

Received: 06/04/2019

Accepted: 05/06/2019

Published: 25/06/2019

The Relationship between Perceived Psychological Control Self-

Regulation Skills and Academic Motivations of Adolescents

Özgenur Korkın ORCID: https://orcid.org/0000-0001-7345-4722

Abstract

International academic literature emphasizes that a person keeps on developing in his or her psychosocial stages. These developmental stages have different characteristics like physiological and psychological. Adolescence is one of these developmental stages and adolescence is a period of heightened "storm and stress" is reconsidered in light of contemporary research. Adolescence is a maturation period of sexual and psychosocial. Persons obtains their autonomy, identity development and social harmony during adolescence period. Developmental tasks that remain for adolescence also leads to a changing in variability and balance in the family processes. Besides, parents realize the idea that their children are growing up. Parents apply many different parenting behaviors during the growth process of their children. One of these behaviors is psychological control. Psychological control, that perceived by adolescent, which is applied by parents, affects adolescent's many behaviors. The main purpose of the present study was to investigate the relationships between perceived psychological control, self-regulation and academic motivation for adolescent persons. Personal information form for demographics variables, Psychological Control Scale, Perceived Self-Regulation Scale and Academic Motivation Scale were used for collecting data. A total of 484 adolescents participated in this study. Participants are student from 8 different high school in Aydın. Because of the study we found that perceived psychological control from parents effected academic motivation.

Keywords: Perceived psychological control, perceived self-regulation, academic motivation.

1. Introduction

According to Erikson's psychosocial development theory, every individual born to the world has different developmental stages depending on their age. In these stages, individuals have to gain different behaviors and skills. One of these important developmental periods is adolescence. The concept that needs to be acquired by adolescence is identity development (Erikson, 1968). For the development of identity, autonomy and self-control need to be gained. In the development stage of autonomy, the individual and his / her social environment are effective (Koç, 2004). Family is one of the social circles of the adolescent. Parents use different patterns of behavior towards their children. Control is one of the parental behaviors. Control behavior is applied in two different ways as psychological and behavioral (Barber, 1996).

1.1. Psychological Control

Psychological control which is defined as complicating effect on adolescent's being an autonomous individual, is combination of parent's own goals and desires. These goals and

desires because parents disregard their child's psychological needs and prevent the child from expressing his or her inner processes (Barber, 1996; Soones and Vansteenkiste, 2010). Common psychological control behaviors are; to create guilty to present conditional love to child, to worry the child, to make them believe that their ideas and feelings are invalid (Barber and Harmon, 2002). According to this information, psychological control is considered as a situation which affecting the autonomy of the individual.

1.2. Self-Regulation

Self-regulation, which is defined by Zimmerman in 1986, is an effect, and controlling position of individuals in metacognitive, motivational and behavioral processes (Ulutaş, 2016). Self-regulation is an effective way by adapting to environment and change with processes related to expectations of the individual. In short, self-regulation can be defined as the individual's emotion thoughts and behaviors expressed as regulating the behavior of himself (Zimmerman, 1986; Hoyle, 2010; Mithaug, 1993; Bandura, 1986).

1.3. Motivation

Motivation that contains requirement, interests, request, impulse is a power which enables an individual to start, keep and end a job (Cüceloğlu, 2004). This power that stimulates the individual is fed from different sources. According to the literature, the power has three sources. The sources define intrinsic motivation, extrinsic motivation and non-motivation. Intrinsic motivation consists of individual's interest, ability and curiosity. External motivation arises from environmental processes such as reward and punishment. Amotivation means, any source of motivation, internally or externally, cannot reach the power to move the individual. In addition to this, it often creates the feeling of inadequacy (Wu, 2003; Lin, McKeachie, & Kim, 2003).

