

The Mediator Role of Satisfaction of Needs between Academic Motivation and Life Goals

İhtiyaç Doyumunun Yaşam Amaçları ile Akademik Motivasyon Arasındaki Aracı Rolü

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ABSTRACT: The present study aims to test the theoretical model which assumes that academic motivation of high-school students is affected by need satisfaction and having life goals. Present study was conducted on 259 high-school students (136 male, 123 female) whose mean age was 15.84, and standard deviation was 0.75. The data of this study were collected with personal information form, the Scale of General Need Satisfaction, the Scale of Academic Motivation and also the Scale of Life Goals. In order to analysis of data, structural equation modelling method was used. Fit values indicate that the theoretical model was consistent with the data obtained. Results show to us that high-school students combine their life goals with satisfaction of needs, a combination that appears to increase their academic motivation levels.

Keywords: Academic motivation, life goals, need satisfaction

ÖZ: Bu çalışma, akademik motivasyon ile yaşam amaçları arasında ihtiyaç doyumunun aracılık rolünü test etmek amacıyla gerçekleştirilmiştir. Çalışmaya 136 kadın ve 123 erkek olmak üzere toplam 259 öğrenci katılmıştır. Çalışmanın verileri kişisel bilgi formu, genel ihtiyaç doyumu ölçeği ve yaşam amaçları ölçekleri ile toplanmıştır. Verilerin analizinde yapısal eşitlik modeli yönteminden faydalanılmıştır. Analiz sonuçlarına göre, ihtiyaç doyumunun aracılık rolünün önemli olduğu bulunmuştur. Lise öğrencilerinin akademik motivasyon düzeylerini yükseltmek için, yaşam amaçları belirlemeleri ve bu süreçte de psikolojik ihtiyaçlarını doyurmaları önerilebilir.

Anahtar sözcükler: Akademik motivasyon, yaşam amaçları, ihtiyaç doyumu

1. INTRODUCTION

Academic motivation, which has been investigated by several theories up to date, refers to the motivated behaviour of students contributing to their learning and achievement (Bandura, 1997; Richer & Vallerand, 1998; Wigfield & Eccles, 2000), one of which is self-determination theory (Deci & Ryan, 1991). This theory assumes that academic motivation is composed of three dimensions: intrinsic motivation, extrinsic motivation, amotivation (Vallerand, 1997). Individuals with intrinsic motivation are those preferring to carry out an activity only to satisfy their curiosity and interest without having to be driven by an external force, whereas individuals with extrinsic motivation are those carrying out an activity driven by such external forces as getting a reward or avoiding punishment. As to amotivation, individuals in this state fail to make a connection between their behaviour and its consequences (Niemic & Ryan; 2009; Vallerand, 1997). Among the several factors influencing the academic motivation of students are satisfying psychological needs and goals.

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According to the Self-determination theory, humans are predisposed to satisfy three basic psychological needs: competence, relatedness and autonomy. The need for autonomy could be defined as being able to act freely and thus having the right to make choices on the part of the individual. The need for competence is the tendency to interact with the environment effectively. As for relatedness, individuals tend to feel the need for establishing relationships with other individuals (Deci & Ryan, 1991; Richer & Vallerand, 1998; Ryan & Deci, 2000).

The relationship between need satisfaction and motivation points out to three basic needs leading up to motivated behaviour in individuals. In support of this, Self-determination theory contends that motivation of individuals might progress from extrinsic to internal, for the achievement of which the need for a mediator arises. This mediator could be identified as satisfaction of psychological needs (Ryan & Deci, 2000). For instance, students have been observed to increase in academic motivation when their psychological needs are satisfied (Benware & Deci, 1984; Grolnick & Ryan, 1987; Reeve & Halusic, 2009). Likewise, students whose psychological needs are satisfied in the classroom setting have been observed to be more willing to learn, value learning more highly, and achieve better self-regulation (Black & Deci, 2000). Moreover, students tend to increase in motivation to do research in line with satisfaction of their psychological needs (Arnone, Reynolds & Marshall, 2009). In conclusion, the higher the level of satisfaction of needs is, the higher the academic motivation of students tends to be, according to the results of the studies conducted across different cultures (Hui, Sun, Chow & Chu, 2011).

One of the variables closely associated with academic motivation of students is goals. Goals have so far been investigated in respect of such dimensions as achievement goals (Ames & Archer, 1988; Elliot, 1999), social goals (Anderman, 1999), personal goals (Karoly, 1999), daily goals and life goals (Kasser & Ryan, 1996; King, Richard & Stemmerich, 1998). The common feature of these studies is that having goals and striving for them increase motivation of individuals remarkably.

Goals are identified as internal representations of the desired consequences on the part of individuals. While daily goals refer to that which is planned to be done during the day, life goals relate to that which is planned to be done during a whole lifetime (King, Richard & Stemmerich, 1998). However, life goals have been investigated from different perspectives so far. As far as the self-concordance model is concerned, life goals have been investigated in terms of internal and external dimensions, including contribution to society, personal development, interpersonal relationships, physical health, affluence, and attractiveness (Kasser & Ryan, 1996). Similarly, Peseschkian and Walker (1987) have also conducted investigations into life goals, in which they assume that individuals possess life goals and strive for them in consideration of four life domains: body-senses, achievement, relationships, and spirituality. When coping with conflicts, people resort to these goals (Peseschkian, 1996, 2002). The achievement goals studied by Peseschkian (1996) are consistent with personal development goals studied by Kasser and Ryan (1996). Likewise, relationship goals are consistent with interpersonal relationship goals; body-senses are consistent with physical health goals; spiritual goals are consistent with contribution to society.

