A Research on the Relationship between Parental Attitudes, Students' Academic Motivation and Personal Responsibility

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Article Info	Abstract
	This study examines the predictive effect of parental attitudes on high school students' academic motivation and personal responsibility levels. In this research predictive correlation model, which is one of the quantitative research methods, was used. 368 students attending the 10th grade in 6 different high schools participated in the study. Parental Attitudes Scale, Academic Motivation Scale and Personal Responsibility Scale were used as data collection tools. Independent samples t-test and MANOVA were performed to determine gender effect on parental attitudes, academic motivation and personal responsibility and Pearson Correlation and Multiple Linear Regression were performed to determine the relationship between parental attitudes, academic motivation and personal responsibility. According to the results, parental attitudes are a significant predictor of personal responsibility and academic motivation of high school students. Democratic parental attitude predicts personal responsibility levels by 31.2% and academic motivation level by 25.7%. In this context, it can be said that the support of parents with democratic attitude provides a positive contribution to students' academic success, social and personal competencies.

Introduction

Academic achievement is an important factor that determines students' future career, social life and status. Academically successful individuals are more likely to be employed, be more productive and therefore have a higher salary and become active and happier citizens (Regier, 2015). Therefore, for every country, increasing the academic achievement of students is a priority in education. PISA conducted by the OECD that allow countries to evaluate their own education systems and measure the achievement of 15-year-old students are an important indicator in determining the academic achievement of students. PISA reports indicate that parents' attitudes as active participants in their children's education, both at home and school, are an important determinant of their children's future. For instance, according to the PISA (2012) report, students who eat dinner together with their parents have a stronger sense of school belonging. Similarly, it is stated that the engagement of students who spend time talking with their parents is higher. Parental attitudes, which play such an important role in determining the future of students and are one of the factors that can increase academic achievement, have been investigated in many studies. Studies in the literature show that there is a significant relationship between parental attitudes and academic achievement (Ben-Tov & Romi, 2019; Bempechat &

Shernoff, 2012; Brown & Iyengar, 2008; Chen, 2015; Desforges & Abouchaar, 2003; Epstein, 2001; Eccles, 2007; Matejevic, Jovanovic, & Jovanoic, 2014; Rivers, Mullis, Fortner, & Mullis, 2012). However, considering that the path to the result passes through the process, investigating the effects of the parents' attitudes in the process that leads the student to success, such as motivation, self-efficacy, sense of responsibility, and studying habits, may contribute to the quality of education. In Turkey, few studies investigated the effect of parents' attitudes on variables such as academic motivation and social, personal responsibility levels, which are known to have a positive relationship with students' academic achievement.

Parents' attitudes and the support that parents offer to students in the context of these attitudes contribute positively to their academic success and social and personal competencies, regardless of their age (Ben-Tov & Romi, 2019; Comer, 1988; Desforges & Abouchaar, 2003; Epstein, 2001; Jeynes, 2003, 2005, 2007; Miedal & Reynolds, 1999). It is emphasized that how much schools let students' parents involve into the their learning process and how much this involvement affects students are important variables in the success of students, (Edwards & Alldred, 2000; Grant & Ray, 2010; Henderson & Mapp, 2002; Jowett, 1990; Sanders & Sheldon, 2009). Parents' attitudes towards school and the learning process is a wide-ranging factor that naturally affects the support they provide for students, the relationship they establish with school management, and the nature of their communication with teachers. These attitudes also play an important role in students' academic development as well as in their social and emotional development (Dahl, 2015; Rheingold, 1982).

The first reflection of parents' attitudes towards school and the learning process is for students' motivation. One of the variables that affects motivation, which plays an effective role in academic achievement, is parental attitudes and support (Gonida & Urdan, 2007; Sha, Schunn, Bathgate & Ben-Eliyahu, 2016). The family steps in as an important variable when it comes to students' school life, success in the lessons, and relationship with friends. Parents' views, suggestions and supports regarding the school life of students will also affect the attitudes of students towards their lessons (Urdan, Solek & Schoenfelder, 2007; Usher & Kober, 2012). The attitudes that students will develop towards their lessons in order to get the approval of their family will cause the development of motivation in time and lead to a higher achievement in the lessons.

The support provided by the family for students also draws attention as a factor that improves students' sense of responsibility. Duke and Jones (1985) defines the student responsibility as a desire and competence of the student to behave in accordance with the rules, self-correct his/her inappropriate behaviors, and other friends to behave accordingly. Another definition of the student responsibility in the context of learning is as follows: the student is held responsible for his/her academic success and accepts this responsibility and takes an active role in the learning process (Jamestown Community College, 2020). The student's undertaking his/her own learning process, showing the required behavior in this process, and reaching the goals he/she set can also be considered within the concept of responsibility. Responsibility can be considered not only as a learning process but also as a kind of self-regulation that students need to gain beginning from kindergarten. Therefore, families' reinforcement of students' appropriate behavior appears as a variable that will develop students' sense of responsibility. In this context, the aim of this study is to determine the relationship between parental attitudes and students' academic motivation and sense of responsibility, and the predictive level of parental attitudes for

academic motivation and sense of responsibility.