1.4. Variables in Terms of Self-Determination Theory

Concepts of psychological control, self-regulation and motivation are intersecting concepts based on self-determination theory. The self-determination theory created by Deci and Ryan in 1985 that a theory of positive psychology that includes motivation and personality structures. Self-determination theory explains the human motivation by basing psychological needs on autonomy, relationality and competence. Autonomy means that the individual, chooses his / her own behaviors, determines his / her own goals, can motivate himself / herself in a process, takes responsibility and can make decisions by himself / herself. The autonomous individual regulates his / her behavior and this behavior is effective in the regulation process and takes an active role (Deci & Ryan, 2000).

According to the literature, parental support contributes to adolescent self-development and psychological well-being. The child, who perceives psychological control from his family, remains emotionally dependent on the parent. She/he lacks the skills to manage and regulate himself or herself, and independence development is adversely affected (Pettit, Laird, Dodge, Bates, & Criss, 2001). According to Zimmerman (2000), self-regulation is very important because it is intertwined with social acceptance. The concept, which is the basis of self-regulation which is so effective in human life, is self-control. Self-control is an ability of a child to maintain the behavior of adult adherence to the instructions given by the adult. Psychological control is a factor that prevents self-control and thus self-regulation, which is the preliminary step of self-regulation.

In the literature, self-control is a child's who has given instructions by his or her parents, ability to maintain his or her behaviors without the need of parent's presence. In this regard, when the concept of psychological control is taken into consideration with parental psychological control, psychological control appears to be a factor which prevents self-control, which is preliminary step of self-regulation, and thus self-regulation. While the individual is expected to regulate his/her own goals, path, responsibilities, emotions and behaviors by him/herself, even the

psychological state of child is under control of the family. Therefore, it will be difficult to expect from a student, who is under psychological control, to identify and implement strategies. According to Barber and Harmon (2002), one of the ways of applying psychological control is to convince the child that their emotions, thoughts and perceptions are invalid. Accordingly, it will be difficult for the individual to produce ideas. It is expected to have difficulty in setting goals, analyzing the self and identifying new ways, transferring knowledge to the others and exhibiting their behavior.

As explained earlier, the theory of self-determination is based on self-regulation and autonomy. Autonomy means that an individual makes choices and experiences by living them. In the process an individual demonstrates his/ her ability to motivate and take responsibility. Individuals who have ability of self-regulation, attach importance to motivation and being motivated (Woofolk, 1997). Individuals work on how to mobilize and motivate themselves or the others. In this direction, practices based on external stimuli such as rewards, punishments and reinforcements, which are supported by the behavioral approach, come to the agenda (Deci & Ryan, 1985). Self-determination theory distinguishes motivation not only internal to external or non- existed, but also from the aspect of the source and type of motivation (Deci & Ryan, 2009; 2000). In this direction motivation is divided into autonomous and controlled types within the frame work of self-determination theory. Internal motivation is based on internal sources and external motivation is based on external sources. Some individuals don't need any reason to take action, the reason is lack of motivation. (Deci & Ryan, 1985).

2. Method

This study aims to see the relationship between the different variables as a whole. Therefore, structural equation model was preferred. The study aims to test the model established below and see the model structure between the variables.

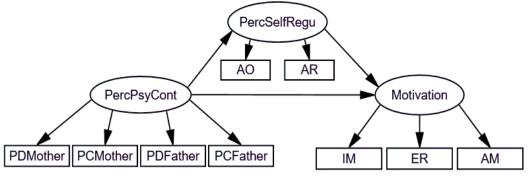


Figure 1. Structural Model for Variables

Note: PercPsyCont means perceived psychological control scale it has four subfactor. PDMoth: Parental Disrespect for mother, PCMoth: Perceived Psychological Control from mother, PDFath: Parental Disrespect for father, PCFath: Perceived Psychological Control from father. PercSelfRegu means perceived self regulation skills' scale. This scale has two subfactor. AO: Opennes in learning, AR: Seeking for materials in learning. Motivation: Academic Motivastion Scale. This Scale has three subfactor. IM: Instrinsic Motivation, ER: External Motivation, AM: Amotivation.

