

Studying the impacts of interpersonal treatments on academic procrastination and emotional-cognitive enthusiasm. (Among students in Mashhad families)

Tavassoli D.,¹ Nasri M.,*²

Abstract

Introduction: Considering the importance of educational and motivational issues in the future of individuals and its importance in the development of society, this research was conducted with the aim of investigating the effectiveness of interpersonal treatments on academic procrastination and emotional-cognitive enthusiasm.

Methods: This study was done according to exploratory mixed research design. In qualitative section, experts, pundits and therapists were selected for interpersonal approach, and male students of high school formed the target community in quantitative section that 30 of whom were purposefully selected and divided to 15 people groups in semi-experimental studies and participated by randomly substitution in the research. In first section which was according to qualitative method, interpersonal approach was modified in accordance with model and structure of target group based on experts' opinions and existing basics. After this stage, the impacts of mentioned approach were studied on cognitive- emotional enthusiasm and academic procrastination. Before and after the intervention on the experimental group, both groups fulfilled the researcher-made questionnaire about cognitive-emotional enthusiasm and academic procrastination.

Results: Based on results, interpersonal treatments were effective in increasing emotional cognitive enthusiasm and decreasing academic procrastination, and mentioned approach predicts 69% variance changes in decreasing procrastination scores and 61% of increasing enthusiasm scores based on eta parabolic space.

Conclusion: The interpersonal intervention approach has a positive effect on improving the conditions and acceptance of the person in the group of friends and environment by creating a healthy communication relationship and targeting interpersonal relationship problems.

Key words: interpersonal treatment, academic procrastination, cognitive- emotional enthusiasm

Received: 20/may/2022

Accepted: 12/July/ 2022

Citation: Tavassoli D., Nasri M.. Studying the impacts of interpersonal treatments on academic procrastination and emotional-cognitive enthusiasm. (Among students in Mashhad families), Family and health, 2022; 12(2): 102-114

¹ - Ph.D. student of general psychology, Birjand Branch, Azad Islamic University, Birjand, Iran. da.tavassoli@gmail.com, ORCID: 0000000168808055

² - Ph.D. in General Psychology, Assistant Professor, Department of Psychology, Birjand Branch, Azad Islamic University, Birjand, Iran, Corresponding author, Maryam_nasri_59@yahoo.com

Introduction:

Education is the most important tool of a system and society in achieving development and progress and fulfilling the set goals (1), many factors are involved in educational model and structures based on them with different dimensions (2), that these individual social dimensions need special attention (3).

Education and all researches related to this subject can be investigated from different angles. One of the most important factors related to academic success is motivation (4). Enthusiasm is a concept related to internal and external motivation for study and education that plays an important role in this process and academic progress (5). Surveys show that academic motivation and procrastination of students have been increasing (6). By studying related contextual and environmental factors such as teachers, parents, and peers, academic procrastination and decreased academic motivation have been considered as a situational characteristic. In this case, the student does not show logical and suitable reaction to his assignments that results weakness in learning (6). Academic procrastination is a growing concern in educational sector which has been increasing seriously during pandemic period (7). Previous studies have shown that low self-efficacy, disorganization, low internal motivation, poor effort regulation, and poor time management are all the characteristics of academic procrastination, and therefore, it is a reliable predictor of poor academic performance (8,9,10).

The root of academic procrastination goes back to the lack of motivation and interest for learning and acquisition that cause disinterest in students for education and its related process and leads to development of unmotivated and incompetent people and provide the condition of having a weak society. Based on this, one of the most important factors in starting any activity is to refer motivation, enthusiasm and its dimensions (11). Motivation is considered to be the power of acting and forming behavior (12, 13). Motivation is studied in terms of lack of needs and goal-oriented behaviors. The NEED in education process, motivation in general and academic motivation is debated which can be the basis of activity model and action in relevant field. Motivation is closely related to enthusiasm, and therefore its investigation is very important. Martin et al. have defined enthusiasm as the energy that engages the student to work effectively and bring his talent to the fore, and also the consequent behaviors following this energy (14). Enthusiasm is a multi-dimensional formation that has cognitive, motivational and behavioral dimensions and is one of the most important concepts in engaging the learners in educational process. Therefore, academic engagement is an important factor in educational quality and the performance based on it. This concept was proposed for the first time to understand and explain academic failure and was considered as the basis of modifying efforts in education field, which is a very important factor in achieving of learning experience and indirectly guarantees academic success of learners and has direct relationship with emotional and cognitive enthusiasm (15).