Wilding and Andrews (2006) have investigated life goals in terms of three dimensions by adapting a study by Andrews and Brown (1993); wealth/status life goals, altruistic life goals and relationship life goals. Some others investigations (Eryilmaz, 2010, 2012a) have dealt with life goals in terms of three different dimensions based upon self-concordance and balance models; personal development-career life goals, interpersonal relationship life goals, and body-physical health life goals.

Generally, the goal theory claims that setting life goals and striving for them has been observed to result in motivating impacts in various life domains of individuals (Locke & Latham,

1990, 2002). Likewise, studies into in educational settings have demonstrated that, students having goals and striving for them do learn better and get higher scores (Elliott & Dweck, 1988; Pekrun, Elliot, & Maier, 2006; Wilding & Andrews, 2006). Furthermore, students having life goals are reported to have higher motivations for class engagement (Eryilmaz & Aypay, 2011). As a result, there are some studies showing that students have different kinds of goals such as learning goals tend to have higher levels of academic motivation (Ames & Archer, 1988; Elliot, 1999). However, there is no study which investigates the relationship between academic motivation and life goals.

There are known to be significant relationships between need satisfaction and having life goals (Benware & Deci, 1984; Grolnick & Ryan, 1987; Reeve & Halusic, 2009). According to Self-determination theory, need satisfaction and having life goals are closely related, considering that individuals, either consciously or unconsciously, have life goals (Ryan and Deci, 2000). Some studies find that need satisfaction is an important mediator as far as the relationship between subjective well-being and life goals is concerned (Ivancevich & Matteson, 1999; Ryan and Deci, 2000; Sheldon and Elliot, 1999; Sheldon & Kasser, 1998). While, there is no study which investigates the mediator role of need satisfaction between academic motivation and life goals. Additionally, the variables in this study have so far been studied independently of each other. However, the present study aims to investigate these variables in a structural equation modelling.

It is essential that academic motivations of the students be increased (Wang & Pomerantz, 2009), since the higher the level of academic motivation is, the keener students are to learn (Zimmerman, 2000, 2008). Likewise, academic achievement increases in line with increasing academic motivation levels (Pintrich & Zusho, 2002). However, the lower academic motivation is, the more likely students are to drop out of school (Glass & Rose, 2008) and the lower their academic achievement is (Wigfield, Lutz & Wagner, 2005). Need satisfaction and having life goals are essential to psychological functioning and development of individuals (Sheldon & Elliot, 1999; Nurmi, 1993; Vansteenkiste, Lens & Deci, 2006). In order to learn and achieve, motivation issue in education is very important (Pintrich & Schunk, 2002). Researches results indicate that most of the students could not get motivated from time to time (Brophy, 2008; Lepper, Corpus & Iyengar, 2005). It is important that in parallel with the increase in academic motivation, individuals' academic success and learning increase (Stipek, 2002). Thus, it has been needed some academic motivation models to increase learning. We know of some investigations into the relationship of academic motivation with identity and intimacy (Faye & Sharpe, 2008). Nonetheless, there are little studies into the mediator role of need satisfaction as far as the relationship between academic motivation and life goals is concerned. Thus, the present study aims to seek answers to the hypotheses given below:

- a) Life goals has a positive effect on academic motivation of students in high school
- b) Satisfaction of needs has a positive effect on academic motivation of students in high school
- c) Satisfaction of needs has a significant mediator effect on the relation between academic motivation and life goals

2. METHOD

2.1. Research Design and Procedure

The present study aims to test the theoretical model which assumes that academic motivation of high-school students is affected by need satisfaction and having life goals. This research was carried out with a cross-sectional design and the data were obtained through a single application. The variables in this study have so far been studied independently of each other

(Benware & Deci, 1984; Grolnick & Ryan, 1987; Lock & Latham, 2002; Reeve & Halusic, 2009; Ryan and Deci, 2000). However, the present study aims to investigate these three variables as a whole. The independent variables are need satisfaction and life goals, and the dependent variable is academic motivation. The hypothetical model developed for the present study has been presented in Figure 1.