2.1. Sample

Participants consists of 454, 9th students living in the Aydın/Turkey. 50.9% of the participants were female and 49.1% were male. 90.1% of the participants were family, 9.9% were separated or divorced. 81.1% of the participants were with their family; 18.9% of them live outside their families as a caregiver or boarding student. 49% of the participants were firstborn, 51% were middle/other or last-born in the family.4.2% of the mothers of the students who participated in

the study were not literate, 27.1% were primary school, 16.7% were secondary school, 23.6% were high school, 6.8% were pre-graduate and 21.6% were undergraduate. 2.0% of the fathers of the participants were not literate, 18.7% were primary school, 17.8% were secondary school, 22.9% were high school, 7.5% were pre-graduate and 31.1% were undergraduate.

2.2. Instrument

2.2.1. Personal Information Form

This scale has been used in order to determine the demographic information of the students (gender, family education status, family life status, family cohesion, sibling order and number, type of school, family personal status, the place where the students live).

2.2.2. Perceived Psychological control scale

It was created by Barber (1996) in order to measure the psychological control the adolescent perceives from his / her family. This scale, which is consisted of 16 common items and the information for the parents, is composed of subfactor of parental disrespect and psychological control. The Turkish version of the Psychological Control Scale and its validity and reliability studies conducted by Sayıl and Kındap (2010). In the validity and reliability study, a study group was selected from 4 different primary schools and 5 different high schools in Ankara. Information from a total of 777 students was used the ages of these students are between 11-18 and the average age is 14.9.In the adaptation study to Turkish conducted by Sayıl and Kındap (2010), two sub-dimensions consisting of 8 classical(4,5,7,10,11,12,14,15) and intercultural (1,2,3,6,8,9,13,16) items were developed in parallel with original version of the scale. The sub-dimension composed of new items was called "parental disrespect". These sub-dimensions appeared in accordance with the original version of the scale. The current study also demonstrated high internal consistency of the scale; Cronbach's Alpha for father was .73 for mother .71 and for whole scale was .82.

2.2.3. Perceived Self Regulation Scale

It was created by Arslan and Gelisli (2015). This scale allows individuals to evaluate their selfregulation skills in their own learning processes. It has 16 items and 2 subfactor. Subfactors are opennes in learning and seeking for materials in learning. The current study is also demonstrated high internal consistency of the scale; Cronbach's Alpha was .85.

2.2.4. Academic Motivation Scale

The scale which was created by Vallerand et al. in 1992, has 28 items and 7 sub-factor. Both intrinsic and extrinsic motivation are divided into three. The sub-factors are, intrinsic motivation – knowledge, intrinsic motivation accomplishment, intrinsic motivation. The current study also demonstrated high internal consistency of the scale; Cronbach's Alpha was .89. Although these 7 sub - factor mainly belong to the concept of intrinsic motivation - extrinsic motivation and non-motivation, they contain a detailed dimensioning for the source of these concepts. 7 sub-factor, intrinsic motivation, extrinsic motivation and non-motivation, they contain a detailed dimensioning for the source of these concepts. 7 sub-factor, intrinsic motivation, extrinsic motivation and non-motivation were studied in this study. At this point, in the literature there is a study in which two higher order subfactor, includes general and other featuring within 5 Factor Personality Traits. A positive correlation was found between five order personality model and higher order variables (Buruk, Şimşek and Kocayörük, 2017). In this study, intrinsic motivation – knowledge, intrinsic motivation, introjected regulation, identified regulation as external motivation and amotivation are subfactors.

2.3. Data Analysis

In order to determine the consistency of the data obtained within the scope of the research and the appropriateness of the data to the analysis, the SPSS program and the Kolmogorov - Smirnov analysis was used to evaluate the total distribution of the total scores. As a result of the statistical analysis, it was determined that all the data were distributed normally and suitable for the analysis. The model was tested with the AMOS program.

3. Findings

The model that is perceived from the parents for psychological control, self-regulation skills and academic motivation variables and standardized estimations are shown below.

