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Who is Responsible and for How Much? An Analysis of the Responsibility Value by Student- and School-Related Factors

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Value education is one of the basic elements of the Turkish national education system. Therefore, values have been the focal point of curricula in Türkiye. Responsibility is one of the common values aimed to be acquired in the curricula in Türkiye. Also, responsibility is a value that has long been a focus of the social studies curriculum in Türkiye, and its significance continues to grow. In this study, the effect of the student- and school-related variables on secondary school students' responsibility value was examined. The study was designed as a correlational survey. The study group of the research consisted of 1007 students (girl = 53%; boy = 47%) and 48 social studies teachers (female = 45.8%; male = 54.2%) working in these schools selected by random sampling who were studying at 28 secondary schools a region of Türkiye. The research data were collected face-to-face by the authors. The Hierarchical Linear Modeling (HLM) 8.2 statistical program (trial version) was used to analyze the data. Drawing on the relevant literature, eight student-related and six school-related variables were selected. At the student level, the most significant effect on students' responsibility scores is self-control. At the school level, the only significant effect with an increase of half a point was the social studies teachers' organizing activities and assigning homework related to values. The results of the research were evaluated together with the studies found in the related literature. It was concluded that in addition to personal factors, both social studies teachers and parents influence secondary school students' responsibility.

Introduction

Values are the building blocks of identity (Hitlin, 2003). Values education, which is seen as the key to raising individuals with character, has always been considered valuable in

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the Turkish national education system and has been the focal point of curricula. In the Social Studies curriculum, which is one of the pioneers of value teaching, values are defined as an indispensable element of social life and in this direction, the aim is to teach students 20 national, spiritual and universal values, including the value of responsibility (Ministry of National Education [MoNE], 2024). Responsibility is an important value that all curricula in Türkiye have in common. Responsibility is one of the values that parents want teachers to make students acquire first (Çelikkaya et al., 2014). In a recent study conducted by Espinoza & Gonzales (2023), it was observed that responsibility was among the values most encouraged by the principals and teachers of 160 schools in 17 different countries, including the United States, Italy, France, the Philippines, Argentina, Peru, and so on in primary and secondary schools. The aforementioned research shows that responsibility is a universally valuable and evergreen value. To know what it means to the concept of the value of responsibility, why it is important and the factors affecting it, it is necessary to understand values as a whole and in their context.

Values are structures that enable individuals to decide what is right and wrong, to make sense of the world, and to guide individuals. These values can also be examined both individually and in societies and groups (Oyserman, 2015). Values, which form the basis of behaviors (Demircioğlu & Tokdemir, 2008), are also expressed as important values that are effective in all areas of life and that guide and direct life (Bazarkulov, 2008). Varying from society to society and from person to person, values are a vital part of the culture and individuals have different sets of values (Rokeach, 1973). Parents act as children's first moral educators, and the family is one of the main transmitters of values (Brannon, 2008; Berkowitz & Bier, 2005; Lickona, 2009). Transferring values to future generations is based on school-parent cooperation. In other words, value education starts in the family and continues at school with the support of teachers (Demircioğlu et al., 2011; Dinç & Üztemur, 2016; Gökalp, 2022a; Ulusoy & Dilmaç, 2018). In this life-long process, values should be adopted and turned into behavior by making them the keystones of personality (Yaman, 2016). In this process of behavior transformation, values education aims to establish a relationship between individual and society, to develop desired behaviors, to teach democratic, social, ethical and moral values that are significant in the process of becoming a democratic society (Zajda, 2023)

An important question in value education is to determine which values to be gained by the student and how because values are classified in many ways such as self-organized purpose and means (Rokeach, 1973), intrinsic, transcendent, and normative (Ülken, 2016), and self-direction, hedonism, power, success etc. (Schwartz, 1992). However, these values can be affected by external factors. (Nazirova & Borbala, 2024). Therefore, a value can interact with another value, a conclusion supported by various studies (Çalışkan et al., 2019; Elban & Aslan, 2023; Gökalp & İnel, 2021a; Gökalp, 2022b). Moreover, values are the direct result of individual action that is manifested according to moral and logical reasoning (Ekşi & Katılmış, 2020, p. 18). Due to scientific, technological, and social developments, value perceptions of individuals change. For example, a fast lifestyle with heavy reliance on internet technologies has been reported to increase impatience (Janakiraman, et al., 2011), and middle school students who spend three or a lot of hours on the internet during the day have lower patience values than those who spend two hours or less (Gökalp, 2022b). As such, values are open to change, are dynamic, and interrelated, which should also be considered in values education. To live together in a dignified manner without interfering with the rights and freedoms of others, many values such as honesty, respect, love, and responsibility must be gained (Kılcan, & Akbaba, 2014). Responsibility, one of the most significant values and a duty that the individual must fulfill in all spheres of life (Aladağ, 2012), is a value that



children learn from their parents, schools, and environments (Yontar & Yurtal, 2009), which is becoming increasingly important (Selanik-Ay & Dal, 2014). Besides being a value-laden concept (Chamberlin & Chambers, 1994, p. 204), it is attitude, character, and personality (Golzar, 2006). Furthermore, responsibility is the child's fulfillment of his/her duties in accordance with his/her gender, age, and developmental period, which begins at an early age (Yavuzer, 1998).