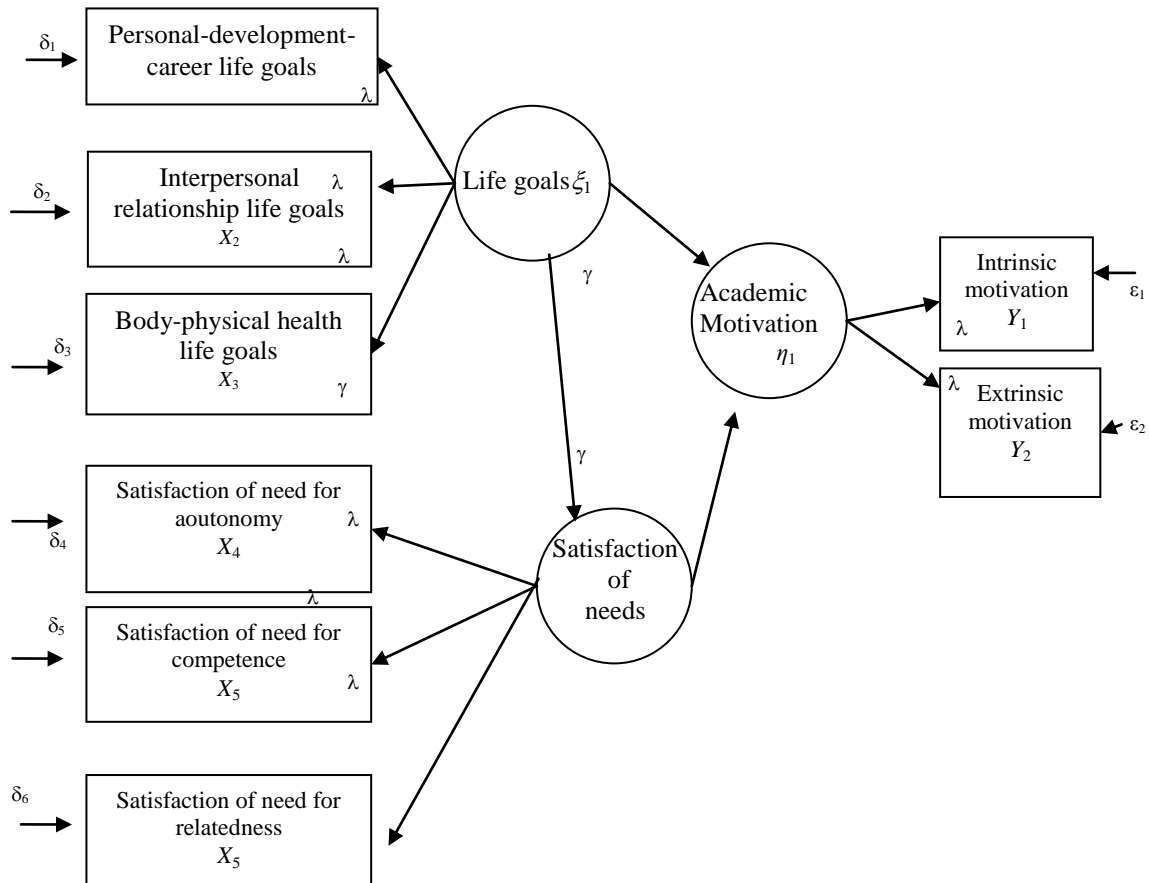


Figure 1. Hypothetical Model

2.2. The Study Group

The study group was determined through a purposive sampling method, in which three criteria (theoretical knowledge, knowledge of the researcher, and the specific goal of research) are considered (Fraenkel & Wallen, 1993). It is essential that sample range be determined in a structural equation modelling study. If the sample is too large, the model does not work (Jöreskog & Sörbom, 1993), while the fit indexes for the model fail to be obtained if the sample is too small (Kenny & McCoach, 2003). According to Kline (1998, 2005), the sample size is large if the number of the participants is 300 and above, and the sample size is small if the number of the participants less than 100, but the sample size is within an acceptable range if the number of the participants varies between 100 and 200. Therefore, the scales of the present study were implemented upon 259 high-school students in Eskişehir, Turkey.

The responses derived from the participants were examined prior to data analysis. 41 data of these participants were excluded from the data set either because they just ignored most of the items (at least 5%) or because they made central tendency errors. As a result, analyses of the

present study were conducted on 259 high-school students (136 male, 123 female) whose mean age was 15.84, and standard deviation was 0.75.

77 of the mothers of the participants had primary school education only (29.7%) and 107 were high school graduates (41.3%), 9 were college graduates (3.5%), 63 had university degrees (24.3%) and another 3 had master's degrees (1.9%). As to the fathers, 35 had primary school education only (13.5%) and 79 were high school graduates (30.5%), 15 were college graduates (7.4%), 122 had university degrees (47.1%) and another 8 had master's degrees (3.1%).

2.3. Instruments

Personal Information Form: A personal information form including such variables age, sex, education level, and socioeconomic status was prepared in order to determine the demographic features of the participants.

The Scale of General Need Satisfaction: This three-dimensional scale was developed by Deci and Ryan (1991). It is composed of 21 items pertaining to the need for competence, autonomy and relatedness. This is known as a seven-point Likert type scale. It was adapted to Turkish by Cihangir-Çankaya and Bacanlı (2003), who determined the internal consistency value of this scale to be 0.80 for competence, 0.82 for autonomy and 0.81 for relatedness respectively. In this study the internal consistency values of the scale has been computed, and the internal consistency value of this scale to be 0.84 for competence, 0.86 for autonomy and 0.88 for relatedness. Getting high scores from any of the sub-dimensions of this scale is accounted for by the fact that these individuals have satisfied their needs.

The Scale of Academic Motivation: This scale was adapted to English from French by Vallerand and his colleagues in 1993. It was devised based upon the self-determination theory. It is composed of 28 items pertaining to intrinsic motivation, extrinsic motivation and amotivation. It was adapted to Turkish by Çakir (2006), who determined the internal consistency value of this scale to be 0.80 for intrinsic motivation, 0.81 for extrinsic motivation and 0.79 for amotivation, respectively. In this study the internal consistency values of the scale has been computed, and the internal consistency value of this scale to be 0.83 for intrinsic motivation, 0.84 for extrinsic motivation.

The Scale of Life Goals: This scale was developed by Eryılmaz (2010) based upon self-concordance and balance models. It was first conducted on adolescents, and then on university students (Eryılmaz, 2012a). This scale is known to determine whether or not individuals have life goals in three life domains. This is a four Likert-type scale, and is composed of three dimensions: personal development-career life goals, interpersonal relationship life goals, and body-physical health life goals. While the explained variance for adolescence in this scale is 65.32%, the same variance is 69.55% for university students. In favour of the validity of this scale, *oxford happiness scale* and *life orientation scales* were used. The Cronbach Alpha value for this scale was determined as 0.85 for the sub-dimension of personal development-career life goals, while it was found to be 0.73 for the sub-dimension of interpersonal relationship life goals. As to the body-physical health life goals, this value was 0.68. In this study the internal consistency values of the scale has been computed, and the internal consistency value of this scale to be 0.84 for the sub-dimension of personal development-career life goals, 0.76 for the sub-dimension of interpersonal relationship life goals, and also 0.72 for the body-physical health life goals.