Enthusiasm originates specifically from the process related to it and being active in terms of motivational self-regulation. Regarding enthusiasm and active behavior in every individual and every behavior, it can be said that motivation and excitement affects enthusiasm in its various dimensions and changes it. (16). Self-determined motivation is defined as a mental effort to control internal situation, processes and functions to achieve higher goals (17). Motivation has internal and external dimensions, which mainly originates from the source of control. Various research findings have shown that, learner who are cognitively and emotionally are more enthusiastic and involved in learning compare to those who have less emotional and cognitive motivation, show more willingness to spend time and effort in doing their assignments and studies and more efficiency in solving problems (18). With this back drop, the concepts related to motivation can be investigated in two levels, firstly, by strengthening and creating energy, suitable foundation for activity and effort to achieve goals will be provided, and secondly, it can prevent academic problems and its related

factors such as academic procrastination that this research examines these two levels of concepts functionary.

Different approaches in improving educational and motivational conditions are on the table. Modifying the problems related to enthusiasm and academic procrastination has been investigated according to different perspectives and approaches. For example, Mehrabi et al. (19) examined cognitive-behavioral approach in increasing academic motivation and evaluated this approach as effective, but these findings were resulted according to university student's data but corresponding findings and stability of effectiveness over time were not observed in school students. Driver (27) considered the effectiveness of a psychoanalytic approach in improving motivation and enthusiasm in organizational structures and employees, and presented the applicability of this approach as ambiguous for basic groups and educational sectors. In concepts based on the humanistic approach, Gasong and Tuding (28) believed that improving motivation is dependent on communication structuring and modifications. Based on this, it is observed that different approaches in enthusiasm improvement and reducing procrastination are necessary in formation of an interactive environment that basic pre assumptions for improvement and modifications of research variables was not available or was weak in many of them. The role of psycho-emotional and social factors in educational success has been largely proved in various researches (29). researches are confirming that relational engagement among learners and cooperative and communicational skills can improve motivational and functional pattern in individuals (30). Thus, applying approaches aimed at strengthening interpersonal and communicational skills can have a role in quality of education and conditions of learners, and in study it has been tried to investigate and analyze this structure functionally based on interpersonal approach. Interpersonal approach has a positive role in creating communicative and corrective interactions that can be a very helpful step in Improving conditions and recreating enthusiasm in different dimensions.

This interventional approach has a more comprehensive model in improving enthusiasm and motivation in target society of this research, which needs operational investigation and analyze. With refer to these illustrations, this research raises its question as follows: What is the effect of interpersonal treatments on academic procrastination and emotional-cognitive enthusiasm of students?

Swartz et al. (25) showed that interpersonal psychotherapy is an important factor in improving motivation and reducing depression in the studied groups. In a clinical trial, Toth et al (26) showed that interpersonal intervention approach plays an important role in improving depression symptoms and reducing perceived stress in studied groups, and as a result enthusiasm improvement happens in different dimensions. Turk et al (27) considered that applying and use of technological and communicational tools for education as an important factor in increasing and decreasing of students' educational problems.

Camacho et al. (28); Mak et al. (29) investigated and analyzed academic motivation and engagement in learners. In these surveys, it has been stated that decrease in academic motivation and indifference of students has been increasing during recent years and applying technological and communicational model among learners is an important approach for improving conditions and increasing academic motivation and involvement. Kuppens et al confirmed that rearing and Communicational styles affects child's conceptual and behavioral pattern, and pointed out that this effect also has a role on motivational behavior and functional enthusiasm. Fan et al. (30) showed that students' perception of the atmosphere and interpersonal relationships play an important role in motivational structure and enthusiasm. Wang and Degol (32) also confirmed that the background and surrounding conditions and atmosphere of learners such as social and communicational factors are effective in formation of problems and negative structures such as procrastination and indifference on education.

