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# Predicting Academic Engagement Based on Academic Optimism, Competency Perception and Academic Excitement in Students

Fariborz Sabbaghi<sup>1</sup>, Kiomars Karimi<sup>2\*</sup>, Maryam Akbari<sup>3</sup>, Yahya Yarahmadi<sup>3</sup>

- 1. PhD Student, Department of Psychology, Sanandaj Branch, Islamic Azad University, Sanandaj, Iran.
- 2. Assistant Professor, Department of Psychology, Mahabad Branch, Islamic Azad University, Mahabad, Iran.
- 3. Assistant Professor, Department of Psychology, Sanandaj Branch, Islamic Azad University, Sanandaj, Iran.

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#### Abstract

**Purpose:** Academic engagement as a basis for reformist efforts in the field of education is very important in achieving learning experience so that indirectly guarantees students' academic achievement. Therefore, purpose of this study was to prediction of academic engagement based on academic optimism, perception competence and achievement emotions in students. The descriptive- correlation method was used.

**Methodology:** The statistical population consists of all male students studying of Hewraman region in year academic 2019-20 to 1476 student. In this study, according to random cluster sampling method, 100 married students by formula Plant of Tabachnick & Fidell (2007) were selected as samples and they were asked to academic engagement scale (AES) of Reeve (2013), perception competence scale of Harter (1982), academic optimism scale (AOS) of Tschannen-Moran, Bankole, Mitchell and Moore (2013) and achievement emotions questionnaire (AEQ) of Pekrun, Goetz & Perry (2005).

**Findings:** The data were analyzed by tests of Pearson correlation and multivariate regression. Results: Findings showed that there was positive and significant correlation between spdemic optimism, perception competence and positive achievement emotions with academic engagement (P<0/01). There was negative and significant correlation between negative with academic engagement (P<0/01). Regression analyses also revealed that %79/2 of variance of academic engagement was explained by academic optimism, perception competence and achievement emotions.

**Conclusion:** This study confirmed the significant contribution of academic optimism, perception competence and achievement emotions in academic engagement of students. The results of this research can help planners and implementers of education organization to adopt appropriate educational policies in order to engage students in academic studies and the factors affecting it.

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<sup>\*</sup> Corresponding author: q.karimi@iau-mahabad.ac.ir

#### 1. Introduction

Academic engagement is one of the most important indicators of academic achievement in students (Reeve, Cheon & Jang, 2020), which describes investment and engaging behavior in student learning processes (Cheon, Reeve & Vansteenkiste, 2020). Existence of academic conflict can affect the socialization process of students in addition to the educational process (Reeve & Shin, 2020). Research has shown that if students can be more involved in academic issues and learning assignments, their academic success can be hoped for more (Lindfors Minkkinen Rimpelä & Hotulainen, 2018). Academic engagement is a multidimensional structure that includes emotional, cognitive, and behavioral and factor dimensions (Reeve, 2013). Behavioral engagement, to observable academic behaviors, such as effort and perseverance when faced with problems and challenges while doing homework, attending school, and following school rules (Storlie & Toomey, 2020). Emotional engagement has been described as students' enjoyment and interest in challenging academic situations and their encounters at school (Dong & Liu, 2020), cognitive engagement, readiness to learn a variety of subjects (Bakadorova, Lazarides & Raufelder, 2020).

Factor involvement refers to the active and constructive participation of students in education (Pineda-Báez, Manzuoli & Sánchez, 2019). Based on what has been said, students' academic engagement in academic affairs is at the heart of school reform efforts to improve education, which plays an important role in academic achievement and success (Li, Chen & Li, 2020). It has students. Academic conflict is influenced by tissue factors on the one hand and intrapersonal factors on the other (Hejazi, Ghazi Tabatabai, Lavasani and Moradi, 2014). Individual factors are factors that relate to the student himself and his beliefs and thoughts. The undeniable necessity of enlightened study clarifies this concept. It is very important to know the factors affecting this structure. Among the interpersonal factors affecting academic conflict are academic optimism (Icekson, Kaplan & Slobodin, 2020; Gholampour, Pourshafei and Quranisirjani, 2019). Students' attitudes toward school are an important factor in learning and improving their academic achievement (Ladd & Dinella, 2009). Academic optimism is a positive individual belief and the belief that he or she will be academically successful. Belief raises students' expectations of success and motivation (Oludipe & Dixon, 2020). The structure of academic optimism first by Hoy Tarter & Hoy (2006) was presented. Hoy (2006) points out that the structure of academic optimism over time and based on humanistic psychology and is one of the most important components of positive psychology and using the theoretical foundations of social cognition, after presenting the structure of optimism Hoy et al's school education nose, several studies on this structure and its extension to the individual sphere were formed.