3. FINDINGS

3.1. Descriptive Statistics of Variables

The mean and standard deviation values for the variables in the present study were computed and are presented in Table 1.

Table 1. Descriptive statistics

Variables	\bar{X}	Sd
Need for autonomy	35,95	5,58
Need for competence	29,81	4,66
Need for relatedness	44,87	6,19
Personal development-career life goals	9,05	1,78
Interpersonal relationship life goals	7,97	2,20
Body-physical health life goals	9,24	1,83
Intrinsic motivation	55,68	9,33
Extrinsic motivation	39,90	6,63

3.2. Findings of the Fit Indexes for the Model

The present study has developed and tested a structural equation model about academic motivation of high-school students. The findings of this model have been presented in Figure 2. Furthermore, contributions of both latent and observed variables to this model have been demonstrated in Table 2. As to the values of the fit indexes, the values of CFI, NNFI, IFI, RFI, GFI, AGFI, RMSEA, χ^2 and the value of χ^2/df were computed. The values of these fit indexes were CFI = 0.95, IFI = 0.95, NFI = 0.92, NNFI = 0.92, RFI = 0.86, GFI = 0.96, AGFI = 0.91, RMSEA = 0.074, $\chi^2/df = 2.19$. These values indicate that the theoretical model is consistent with the data obtained (Kline, 2005).

Table 2. Fit indexes

Indexes	Values
GFI	0.96
AGFI	0.91
CFI	0.95
IFI	0.95
NFI	0.92
NNFI	0.92
RFI	0.86
RMSEA	0.074
<i>Df</i>	17
X^2	37.35
X^2/Df	2.19

The effects of the observed variables upon academic motivation have been explained through coefficients. According to Kline (1998, 2005), if coefficients are smaller than 0.10, the effect size is small, if coefficients are between 0.11-0.30, the effect size is moderate, and if coefficients are bigger than 0.30, the effect size is big. These taken into account, a rise of one unit in need satisfaction raises academic motivation by 0.33. Another observed variable is that a rise of one unit in having life goals raises academic motivation by 0.26. As a mediator variable, need satisfaction makes a moderate contribution to the relationship between academic motivation and life goals (0.17). These results show to us that high-school students combine their life goals with satisfaction of needs, a combination that appears to increase their academic motivation levels.