Research Method:

This research is exploratory mixed research design, in which qualitative data are collected first. The researcher's exploratory mixed research design is trying to find unstable situation. In the first section which corresponds to qualitative method, interpersonal approach was modified in accordance with target model and structure of students based on experts and existing foundations and then effectiveness of mentioned approach on emotional and cognitive enthusiasm and academic procrastination was investigated.

Statistical population in this research includes two groups:

1- In qualitative section, experts, pundits and therapists of interpersonal approach were selected, and 10 people participated in research based on snowball method.

2. In quantitative section, all male high school students of Mashhad (Region No 2) were participated that 30 of them participated in semi-experimental studies due to the necessity of 15 participant groups, they were selected purposefully and replaced randomly in research groups. (It should be mentioned that subjects were selected based on high scores in academic procrastination and low scores in cognitive emotional enthusiasm.)

Interpersonal therapy sessions

This program was provided according to experts' opinions that will be explained in findings section.

To measure cognitive emotional enthusiasm and academic procrastination, a researcher-made questionnaire with following characteristics was used:

Table No. 1: Examining the psychometric characteristics of the researcher-made questionnaire.

Item	No of questions	Validity	Cronbach's alpha coefficient
Enthusiasm	24	0/622	0/859
Academic procrastination	20	0/513	0/791

Considering that the value of the AVE index for all concepts and dimensions of this research is greater than 0.50, and on the other hand since convergent validity is confirmed when the value of the average extraction index is greater than 0.50, therefore, it can be said that convergent validity is approved for all concepts and dimensions of this research. Also, the reliability of each item, which shows the internal adjustment of test materials, is higher than 0/7 in all items that shows the adequacy of applied tool.

Results:

Description of interpersonal psychotherapy sessions (the list of sessions is provided briefly).

Table No. 2: Description of interpersonal psychotherapy sessions.

No of session	Duration (Minute)	target training	Specific considerations
First session	95	Relation between clients and therapists, presenting general concepts about social relations and communications, conducting pre-test	Low group communication, having doubt about test subjects, lack of favorable participation
Second session	120	Relating the problems of each member to inter- individual context, unifying the main	

		problem, and modifying the presentation of the role of relationships in academic motivation and the structure based on it, subjective communication techniques	
Third session	90	Examining exercises, Role transfer as any change, sympathy and recognition the people with similar problems	Fading unpleasant atmosphere and the feeling of familiarity among the members
Forth session	90	Examining the strengths and weaknesses of previous and new role group to brainstorm about adjusting methods, assignments	Increasing of participation.
Fifth session	90	Checking assignments, increasing functional actions in group and creating mental roles and patterns for dealing with different situations, assignments	In visualization stage some adverse reactions occurred and therapist and the group itself presented correcting points
Sixth session	90	Checking assignments, creating relaxation techniques and relationships with different stress levels and also providing suggestions for improving and attracting others	
Seventh session	90	Checking assignments, compliments about classmates and conditions, rearranging the classroom world and communication through positivism	
Eighth session	100	Examining conflict solving patterns; Collaborative patterns, competitiveness (dominance), avoidance, flexibility, compromise (agreement), conflict solving styles, providing functional techniques	
Ninth session	90	Removing and correcting the deficiencies in interpersonal interactions (chasing pattern, identification of one-sided expectations, self-pity, blame, resentment, etc.) and the goal is	Increasing of participation and enthusiasm.

		to create sincere and satisfying relationships.	
Tenth session	120	Sharing insights, helping group members to each other, creating teams, assignments; Post-test conduction	Feeling of satisfaction and motivation

In order to evaluate the validity of checklist, three types of validity were used.

1- Formal validity: This validity has subjective and study type criterion, in order to provide validity in this section, 5 experts read the checklist several times and investigated it precisely in terms of content, writing and capability of delivering the concept, after several stages of editing they finally approved it.