While researchers indicate that democratic parental attitude increases achievement (Bempechat & Shernoff, 2012; Matejevic, Jovanovic&Jovanoic, 2014; Rivers, Mullis, Fortner&Mullis 2012), they do not take into account individual variables such as motivation, self-efficacy, and goal orientation (Reshvanloo& Hejazi, 2014; Tang,Sandoval& Liu, 2018). However, motivation can help to explain the relationship between academic achievement and parental attitudes because motivation is essential for individuals to reveal their potential by meeting academic, social and psychological standards (El Nokali, Bachman& Votruba-Drzal, 2010; Mateyevic,Jovanovic&Jovanic, 2014; Ray& Giraldo-Garcia, 2018; Turner, Chandler&Heffer, 2009). It is seen that previous studies on parental attitudes are focused on academic achievement rather than social-emotional skills, because of success-oriented education. However, student behavioral problems may have a negative impact on the teaching process and classroom climate. Positive parental attitudes, which are seen as a way to increase academic achievement, can also affect students' development of positive social-emotional behavior at home and school (Ericson& Ellet, 1990; Fishman, 2014; Wentzel, 1991b). Considering that success increases as academic motivation and personal responsibility perception increases, the effect of family on success can be examined through reasons rather than results. For this reason, the study aims to analyze the effect of family on academic achievement in depth, contrary to previous studies.

Review of Literature

Family Attitudes and Expectations as a Key Variable on Students' Academic Achievement and Social Emotional Development

Parents are the first and most important teachers of their children (Martin & Dowson, 2009; Vartuli & Winter, 1989; Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006). Therefore, they play a critical role in their children's academic life. Parents continue to be involved in this process, in which they are involved in the early stages, throughout their education, especially during adolescence (Deplanty, Coulter-Kern, & Duchane, 2007; Martin, 2012). Research shows that the home environment affects academic achievement and problematic behaviors, thereby preventing school dropout at high school level (El Nokali, Bachman, & Votruba-Drzal, 2010; Ray & Giraldo-Garcia, 2018). Family-related factors affecting academic achievement and the development of social-emotional skills include parental education level, family structure, family involvement, and parental attitudes. The quality of the relationship between the parent and the child is generally considered in parental attitudes (Rivers, Mullis, Fortner, & Mullis, 2012).

Parental attitudes refer to a general model of child raising that characterizes the parents' behaviors while raising their children (Deslandes, Royer, Turcotte, & Betrand, 1997). Parental styles that Baumrid (1966) conceptualized in four types as authoritative (democratic), permissive, authoritarian, and uninvolved are directly influential from the child's table manners to academic performance (Matejevic, Jovanovic, & Jovanovic, 2014). Parents with a 'Democratic' attitude, also called authoritative, are characterized as sensitive to their children, participatory, relevant and supporting autonomy (Baumrid, 1991). They direct their children's behavior and decisions within a reasonable discipline. They are open to communication and encourage children to take

initiative and make their own decisions (Turner, Chandler, & Heffer, 2009). They know their children well and help them set goals for the future based on their competencies and skills. Parents who do not set rules, guide and control their children's behavior are defined as 'Permissive'. Children raised in the permissive parental style are uninterested in school and show irresponsible and immature behaviors (Rivers, Mullis, Fortner & Mullis, 2012). In the 'authoritarian' style, parents tend to have a restrictive, too much guiding, and punitive attitude towards the children's behavior. In the attitude where the expectation from the child is high, children tend to be successful but have a sense of inadequacy and low self-confidence (Kuzgun & Eldeleklioğlu, 2005).

Researches and literature show that the democratic attitude has a positive relationship with the academic achievement (Bempechat & Shernoff, 2012; Brown & Iyengar, 2008; Chen, 2015; Deslandes, 1997; Eccles, 2007; Matejevic, Jovanovic, & Jovanoic, 2014; Reshvanloo & Hejazi, 2014; Rivers, Mullis, Fortner, & Mullis, 2012; Turner, Chandler, & Heffer, 2009) and social-emotional skills (El Nokali, Bachman & Votruba-Drzal, 2010; Ray & Giraldo-Garcia, 2018) of the adolescent. Children of parents with a democratic attitude are cognitively more motivated, socially responsible, success-oriented, and have high self-efficacy (Mateyevic, Jovanovic, & Jovanic, 2014; Turner, Chandler & Heffer, 2009). Parents' positive approach to education, science and talking about school at home increase children's interest and success in these areas. Parents who help their children realize their weaknesses and strengths contribute to the development of their social-emotional skills and academic performance (Ray & Giraldo-Garcia, 2018). While the democratic attitude increases the adolescents' desire for success to make their parents' proud, reverse attitudes cause adolescents to resist any suggestions given by their parents (Chen, 2015).

Academic Motivation as a Critical Variable in Academic Achievement

The motivation, which is closely related to the outcomes of the teaching process (curiosity, desire to learn, success, performance), is at the center of educational researches (Rowell & Hang, 2013; Yoshida et al., 2008). Although there are many important psychological factors that affect student behavior, motivation is one of the indispensable elements for students' academic life (Areepattamannil, 2014; Steinmayr & Spinath, 2009). Therefore, various theories have been developed to explain the relationship between motivation and academic success. In Self-Determination Theory, Deci and Ryan (2000) proposed three types of motivation, intrinsic motivation, extrinsic motivation, and amotivation.