Student academic optimism is a new field developed by Tschannen - Moran Bankole Mitchell & Moore, (2013). This structure consists of three components: students' academic emphasis, students' trust in teachers, and students' sense of identity towards school. In fact, academic optimism is a positive individual belief in students that they are able to contribute to their academic achievement by emphasizing their learning, trusting teachers, and a sense of identity toward the school (Maktabi, Faramarzi, and Farzadi, 2017) Research background has shown that academic optimism plays an important role in academic conflict (Gholampour, Pourshafei and Qurani sirjani, 2019; Ahmadi, Jadidi and Khalatbari, 2019) students, an important factor within another person as a prerequisite. The observer of academic conflict can be the perception of competence (Mirzaei, Kiamanesh, Hejazi and Bani Chamali, (2016). It means the ability of an individual to effectively cope with the demands and challenges of everyday life (Manjunatha & Saddichha, 2011) and to It has been described as a psychological need, which according to Deci & Ryan (2020) theory of self-determination means to be effective in practice (Sturm Bachner Haug & Demetriou, 2020).

Harter (1982) defines competency perception as a dimension of self-evaluation and defines competency perception as "an individual's perception of his / her abilities in dealing with different areas of life" and in four cognitive categories, Social, physical and self-satisfaction are examined. Perception of competence is one of the components of "self-concept" or self-concept, which refers to the process of becoming aware of one's characteristics, type of relationships with others, feedback on events, capacities

and abilities, and on various cognitive, social areas. And is physically focused (Ninot Bilard & Delignieres, 2005). And plays an important role in academic conflict (Abbasi, Shah Karami and Aalipour, 2019; Meece Blumenfeld & Hoyle, 2006).

The third structure that positively and negatively affects students' academic performance and engagement is the student's academic excitement. Emotions are the basic psychological systems that regulate the adjustment of individuals to personal and environmental desires (Glaser-zikuda, Stuchikova & Janik, 2013). Today, educational psychologists believe that students not only acquire knowledge and cognitive skills during formal education, but also develop pleasant and unpleasant emotions related to learning and progress (Hosseini and Khaier, 2011). The increase in attention to academic emotions in psychological research has been partly a reaction to the publication of Pekrun's theory of control-value of academic emotions (Pekrun, 2006), which provides an integrated framework for studying the antecedents and consequences of emotional experiences related to educational situations, Suggested learning, engagement, progress and other activities. Emotions of progress (Pekrun & Stephens, 2010) emphasize not only consequential emotions, but also emotions related to activities such as enjoyment of learning, fatigue during training, and anger at homework requirements. Academic excitement is directly related to academic achievement (Bhansali & Sharma, 2020), which affects student performance and subsequently enhances learning and academic achievement (Putwain, Schmitz, Wood & Pekrun, 2020). Research has confirmed the two-way relationship between academic excitement and academic achievement. Positive emotions (pleasure, pride) positively predict the next success (such as math scores at the end of the year) and success positively. Positively predicts these emotions. Negative emotions (anger, anxiety, shame, classroom fatigue, and frustration) also negatively predict success, and failure negatively predicts these emotions (Pekrun Lichtenfeld Marsh Murayama & Goetz, 2017). In general, we can say that academic optimism (Icekson, Kaplan Slobodin, 2020), perception of competence (Movahedzadeh and Rahmatmand, 2018) and academic excitement (Simonton & Garn, 2020; King, McInerney, Ganotice and Vilarosa, 2015). Students can be theoretically related to academic engagement, as academic engagement has positive consequences such as participation in learning activities, interaction with staff, teachers and other students, and interest in completing homework. (Southerland, 2010). And students with more academic involvement also enjoy higher school and university stays, higher education, and higher academic achievement (Saber and Sharifi, 2013), so it is essential that the variables associated with this structure are accurately measured. Be examined. Based on research findings, in less than one study, the simultaneous relationship between these variables has been investigated. Considering the effective role of academic engagement in students' performance and academic achievement, the aim of the present study was to predict academic engagement based on academic optimism, perception of competence and academic excitement in students.