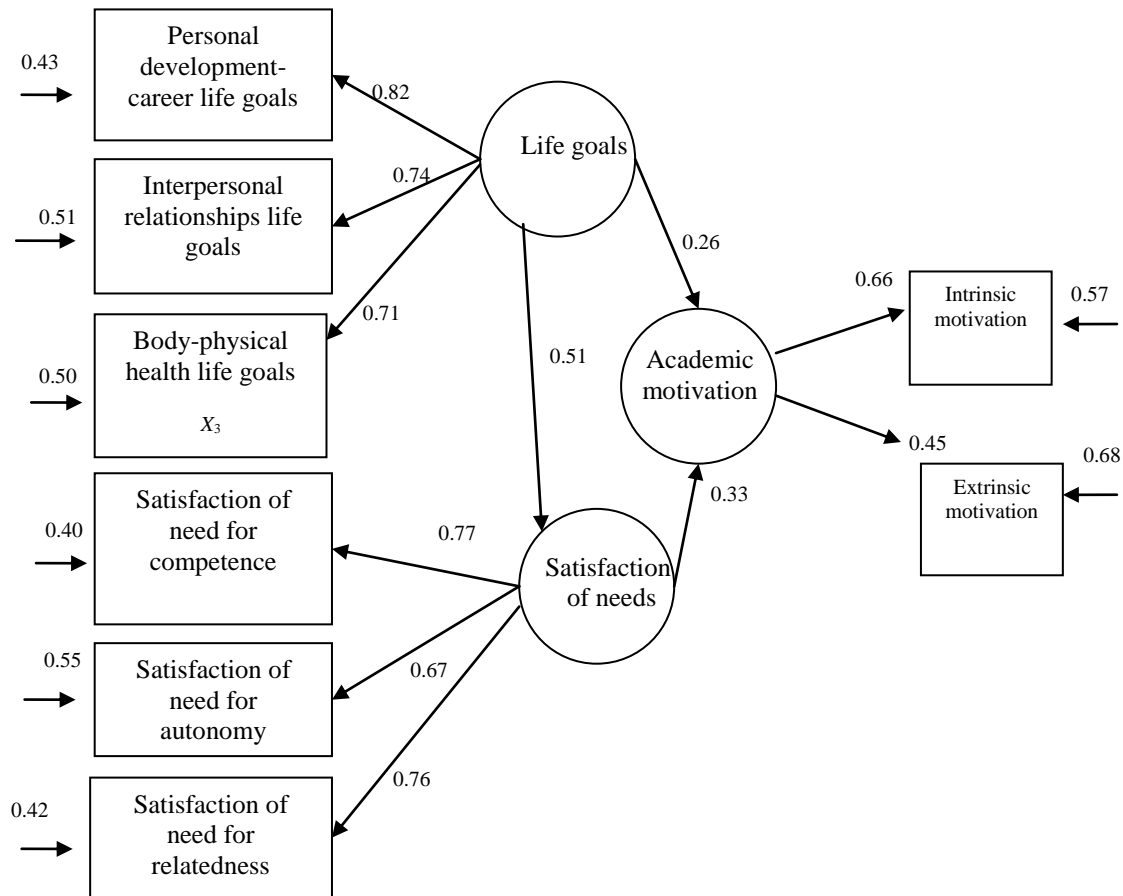


Figure 2. Model of academic motivation

According to Kline (1008, 2005), the more alternative models are developed in a model study, the more likely we are to attain the appropriate model. Thus, the mediator role of life gaols concerning the relationship between academic motivation and need satisfaction has been analysed in the present study. However, the alternative model developed for this purpose failed to work.

Table 3. Evaluations of model

Variables	Coefficients	Effect size
Direct effect of life goals	0.26	Moderate
Direct effect of need satisfaction	0.33	High
Mediator effect of need satisfaction	0.17	Moderate
Total effect of life goals	0.43	High

4. DISCUSSION and RESULTS

There is no denying the fact that increasing the motivation of students is vital to learning in educational settings. With this in mind, the present study developed and tested a structural equation model about academic motivation of high-school students. According to the study

results, not only life goals but also satisfaction of needs contributes to the academic motivation of students in a positive way.

There are known to be several factors affecting the motivation levels of students, one of which is satisfaction of needs. In particular, many studies based upon the self-determination theory have shown that the motivation of students has increased in line with their satisfaction of needs (Black & Deci, 2000; Benware & Beci, 1984; Grolnick & Ryan, 1987; Reeve & Halusic, 2009; Deci & Ryan, 1991; Richer & Vallerand, 1998; Ryan & Deci, 2000). Likewise, the results of this study have also shown that the academic motivation levels of the participants increased consistently with the satisfaction of needs. The finding that satisfying the needs of students contributes positively to their academic motivation, regardless of the culture they belong in (Hui, Sun, Chow & Chu, 2011), is confirmed by the findings of the present study conducted on Turkish high-school students.

The second significant factor affecting academic motivation levels of the students is their life goals. There are studies showing that students with more learning goals tend to have higher levels of academic motivation (Ames & Archer, 1988; Elliot, 1999). However, the present study is different in that it has investigated the relationship between academic motivation and life goals. Nonetheless, the findings of this study are in agreement with the assumption of the goal theory, that having goals increases the motivation levels of individuals (Lock & Latham, 2002).

One of the most interesting findings of this study is that the mediator role of need satisfaction between life goals and academic motivation is of significance. Studies based upon the self-determination theory have revealed that satisfaction needs has a mediator role in optimal functioning. For instance, need satisfaction is an important mediator as far as the relationship between subjective well-being and life goals is concerned (Ivancevich & Matteson, 1999; Sheldon & Kasser, 1998). Another study has found the role of need satisfaction as a mediator in student motivation and teacher support (Hui, Sun, Chow & Chu, 2011). Yet another study has found that there is a mediator role of need satisfaction in reasons for living and adolescents' subjective well-being (Eryilmaz, 2012b). Finally, Faye and Sharpe (2008) found the mediator role of need satisfaction in academic motivation and identity formation. The results of the present study bear similarity to those of the above in that it has found that need satisfaction serves as a mediator for optimal functioning, while the results of the present study are dissimilar to those of the others in that it has investigated the mediator role of need satisfaction concerning life goals and academic motivation.

One of the significant theories that could account for the results of the present study is the self-concordance model. Other studies based upon this model have investigated the mediator role of need satisfaction concerning life goals and subjective well-being (Sheldon & Kasser, 1998). According to this model, individuals should first set intrinsic life goals, and then commit themselves to these goals, for the realization of which they should strive. However, they need a mediator variable in the meantime, that is, satisfaction of their needs (Ryan & Deci, 2000). In other words, individuals should be able to satisfy their psychological needs while they are achieving their life goals.

According the other studies, setting of life goals autonomously encourages learners to strive harder towards these goals (Deci & Ryan, 2000). However, this study has not deal with this aspect. Future studies could be conducted with a view to comparing individuals who set their life goals autonomously and those who do not.

An essential subject matter of education is motivation, on which a large number of studies have been carried out. For instance, keeping the academic motivation levels of students high is essential to both self-actualization and successful learning (Mansfield & Wosnitza, 2010). In addition, some studies have found that academic motivation levels of students decrease from

primary school to high school (Anderman & Anderman, 1999; Eccles & Midgley, 1989). Therefore, the findings of the present study could be useful for increasing academic motivation levels of high-school students. For instance, teachers could structure their teacher process by helping them to set life goals and satisfy their psychological needs. Likewise, the school counsellor could prepare programs for setting life goals.

In conclusion, having life goals is very important for academic motivation of high-school students but it is not sufficient on its own. To this end, it is necessary that a combination of life goals and satisfaction of needs should be encouraged in order to increase the academic motivation levels of these students. Thus, in school setting counsellors might develop academic motivation educational guidance program. Life goals and need satisfaction might be important sub-dimensions of these kinds of programs. Parents also might find the ways to satisfy of needs their children.