It is the "Intrinsic Motivation" that causes the individual to exhibit his/her preferred behaviors (Mammadov, Cross, & Ward, 2018). Students with high intrinsic motivation participate in learning activities voluntarily and enjoy the process more (Moneta & Siu, 2004). In "Extrinsic Motivation", students are involved in the learning process, but for instrumental reasons such as supervision, peer competition, reward and punishment. For this reason, students with high external motivation generally do not enjoy their work and expect constant incentives (Vallerand & Ratelle, 2002). Finally, in "Amotivation", there is no external or internal motivation.

Research shows that intrinsic motivation is more effective on permanent learning, desire to learn and perform (Areepattamannil, 2014; Mammadov, Cross, & Ward, 2018; Moneta & Siu, 2004; Rowell & Hang, 2013;

Urdan, Solek, & Schoenfelder, 2007; Vallerand & Ratelle, 2002; Yoshida et al., 2008). Students academically motivated consider school and learning more valuable. Increasing academic motivation enhances learning continuity, performance, willingness, and effort. The highly motivated students spend their energy to achieve and their behaviors are energetic, purposeful, and continuous (Amrai, Motlagh, Parhon, & Zalani, 2011; Reshvanloo & Hejazi, 2014). Environmental factors can affect intrinsic and extrinsic motivation and cause it to change. The family atmosphere, which supports autonomy, a sense of curiosity and enables exploration, increases intrinsic motivation. Conversely, environments that punish autonomy and hinder curiosity prevent intrinsic motivation (Moneta & Siu, 2004). Parents who value and support academic success and do not control behaviors ensure that their children are more motivated academically (Urdan, Solek & Schoenfelder, 2007).

The Concept of Responsibility in Social-Emotional and Academic Development

Laurman and Karabenic (2011) defined responsibility as "a sense of internal obligation to achieve or prevent specified results". The sense of responsibility can be not only a personal tendency but also the result of responsibilities attributed by others (Helker & Wosnitza, 2014). The sense of personal responsibility is in line with intrinsic and extrinsic motivation (Ericson & Ellet, 1990). The motivational dimension of responsibility can affect the degree of student engagement in learning activities (Wentzel, 1991a). Students with strong sense of responsibility do their homework without teacher control, have control over learning outcomes, implement effective learning strategies, and show positive interpersonal behavior (Ericson & Ellet, 1990; Fishman, 2014; Wentzel, 1991b). This shows that responsibility plays a critical role in academic motivation, academic achievement, and self-regulation (Singg & Ader, 2011). Social responsibility defined as adherence to social rules and expectations; by pushing the student to act cooperatively and harmoniously in the classroom, it creates a suitable classroom environment for learning (Wentzel, 1998). Students are expected to listen carefully to the lesson, do their homework, participate in activities, and develop positive relationships with their peers (Ericson & Ellet, 1990; Helker & Wosnitza, 2014). Other behaviors, such as not focusing on the lesson and showing disruptive behaviors , an lead to communication problems and in-class disorder, which increase the risk of academic failure and social rejection.

Researches show that there is a relationship between students' perception of social responsibility, parents, teachers and peer support (Ericson & Ellet, 1990; Helker & Wosnitza, 2014; Wentzel, 1991a). The students' sense of responsibility is shaped from the perspective of parents and teachers towards responsibility. Parents of students with high sense of responsibility display supportive attitudes, involve in learning processes, and have high expectations (Ericson & Ellet, 1990). Peers can replace parents who are effective in social-emotional development in the early years during adolescence. Acting responsibly and developing positive social relationships with their peers provide students a source of motivation and can help them achieve high success (Wentzel, 1991a; Wentzel, 1991b). In this regard, the purpose of this study is to determine the relationship between perceived parental attitudes, personal responsibilities and academic motivations of high school students, and to what the extent perceived parental attitudes predicting students' personal responsibilities and academic motivations, besides determining the effect of gender on variables. For this purpose, answers to the following questions were sought:

1. What is the effect of gender on high school 10th grade students' levels of parental attitude, academic motivation and personal responsibility?

2. What is the relationship between perceived parental attitudes and academic motivation and personal responsibility levels of high school 10th grade students?

3. At what level do high school 10th grade students' perceived parental attitudes predict, academic motivation and personal responsibility levels?

Method

In this study, predictive correlational research method to investigate the relationship between perceived parental attitudes, academic motivation and personal responsibility levels of 10th grade students, which is the main problem of the study and descriptive research model to investigate the effect of gender on variables were used. The main purpose of this descriptive research was to define data and properties related to the variables studied. Correlational research is the research in which the relationship between two or more variables is examined without interfering with the variables (Fraenkel, Wallen, & Hyun, 2011; Gall, Borg, & Gall, 1996). Based on this relationship, an unknown value of one variable is estimated from a known value of one of the variables. It can be said that the higher the relationship between the two variables, the more accurate it is to estimate the unknown value of a variable. In this study, the extent of the parental attitudes scale predicted academic motivation and personal responsibility was considered as the main problem.