2- Content validity: CVI and CVR methods were used to determine content validity. First, to determine CVR, an expert group consisting of 10 experts were requested to rate each item based on a three-part spectrum (necessary- useful, but not necessary – not necessary). It should be noted that the experts who determine the content validity of the research were experts in investigated fields and their scientific qualifications have been confirmed, and were professionals in the field of the mentioned items. After this stage, the value of CVR was calculated based on following formula:

In above formula, nE is the number of experts who answered to - necessary -option, and N is total number of experts, which is 10 in this research. The value of CVR calculated for each session based on Lavoshi's table for 10 people should be more than 0.62. Table 3 shows the values of CVR and the comparison result for each session. Then, to determine CVI, three factors of simplicity, specificity (relevance) and clarity were evaluated in the form of a 4-point Likert scale for each session by 10 experts. CVI was calculated by adding all scores that have obtained 3 and 4 in each session (that is, choices – necessary- and – useful -) to total number of specialists, and the acceptance limit was based on scores above 0.79.

Table No. 3 Validity of CVI and CVR checked for mentioned content.

No	CVR	Result	CVI	Result	Final result
First Session	0.95	Acceptance	1.00	Acceptance	Confirmed
Second Session	1.00	Acceptance	1.00	Acceptance	Confirmed
Third Session	0.93	Acceptance	0.97	Acceptance	Confirmed
Forth Session	0.88	Acceptance	1.00	Acceptance	Confirmed
Fifth Session	0.83	Acceptance	0.88	Acceptance	Confirmed
Sixth Session	0.80	Acceptance	0.87	Acceptance	Confirmed
Seventh Session	0.95	Acceptance	1.00	Acceptance	Confirmed
Eighth Session	0.95	Acceptance	1.00	Acceptance	Confirmed
Ninth Session	0.85	Acceptance	0.96	Acceptance	Confirmed
Tenth Session	1.00	Acceptance	1.00	Acceptance	Confirmed

Conduction of effective sessions

Examining descriptive changes

Table No. 4 mean and standard deviation of pre-test and post-test variables of research

	pre-test	post-test	pre-test	post-test
	M ± SD	M ± SD	M ± SD	M ± SD
Enthusiasm	49.29(2.88)	83.1(3.01)	51.11(2.43)	52.93(2.88)
Academic procrastination	75.17(3.88)	38.52(2.71)	73.23(3.52)	73.16(3.40)

Based on the findings, the amount of average after post-test regarding enthusiasm in the experimental group has increased 33.81 and 1.82 in control group. The amount of average after post-test regarding academic procrastination in the experimental group has decrease 36.65 and, in the control, group has decreased 0.07. In the following, covariance analysis is used to check the effectiveness, for this regard, the first step is to check presuppositions.

Table 5, Covariance presuppositions regarding enthusiasm and academic procrastination

variable	Kolmogorov Smirnov		Levin		Regression	
	Statistics amount	significance	Statistics amount	significance	Statistics amount	significance
Level	0.510	0.923	0.93	0.401	1.067	0.081
Attitude	0.539	0.881	0.769	0.611	0.929	0.288

As it is seen in above table, according to significance level of above 0.05 in all groups, the assumption of normal distribution of scores in the main variables of this research is confirmed, significance level in Levine test is also reported and the assumption of homogeneity of variances is confirmed ($p > 0.05$) and the slope of the regression line showed that interaction of groups with the studied variables has no systematic difference in terms of covariate mean of the variable.

Table 6: The results of multivariate covariance analysis on average scores of post-test categories regarding enthusiasm and academic procrastination

Test name	Amount	F	P value
Pillai effect test	0.663	4.823	0.001
Wilks's lambda test	0.782	4.823	0.001
Hotelling effect test	0.852	4.823	0.001
Roy's Largest Root	0.899	4.823	0.001

The results of Table 6 showed that there is a significant difference ($p < 0.001$) between the pre-test and post-test of experimental and control groups in terms of enthusiasm and academic procrastination variables, so it can be said that there has been a significant difference at least in one of the dependent variables between two groups. In order to find this difference, several covariance analyzes were performed according "MANCOVA".