5. REFERENCES

- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: students' learning strategies and motivation processes. *Journal of Educational Psychology, 80*(3), 260–267.
- Anderman, L.H. (1999). Classroom goal orientation, school belonging and social goals as “predictors of students' positive and negative affect following the transition to middle school. *Journal of Research and Development in Education, 32*(2), 89–103.
- Anderman, L. H., & Anderman, E. M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology, 25*, 21–37.
- Anderman, E. M., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools. *Contemporary Educational Psychology, 22*, 269–298.
- Andrews, B., & Brown, G. W. (1993). Self-esteem and vulnerability to depression: The concurrent validity of interview and questionnaire measures. *Journal of Abnormal Psychology, 102*, 565–572.
- Arnone, M. P., Reynolds, R., & Marshall, T. (2009). The effect of early adolescents' psychological needs satisfaction upon their perceived competence in information skills and intrinsic motivation for research. *School Libraries Worldwide, 15*, 115–134.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Black, A., & Deci, E. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: a self-determination theory perspective. *Science Education, 84*, 740–756.
- Benware, C., & Deci, E. (1984). Quality of learning with an active versus passive motivational set. *American Educational Research Journal, 21*, 755–765.
- Brophy, J. (2008). Developing students' appreciation for what is taught in school. *Educational psychologist, 43*(3), 132–141.
- Cihangir-Cankaya, Z., & Bacanlı, H. (2003). Adaptation of the needs satisfaction in general scale. *Paper presented at the meeting of VII. National Psychological Counseling*, Malatya, Turkey.
- Çakır, E. (2006). The levels of high school students' depression and academic motivation. *Unpublished master dissertation*. Sakarya University, Skarya, Turkey.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: İntegration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation. Vol. 38. Perspectives on Motivation* (Pp. 237–288). Lincoln, Ne: University of Nebraska Press.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.
- Eccles, J. S., & Midgley, C. (1989). Stage– environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames & R. Ames (Eds.), *Research on motivation in education: Vol. 3. Goals and cognitions* (pp. 13–44). New York: Academic Press.
- Elliot, A.J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist, 34*(3), 169–189.
- Elliott, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology, 54*, 5–12.
- Eryılmaz A (2010). Renew: Expansion of goals program for adolesonts with respect to positive psycholterapy and

- comprehensive guidance, *Journal of Family and Society (Aile ve Toplum Dergisi)*, 20, 53-65.
- Eryılmaz, A., & Aypay, A. (2011). Relationships between motivation to class engagement and determining life goals in high school students. *Journal of Ahi Evran University Education Faculty*, 12, 3, 149-158.
- Eryılmaz, A. (2012a). Investigating of psychometric properties the scale of setting life goals with respect to positive psychotherapy on university students. *Journal of Clinical Psychiatry (Klinik Psikiyatri Dergisi)*, 15, 166-174.
- Eryılmaz, A. (2012b). A model for subjective well-being in adolescence: Need satisfaction and reasons for living. *Social Indicator Research*, 107, 3, 561-574.
- Faye, C., & Sharpe, D. (2008). Academic motivation in university: The role of basic psychological needs and identity formation. *Canadian Journal of Behavioural Science*, 40, 189-199.
- Fraenkel, J. R., & Wallen, N. E. (1993). *How to design and evaluate research in education*. New York: McGraw Hill.
- Glass, R., & Rose, M. (2008). Tune out, turn off, drop out. *American Teacher*, 93(3), 8-21.
- Grolnick, W., & Ryan, R. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, 52, 977-1077.
- Hui, E.K.P., Sun, R.C.F., Chow, S.S.Y., & Chu, M.H.T. (2011). Explaining Chinese students' academic motivation: Filial piety and self-determination. *Journal of Educational Psychology*, 31, 3, 377-392.
- Ivancevich, J.M., & Matteson, M.T. (1999). *Organizational behavior and management*. Singapore: McGraw-Hill.
- Joreskog, K., & Sorbom, D. (1993). *Lisrel 8: Structural equation modelling with the simplis command language*. Chicago, IL: Scientific Software International Inc.
- Karoly, P. (1999). A goal systems-self-regulatory perspective on personality, psychopathology, and change. *Review of General Psychology*, 3, 264-291.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential Correlates of intrinsic and extrinsic goals. *Personality And Social Psychology Bulletin*, 22, 280-287.
- King, L. A., Richards, J. H., & Stemmerich, E. (1998). Daily goals, life goals, and worst fears: Means, ends, and subjective well-being. *Journal of Personality*, 65, 713-44.
- Kenny, D. A., & McCoach, D. B. (2003). *Effect of the number of variables on measures of fit in structural equation modelling*. *Structural Equation Modelling*, 10(3), 333-351.
- Kline, R. B. (1998). *Principles and practice of structural equation modelling*. New York: Guilford Press.
- Kline, R. B. (2005). *Principles and practice of structural equation modelling (2nd ed.)*. New York: The Guilford Press.
- Lepper, M. R., Corpus, J. H., & Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and academic correlates. *Journal of educational psychology*, 97(2), 184-196.
- Locke, E. A., & Latham, G. P. (1990). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, Nj: Prentice Hall.
- Locke, E. A. & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation. *American Psychologist*, 57, 705-717.
- Mansfield, C. F., & Wosnitza, M. (2010). Motivation goals during adolescence: A cross sectional perspective. *Issues in Educational Research*, 20, 149-165.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the Classroom: Applying self determination theory to educational practice. *Theory and Research in Education*, 7, 133-144.
- Nurmi, J.-E. (1993). Adolescent development in an age-graded context: The role of personal beliefs, goals, and strategies in the tackling of developmental tasks and standards. *International Journal of Behavioral Development*, 16, 169-189.
- Pekrun, R., Elliot, A. J., & Maier, M.A. (2006). Achievement goals and discrete achievement emotions: A theoretical model and prospective test. *Journal Of Educational Psychology*, 98 (3), 583-597.
- Peseshkian, N. (1996). *Positive family therapy. The family as therapist*. New Delhi, Sterling Paperbacks.
- Peseshkian, N., & Walker, R.R. (1987). *Positive psychotherapy theory and practice of a new method*. Berlin: Springer-Verlag.
- Pintrich, P. & Zusho, A. (2002). The development of academic self-regulation: the role of cognitive and motivational factors. In A. Wigfield & J. S. Eccles (Eds.), *Development of Achievement Motivation* (pp. 249-284). San Diego, Ca: Academic Press.
- Pintrich, P. R., & Schunk, D. H. (2002). The role of goals and goal orientation. *Motivation in education: Theory, research and application (2nd ed., pp. 190-242)*. Englewood Cliffs, NJ: Simon & Schuster.
- Reeve, J., & Halusic, M. (2009). How k-12 teachers can put self-determination theory principles into practice. *Theory and Research in Education*, 7, 145-154.
- Richer, S. F., & Vallerand, R. J. (1998). Construction et validation de l'échelle du sentiment d'appartenance sociale. *Revue Européenne De Psychologie Appliquée*, 48, 129-137.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Sheldon, K. M., & Kasser, T. (1998). Pursuing personal goals: Skills enable progress but not all progress is beneficial. *Personality and Social Psychology Bulletin*, 24, 1319-1331.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction and longitudinal well being: The self concordance model. *Journal of Personality and Social Psychology*, 76, 482-497.
- Vallerand, R.J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M.Zanna (Ed.), *Advances in experimental social psychology* (pp. 271± 360). New York: Academic Press.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brière, N. M., Senécal, C. B. & Vallières, E. F. (1993). On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. *Educational and Psychological Measurement*, 53, 159-172.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41, 19-31.
- Wang, Q., & Pomerantz, M. E. (2009). The motivational landscape of early adolescence in the united states and china: A longitudinal investigation. *Child Development*, 80, 1271-1287.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy - value theory of motivation. *Contemporary Educational Psychology*, 25, 68-81
- Wigfield, A., Lutz, L. S., & Wagner, A. L. (2005). Early adolescents development across the middle school years: Implications for school counselors. *Professional School Counseling*, 9, 112-119.
- Wilding, J., & Andrews, B. (2006). Life goals, approaches to study and performance in an undergraduate cohort. *British Journal of Educational Psychology*, 76, 171-182
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M.Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of Self-Regulation* (pp. 13-39). San Diego, Ca: Academic Press.
- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45, 166-183.