Participants

The population of the research consists of 10th grade students studying at academic high schools that prepare students for higher education in Bandırma district of Balıkesir province in the 2019-2020 academic year. The reason for selecting the 10th grade students as the research population is that they are in the 10-24 age range, which is accepted as adolescence (Sawyer et al., 2018), and they are at the beginning of the university preparation period. Purposeful sampling method was preferred in determining the sample. The purposeful sampling method, in which one or several parts of the universe are taken as samples for the purpose of the research, considering the units most suitable for the purpose of the research, makes the most appropriate part of the research subject (Palinkas et al., 2015). Of the 368 students participating in the study, 205 (56%) were females and 163 (44%) were males.

Data Collection and Analysis

The research data was collected through face-to-face meetings in one lesson hour by visiting the schools that constituted the sample by the researcher after obtaining the necessary permissions from the Ministry of Education and the school administration. After explaining the purpose of the study to the students, it was stated that participation in the study was voluntary and no information determining their identity would be requested. In addition, it was emphasized that the data will be used for scientific purposes and will not be shared with anyone other than the researcher.

The assumption of normality was tested by using the data collected from 368 students, primarily using the SPSS 21 program. Independent samples t-Test and MANOVA were performed to determine the gender effect on variables; Pearson Correlation and Multiple Linear Regression were performed to determine the relation between variables. Required prerequisites were tested before regression.

Research Instruments

Parental Attitude Scale

The Parental Attitude Scale [PAS], developed by Kuzgun and Eldeleklioğlu (2005), consisting of 40 items, is a five-point Likert scale. The highest score that can be obtained from the scale is 200, and the lowest score is 40. Confirmatory factor analysis was performed to test the construct validity of the scale. Normality assumptions were tested to determine which method to use before the confirmatory factor analysis. In this context, skewness and kurtosis coefficients of the distribution were tested. The fact that the mode, median and mean of the distribution are equal or close to each other and that the skewness and kurtosis coefficients are close to 0 in the range of ± 2 are seen as evidence of the normality of the distribution (Tabachnick & Fidell, 2013; McKillup, 2012; Wilcox, 2012). Mode, median and mean values were taken as descriptive statistics of the distribution [Mo: 3.13; Mdn: 3:22; Mean: 3.23]. When the obtained values are examined, it is seen that they are quite close to each other. PAS skewness and kurtosis coefficients were obtained as Skewness: 0.043 and Kurtosis: -0.173. As the obtained values are close to 0 in the range of ± 2, it has been concluded that the distribution shows the normal distribution feature. Based on these results, Maximum Likelihood was used as a method in CFA. As a result of the CFA, the three-factor structure of the scale was confirmed but items numbered as K14, K3, and OT7 were excluded from the scale due to high error variance and low factor load. In the second CFA, factor loadings of the scale were between 0.36-0.78. The t-values of the scale are [t> 2.56; p = 0.001] significant. The fit indices obtained from CFA were determined as Chi Square: 2229,24; Sd: 621; Chi Square/Sd: 3.58; RMSA: .083; SRMR: .087; CFI: 0.94; NFI: 0.91; and NNFI: 0.93. When the fit indices were evaluated, the ratio of Chi square and degrees of freedom was found as Chi Square/Sd=3.58. This value was realized in acceptable intervals (Byrne, 1998; Wheaton, Muthen, Alwin & Summers, 1977). Other fit indices are also in the acceptable range (Baumgartner & Homburg, 1996; Bentler, 1980; Bentler & Bonett, 1980; Marsh, Hau, Artelt, Baumert, & Peschar, 2006). Alpha reliability coefficient of the measurements obtained from the scale is 0.910 for the democratic sub-dimension; 0.790 for the authoritarian sub-dimension; 0.758 for the protective/demanding sub-dimension. It was decided that the scores obtained from the scale were sufficient for the reliability level.

Student Personal Responsibility Scale

In order to measure the personal responsibility levels of students, the Student Personal Responsibility Scale [SPRS], which was developed by Singg and Ader (2005) and adapted to Turkish by Doğan (2015) and consisted of 10 items, was used. The highest score that can be obtained from this five-point Likert scale is 50 and the lowest score is 10. The scale explains the variance 39.63%. Confirmatory factor analysis was performed to test the construct validity of the scale. Normality assumptions were tested to determine which method to use before the CFA analysis. In this context, an investigation was made in terms of skewness and kurtosis coefficients of

the distribution. As a result of the analysis, mode, median and mean values for SPRS were calculated [Mo: 3.80; Mdn: 3.80; Mean: 3.66]. It is seen that descriptive statistics are realized in close intervals. SPRS skewness and kurtosis coefficients were obtained as Skewness: -1.036 and Kurtosis: 0.936. The fact that the mode, median and mean of the distribution are equal or close to each other and that the skewness and kurtosis coefficients are close to 0 in the range of ± 2 are seen as evidence of the normality of the distribution (Tabachnick & Fidell, 2013; McKillup, 2012; Wilcox, 2012). Based on these results, Maximum Likelihood was used as a method in CFA. As a result of the CFA, the single-factor and 10-item structure of the scale was confirmed. The factor loads of the items that make up the scale vary between 0.24-0.59. The t-values of the scale are [t> 2.56; p = 0.001] significant. The factor load of the 10th item was [0.24]. Although this level is low for factor loads, the levels of fit indices of the scale are in perfect and acceptable ranges. Due to the fact that the t-value for this item is meaningful at M10: t = 3.17> 2.56 level and when the item was removed from the scale, the structure of the scale deteriorated, it was decided to keep the item. The fit indices obtained from CFA were found as Chi Square: 63.06; Sd: 33; Chi Square/Sd = 1.91; RMSA: .050; SRMR: .045; CFI: 0.95; NFI: 0.91; and NNFI: 0.93. When the fit indices are analyzed, the ratio of Chi square and degrees of freedom was found as Chi Square/Sd=1.91, this is a perfect fit and other fit indices are acceptable (Baumgartner & Homburg, 1996; Bentler, 1980; Bentler & Bonett, 1980; Marsh, Hau, Artelt, Baumert & Peschar, 2006). Alpha reliability coefficient of the measurements obtained from the scale was determined to be 0.689. In line with these values, it can be said that the scale is at a sufficient level in terms of construct validity and reliability of the measurements.