Table 7: analysis of covariance

Item	Diffraction source	SS	F	Sig .	Eta
enthusiasm	Experimental conditions	593/239	6/419	0./001	0/61
	Error	76/11			
academic procrastination	Experimental conditions	511/101	8/62	0/001	0/69
	Error	68/22			

Based on results, interpersonal treatment has been effective in increasing cognitive-emotional enthusiasm and reducing academic procrastination, and mentioned approach based on 69% of Eta predicts variance changes of reducing procrastination scores and 61% of increasing enthusiasm scores in post-test.

Discussion and Conclusion:

Understanding and root finding of emotional experiences of students, during the learning and school process, has always been the concern of researchers, educators and consultants. According to (33), this phenomenon affects the performance of millions of students around the world every year. Lack of academic motivation and necessary enthusiasm is defined as drop of academic motivation (34) that is a fundamental and important factor in the formation of social and behavioral indifference thinking in student and makes him less motivated towards education and school and greatly reduces his functional interest. Therefore, motivation is the source of effort and function, lack of motivation is the source of indifference and lack of attention among students. This is one of the mechanisms of academic procrastination. In general, the more motivated a person is to learn and study, the more activity and effort he will endure to reach his final goal. For example, if the learner has high academic motivation, pays attention to the lesson well, based on this, the basic principle in this structure and the quality of education refers to the existence of enthusiasm and motivation. Enthusiasm and motivation have many emotional, cognitive, and behavioral, dimensions each of which causes satisfaction, comparison, and performance in a process (35).

Therefore, increasing motivation and enthusiasm is an important functional factor in reducing academic procrastination in different dimensions, and this research examined its increase from interpersonal approach as a communicative and motivating structure. The results of intervention showed that the average after enthusiasm post-test in experimental group increased by 33.81 and 1.82 in control group. The average after post-test in academic procrastination in experimental group has decreased by 36.65 and 0.07 in control group. Also, the covariance analysis showed that interpersonal treatments increase emotional-cognitive enthusiasm and decrease academic procrastination and mentioned approach based on 69% of Eta predicts variance changes of reducing procrastination scores and 61% of increasing enthusiasm scores in post-test. These results, along with other researchers, findings prove that the root of many academic and educational problems goes back to communicational problems and existing atmosphere, procrastination is a reactive behavior against lack of motivation and difficult conditions that the person chooses indifference and isolation as simplest solution. Improving relationships based on interpersonal approach and strengthening existing factors in this field, creates intimacy and internal motivation for something more than just education that results reducing educational procrastination and increasing enthusiasm. Interpersonal psychotherapy method is a multi-method that uses the techniques of other psychotherapy methods during treatment, especially cognitive and behavioral psychotherapy and positive psychology methods. This approach focuses on relieving symptoms by improving interpersonal functioning and focuses on current problems and relationships rather than childhood or developmental issues. In this model, therapists are active, supportive and motivating and provide options for change and improvement. Among the other reasons for effectiveness of the approach, it can be mentioned that the teenager needs suitable interaction

due to the specific stage of his life, which interpersonal psychotherapy improves it and provides solutions for progress. Working with teenagers needs special considerations and supporting and providing positive energy instead of forcing interventions will encourage him to accept the intervention and will have better acceptance and application of presented and taught issues. Thus, interpersonal intervention approach by creating a healthy relationship and targeting interpersonal problems has a positive effect on improving the conditions and acceptance of person in group of friends, which results in improving motivational conditions and reducing academic procrastination. Based on the findings, it is suggested that intervention programs to be carried out in educational courses at different levels by identifying those with interpersonal communicational problems with the aim of improving and reforming of this group in the society.

References:

- 1- Chankseliani M., McCowan T.. Higher education and the Sustainable Development Goals. High Educ, 2021; 81: 1–8 . <https://doi.org/10.1007/s10734-020-00652-w>
- 2- Groccia J.E., Gillespie A.R., Mason J., Long K.A. International perspectives on faculty professional development. International Perspectives on University Teaching and Learning, 2022;169: 9-20.
- 3- Hall T., Connolly C., Ó Grádaigh S., Burden K., Kearney M., Schuck S., Bottema J., Cazemier G., Hustinx W., Evens M., Koenraad T., Makridou E. and Kosmas P. Education in precarious times: a comparative study across six countries to identify design priorities for mobile learning in a pandemic, Information and Learning Sciences, 2020; 121: 433-442. <https://doi.org/10.1108/ILS-04-2020-0089>
- 4- Burrows P,L.. An examination of the relationship among affective, cognitive, behavioral, and academic factors of student engagement of 9th grade students. [dissertation]. Eugene, Oregon: University of Oregon; 2010
- 5- Nawa N.E., Yamagishi N.. Enhanced academic motivation in university students following a 2-week online gratitude journal intervention. BMC Psychol, 2021; 9: 71, <https://doi.org/10.1186/s40359-021-00559-w>
- 6- Ann Schou R.. Countering Student Apathy to increase Student Engagement. Walden Dissertations and Doctoral Studies. Walden University: Walden University: 2015 <http://scholarworks.waldenu.edu/dissertations>
- 7- Melgaard J., Monir R., Lasrado L., Faderstrom A.. Academic Procrastination and Online Learning During the COVID- 19 Pandemic. Procedia Computer Science, 2022; 196: 117-124
- 8- Hong J.-C., Lee Y.-F., Ye J.-H.. Procrastination predicts online self-regulated learning and online learning ineffectiveness during the coronavirus lockdown. Personality and Individual differences, 2021; 174: 110673
- 9- Rakes G.C., Dunn K.E.. The Impact of Online Graduate Students' Motivation and Self-Regulation on Academic Procrastination. J interactive online learning, 2010; 4: 9.
- 10- Wolters C. A., Won S., Hussain M.. Examining the relations of time management and procrastination within a model of self-regulated learning. Metacognition and learning, 2017; 12: 381-399
- 11- Datu J.. Beyond Passion and Perseverance: Review and Future Research Initiatives on the Science of Grit. Frontiers in psychology, 2021; 11: 545526. <https://doi.org/10.3389/fpsyg.2020.545526>
- 12- Worthy D. A., Brez C. C., Markman A. B., Maddox W.T.. Motivational Influences on Cognitive Performance in Children: Focus Over Fit. Journal of cognition and development: official journal of the Cognitive Development Society, 2011; 12(1): 103–119. <https://doi.org/10.1080/15248372.2010.535229>
- 13- Braver T.S., Krug M.K., Chiew K.S., Kool W., Westbrook J.A., Clement N.J., Adcock R.A., Barch D.M., Botvinick M.M., Carver C.S., Cools R., Custers R., Dickinson A., Dweck C.S., Fishbach A.,