Responsibility does not mean obedience, and a person cannot be forced to be responsible (Chamberlin & Chambers, 1994). Neither responsibility nor self-control can be fostered in environments with forced obedience and pressure (Duke & Jones, 1985). Responsibility cannot occur with external pressure, (Özen, 2015), and the main source of responsibility is internal control (Öner, 1987). Cüceloğlu (2002) describe a responsible individual as a person with a developed sense of duty and self-awareness, and who only holds him/herself accountable for his/her thoughts and behaviors. In addition, students can be more responsible if they are taught ways of thinking about self-control (Anderson & Prawat, 1983). Bosacki et al. (2011) suggest that self-control may contribute to the links between some concepts such as spirituality and social behavior. Therefore, internal control studies and exercises are added to the instructional approaches and curricula created to improve student responsibility (Duke & Jones, 1985; Glasser, 2002). As such, there is a relationship between responsibility and self-control (MoNE, 2018a), which is one of the ten core values that should be taught in all curricula in Türkiye and is also a targeted skill to be attained by students in the Social Studies curriculum. Moreover, self-control was included as a self-skill in the Social Studies Curriculum of the Turkish Century Education Model, which was last updated and implemented in the fifth grades in 2024 (MoNE, 2024). In studies conducted with adolescents, it has been found that there are positive and significant relationships between self-control and responsibility. For example, Ahmadi Joybar (2017) found a significant positive relationship between self-control and responsibility levels of sixth-grade female students and stated that an increase in self-regulation leads to an increase in students' responsibility levels. Similar findings can be supported by other studies (Gökcalp et al., 2021; Temel, 2022).

Although both parents and schools have responsibilities in value education, turning a value into behavior is possible through formal education, and the way to this is teachers (Aktepe & Yalçınkaya, 2016; Tokdemir, 2016). The role of social studies course and social studies teachers in teaching values is extremely important (Tonga, 2017), because in the social studies curriculum in Türkiye, values and skills are taught in relation to the learning outcomes so that the students "know the importance and ways of being a virtuous person by adopting national, spiritual and universal values" (MoNE, 2018a, p. 8). On the other hand, the United States National Council of Social Studies (NCSS), which provides the framework for the social studies curriculum, states that social studies is a significant discipline in value education, and the standards prepared by the council for social studies teachers emphasize that social studies is stronger when taught by incorporating it with values (National Council for the Social Studies [NCSS], 2002). Thus, it can be said that social studies teachers can help students in acquiring the value of responsibility. It is important to assign tasks to students to ensure that they display responsible behaviors (Sezer & Çoban, 2016). Since they are given more tasks than boys in household chores and taking care of their siblings, girls show stronger sense of responsibility than boys (Kesici, 2018). Therefore, cultural factors can be as important as personal and environmental factors in students' development of responsible behaviors. On the other hand, with its particular culture, the school is where instructional activities are implemented in a planned manner.

Based on our literature review, we do not find any existing study that analyzes secondary school students' responsibility scores concerning student-level and school-level variables. It is important to reveal the factors related to and affecting students' responsibility value in terms of teaching this value. This is because high values such as respect and responsibility have a common moral basis for their visibility in everyday life. Recognizing this common ground can be a fundamental step for doing values education in schools (Lickona, 2009). Similarly, values such as respect and responsibility play a crucial role in socialization, so these values should be taught (Halstead, 2005). Considering the significance of the subject, the study aims to reveal the effect of the variables related to students and school on the responsibility value of secondary school students. To this aim, the study focused on the following research questions (RQ):

RQ1: Do the responsibility scores of secondary school students differ by the schools they attend?

RQ2: Do the student-related variables predict the responsibility scores of secondary school students?

RQ3: Do the school-related variables predict the responsibility scores of secondary school students?

