	number	group	
3.76	13.13	22	4	340	Test preparation	Educational procrastination
3.12	12.49	22	4	340	Doing home works	
4.01	12.98	23	0	340	Providing half- year survey	
5.12	7.88	21	0	340	Sadness because of procrastination	
7.94	46.49	72	29	340	Educational procrastination	
1.54	5.28	11.46	1	340	Learned helplessness	Cognitive inconsistency
7.91	25.06	48	5	340	motivation	
5.33	24.06	40	10	340	Decreasing inconsistency	
9.58	49.12	77	30	340	Cognitive inconsistency	

According to the data contained in Table 1, the mean score of students for exam preparation 13/13, preparing assignments, 49/12, 98/12 half-year report, the sadness of negligence, 88/7 and educational procrastination in general is 49/46. The mean score of the students for learned helplessness is 28/5. The mean score of 25.6 students' arousal, cognitive dissonance is 6.24 and cognitive inconsistency is 12/49.

Table 2. The relation between learned helplessness and educational negligence

Cognitive inconsistency	Decreasing inconsistency	motivation	Learned helplessness	Statics	variable
0.533**	0.803**	0.104	0.354**	Correlation coefficient	Educational negligence
0.0001	0.0001	0.054	0.0001	Significance level	
0.185**	0.620**	-0.194**	0.195**	Correlation coefficient	Doing home works
0.0001	0.0001	0.0001	0.0001	Significance level	
0.382**	0.621**	0.045	0.178**	Correlation coefficient	Providing half- year survey
0.0001	0.0001	0.406	0.0001	Significance level	
0.210**	0.060	0.213**	0.051	Correlation coefficient	Sadness of procrastination
0.0001	0.272	0.0001	0.345	Significance level	
0.277**	0.435**	0.043	0.325**	Correlation coefficient	Test preparation
0.0001	0.0001	0.434	0.0001	Significance level	

$P < 0/01 = **$

According to information contained in Table 2 concerning educational negligence learned helplessness 354/0, 803/0 with reducing inconsistency and with cognitive dissonance 533/0, that there is a significant relationship in 99/0 level (0001/0 = p). It also prepared the following equation variable assignments with learned helplessness 195/0, 194/0 stimulated by reducing inconsistency 620/0 = r and with the cognitive inconsistency is 185/0 that there is a significant relationship (0001/0 = p). Subscale reporting half-year relationship with learned helplessness 178/0, 621/0 with the cognitive dissonance reducing and with cognitive mismatch is 382/0 the that there is a significant relation (0001/0 = p). sadness of procrastination relationship with motivation 0/231 and with cognitive inconsistency is 210% that there is significant relation (p = 0/0001). At last the relation of test preparation with learned helplessness is 0/277 that there is significant relation (p=0/0001), therefore all research variables have significant relation with together.

Table 3. The summary of cognitive inconsistency model and learned helplessness on educational negligence

SE	AR ²	R ²	R	variable	model
6.72	0.28	0.28	0.53	Cognitive inconsistency	1
6.45	0.34	0.34	0.58	learned helplessness Cognitive inconsistency	2

The adjusted squared multiple correlation coefficient indicates that the first model is based on cognitive dissonance 28/0, and based on the second model of cognitive dissonance and learned helplessness can explain 34/0 the variance of students' procrastination, therefore we

can say that cognitive dissonance and learned helplessness of students can determine their educational negligence.

Table 4. Regression analyze of cognitive inconsistency and learned helplessness on educational negligence

Significant level	F amount	Squared average	Freedom degree	Total squared	Change resource	model
0.0001**	134.11	6071.15	1	6071.152	regression	1
		45.27	338	15301.801	remaining	
			339	21372.953	total	
0.0001**	88.31	3674.87	2	7349.734	regression	2
		41.61	337	14023.219	remaining	
			339	21372.953	total	

Results of regression analysis showed that based on the first model, cognitive dissonance (01/0 <P and 11/134 = (338,1) F); based on the second model, cognitive dissonance and learned helplessness (01/0 <P and 31/88 = (337,2) F) significantly predict academic procrastination in their students.