Academic Motivation Scale

In order to determine the academic motivation levels of students, the Academic Motivation Scale [AMS] developed by Bozanoğlu (2004) and consisted of 20 items was used. The highest score that can be obtained from this Likert type scale is 100 and the lowest score is 20. The scale explains 42.2% of the variance. Confirmatory factor analysis was performed to test the construct validity of the scale. Normality assumptions were tested to determine which method to use before the CFA analysis. In this context, an analysis was made in terms of skewness and kurtosis coefficients of the distribution. As a result of the analysis, mode, median and mean values for AMS were calculated [Mo: 3.32; Mdn: 3:47; Mean: 3.46]. It is seen that descriptive statistics are realized in close intervals. AMS skewness and kurtosis coefficients were obtained as Skewness: -0.685 and Kurtosis: 1.330. Since the values obtained are close to 0 in the range of ± 2, it was concluded that the distribution had a normal distribution (Tabachnick & Fidell, 2013; McKillup, 2012; Wilcox, 2012). Based on these results, Maximum Likelihood was used as a method in CFA. As a result of the CFA, the single-factor and 20-item structure of the scale was confirmed. The factor loads of the items that make up the scale vary between 0.39-0.64. The t-values of the scale are [t> 2.56; p = 0.001] significant. The fit indices obtained from CFA were found as Chi Square: 508.56; Sd: 170; Chi Square/Sd = 2.99; RMSA: .074; SRMR: .060; CFI: 0.94; NFI: 0.91; and NNFI: 0.93. The values obtained were within acceptable ranges (Baumgartner & Homburg, 1996; Bentler, 1980; Bentler & Bonett, 1980; Marsh, Hau, Artelt, Baumert & Peschar, 2006). Alpha reliability coefficient of the measurements obtained from the scale was determined as 0.867. In line with these values, it can be said that the scale is at a sufficient level in terms of construct validity and reliability of the measurements.

Results

Research results are presented under three headings according to sub-problems. The first heading is about the t-test and MANOVA results to determine the effect of gender on the determined variables, the second heading is about the Pearson Correlation results to determine the relationship between the variables, and finally the third heading is about the Multiple Linear Regression Analysis between variables.

The Effect of Gender on Perceived Parental Attitudes, Personal Responsibility and Academic Motivation

Skewness and Kurtosis coefficients were examined for the normality distribution of the obtained data before the analysis. The skewness and kurtosis values of all scales are close to 0 in the range of ± 2 [Parents Democratic: Skewness = -.654, Kurtosis = -.262; Parents Protective/Demanding: Skewness = .119, Kurtosis = -.273; Parents Authoritarian: Skewness = .701, Kurtosis = .373; Personal Responsibility: Skewness = -1.036, Kurtosis = .996; Academic Motivation; Skewness = -.685, Kurtosis = 1.330]. The mode, median, and mean values of the distributions are also close to each other [Parents Democratic: Mod = 4.73; Med. = 4.17, Mean = 4.03; Parents Protective/Demanding: Mod = 2.85, Med. = 3.03, Mean = 3.01; Parents Authoritarian: Mod = 1.00, Med. = 2.00, Mean = 2.05; Personal Responsibility: Mod = 3.80, Med. = 3.80, Mean = 3.67; Academic Motivation: Mod = 3.32, Med. = 3.48, Mean= 3.46]. According to these results, it was confirmed that the data satisfied the normality condition.

Whether there was a significant difference in the parents' attitude scores of the students by gender was examined by MANOVA analysis. Covariance equality tested Box's M = 6.796 and p = .346> .05. Homogeneity of variances was found as p>.05. After the prerequisites were met, the analysis phase was started. The results are shown in Table 1. Multiple normality tests were performed before the analysis.

Table 1. MANOVA Analysis Results

	Gender	*N*	**Mean**	*Sd*	*df*	*F*	*p*	**Effect**
Authoritarian	Female	205	1.902	.712	366	22.186	.00	.997
	Male	163	2.257	.727				
Democratic	Female	205	4.105	.677	366	5.361	.021	.637
	Male	163	3.936	.717				
Protective/ Demanding	Female	205	2.861	.610	366	31.531	.00	1.00
	Male	163	3.213	.580				

p<.05

According to the obtained results, it was determined that the mean scores of attitudes of students' parents differed by gender (Wilk's Lambda = .914, p <.005). This result revealed that gender was an effective variable in parental attitudes. Gender Authoritative, Democratic and Protective-Demanding sub-dimensions differ significantly. It was revealed that gender had a very high level of impact on all three sub-dimensions (Eta = .997, .637, 1.00). While the difference was caused by female students in democratic attitude (Mean = 4.105, Sd

= .677), it was determined that it was caused by male students in authoritarian and protective-demanding attitude (Mean = 2.257, Sd = .727, Mean= 3.213, Sd = .580).Independent samples t-test analysis was conducted to compare students' personal responsibility scores by gender and the results are presented in Table 2.