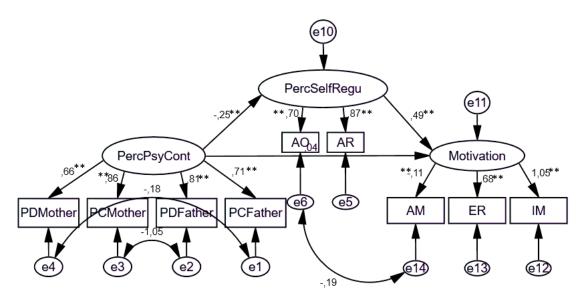


Figure 3. The standardized path coefficients calculated in the structural model for the relationship between psychological control, self-regulation and academic motivation

Note: N=454. PercPsyCont means perceived psychological control scale it has four subfactor. PDMoth: Parental Disrespect for mother, PCMoth: Perceived Psychological Control from mother, PDFath: Parental Disrespect for father, PCFath: Perceived Psychological Control from father. PercSelfRegu means perceived self-regulation skills' scale. This scale has two subfactor. AO: Openness in learning, AR: Seeking for materials in learning. Motivation: Academic Motivation Scale. This Scale has three subfactor. IM: Intrinsic Motivation, ER: External Motivation, AM: Amotivation. p=.006.

The conformity values obtained as a result of the conducted analysis are presented in Table 1.

Table 1: The conf	ormity values
-------------------	---------------

Index of Conformity	Conformity Values				
χ^2	41,770				
χ^2 /sd	1,989				
GFI	,979				
AGFI	,956				
CFI	,985				
RMSEA	,047				

The conformity values regarding the model are examined, it can be stated that the model shows good fit with the data.

		Х	Sd	1	2	3	4	5	6	7	8	9
1	AM	10.485	6.588	-								
2	ER	59.343	13.882	055	-							
3	IM	54.333	16.428	122**	.714**	-						
4	AR	27.464	6.651	145**	.259**	.436**	-					
5	AO	30.809	4.728	232**	.278**	.361**	.619**	-				
6	PCFath	13.238	3.355	007	.059	050	095*	063	-			
7	PDFath	10.320	2.194	.078	027	098*	207**	154**	.550**	-		
8	PCMoth	13.993	3.359	.049	.069	027	159**	132**	.628**	.372**	-	
9	PFMoth	10.402	2.039	.028	.000	093*	225**	157**	.371**	.555**	.545**	-

Note: N=454. PercPsyCont means perceived psychological control scale it has four subfactor. PDMoth: Parental Disrespect for mother, PCMoth: Perceived Psychological Control from mother, PDFath: Parental Disrespect for father, PCFath: Perceived Psychological Control from father. PercSelfRegu means perceived self-regulation skills' scale. This scale has two subfactor. AO: Openness in learning, AR: Seeking for materials in learning. Motivation: Academic Motivation Scale. This Scale has three subfactor. IM: Intrinsic Motivation, ER: External Motivation, AM: Amotivation. **p<.01 ve *p<.05.

The conformity values regarding the model are examined, it can be stated that the model shows good fit with the data. The value of χ^2 /sd obtained a high value in terms of compliance with 1.989. AGFI =.956, GFI=.979, ve CFI=.985, RMSEA=.047. The model has been validated as the psychological control perceived by the mother and father of the individual on self-regulation skills and academic motivation.