Table 5. Regression coefficients of cognitive inconsistency and learned helplessness on educational negligence

P	t	Beta	SE	B	coefficient	mode
0.0001	12.99	-	1.91	24.79	stable	1
0.0001	11.58	0.53	0.038	0.44	Cognitive inconsistency	1
0.0001	10.053	-	2.009	20.19	stable	2
0.0001	10.57	0.48	0.037	0.39	Cognitive inconsistency	
0.0001	5.54	0.25	0.23	1.29	Learned helplessness	

Results Table 5, with respect to standardized beta weight based on the first model, shows that one standard deviation change in cognitive dissonance caused 53/0 standard deviation change in students' academic procrastination bas on second model a standard deviation of simultaneous changes in cognitive dissonance and learned helplessness 48/0 and 25/0 respectively will cause standard deviation of changes in students' educational neglect. Therefore, second model equation as predictor of cognitive dissonance negligence-based training and learned helplessness can be written: $y' = a + b_1x_1 + b_2x_2$

Discussion and Conclusion

Cognitive inconsistency and learned helplessness can forecast educational negligence of students and cognitive dissonance and learned helplessness can determine students' procrastination; therefore, we can say that these two element will predict educational negligence. This finding coordinates with Hosseini and Kheir (Hosseini, Kheir, 2009), Jokar and Delavarpour (Jokar, Delavarpour, 2007), Hajhosseini and Akhavan (Hajhosseini, Akhavan Tafti, 2003), Tamanaifar (Tamanaifar, Sedighi Arfai, Moghadesin, 2012), Heidari, Mansouri sepher and Bagherian (Masouri sepeht, R., Bagherian, F., Heydari, M, 2011), Mansouri sepeht, Khodapanahi and Heydari (Mansouri Sepehr, Khodapanahi, Heydari, 2012), Sligman et.al (Sligman et.al, 2001), Ferrari (Ferrari,j, 2001) studies.

Dewit and Schonberg (Dewitte & schouwen bury, 2002) relate dynamic nature of procrastination to temporal discounting. They believe that procrastination tends to undermine the importance of worthlessness or delayed rewards. According to this view, a temporary

discount and consequently educational procrastination subject to certain situational factors such as and in rewarding task unemployment and personality traits like low self-consciousness, mental disorder, low self-control, lack of motivation progress.

Most of studies indicate that educational negligence is a behavioral problem among students. Ferrari (Ferrari, 2001) showed that about 20 percent of adults experience chronic procrastination for daily tasks while experiencing academic procrastination problem rates among undergraduates is equal to at least 95-70 percent. In other research chronic procrastination among students determined between 60-70 percent (Steel, 2007).

Learned helplessness and cognitive dissonance in different aspects of educational life of a person are effective and should be considered. Learned helplessness can cause educational negligence in different ways such as when a person can't control his educational conditions and behaviors and can't predict that he will achieve to his goals or won't, this fact can increase his helplessness. Distress learning in the educational system is due to a variety of factors such as classroom teachers, other students, learning objectives, teaching methods. If structure of class room is such that student feels that he doesn't play any role in class and it is teacher- based a kind of disinterest and frailty toward lesson and classroom will form. If educational goals are not certain and apparent i.e. student doesn't know what are others' expectations he won't pay attention to lesson and consider lesson unimportant and at last it causes procrastination and delay in learning activities. As a result, that person hasn't any motivation for learning and just do follow them passively and these factors cause negative feelings and helplessness among students and learners. Most of these factors are educational and school that suitable relation and un- comparative structure and balance between tasks and abilities through emotional and educational support.