Table 2. Independent Samples t-Test Analysis Results

	Gender	N	Mean	Sd	Levene Test		t	df	p
					F	p			
Responsibility	Female	205	3.72	.419	.066	.798	2.76	366	.006
	Male	163	3.59	.418					

p<.05

According to the independent samples t-test analysis, there was a significant difference in the personal responsibility scores of the students by gender (t = 2.76, p <.05). The difference was found in favor of female students. Female students' responsibility score (Mean = 3.72, Sd = .419) was higher than male students (Mean = 3.59, Sd = .418).

The results of t-test comparing students' academic motivation by gender are shown in Table 3.

Table 3. Independent Samples t-Test Analysis Results

	Gender	N	Mean	Sd	Levene Test		t	df	p
					F	p			
Academic	Female	205	3.52	.561	1.615	.205	2.286	366	.023
Motivation	Male	163	3.38	.646					

p<.05

The results showed that gender caused differences in academic motivation scores (t = 2.286, p <.05). This difference was in favor of female students. The academic motivation of female students (Mean = 3.52, Sd = .561) was higher than male students (Mean = 3.38, Sd = .646).

The Relationship between Perceived Parental Attitudes and Academic Motivation and Personal Responsibility Levels

The relationship between parental attitudes, academic motivation and personal responsibility is examined by Pearson Correlation analysis. The analysis results are shown in Table 4. According to the results of the analysis, there was a significant (p <.01) and positive moderate (r = .555) relationship between personal responsibility and democratic parental attitude. In this context, it can be said that as the democratic parental attitude scores increase, the student personal responsibility scores increase as well. In addition, there was a significant (p <.01) negative moderate (r = -. 420) relation between authoritarian parental attitude and personal responsibility and a negative weak relation (r = -. 242) between protective/demanding parental attitude and personal responsibility.

This result can be interpreted as the authoritarian attitude negatively affects the personal responsibility level of the student.

Table 4. Pearson Correlation Analysis Results

	Authoritarian Attitude	Protective/Demanding Attitude	Democratic Attitude	Academic Motivation
Personal Responsibility	-.420*	-.242*	.555*	.550*
Academic Motivation	-.303*	-.156*	.502*	1

*p<.01

A significant (p <.01) and positive moderate (r = .502) level relationship was found between academic motivation and democratic parental attitude. This result can be explained that when the students' academic motivation increases, their parents' democratic attitudes increase as well. On the contrary, the authoritarian attitude that has a negative weak (r = -. 303) relationship may decrease the academic motivation of the students. In addition, a significant (p <.01) positive moderate (r = .550) relationship was found between personal responsibility and academic motivation. It can be interpreted that as student personal responsibility scores increase, academic motivation increases.

Regression Analysis Results to Determine Perceived Parental Attitudes, Academic Motivation and Personal Responsibility Levels of Students

One of the prerequisites before multiple regression analysis is the absence of multicollinearity between variables. For this purpose, the correlation table was examined, and the values were found below the upper limit of .850. For autocorrelation as another prerequisite, Durbin-Watson value was determined to be between 1-3 [personal responsibility: DW = 1.885; academic motivation: DW = 1.663]. The study according to these values is suitable for Multiple Linear Regression analysis. Stepwise analysis was used as a method in Multiple Linear Regression analysis. Firstly, ANOVA table was analyzed, and it was determined that the independent variable was a significant predictor of the dependent variable [F = 55.020, p = .00].

Regression analysis was done in three steps. The protective-demanding attitude shown in Model 1 was the first step. According to the results of the analysis, the sub-dimension of protective-demanding attitude explained 5.9% of the total variance regarding the personal responsibility levels of the students [R = .242, R2 = .059]. The Beta value of the variable was [β = -.242]. The t value of the variable was significant [t = -4.778; p <.05]. The second step shown in Model 2 was the authoritarian attitude that explained 17.8% of the total variance regarding the personal responsibility level of students [R = .422, R2 = .178]. According to this result, authoritarian attitude contributed 11.9% to the model. Beta (β) values of the variables included in the model were as follows: [protective-demanding attitude was β = .042; authoritarian attitude was β = -.447]. The t value of the protective/demanding attitude from variables was not statistically significant [t = .675*; t = -7.267; p> .05*; p

<.05]. The last step shown in Model 3 was the democratic attitude that explained 31.2% of the total variance regarding the personal responsibility levels of students [R = .558, R2 = .312]. Democratic parental attitude contributes 14% to the model. Beta (β) values of the variables included in the model were as follows: [protective-demanding attitude was β = -.049; authoritarian attitude was β = -.032; democratic attitude was β = .517]. Of the variables, only the t value of the democratic attitude was statistically significant [t = -.854*; t = -.421*; t = 8.429; p <.05; p > .05*]. The results are presented in Table 5.