Method

Research design

The study is designed as a correlational survey research, which is implemented to reveal whether two or more variables affect each other (Fraenkel et al., 2012). This design was preferred to find out the effect of the student and school variables on the responsibility scores, which is the dependent variable in this study. As part of the research, HLM method was used as a data analysis technique in analyzing the relationships between variables. HLM is a special regression technique designed to analyze hierarchically structured data. HLM is a highly flexible method that allows researchers to identify relationships between multiple levels of the education system (e.g. students, classes, schools, etc.) (Leyland & Groenewegen, 2023). The HLM analysis used in this study allowed the combined analysis of two different data sets, which consisted of individual factors and school-related factors affecting the responsibility levels of secondary school students.

Study group

The study group consisted of 28 public secondary schools in a city in western Türkiye, 1007 students randomly selected from these schools and 48 social studies teachers. There are a total of 7349 students studying in grades 5, 6 and 7 in these 28 secondary schools. The researchers did not have any intervention in the selection of the students. The students were randomly selected from the classes determined by the school administrations. Characteristics of the participants and schools are presented in Table 1.

Table 1. Participants and schools' characteristics

Characteristics	Category	N	%
Gender	Girl	534	53.0
	Boy	473	47.0
Location of the school	Village	7	25.0
	Small town	7	25.0



	City centre	14	50.0
Grade level	5 th grade	328	32.6
	6 th grade	319	31.7
	7 th grade	360	35.7
Type of school	Middle school	22	78.6
	Islamic vocational middle school (IVO)	6	21.4
Social studies teacher	Female	22	45.8
	Male	26	54.2

As seen in Table 1, relatively close ratios of students from the fifth, sixth and seventh grades participated in the study, with 53% of them made up by girls and 47% by boys. Secondary schools located in the city center constitute 50% of the sample, and the remaining schools located in the village and small towns constitute an equal number. Among middle schools, 21.4% are Islamic vocational middle schools. Approximately 46% of the 48 social studies teachers included in this study were female.

Although the size of the sample size is an important criterion in HLM models, there is no consensus in the literature regarding this. Fein (2000), used the definition of low sample for 10 clusters, medium for 25 clusters, and large sample for 50 clusters at the second level. Also stated that for a simple model, the total number of people at the first level should be at least 750. In the current study, a sufficient sample size was reached, considering that there were a total of 1007 students at the first level, and a total of 28 schools with the number of participants ranging from 30 to 66 at the second level.

Data collection

Before the data collection, the ethics committee permission was obtained. Data were collected face-to-face and participants were not payment. Participation in the study was voluntary and anonymous. The instructions emphasized that there were no right or wrong answers and that each answer reflected the respondent's personal views and beliefs. The data was collected using Responsibility Scale, Self-control Scale, and the Student and School Information Form created by the authors and included student and school characteristics.

Confirmatory Factor Analysis (CFA) was performed to test the validity of the scales in the current research sample. The fit indices (RMSEA [$\leq .08$], SRMR [$\leq .08$], CFI [$\geq .90$], TLI [$\geq .90$]) were required to be at least acceptable (Kline, 2011). According to George and Mallery (2010), the Cronbach Alpha (α) internal consistency coefficients of values are between $0.6 \leq \alpha < 0.7$ acceptable.

The seven-item Responsibility Scale (Gökalp, 2021) was used to assess responsibility. The items of the unidimensional Responsibility Scale are evaluated on a four-point scale (1 = doesn't describe me at all; 4 = describes me completely). The highest Responsibility Scale score is 28 and the lowest score is 7. Higher scores reflect greater levels of responsibility (Sample item: "I always do what I promise to do").

In the present study, the internal consistency of the Responsibility Scale was acceptable (Cronbach's $\alpha = 0.60$). The CFA confirmed the scale's original one-factor structure, and the fit indices were acceptable: RMSEA = .001, SRMR = .017, CFI = .998, TLI = .996.

The seven-item Self-control Scale (Gökalp & İnel, 2021b) was used to assess responsibility. The items of the unidimensional Self-control Scale are evaluated on a four-point scale (1 = doesn't describe me at all; 4 = describes me completely). The highest Self-control Scale score is 28 and the lowest score is 7. Higher scores reflect greater levels of self-control (Sample item: "I avoid behavior that makes me make mistakes"). In the present study, the internal consistency of the Self-control Scale was acceptable (Cronbach's $\alpha = 0.66$). The CFA confirmed the scale's original one-factor structure, and the fit indices were acceptable: RMSEA = .050, SRMR = .029, CFI = .951, TLI = .927.