Cognitive inconsistency in educational improvement is effective and therefore can predict procrastination and if a person doesn't try and fails will cause his approach toward himself and his abilities. When self- concept and self- esteem threatened more inconsistency forms and person will reject from knowing realities and finding solution for problems and start to defend from illogical behavior. When a person do something that is opposed to personal standards he becomes passive, helpless and uninterested toward efforts that may cause failure and therefore he starts procrastination and laziness.

Other hypothesis of research about relation between educational negligence and helplessness had approved. In fact, the results of data analyze showed that this relation is linear and in one side.

These findings coordinate with Tamadoni (Tamadoni, 2010), Karami (Karami, 2009), Kamali (Kamali, 2012), Stil (Steel, 2007), Ferrari (Ferrari, 2001), Stide, Shanahan and Newfiled (Stead, shanahan, Neufeld, 2010), Sengal, Castner Velran (Senécal, Koestner, & Vallerand, 1995), Heybatllohi (Heybatollahi, 1994), Carol and Douek (Dweck & Carol, 1975), Bakom (Baucom, 1983), Roudin (quoted from 42), Floger and Kernoskai (quoted from 43), Kelsen, Kerachok and Rajani (Klassen, Krawchuk & Rajani, 2008) researches.

Sligman (Seligman, 1975) defined helplessness as a psychological mood that forms in uncontrollable circumstances. Conditions that the result of an event exists independent from intentional response. Experimental evidences show that in such condition, current motivation for responding in controllable circumstances will decrease and will have a problem in response with more emotionality.

Procrastination is not a natural and normal delay that sometimes happens but also it means one personal feature that disrupts individual satisfaction and injures the quality of human relations. One of primary factors of procrastination is fearing from failure and because of that a person escapes from failure and blame in tasks and postpones them alternatively.

People with procrastination have problem in predicting required time for doing tasks, their importance and achieving to goals, and all these problems will cause helplessness. With more underestimation of tasks and responsibility for them, they will do lately with more delay and gradually this process causes failure in education and learned helplessness and more educational negligence.

Third hypothesis of relation between educational negligence and cognitive inconsistency approved. The results of data analyze show that this relation is linear and in one side, therefore there is a positive significant relation between educational procrastination and cognitive inconsistency.

These findings cooperate with Safarinia, Zareh and Hassani (Safari nia, Zareh, Hassani, 2012), Mansouri, Bagherian and Heydari (Mansouri, Bagherian and Heydari, 2011), Kagan, Ketkar, Ihan and Kandmir (Kayan, cakil, o.lihan & kandemir, 2010), Diaz, Mozalz, Kerman and Ferrari (Diaz- Morales, Cohn, & ferrari, 2008) and Stil (Steel, 2007) researches.

Those who studied cognitive inconsistency, refers to inconsistency after making decision. Cognitive inconsistency will cause tension and ambivalence and this mood may change a person to a passive condition for doing tasks and at last forms helplessness. It means that students don't have power for selecting and performing and therefore they feel failure especially in educational performance, then one of effective factors in educational improvement of students is helplessness which consists as a result of repeated failures.

In determining the above hypothesis, we can say that when a person faces with conflict between self- cognitions, he forces to reduce this incompatibility. Incompatibility and inconsistency in a person may result from personal decisions or inconsistent efforts or difference with others. But this inconsistency results from trying and working. If a student tries and doesn't success will face with cognitive inconsistency, therefore if he can't handle that failure he may become discouraged and doesn't have any emotion for doing tasks. Raised inconsistency from doing work is such that when a person in a condition that should tolerate it, his cognition is different. For example, a student who doesn't like studying and forced to pass the course therefore, he can't tolerate class and as a result not only learning doesn't happen but also, he will have a kind of procrastination approach toward that lesson and won't do tasks.

Conflict of Interest

The authors have not declared any conflicts of interest.