## 2. Methodology

ربال حاج علوم الثابي The present study was descriptive and correlational. The statistical population of the study was all male students of the 11th grade of the second theoretical high school of Oramanat region (Kermanshah province) in the first semester of the academic year 2019-20 with a total of 1476 students. To estimate the sample size according to Klein (2011)'s view is 2.5 to 5 times the number of questionnaire items. In this study, a sample of approximately 5 times the number of tools used (740 people) were selected by multistage random cluster sampling. In this way, first the cities and regions, then the schools and finally the classes were randomly selected and all the students of the class participated in the research. Rio Academic Conflict Scale (AES) (2013): This scale has 17 questions and is scored on a 7-point scale (from 7 strongly agree to 1 strongly disagree). In Iran, Ramezani and Khamsan (2017) performed the mean root mean square error (RMSEA) of 0.060 and the reliability of the questionnaire by Cronbach's alpha method ranged from 0.79 to 0.92 (Ramezani and Khamsan, 2017), The manufacturer of the scale has examined the validity of the scale with Cronbach's alpha and reported the coefficients in the range of 0.72 to 0.91

(Rio, 2013). In the present study, the validity of the questionnaire was evaluated by factor analysis and the mean root mean square error (RMSEA) was 0.062 and the reliability of the scale was assessed by Cronbach's alpha and the coefficient was calculated to be 0.81.

Tschannen - Moran, Bachner, Mitchell, and Moore (2013) Academic Optimism Scale (AOS): This scale consists of 28 questions, of which 3 subscales of student academic emphasis are 8 questions; Student trust in teachers 10 questions; The student's sense of identity towards the school measures 10 questions. The score of the questionnaire in the Likert scale is 5 degrees (very low 1 to very high 5). In Iran, Cronbach's alpha coefficient was used to assess the scale of trust. The coefficients of student academic emphasis were 0.95, student trust in teachers was 0.85, and student's sense of identity towards school was 0.90. This shows the internal consistency and reliability of the academic optimism scale (Ghadmapour, Amirian, Khalili Gashnigani and Biranvand, 2017). Abroad, the Cronbach's alpha coefficient was used to assess the scale of trust (Schenmoran-Moran, Bankole, Minchel & More, 2013). In another study, Cronbach's alpha coefficients ranged from 0.91 to 0.98 (Mitchell and Tarter, 2016). In the present study, the validity of the questionnaire was assessed by factor analysis and the mean root mean square error (RMSEA) was 0.70 and the reliability of the scale was assessed by Cronbach's alpha and the coefficient was calculated to be 0.90.

Harter (1982) Individual Perception of Self-Competence Scale (1982): This scale includes 28 questions, of which 4 subscales of life satisfaction 7 questions; Cognitive (academic) 7 questions; Measures 7 social and 7 physical questions. The scoring of the questionnaire in the Likert scale is 4 degrees (from 1 to 4). Inside Iran, Cronbach's alpha coefficient was used to assess the confidence of the scale, which was obtained as a coefficient of 0.70, which indicates the internal consistency and reliability of the scale of individual perception of self-efficacy. Also, the validity of convergence with the variable of academic achievement has a correlation coefficient of 0.20 and significant at the level of 0.01 (Bai, Hassanabadi and Kavousian, 2017). In another study, Cronbach's alpha coefficient was used to examine the confidence of the scale, which was reported to be 0.93 (Bahador Motlagh, Attari and Bahador Motlagh, 2012). In the present study, the validity of the questionnaire was evaluated by factor analysis and the mean root mean square error (RMSEA) was 0.071 and the reliability of the scale was assessed by Cronbach's alpha and the coefficient was calculated to be 0.85.