Uzun Özet

Pek çok kuram tarafından incelenen akademik motivasyon kavramı, öğrencilerin öğrenmeye ve dolayısıyla başarılı olmalarına yönelik motive olmuş davranışları anlamına gelir (Bandura, 1990; Richer & Vallerand, 1998). Öğrencilerin akademik motivasyonlarını inceleyen önemli yaklaşımlardan biri de öz belirleme kuramıdır (Deci & Ryan, 1991). Öz belirleme kuramına göre akademik motivasyonu içsel, dışsal ve amotivasyon olmak üzere üç önemli boyutu bulunmaktadır (Vallerand, 1997). İçsel motivasyona sahip bireyler bir aktiviteyi; herhangi bir dışsal yönlendiriciye ihtiyaç duymadan içsel olan merak ve ilgi duygularını doyumak için gerçekleştirirler. Dışsal olarak motive olan bireyler; ödüle ulaşmak ya da cezadan kaçınmak gibi dışsal nedenlerin etkisiyle bir aktiviteyi gerçekleştirirler. Amotivasyon durumunda ise, bireyler davranışları ile davranışların sonuçları arasında bağ kuramazlar (Niemic & Ryan; 2009; Vallerand, 1997). Öğrencilerin akademik motivasyonlarını etkileyen önemli faktörlerden biri onların doğuştan getirdikleri ve doyumak istedikleri ihtiyaçları iken bir diğeri de yaşam amaçlarıdır.

Öğrencilerin ihtiyaçlarını doyumaları ve onların yaşam amaçlarına sahip olmaları, onların akademik motivasyon düzeylerini yükseltmektedir. Ayrıca ihtiyaç doyum ve yaşam amaçlarına sahip olma arasında önemli ilişkiler bulunmaktadır (Benware & Deci, 1984; Lock & latham, 2002; Reeve & Halusic, 2009). Örneğin öz belirleyicilik kuramına göre, ihtiyaç doyum ve yaşam amaçlarına sahip olma birbirleriyle ilişkilidir. Bireyler, öncelikle bilinçli ve bilinçsiz bir şekilde yaşam amaçlarına sahip olmaktadır (Ryan ve Deci, 2000). Bireylerin ihtiyaçlarını doyumaları onların amaçlarını gerçekleştirmelerine aracılık etmektedir (Ivancevich ve Matteson, 1999; Sheldon ve Elliot, 1999). Sonuç olarak yaşam amaçlarına sahip olma, ihtiyaç doyum ve akademik motivasyon arasındaki ilişkiler ayrı ayrı incelenmekte fakat bu değişkenlerin birlikte ele alındığı çalışmalar bulunmamaktadır.