Table 5. Stepwise Multiple Linear Regression Analysis Results

Model	R	R^2	Adjusted R^2	Beta	Sr^2	t	p
Model 1	.242[a]	.059	.056				
Protective/ Demanding Attitude				-.242	-.242	-4.778	.000
Model2	.422[b]	.178	.173				
Protective/ Demanding Attitude				.042	.032	.675	.500
Authoritarian Attitude				-.447	-.345	-7.267	.000
Model 3	.558[c]	.312	.306				
Protective/ Demanding Attitude				-.049	-.037	-.854	.394
Authoritarian Attitude				-.032	-.018	-.421	.674
Democratic Attitude				.517	.366	8.429	.000

Stepwise analysis was used as a method in the Multiple Linear Regression analysis to determine the level of parental attitudes predicting academic motivation. Firstly, ANOVA table was analyzed, and it was determined that the independent variable was a significant predictor of the dependent variable [F = 41.912, p = .000]. Regression analysis was done in three steps. The protective-demanding attitude shown in Model 1 was the first step. According to the results of the analysis, the protective/demanding attitude sub-dimension explained 2.4% of the total variance regarding students' academic motivation levels [R = .156, R2 = .024]. The Beta value of the variable was [β = -.156]. The t value of the variable was significant [t = -3.012; p <.05].

The second step shown in Model 2 was the authoritarian attitude that explained 9.4% of the total variance regarding students' level of academic motivation [R = .307, R2 = .094]. According to this result, authoritarian parental attitude contributed 7% to the model. Beta (β) values of the variables included in the model were as follows: [protective/demanding attitude was β = .062; authoritarian attitude was β = -.342]. The t-value of the protective/demanding attitude from variables was not statistically significant [t = .959*; t = -5.304; p > .05*; p < .05].

The last step shown in Model 3 was the democratic attitude that explained 25.7% of the total variance related to students' level of academic motivation [R = .507, R2 = .257]. Democratic attitude contributes 16.3% to the model. Beta (β) values of the variables included in the model were as follows: [protective/demanding attitude was β = -.038; authoritarian attitude was β = 115; democratic attitude was β = .569]. Of the variables, only the t value of the democratic attitude was statistically significant [t = -.632*; t = 1.476*; t = 8,927; p > .05*; p < .05]. The results are presented in Table 6.

Table 6. Stepwise Multiple Linear Regression Analysis

Model	*R*	*R²*	Adjusted R²	Beta	*Sr²*	*t*	*p*
Model 1	.156[a]	.024	.022				
Protecting/ Demanding Attitude				-.156	-.156	-3.02	.003
Model2	.307[b]	.094	.089				
Protective/ Demanding Attitude				.062	.048	959	.338
Authoritarian Attitude				-.342	-.264	-5.304	.000
Model 3	.507[c]	.257	.251				
Protective/ Demanding Attitude				-.038	.029	-.632	.528
Authoritarian Attitude				.115	.067	1.476	.141
Democratic Attitude				.569	.403	8.927	.000

Discussion

The aim of this study was to examine the relationship between parental attitudes and academic motivation and personal responsibility levels of high school students. The results of the analysis show that the democratic parent attitude, which is one of the sub-dimensions of the parental attitude scale, is a significant predictor of the students' level of academic motivation and personal responsibility. This result overlaps with the literature and previous studies (Bempechat & Shernoff, 2012; Brown & Iyengar, 2008; Deslandes, 1997; Eccles, 2007; El Nokali, Bachman, & Votruba-Drzal, 2010; Matejevic, Jovanovic, & Jovanoic, 2014; Turner, Chandler, & Heffer, 2009). Most of the research on parental behavior shows that the children whose parents are actively involved in the education of their children, support their sense of self-esteem and provide a positive emotional environment are more motivated, more successful at school and develop social emotional skills (Chen, 2015; Ray & Giraldo-Garcia, 2018; Reshvanloo & Hejazi, 2014; Rivers, Mullis, Fortner, & Mullis 2012).

Parents who know their children well push and support them in a balanced way. Children who grew up in a safe and supported environment, where academic success is valued tend to take their parents as role models. For this reason, parents should emphasize the importance of effort, not success, especially for children with low academic motivation and support their learning strategies while helping with their homework because the expectations and values of the parents affect the values of the children regarding academic success. Thus, it can be ensured that the children develop positive beliefs towards success.

The results of the study showed that democratic parental attitude predicts academic motivation by 25.7%. Considering the existence of many variables (self-efficacy, self-regulation, anxiety, etc.) that affect academic motivation and increased environmental impact during adolescence, this result showed that the family is indispensable in the success of the children. Internal motivation of students with high success and willingness to learn is high. They participate in learning activities, even if there is no reward or punishment in the environment. Therefore, instead of using external tools such as reward, punishment, and pressure, parents should display a supportive attitude towards the children's intrinsic motivation. They can help develop intrinsic motivation by providing the children with positive feedback, autonomy support, a positive emotional environment that allows

curiosity and discovery.