Academic Emotion Questionnaire (AEQ) Pekrun, Goetz & Perry (2005): This scale consists of 234 questions, of which the three main emotions include class-related emotions (80 questions), learning-related emotions 75 questions and exam-related emotions 77 questions. In the present questionnaire, students rate their emotional experiences on a Likert scale of 5 from strongly disagree 1 point to strongly agree 5. In Iran, Cronbach's alpha coefficient has been used to assess the confidence of the scale. The coefficients have been obtained in the range of 0.78 to 0.84, which indicates the internal consistency and reliability of the academic optimism scale (Kadivar, Farzad, Kavousian and Nikdel, 2009). ). Abroad, Cronbach's alpha coefficient has been used to assess the scale's confidence, with coefficients reported in the range of 0.68 to 0.87 (Riffert, Hagenauer, Kriegseisen & Strahl, 2020). In the present study, the validity of the questionnaire was evaluated by factor analysis and the mean root mean square error (RMSEA) was 0.069 and the reliability of the scale was evaluated by Cronbach's alpha and the coefficient was calculated to be 0.75.

Data were analyzed at descriptive and inferential levels. At the descriptive level, mean and standard deviation were used to measure the research variables. The research assumptions included skewness and elongation for normal distribution of scores, Watson camera test for error independence test, tolerance coefficient test and variance inflation test for multiple non-alignments. At the level of inferential statistics, Pearson correlation coefficient and multivariate regression analysis were used to examine the relationships between variables. Data analysis tool was SPSS software version 24.

| 3. Findings | 5 |
|-------------|---|
|-------------|---|

**Table1.** Describe the demographic characteristics of the sample

| Demographic variable |              | Abundance | Percentage |
|----------------------|--------------|-----------|------------|
|                      | 14 years     | 16        | 2/2        |
|                      | 15 years     | 16        | 2/2        |
|                      | 16 years     | 284       | 38/4       |
| Age                  | 17 years     | 293       | 39/6       |
|                      | 18 years     | 60        | 8/1        |
|                      | 19 years     | 71        | 9/6        |
|                      | Total        | 740       | 100        |
|                      | 13           | 87        | 11/8       |
|                      | 14           | 103       | 13/9       |
|                      | 15           | 103       | 13/9       |
| degree of education  | 16           | 193       | 26/1       |
| -                    | 17           | 151       | 20/4       |
|                      | 18           | 103       | 13/9       |
|                      | Total        | 740       | 100        |
| Field of Study       | human        | 217       | 29/3       |
| Demographic variable | Experimental | 372       | 50/3       |
| Age                  | Math         | 151       | 20/4       |
| -                    | Total        | 740       | 100        |

Table 1 shows the demographic characteristics of the sample that the mean age was 16.78. Also, according to the results of the above table, 16 people (2.2%) are 14 years old, 16 people (2.2%) are 15 years old, 284 people (38.4%) are 16 years old, 2933 people (39.6%) are 17 years old, 60 (8.1%) were 18 years old and 71 (9.6%) were 19 years old. 87 (11.8%) GPA 13, 103 (13.9%) GPA 14, 103 (13.9%) GPA 15, 193 (26.1%) GPA 16, 151 10 (20.4%) had a GPA of 17 and 103 (13.9%) had a GPA of 18. 217 (29.3%) were humanities, 372 (50.3%) were experimental and 151 (20.4%) were mathematics.

| Table2.  | Descriptive in | ndicators   | s and normality | of research va | ariables              |        |            |
|--|----------------|-------------|-----------------|----------------|-----------------------|--------|------------|
| Research variables                                 | Number         | At<br>least | Maximum         | Average        | Standard<br>deviation | tilt   | Elongation |
| Academic conflict                                  | 740            | 22          | 57              | 34/86          | 9/08                  | 0/564  | -0/518     |
| Perception of life satisfaction                    | 740            | 7           | 25              | 13/07          | 5/60                  | 0/834  | -0/679     |
| Cognitive perception (academic)                    | 740            | 7           | 22              | 12/19          | 4/39                  | 0/892  | -0/168     |
| Social perception                                  | 740            | 7           | 22              | 12/18          | 4/19                  | 0/978  | -0/271     |
| Physical perception                                | 740            | 7           | 21              | 12/68          | 3/43                  | 0/711  | 0/669      |
| Student's academic emphasis                        | 740            | 7           | 35              | 19/91          | 10/35                 | 0/209  | -0/785     |
| Student trust in teachers                          | 740            | 10          | 35              | 18/63          | 5/53                  | 0/635  | -0/315     |
| The student's sense of identity towards the school | 740            | 11          | 35              | 20/41          | 8/58                  | 0/335  | -0/620     |
| Negative academic emotions                         | 740            | 113         | 394             | 205/20         | 71/11                 | 0/678  | -0/343     |
| Positive academic emotions                         | 740            | 212         | 597             | 361/03         | 109/70                | -0/173 | -0/101     |