Öğrencilerin akademik motivasyonlarının desteklenmesi çok önemlidir (Wang & Pomerantz, 2009). Çünkü akademik motivasyona yüksek düzeyde sahip olma ile okulu ve öğrenmeyi sevme (Zimmerman, 2000, 2008) ve akademik başarı arasında (Pintrich & Zusho, 2002) olumlu ilişkiler bulunmuştur öte yandan akademik motivasyon düzeyinin düşük olması ile akademik başarı (wigfield, lutz & wagner, 2005) arasında olumsuz ve okul terki (Glass & Rose, 2008) ile olumlu ilişkiler bulunmuştur. Öğrencilerin amaçları belirlemeleri ve bunlar için mücadele etmeleri durumunda akademik başarıları yükselmektedir (Pekrun, Elliot, & Maier, 2006). Öğrencilerin akademik açıdan motivasyonlarının yükseltmede onların ihtiyaçlarının

doyurulması önemli bir araçtır (Deci & Ryan, 2000). Gerek yaşam amaçlarına sahip olmak gerekse ihtiyaçları doymak, bireylerin psikolojik işlevsellikleri ve gelişimleri açısından önemlidir (Sheldon ve Elliot, 1999; Vansteenkiste, Lens & Deci, 2006). Literatürde akademik motivasyon ile kimlik ve yakınlık gibi değişkenler arasındaki ilişkileri inceleyen çalışmalar bulunmaktadır (Faye & Sharpe, 2008). Öte yandan akademik motivasyon ile yaşam amaçları arasındaki ilişkide ihtiyaç doyumunun aracılık ilişkisini inceleyen çalışmalar bulunmamaktadır. Sonuç olarak bu çalışmada ihtiyaç doyumunun akademik motivasyon ile yaşam amaçları arasındaki aracılık rolü test edilmiştir.

Bu çalışmanın amacı, lise öğrenimi gören öğrencilerin akademik motivasyonlarının ihtiyaç doyumundan ve yaşam amaçlarına sahip olmadan etkilendikleri şekilde oluşturulan teorik modeli yapısal eşitlik modeli kapsamında test etmektir. Çalışma, ilişkisel tarama modelinde yürütülmüştür. Bu çalışmada veriler tek seferde toplanmış, yani kesitsel araştırma düzeni kullanılmıştır.

Araştırma kapsamında kullanılan veri toplama araçları, Eskişehir’de yer alan Anadolu lisesine devam eden 300 kişiye uygulanmıştır. Veri analizleri öncesi, katılımcıların veri toplama araçlarına verdikleri yanıtlar gözden geçirilmiştir. Bu inceleme sonucunda, ölçek maddelerinin çoğunu boş bırakan (en az % 5’ini) ya da merkeze kayma hatalarının gözlemlendiği toplam 41 kişi veri setinden çıkarılmıştır. Sonuçta analizler, 14–17 yaşları arasındaki 123 kız ve 136 erkek lise öğrencisi olmak üzere toplam 259 katılımcıdan elde edilen verilerle gerçekleştirilmiştir. Araştırmada katılımcıların demografik özelliklerinin belirlenmesi için yaş, cinsiyet, eğitim durumu ve sosyo-ekonomik düzey gibi değişkenleri içeren bir kişisel bilgi formu kullanılmıştır. Çalışmada ayrıca genel temel ihtiyaç doyumu ölçeği, akademik motivasyon ölçeği ve yaşam amaçları ölçeği kullanılmıştır.

Bu çalışmanın mevcut modelinde CFI değeri 0.95, IFI değeri 0.95, NFI değeri 0.92, NNFI değeri 0.92, RFI değeri 0.86 VE GFI değeri 0.96 olarak saptanmıştır. AGFI uyum iyiliği değeri 0.91 olarak saptanmıştır. Sonuç olarak, elde edilen uyum iyiliği değerleri, teorik modelin elde edilen veriye uygun olduğunu göstermektedir. Diğer taraftan, RMSEA, model tarafından açıklanamayan varyans ve kovaryansın ortalamasını içermekte ve çalışmada ise RMSEA değeri, 0.074 olarak saptanmıştır. Çalışmada χ^2/df oranı, 2.19 olarak saptanmıştır. Bu oranın 4’den küçük olması, gözlenen ve çoğaltılan kovaryans matrisleri arasında iyi bir uyumun göstergesi anlamına gelmektedir (Kline, 2005).

Öğrencilerin motivasyon düzeylerinin artırılması, öğrencilerin öğrenmeleri için önemlidir. Bu çalışmada öğrencilerin akademik motivasyonlarına yönelik bir yapısal eşitlik modeli test edilmiştir. Araştırma sonuçlarına göre sadece yaşam amaçları değil aynı zamanda öğrencilerin ihtiyaçlarını doymaları da akademik motivasyon düzeyinin yükseltilmesi için önemli bulunmuştur.

Literatürde gerçekleştirilen çalışmaların sonuçlarına göre, lise öğrenimi göre öğrencilerin akademik motivasyon düzeylerinin ilköğretim öğrencilerine göre daha düşük düzeyde olduğu bulunmuştur. Anderman & Anderman, 1999; Eccles & Midgley, 1989). Tüm bunların yanında öğrencilerin akademik motivasyon düzeyinin yükseltilmesi başarılı bir öğretimin anahtarı olarak görülmektedir (Mansfield & Wosnitza, 2010). Buradan hareketle bu çalışmanın sonuçları, ilerleyen süreçte bu çalışmada geliştirilen modelin farklı örneklemeler üzerinde de ele alınmasını göstermektedir. Öğrencilerin akademik motivasyonlarını yükseltmek amacıyla amaç belirleme programlarının uygulanması işlevsel olabilir.