4. Discussion and Conclusion

Psychological Control is a parental behavior which aiming keep under control of child's psychological status; through deprivation of love, feeling guilty and some other kind of behaviors. Psychological control is opposite of autonomy. The families with psychological control question thoughts of the child constantly and ask the child adopt the family's ideas. The basis of self-regulation is autonomy and self-responsibility. Self-regulation is a combination of skills which is individual's determination of their goals, drawing the path to his/her target, evaluation of his/her learning, self-observation and self-assessment. It is not expected that individuals whose personal processes are kept under control and who have not gained autonomy can show their self-regulation skills in the learning environment. The data obtained from the study sample and the structure showing this information were verified according to the research. The results of statistical analysis show that perceived psychological control from parents affects negatively the self-regulation skills of the individual. One of the most fundamental requirements of self-regulation within the scope of self-determination theory is to make conscious choices. However, high levels of perceived psychological control from parents are known to cause a difficult effect on conscious choices (Baumrind, 1996). Kağıtçıbaşı (2005) says, it is not a necessity for the concept of autonomy to be provided with a break from the family, and that both relationship and autonomy can coexist as a necessity. In this respect, autonomy, It is a cornerstone of health in communal cultures. Autonomy and control are a process of conducting cognitive behavior. Individuals who shape their behaviors according to their internal processes have autonomy. These individuals also have the ability to choose how they behave and to control their own behaviors. Individuals made by the external environment of control living with an external control, showing compliance behavior and can't provide their autonomy (Yazıcı, 2008). A child who feels the emotional processes and thoughts that are controlled by his / her parents, who have the risk of losing the unconditional love and acceptance they need most will feel and behave in the direction directed by the family and they will not have an autonomous identity. In the relationships of parents with their children, anxiety vaccination causes them to develop a perception that their feelings and thoughts are false or invalid by using ways of depriving them from love. Therefore, it is difficult for an individual who perceives a high level of psychological control, to produce ideas, set goals and make decisions. The reason for this situation is the loss of competence and self-reliance issues.

In addition, there are many behavioral and emotional problems in families where child perceives a high level of control by the parent. Some of these prolems can be expressed as depression, anxiety,feelings of loneliness, risky behaviours, low self esteem and self confidence, guilt, internalization problems, adaptation problems (Barber,1996; 1999; Barber & Harmon, 2002; Leary & Baumeister, 2000). According to this information, it can be interpreted that in the family where the child receives acceptance, care and constructive behaviours, possiblity of problematic childhood will be lower. It can be found in the literature that autonomy of the individuals in adolecence period is significantly predicted by interest and acceptance perceived from the mother and that individuals who evaluate their family democratically provide more autonomy (Musaağaoğlu & Güre, 2005). It is known that psychological and behavioral control applied by the parents has an effect on mediating effect of self-regulation skills and emotional difficulties and problems (Çelik - Özden, 2013).

Individuals who receives external control focus and who cannot develop their internal dynamism remain behind in determining the 'cause and that will motivate it and to determine the path to that goal and to carry out studies for this purpose. Individuals with these experiences will not be motivated or motivated by external sources.

Studies on the concept of motivation examined in the terms of self-determination theory show that individuals with intrinsic motivation has many possitive aspects related to cognition, emotion or behaviour. Its known that students with a high level of intrinsic motivation exhibit behaviours such as effort, participation, and are more determinent to achieve goals. On the other hand, it is observed that individuals who are observed to be unmotivated or who provide motivation from another source have high levels of anxiety and negativity in coping strategies(Vallerand, Fortier, & Guay, 1997; Deci et al., 1991).

Self-determination theory emphasizes the concepts of autonomy, relationality and competence in explaining human motivation. It is known that the concept of autonomy and competence, expressed in this way, influences the motivation of individuals and prevents the development of psychological control and perception from the parents. Autonomy as a period of development is associated with academic motivation and subjective well-being in autonomous and collectivist cultures (Vansteenkiste et al., 2005). Academic motivation is influenced by individuals' selfregulation skills. An academically motivated individual needs a goal to act first. Each learning cannot result in success. For this reason, a student who is full of motivation is both successful and unsuccessful while observing himself and determining new behaviors and ways. All of the experiences and requirements listed here take place in students who are self-regulated. If a child hasn't self-regulated ability, he / she will not have right of audience for himself / herself. Because for this situation either will not see itself as sufficient or the authority will be exposed to the blocked. For this reason, it will be impossible for him to review his own learning and to evaluate his behaviors, thoughts or himself as a whole with regard to the results of the observation. For this reason, psychological control perceived by parent, harms individual's selfregulation process and will affect badly academic motivation. Also autonomous selfdevelopment will be damaged. In this process, there is a problem that these individuals cannot use their self-regulation skills exactly or at the required level. It is thought that an individual who is told what to feel and what to believe by his/her family will have the possibility of low intrinsic motivation and has not already set his own target. However, as the internalized extrinsic motivation has difficulty in using the self-regulation skills of the individual who will actually use an external source of motivation, he / she will have problems at the arrangement point and be motivated.