REFERENCES

- Akinsola MK, Tella A, Tella A (2007). Correlates of Academic Procrastination and Mathematics Achievement of University Undergraduate. Students.Eurasia. Journal of Mathematics, Science & Technology Education, 3 (4), 363-370.
- Aranson E, Carlsmith JM (1963). Effect of the severity of threat on the devaluation of forbidden behavior. Journal of Abnormal and social psychology, 66. 587-588.
- Baucom DH (1983). Sexrole identity and the decision to remain control among women. Altered helplessness intervention. Journal of personality and social psychology, 44 (2), p. 334.
- Chase L (2003). Procrastination: the new master skill of time management. Agency Sales Magazine, 33, 60-62.
- Cooper J (1992). Dissonance and the return of the self-concept. Psychological Inquiry, 3(4), 320-323.
- Dewitte S, Schouwen Bury HC (2002). Procrastination, and incentives: the struggle between the present and the future in procrastinators and the punctual. European journal of personality, 16, 469-489.
- Diaz- Morales J, Cohn, Ferrari J (2008). An integrated view of personality styles to avoid and procrastination. Personality and Individual Differences, 554-558.
- Dweck Carol S (1975). The Role of expectations and Attributions in the Alleviation of learned helplessness. Journal of personality and social psychology. 31, 674-685.
- Ferrari J, Pynchyl T (2008). Procrastination: Current Issues and New Directions, Volume 15, No. 5.
- Ferrari JR (1992). Procrastinators and perfect behavior: An exploratory factor analysis of self-presentation, self-awareness, and self-handicapping components. Journal of Research in Personality, 26, 75-84.
- Ferrari JR (2001). Procrastination as self-evaluation failure of performances: effects of cognitive load, self awareness and time limits on working best under pressure, European journal of personality, 15, 391: 406.
- Festinger L, Oronson I (1998). Genesis and reducing imbalances in the context of social. in social psychology, basic English and American literature, translation Parviz Sorandi, University of Tabriz.
- Gholipour A, et al (2008). Acquired helplessness, in educational institutions, scientific research Bimonthly Journal of Shahed University, in Issue 32.
- Hajhosseini M, Akhavan Tafti M (2003). Compare attribution style (learned helplessness model) in addicted and non-addicted city of Yazd, Psychology and Education, (3).
- Hosseini F, Kheir M (2009), According to the prediction of procrastination behavior and decision making in students' metacognitive beliefs, Iranian Journal of Psychiatry and Clinical Psychology, Issue 3, Pages 273-265.
- Jokar B, Delavarpour M (2007). Procrastination relationship with achievement goals, new ideas Educational Psychology, University of Al-Zahra University, No. 3, pp. 80-61.

- Heybatollahi SM (1994). Due to the success and failure attribution style review school students learned helplessness model in classroom guidance documents. General Psychology Master's thesis. Faculty of Education and Psychology, University of Teacher Education.
- Kamali N (2012). The relationship between academic procrastination and self-concept and achievement motivation in students. Master's thesis, Islamic Azad University Central Tehran Branch.
- Karami D (2009). The prevalence of procrastination in students and its relationship with anxiety and depression. Journal of thought and behavior, fourth round, No. 13. pp. 25-34.
- Karimi Y (2009). Social psychology, Payam Nour University Publication
- Kayan M, Cakir O, İlhan T, Kandemir M (2010). The academic procrastination behavior of university. Students with perfectionism, obsessive-compulsive and five factor procedural social and Behavioral sciences 2, 2121-2125.
- Klassen RM, Krawchuk LL, Rajani S (2008). Academic procrastination of undergraduates: low self-efficacy to self-regulate predicts higher levels of procrastination. Contemporary Educational Psychology, 33(4), 915-931.
- Lay C (1986). At last, my research article on procrastination. Journal of research in personality, 20, 474-95.
- Mansouri Sepehr R, Khodapanahi MK, Heydari M (2012), Cognitive Dissonance: Tasyrtmrkz self-esteem in changing the attitude of regulators, Journal of Applied Psychology, Volume 6, Number 2 (22), 40-25.
- Masourisepeht R, Bagherian F, Heydari M (2011), Cognitive Dissonance and attitude change: the role of different standards in dealing with self-esteem, Journal of Applied Psychology, Issue 1 (17), pp. 116-101.
- Nasri Sadeghi E, Damavandi M, Ashoori A (2013). Predict academic procrastination based on personality traits. identity styles and commitment, Journal of Personality and Individual Differences, Issue 4, pp. 17-1
- Ninan M, Dradin V (2006). Life thoughts, translates by: Naser Azimi, Tala Mirhadizade, Tehran: Farang Taara.
- Onwuegbuzie AJ, Jiao (2000). I will Go to the library later: The relationship between Academic procrastination & library Anxiety. College & Research libraries.
- Rivait L (2007). What I Don't Do In My Summer Vacations: Fighting Procrastination. Retrieved from <http://www.pastthepages.ca/feature.htm>. Accessed on December 21, 2009.
- Safarinia M, Zandi A (2010). Arousal and reduce inconsistencies in students' standardized questionnaire Tehran. PNU: 2009-2010 school year.
- Safarinia M, Zareh H, Hassani L (2012). Examines the effectiveness of critical thinking on source control and reduce disharmony (meta) cognitive second year students of high schools in the city of Baneh, Social Cognition, Volume 1, Issue 1, Pages 66-76.
- Schouwenburg HC (1995). Procrastination, and incentives: the struggle between the present and the future in procrastinators and the punctual, British Journal of Social Psychology, Volume 43, Number 2, pp. 269 – 286 (18).