Table 2 shows the number, minimum, maximum, mean, standard deviation, tilt and elongation of the research variables. The number of subjects was 100. Also, the normality of the data with tilt and elongation was examined and the results showed that the absolute values of tilt and elongation coefficient for the research variables should be less than 3 and less than 10, respectively, which indicates the normality of the distribution of scores (Byrne, 2001; Kameli And Yousefi, 2019). In the following, the assumption of error independence and multiple non-alignment is examined, the results of which are shown in Table 3.

|  | nultiple nonlinear test and |                                 |       |  |  |
|--|-----------------------------|---------------------------------|-------|--|--|
| Research variables                                 |                             | Multiple alignment test results |       |  |  |
|  | Tolerance coefficient       | Inflation of variance           |       |  |  |
| Perception of life satisfaction                    | 0/158                       | 6/328                           |       |  |  |
| Cognitive perception (academic)                    | 0/180                       | 5/559                           | -     |  |  |
| Social perception                                  | 0/188                       | 5/329                           | -     |  |  |
| Physical perception                                | 0/282                       | 3/544                           | -     |  |  |
| Student's academic emphasis                        | 0/256                       | 3/909                           | 2/749 |  |  |
| Student trust in teachers                          | 0/389                       | 2/570                           | -     |  |  |
| The student's sense of identity towards the school | 0/288                       | 3/474                           | -     |  |  |
| Negative academic emotions                         | 0/336                       | 2/973                           | -     |  |  |
| Positive academic emotions                         | 0/567                       | 1/763                           | -     |  |  |

Table 3 shows the camera-Watson test results. As a rule, if the Watson camera index is to be between 1.5 and 2.5, it indicates that the predictor variables have adequate independence (Bolshideh, 2012; citing Jabbari, Durrani and Rahiminejad, 2019). Watson camera statistics the variables of this study were obtained between 1.5 to 2.5 which indicates the appropriate independence of the research variables. Also, none of the tolerance statistics values are less than the allowable limit of 0.1 and none of the values of the variance inflation factor is greater than the allowable limit of 10. Since the presence of multiple alignments was not observed in the predictor variables, the parametric tests of Pearson correlation coefficient and multivariate regression can be used. Table 4 shows the correlation matrix coefficients between the research variables.

Table4. Correlation matrix between research variables

| Criterion variable = academic conflict | Significance level   |  |
|--|--|--|
| 0/642**                                | 0/001  |  |
| 0/568**                                | 0/001  |  |
| 0/375**                                | 0/003  |  |
| 0/677**                                | 0/001  |  |
| 0/593**                                | 0/001  |  |
| 0/476**                                | 0/001  |  |
| 0/362*                                 | 0/009  |  |
| -0/414**                               | 0/004  |  |
| 0/384**                                | 0/001  |  |
|  | 0/642**<br>0/568**<br>0/375**<br>0/677**<br>0/593**<br>0/476**<br>0/362*<br>-0/414** |  |

\*\* Probability value at the level of 0.01 \* Probability value at the level of 0.05

Based on Table 4, the results of Pearson correlation coefficient matrix showed that there is a positive and significant relationship between academic optimism, competency perception and positive academic emotions with academic engagement (P <0.01). There is a negative and significant relationship between negative academic emotions and academic conflict (P <0.01). Since there is a significant relationship between research variables, this makes it possible to continue the analysis, so multivariate regression is used to predict academic engagement based on academic outlook, competency perception and academic excitement, the results of which are used, Listed in Tables 5 and 6.