The self-regulation is that the individual can re-organize himself / herself after realizing his / her behavior and for the purposes he / she has previously determined. As can be seen from this statement, the most point of self-regulation is that the responsibility belongs to the individual. The family environment in which individuals grow, and the approaches of parents to them are predictors of many behaviors as seen in the literature. In terms of self-regulation, we see two skills that are started to be acquired in the family from an early age. These are responsibility and autonomy.

Parents who fulfill all of the responsibilities of their child instead of him/herself, will harm their child's development of sense of responsibility. This individual, who has started school over the years and is now a student will try to exist non-family environment. At this point, he or she will begin to experience the lack of responsibility and autonomy which are left behind. Therefore, self-regulation skills of children should be strengthened from the moment they are born. Even if the individual cannot fully use this skill at a young a age, this skill which is gradually being completed during the last childhood and adolescence period will be used fully in adulthood. For this reason, self-regulation not only in academic subjects but also it will become a skill that can positively affect an individual's entire life in adulthood.

The fact that the mother and father perform every responsibility that their child has to do will damage the development of responsibility in the child. This child who grew up and started school, in a place where there is no family, need to be self-governing. At this point, it will begin to experience the lack of responsibility and autonomy. Therefore, the self-regulation skills of children should be reinforced from the moment they were born. Even if the individual is not able to use this skill at an early age, this skill will be used in adolescent and will be used fully in adulthood. For this reason, self-regulation will become a skill that can positively affect the individual's whole life in adulthood, not only in academic subjects. Self-regulation skills, which enable to make sense of external stimuli in the first years of life, will improve the self-control, attention processes, problem solving, and planning structures thanks to the social experiences and experiences. This provides time management skills on later development periods; On the other hand, it will contribute to the training of an individual who can fight with the creation of projects, exams, responsibilities alone. The development of self-regulation skills is important for these reasons. In this process, it is necessary to guide the individual by parents and educators.

References

- Akbaba, S. (2006). Motivation in education. *Journal of Kazım Karabekir Education Faculty*, 13, 343 361.
- Arslan, E. (2008). Erikson's psychosocial developmental periods and ego identity processes in adolescents in terms of attachment styles. PhD Thesis. *Konya: Selçuk University*.
- Arslan, S., & Gelişli, Y. (2015). Development of perceived self-regulation scale: validity and reliability study. Sakarya University Journal of Education, 5(3), 67-74. DOI: http://dx.doi.org/10.19126/suje.91303
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. New Jersey: Prentice Hall.
- Barber, B.K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67(6), 3296-3319.
- Barber, B.K. & Harmon, E.L. (2002). Violating the Self: Parental Psychological Control of Children and Adolescents. B. K. Barber (Ed.). Intrusive Parenting: How Psychological Control Affects Children and Adolescents (pp. 15–52). Washington, DC: American Psychological Association.