- Seligman MEP (1975). Helplessness on the development and death. Francisco: Freeman & company.
- Seligman MEP, Steen TA, Park N, Peterson C (2001). Positive psychology progress, empirical validation of interventions. The American Psychological Association, 60(5), 410-421.
- Senécal C, Koestner R, Vallerand RJ (1995). Self-regulation and academic procrastination. The Journal of Social Psychology, 135(5), 607-619.
- Sheikhi M, Fathabadi J, Heydari M (2012). Its anxiety, perfectionism and procrastination in developing self-efficacy and dissertations, developmental psychology, Iranian Psychological Title Number 35.
- Sligman M, et al (1996). Child optimism, a program has been tested for safety of children against depression. translation Foroozandeh Davarpanah, (1383), Tehran, growth.
- Sobhi Gharamaleki N, Hajlo N, Babai K (2014). Procrastination Time Management Skills Training on Students, psychological methods and models, Issue XV, pp. 101-91
- Sorin VJ, Tankard J (2002). Connection Hypothesis, translation Alireza Dehghan. Tehran Publishers.
- Stead SN (2010). I will go to the therapy: procrastination, stress and mental health. Personality and Individual Differences, 69, 175-180.
- Steel P (2007). The nature of procrastination: A meta-analytic and theoretical Review of Quintessential Self-Regulatory Failure, university of Calgary.
- Steele CM, Spencer SJ, Lynch M (1993). Dissonance and affirmational resources: Resilience against self-image threats. Journal of Personality and Social Psychology, 64(6), 885-896.
- Stone J, Cooper J (2001). A self-standards model of cognitive dissonance. Journal of Experimental Social Psychology, 37, 228-243.
- Sutton J (2009). Avoid procrastination. Urge action now, not later.
- Tamadoni M (2010). Procrastination in students. Developmental psychologist: Iranian psychologists, Issue 54, Pages 344-327.
- Tamanaifar MR, Sedighi Arfai F, Moghadesin Z (2012). Explained on the basis of academic procrastination and maladaptive perfectionism Shyafth construction and the Locus of Control, new educational approaches, in Issue 16.
- Valizade Z, Ahadi H, Heydari M, Mazaheri MM, Kajbaf MB (2014). educational procrastination prediction based on factors predicting students' cognitive, emotional, motivational and gender, science and applied research in poor mental fifteenth year, No. 3, pp. 100-92.
- Wolters CA (2003). Understanding procrastination from a self-regulated learning perspective. Journal of Educational Psychology, 95, 179-187.