 Table5. Model summary and analysis of variance of academic engagement based on optimism, competency perception and academic excitement

| Indicator                            | The value obtained |
|--------------------------------------|--------------------|
| Multiple correlations (MR)           | 0/890              |
| Square R (determination coefficient) | 0/792              |
| Modified R squared                   | 0/790              |
| Statistics F                         | 309/778            |
| Significance level F                 | 0/001              |

According to Table 5, the results showed that the multiple correlation coefficient between optimism, competence perception and academic excitement with academic engagement is equal to 0.890. Also, 79.2% of the variance of academic engagement should be explained based on predictor variables. Also, the

significant results of one-way analysis of variance indicate the appropriateness of the regression model. Table 6 shows the multivariate regression coefficients.

| Predictive variables                               | Non-standard<br>coefficients<br>B standard error |       | Standard<br>coefficients     | Т      | Significance<br>level |
|--|--|-------|------------------------------|--------|-----------------------|
|  |  |       | Beta coefficient ( $\beta$ ) |        |                       |
| Constant   | 21/416   | 1/797 | -                            | 11/917 | 0/001                 |
| Perception of life satisfaction                    | 0/529  | 0/037 | 0/603                        | 14/219 | 0/001                 |
| Cognitive perception (academic)                    | 0/584  | 0/042 | 0/548                        | 13/788 | 0/001                 |
| Social perception                                  | 0/228  | 0/041 | 0/216                        | 5/539  | 0/001                 |
| Physical perception                                | 1/196  | 0/051 | 0/738                        | 23/252 | 0/001                 |
| Student's academic emphasis                        | 0/525  | 0/069 | 0/253                        | 7/603  | 0/001                 |
| Student trust in teachers                          | 0/661  | 0/059 | 0/035                        | 11/278 | 0/001                 |
| The student's sense of identity towards the school | 0/553  | 0/083 | 0/150                        | 2/599  | 0/010                 |
| Negative academic emotions                         | -0/407   | 0/004 | -0/156                       | -2/936 | 0/023                 |
| Positive academic emotions                         | 0/014  | 0/002 | 0/170                        | 7/583  | 0/001                 |

Table6. Multivariate regression coefficients predicting conflict based on optimism, competency perception and academic

Table 6- Based on standard and non-standard coefficients, multivariate regression analysis simultaneously to predict academic engagement. The results showed that academic optimism, competency perception and academic excitement can predict academic engagement and the research hypothesis were confirmed.

### 4. Discussion

The purpose of this study was to predict academic engagement based on academic optimism, perception of competence and academic excitement in students. The results showed that there is a relationship between academic optimism, competence perception and academic excitement with academic conflict and academic conflict is explained by academic optimism, competency perception and academic excitement. This result is obtained with the results of research by Icekson, Kaplan and Slobodin (2020), Simonton and Garn (2020), Gholampour, Pourshafei and Qurani sirjani (2019), Abbasi, Shahkarami and Alipour (2019), Mirzaei, Kiamanesh, Hejazi and Bani Jamali (2016), Movahedzadeh and Rahmatmand (2018) and Packran, Goetz, Fenzel, Barchfeld and Perry (2011). According to the results of the present study, there is a relationship between academic optimism and academic engagement. Kadivar (2015) who showed that academic optimism is the belief in Ibn Bavar that the student will be academically successful increases the student's motivation for better performance. It was in line.

Explaining the role of academic optimism in academic conflict, it can be said that optimism means having positive expectations for results and consequences. Optimism is a combination of an optimistic attitude and attitude towards oneself, people, objects, events and the world in general, based on which a good and hopeful expectation, based on one's abilities, is on optimistic people with health. And the root of this optimistic attitude lies in the style of explaining people (Ruthig, Perry, Hall & Hladkyj, 2004). Optimistic students are confident of achieving the goal, and pessimistic people are skeptical of achieving the goal in similar circumstances. Therefore, academic optimism helps students to create a positive environment in school (Gholampour, Pourshafei and Qurani sirjani, 2019). In fact, student academic optimism is an individual belief that is formed under the influence of environmental factors in the individual. This belief indicates that if there is a trusting relationship between students and faculty, the existence of the characteristics of academic emphasis in the environment, followed by the formation of a sense of oneness with the educational environment, the person progresses. Gain high motivation and achieve success. Overall, students 'academic optimism paints a rich picture of human agency that explains

students' behavior in cognitive, emotional, and behavioral dimensions. Since academic conflict involves cognitive, emotional and behavioral dimensions, it can be said that it is logical that there is a relationship between academic optimism and academic conflict.