- Baumrind D.(1966). Effects of authoritative parental control on child behavior. *Child Development*, 37(4), 887-907.
- Boekaerts, M.& Cascallar, E. (2006) How far we moved toward an integration of theory and practice in self-regulation. *Educational Psychology Review*, 18, 199-210.
- Buruk, P., Şimşek, Ö.F., & Kocayörük, E.(2017). Higher-order traits and happiness in the workplace: the importance of occupational project scale for the evaluation of characteristic adaptations. *The Journal of General Psychology*. 144(4), 245-263. ISSN: 0022-1309.
- Cüceloğlu, D. (2004). Human and Behavior. İstanbul: Remzi Publishing.
- Çelik-Özden C.(2013). The effects of parental control behaviors on self-regulation skills and emotional problems of adolescents. Master Thesis. Adnan Menderes University Institute of Health Sciences: Aydın.
- Çelikkaya, H. (2010). Introduction to Educational Sciences. Ankara: Nobel Publishing.
- Deci, E.L. (1975). Intrinsic Motivation. New York: Plenum.
- Deci, E.L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.
- Deci, L.E, Koestner, R., & Ryan, M. R. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research*, 71(1), 1-27.
- Deci, E.L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), Nebraska symposium on motivation: Vol. 38. Perspectives on motivation (pp. 237–288). University of Nebraska: Lincoln.
- Deci, E.L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Deci, E.L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological wellbeing across life's domains. *Canadian Psychology*, 49(1), 14–23.
- Deci, E.L., & Ryan, R.M. (1996). Need satisfaction and the self-regulation of learning. *Learning & Individual Differences*, 8(3), 165-183.
- Hoyle, R.H. (2010). Personality and self-regulation. R. H. Hoyle (ed.), Handbook of Personality and Self-Regulation, pp.1-18. West Sussex: Blackwell Publishing.
- Kağıtçıbaşı, Ç. (2005). Autonomy and relatedness in cultural context: implications for self and family. *Journal of Cross-Cultural Psychology*. 36 (4), 403-422.
- Koç, M. (2004). Adolescence and general characteristics in terms of developmental psychology. *Uludağ University Journal of Social Sciences*, *17*(2), 231-256.
- Leary, M. & Baumeister, R. (2000). The Nature and Function of Self-Esteem: Sociometer Theory. Academic Press.
- Lin, Y.G., McKeachie, W.J., & Kim, Y.C. (2003). College student intrinsic and/or extrinsic motivation and learning. *Learning and Individual Differences*, 13(2003), 251-258. Doi:10.1016/S1041-6080(02)00092-4.
- Mithaug, D.D. (1993). Self-Regulation Theory: How Optimal Adjustment Maximizes Gain. Connecticut, ABD: Praeger Publishers.
- Musaağaoğlu, C & Güre, A. (2005). Relationships between behavioral autonomy and perceived parental attitudes in adolescents. *Journal of Turkish Psychology*. 20 (55), 79-94.
- Pettit G.S, Laird R.D, Dodge K.A, Bates J.E, & Criss M.M. (2001). Antecedents and behaviorproblem outcomes of parental monitoring and psychological control in early adolescence. *Child Development*, 72(2), 583–598.
- Sayıl, M., & Kındap, Y. (2010). Psychological control perceived by parents from adolescents: validity reliability of psychological control scale. *Turkish Psychology Articles*, 13(25), 62-71.
- Soenens B & Vansteenkiste M.A (2010). Theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review*, *30*(1), 74–99.
- Ulutaş, B. (2016). Examination of the change in motivation of chemistry teacher candidates in self-regulated learning environment. PhD Thesis. Gazi University

Vansteenkiste, M., Zhou, M., Lens, W., & Soenens, B. (2005). Experiences of autonomy and control among Chinese learners: Vitalizing or immobilizing? *Journal of Educational Psychology*, 97(3), 468–483.

Woolfolk, A.E. (1998), Educational Psychology, 7th Edition. Boston: Allyn and Bacon.

- Wu, X. (2003). Intrinsic Motivation and Young Language Learners: The Impact Of The Classroom Environment. *System.* 31(4), 501-517.
- Yazıcı, H. (2008), Motivation. Ankara: Pegem Publishing.
- Yurt, E., & Bozer, E.N. (2015). Adaptation of academic motivation scale into Turkish. *Gaziantep University Journal of Social Sciences*, 14(3), 669-685.
- Zimmerman, B.J., & Martinez-Pons, M. (1986). Developing a structured interview for assessing student use of self-regulated Learning Strategies. *American Educational Research Journal*, 23 (4), 614-628.
- 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.

Korkın, Ö.