Since learning is a direct causal result of student actions, students are responsible for their own learning (Ericson & Ellet, 1990). How much students are interested in the lessons and enjoy learning and going to school is related to the sense of responsibility. Therefore, students with strong sense of responsibility may be more successful (Wentzel, 1998). Parents should encourage their children to develop an inner love of learning while at the same time supporting them to be responsible and productive in their interests (Wentzel, 1991a). Studies show that the sense of personal responsibility plays an important role in the motivation of the person (Fishman, 2014). Pearson correlation analysis also showed that there was a moderate positive relationship between academic motivation and personal responsibility (r = .550). In addition, according to the results of the Regression analysis, the democratic parent attitude predicted the level of personal responsibility by 31.2%. The students' sense of responsibility is shaped by the parents' sense of responsibility (Ericson & Ellet, 1990; Wentzel, 1991b). In this context, the family's reinforcement of the students' appropriate behavior appears as a variable that will develop the students' sense of responsibility.

Independent samples t-test analysis that examined the effect of gender on variables showed that academic motivation and personal responsibility levels of female students were higher as in the similar studies conducted (Buğdaycı, 2019; Powell& Rosen, 1999; Taşgın & Çoşgun, 2018). The higher level of responsibility of girls can be explained by the fact that girls assume more responsibilities at home compared to boys beginning from an early age due to gender roles (Taylı, 2013). The expectation that the girl, who is grown up with the traditional perception of household duties as specific to women in order to help the mother, may have led to the development of a strong sense of responsibility in girls. Academic motivation scores, of which female students were higher, are similar to previous studies (Burgler, StClair- Thompson, & McGeown, 2015; Veccchione, Alessandri, & Marsicano, 2014). The opportunity schools offer girls to show that they are equal with boys may motivate girls academically. It may also be that girls know that education is the first condition for their freedom and standing on their own feet and increasing successful female role models may motivate them academically.

In addition, according to MANOVA analysis results, which examined the effect of gender on perceived parents' attitudes, female students perceive their parents more democratically (Kolburan, Çömert, Narter, & İşözen, 2012). It can be thought that the girls perceive their parents' attitudes as more democratic because of the fact that the girl complies more with the rules and has less conflict with the family due to gender roles. In general, it can be considered that the parents of male students, who are raised more freely in Turkish society, have displayed a more authoritarian attitude to protect them from dangers (Aktaş, 2011). As a result of the research, it was significant that girls who perceived their parents democratically also had a high level of academic motivation and personal responsibility and this overlaps with the literature (Ericson & Ellet, 1990; Fishman, 2014; Singg & Ader, 2011; Wentzel, 1991b). As a result, parental attitudes and the support that parents offer to students in the context of these attitudes contribute positively to their academic success and social and personal competencies, regardless of their age. The goal of raising individuals with successful and social emotional competence can only be achieved through a strong partnership between school, family and children (Rowell & Hong, 2013).

Conclusion

The effect of the family on student achievement and the sense of responsibility that fosters motivation for the lesson draws attention as a factor that should be considered more, especially in places where academic success is low and school dropout rates are high (Ray& Giraldo-Garcia, 2018; El Nokali, Bachman& Votruba-Drzal, 2010). The effect that the family has on the student creates a certain influence on the character of the children from early age (Martin & Dowson, 2009; Wubbels, Brekelmans, den Brok & van Tartwijk, 2006). In this context, the duties that will be given to the children in the development of the sense of responsibility, ensuring the freedom of the child, being seen as an individual and participating in the decision-making processes in the family can be counted among the factors that will cause children to take more responsibility. Over time, such children's self-regulation and self-efficacy perception begin to develop. It is observed that such children focus more on school lessons, are meticulous about attending lessons and fight more strongly against the difficulties they encounter in the learning process (Ericson & Ellet, 1990; Fishman, 2014; Wentzel, 1991b). It should be emphasized that this effect of the family is also related to the socio-economic and educational level of the family. Parents who are at a high socio-economic level provide more autonomy to their children and invest more in education and culture than parents at the lower groups. Undoubtedly, this also shows that children whose families are economically in good conditions are more advantageous when starting school compared to the peers (Fan, 2012; Abdu Raheem, 2015). It appears that the school guidance service and classroom teachers play a big role to direct families to be more effective in the life of the children.

The results of the research are similar to the effect of the parental attitude characteristics on children conceptualized by Baumrid (1991). It was found that female students who perceive their parents as democratic have higher academic motivation and responsibility levels than male students who perceive their parents as authoritarian. In order to increase the sense of responsibility of male students, it can be ensured that they share their domestic duties equally at a young age as girls. Therefore, it is important for parents to be role models for their children. According to OECD (2018) data, school achievement of female students is increasing worldwide. While achievement of girls have been increasing, it is thought that the decline in achievement of boys may be related to traditional patriarchy (Hadjar, Backes, & Gysin, 2015). Male students, who were raised with hardness and strength values, tend to disrupt the classroom environment and behave against the rules, which may reduce their academic motivation. In order to increase the motivation of male students, they may be raised as individuals who have high social competencies and comply with the rules with softer but controlled parental attitudes. For this purpose, families can be educated about right parental attitudes towards their children. In this regard, school and teachers, who are in close cooperation with families, also make an important contribution to the success of children.

School counselors should not only make parent interviews, but also provide trainings to support parental attitudes. Especially, teachers working in socio-economically weak schools have more roles in this regard. Of course, it is not possible to bring democratic parental attitudes to parents at once. Parenting is also strongly affected by the cultural structure in which parents live. Changing culture-related structures is often difficult. For this reason, the school can both support the family's democratic parental behavior and support the family in this

field by giving students responsibility within the school and providing them with a democratic school atmosphere.

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