Another finding of the present study was that there is a relationship between the perception of competence and academic engagement, Skinner Furrer Marchand. Kindermann (2008) who showed that a sense of competence increases intrinsic motivation, behavioral participation, and cognitive engagement in school, In explaining it, it can be said that conflict is due to motivation and its strength, direction and continuity are determined by motivation. Motivation underlies actions originates from basic psychological needs. Deci Ryan, (2000) in educational activities, it is a function of degrees to which the basic psychological needs have been met.

It can also be said that the theory of self-determination is one of the major theories about human motivation and well-being of competence as a fundamental psychological need (Koole, Schlinkert, Maldei & Baumann, 2019). In this theory, competence is described as a feeling of effectiveness and empowerment, and ultimately communication with others as having social connection and belonging (Jeno, Adachi, Grytnes, Vandvik & Deci, 2019 Partanen, 2020). (Mirzaei, Kiamanesh, Hejazi and Bani Jamali, 2016), consider competency as a psychological need that provides the energy and motivation to pursue and master optimal challenges. In other words, competency is considered to be the need to be effective in interacting with the environment, which means pursuing the optimal challenges and mastering them using their talents and skills. Therefore, it is expected that a person who has achieved perceived competence in his / her academic assignments has the necessary motivation to do that work, and conversely, if the person has not achieved perceived competence in that field, he / she does not have the necessary motivation to do that activity. Lack of motivation to engage in academic activities, students do not show the necessary engagement or academic motivation in academic activities. Thus, according to Desi and Ryan's theory of self-determination, competency perception can improve students' academic engagement by raising the level of intrinsic motivation. Therefore, it makes sense that there is a relationship between the perception of competence and academic involvement.

Another finding of the present study suggests that academic emotions are related to academic engagement. This research is based on the results of Fredrickson, 2013). It is also consistent with the results of Datua King (2018) research that reported that students who experience more positive and happy emotions engage more in schoolwork. And in explaining it can be said. The experience of positive emotions in the learning environment generally enriches the treasury of momentary thought-action. During the learning activity, the learner's attention span, more adaptive cognitive strategies, and tendency behaviors increase, all leading to more engagement in the activity (Fredrickson, 2013). For this reason, positive emotions are easily identified as catalysts for conflict (King, McInerney, Ganotice, & Vilarosa, 2015), facilitators that accelerate actions (conflict) in learning tasks.

Ouweneel Blanc & Schaufeli, (2011), refer to a positive, reciprocal, and dynamic relationship between positive emotions and academic engagement that is consistent with Pekrun (2006) cognitive-social model of control-value of academic emotions. Control-Value Positive emotions not only help students experience a good feeling but also anticipate increased academic engagement and facilitate behavioral approaches that motivate people to engage in special activities. Positive emotions allow students to imagine themselves as successful people in tasks and to let go of the negative emotions associated with failure.Pekrun Goetz Frenzel Barchfeld & Perry (2011) believe that active emotions Positive instruments such as pleasure, hope, and pride increase internal and external motivation, facilitate the use of deep learning strategies, and in most cases have a positive effect on academic engagement. ¬The learner enjoys learning activities and has a greater sense of inner motivation than before doing the action and with attention and control More flexibility deals with learning processes and this leads to more academic efforts. These academic activities

also lead to consequential emotions of hope, satisfaction and pride, so it makes sense that there is a relationship between academic emotions and academic conflict.

This study was a correlational study and therefore cannot be inferred from it. Considering this limitation, it is suggested that in future research, this project be implemented in the form of a pilot project. Another limitation of the research is that the sample the students were in high school and the research results could not be generalized to higher and lower levels. The research results are important from both theoretical and practical aspects. Theoretically, this research in the field of academic conflict, in which a new sequence of structures affecting the conflict is considered, completes the body of previous research in the field of academic conflict. It can also pave the way for newer research to expand psychological knowledge in the field of factors affecting the formation of students' academic engagement. In practice, the results of this research can be found in the policies of the educational system (development of programs, educational interventions, counseling). And holding educational workshops for parents of students and teachers) in Iran.



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