- Gollwitzer P.M., Hess T.M., Isaacowitz D.M., Mather M., Murayama K.. MOMCAI group. Mechanisms of motivation-cognition interaction: challenges and opportunities. *Cognitive, affective & behavioral neuroscience*, 2014; 14(2): 443–472. <https://doi.org/10.3758/s13415-014-0300-0>
- 14- Martin, A. J., & Liem, G. A. D. (2010). Academic personal bests (PBs), engagement, and achievement: A cross-lagged panel analysis. *Learning and Individual Differences*, 24, 265-270
- 15- Pietarinen J., Soini T, Pyhalto K.. Students emotional and cognitive engagement as the determinants of well-being and achievement in school. *International J Educational Research*, 2014; 67: 40-51. [DOI:10.1016/j.ijer.2014.05.001]
- 16- Shaari A.S., Yusoff N.M., Ghazali I.M., Osman R.H., Dzahir N.F.M.. The relationship between lecturers teaching style and students' academic engagement procedia-social and behavioral sciences, 2014; 118: 10-20.
- 17- Steinmayr R., Weidinger A.F., Schwinger M. Spinath B.. The Importance of Students' Motivation for Their Academic Achievement – Replicating and Extending Previous Findings. *Front. Psychol.* 10:1730. doi: 10.3389/fpsyg; 2019.01730.
- 18- Cole J., Logan T.K., Walker R.. Social exclusion, personal control, self-regulation, and stress among substance abuse treatment clients. *Drug Alcohol Depend*, 2011; 113(1):13-20.
- 19- Safari H., Jenaabadi H., Salmabadi M., Abasi A.. Prediction of Academic Aspiration based on Spiritual Intelligence and Tenacity, *Educ Strategy Med Sci* 8 (6): 7-12.
- 20- Mehrabi T., Behzadi S., Sabouri F., Alavi M.. Assessment the effect of the CBT on motivation of the nursing students. *Iran J Nurs Midwifery Res*, 2016; 21(2): 118-123. doi: 10.4103/1735-9066.178225. PMID: 27095983; PMCID: PMC4815365.
- 21- Driver M.. Motivation and identity: A psychoanalytic perspective on the turn to identity in motivation research. *Human Relations*, 2017; 70(5): 617–637. <https://doi.org/10.1177/0018726716669577>
- 22- Gasong D., Toding A.. Effectiveness of Humanistic Learning Models on Intra and Interpersonal Intelligence Utopía y Praxis Latino Americana, 2020; 35(6): DOI: <https://doi.org/10.5281/zenodo.3987667>
- 23- Cui Z .. The Impact of EFL Teachers' Open-Mindedness and Immediacy on Their Social Intelligence: A Theoretical Review. *Front. Psychol*, 2022; 13(87): 22-50. doi: 10.3389/fpsyg.2022.872250
- 24- Chang C.M., Chou Y.H., Hsieh H.H., Huang C.K.. The Effect of Participation Motivations on Interpersonal Relationships and Learning Achievement of Female College Students in Sports Club: Moderating Role of Club Involvement. *International journal of environmental research and public health*, 2020; 17(18): 6514. <https://doi.org/10.3390/ijerph17186514>
- 25- Swartz H.A., Grote N.K., Graham P.. Brief Interpersonal Psychotherapy (IPT-B): Overview and Review of Evidence. *American journal of psychotherapy*, 2014; 68(4): 443–462. <https://doi.org/10.1176/appi.psychotherapy.2014.68.4.443>
- 26- Toth S.L., Rogosch F.A., Oshri A., Gravener-Davis J., Sturm R., Morgan-López A.A.. The efficacy of interpersonal psychotherapy for depression among economically disadvantaged mothers. *Development and psychopathology*, 2013; 25(4 Pt 1): 1065–1078. <https://doi.org/10.1017/S0954579413000370>
- 27- Turk H., Seckin-Kapucu M.. Innovative technology applications in science educations: Digital holography. *J Education in Science, Environment and Health (JESEH)*, 2021; 7(2): 156-170. <https://doi.org/10.21891/jeseh.748662>
- 28- Camacho A., Correia N., Zaccoletti S., Daniel J.R.. Anxiety and Social Support as Predictors of Student Academic Motivation During the COVID-19. *Front. Psychol.* 2021; 12:644338. doi: 10.3389/fpsyg.2021.644338

- 29- Mak MHC. Children's Motivation to Learn at Home During the COVID-19 Pandemic: Insights From Indian Parents. *Front. Educ*, 2021; 6: 744-686. doi: 10.3389/educ.2021.744686
- 30- Kuppens S., Ceulemans E.. Parenting Styles: A Closer Look at a Well-Known Concept. *Journal of child and family studies*, 2019; 28(1): 168–181. <https://doi.org/10.1007/s10826-018-1242-x>
- 31- Fan., Williams C.. The Mediating Role of Student Motivation in the Linking of Perceived School Climate and Achievement in Reading and Mathematics. *Front. Educ*, 2018; 3: 50. doi: 10.3389/educ.2018.00050
- 32- Wang M.T., Degol J.. Staying Engaged: Knowledge and Research Needs in Student Engagement. *Child development perspectives*, 2014; 8(3): 137–143. doi:10.1111/cdep.12073
- 33- Silvia B., Reeve C.L.. The nature and relative importance of student's perceptions of the sources of test anxiety. *J Learning and Individual Differences*, 2010; 20: 617-625
- 34- Legault L., Pelletier L. Green- Demers I.. Why do high school students lack motivation in the classroom? *J education psychology*, 2006; 91: 15-28.
- 35- Forest J.. Work is My Passion": The Different Affective, Behavioral, and Cognitive Consequences of Harmonious and Obsessive Passion toward Work. *Canadian J Administrative Sciences*, 2011; 28: 27-40