Data analysis

Two-level HLM was performed in the analysis of the research data. For the analyses, the data were first transferred to the SPSS 22 statistical package program. Then, the assumptions of missing data, outliers and normality were checked. 1014 pieces of data were collected under the guidance of the researchers, and the students were reminded to answer each question without leaving any blank answers, and thus, no missing data was found in the data set. To determine the extreme values, Z-scores were computed from the total scores of the scale items and seven observations that were not in the range of -4, +4 were removed (Hair et al., 2006). The kurtosis and skewness coefficient values of the scales (i.e. responsibility and self-control scale) were between the criteria values of -1.5 and +1.5 recommended by Tabachnick and Fidell (2012) for normality. After confirming that the assumptions were met, two separate SPSS data sets were generated to the Level 1 (student) and Level 2 (schools) variables. Level 1 variables include; gender [Gender] (Male= 0, Female=1), class [Class] (fifth= 1, sixth= 2, seventh= 3), family structure [Family] (large= 0, nuclear=1), daily internet use time [Internet] (2 hours and below = 1, 3 hours and above = 2), parents asking their children for help with housework [Help] (No = 0, Yes = 1), sibling rank [SR] (younger sibling = 1, elder brother = 2), the first semester grade of social studies course registered in the e-School system of the Republic of Türkiye Ministry of National Education [Note], and the self-control levels of the students [Self-control].

The level 2 variables include the existence of a values education club in schools [Club] (No= 0, Yes=1), school type [Type] (Middle school=1, IVO= 2), location of the school [Location] (village=1, small town= 2, city centre= 3), the number of social studies teachers working in schools [SSN], the total number of students in fifth, sixth and seventh grades in schools [Size]. Also, the social studies teachers were asked about their status of conducting activities related to values education and giving regular homework [Hwk-Act] (very little= 1, a little= 2, a lot= 3, very much= 4).

The data prepared in SPSS were combined in the HLM 8.2 program (trial version) and three different HLM models were used to find answers to each research question. To avoid misinterpretations and misleading results in the models, Level 1 variables were centralized in the group mean (excluding categorical variables), and Level 2 variables were centralized in the overall mean (Raudenbush & Bryk, 2002). In addition, variables were included in the established models one by one, and unrelated ones were removed and new ones were added, and thus, the final models were obtained (Hox, 2010).

The first question of the study was answered by using "One-Way ANOVA Model". The results of this model indicate that the difference in students' responsibility scores is explained by Level 2 (Raudenbush & Bryk, 2002; Snijders & Bosker, 2012). Significant differences were controlled by the results of the Chi-square test. Then the "Design Effect (DE)" in the

model was calculated using the $DE = 1 + p(\bar{n}-1)$ equation to continue the HLM analysis, and this value was found to be greater than 1 (Hox, 2010). Based on the result, the data were analyzed using the “Regression Model with Random Coefficients” to answer the second research question and the “Regression Model with Averages of Outcomes” to answer the third research question. According to the results of the analysis, the τ_{00} and σ^2 estimates attained from both models were compared with the estimates from the first model to compute the rate of reduction of variances in student-level and school-level variables.

Results

One-way ANOVA model

In this model, the answer to the question “Do the responsibility scores of secondary school students differ by the schools they study at?” was sought and the findings are presented in Table 2.

Table 2. Results from the one-way ANOVA model

Fixed Effect		Coefficient	se	p
Average of all schools, γ_{00}		21.31	.16	.00
Random Effect		Variance Component	df	χ^2
School average, u_{0j}		.38	27	57.99
Level-1 effect Γ_{ij}		11.79		.00

Note: $p < .05$, se= standard error, df= degrees of freedom.

As seen in Table 2, the average score of responsibility of all schools is 21.31, and this score varies between $21.31 \pm 1.96(.16) = 21.00$ and 21.62 with 95% probability. In addition, the Chi-square test was to be found statistically significant ($\chi^2_{(27)} = 57.99, p < .05$), which indicates that the responsibility scores of the schools differ significantly from each other.

According to the variance value, 3% of this difference is due to schools [$(\tau_{00} / (\sigma^2 + \tau_{00}) = .38 / (11.79 + .38) = .03$], and 97% of the variance in student scores is caused by student characteristics [$(\sigma^2 / (\sigma^2 + \tau_{00}) = 11.79 / (11.79 + .38) = 0.97$)]. It is also the value calculated as .03, which refers to the correlation between schools. Thus, the design effect was used the equation $1 + p(\bar{n}-1)$, the result was found to be as $1 + .03(1007/28-1) = 2.05$. Since the design effect was calculated to be $2.05 > 1$, the data set shows that it may be suitable for multilevel models for analysis. Lastly, the calculated reliability was $\lambda = .53$. In HLM models, it is sufficient for the reliability coefficient to be greater than .05 (Raudenbush & Bryk, 2002). In addition, the reliability value obtained shows that 53% of the school’s responsibility score averages are result from real school averages and 47% from random errors.

Random coefficient regression model

In this model, the answer to the question “Do the variables at the student level predict the responsibility scores of secondary school students?” was sought. The *sibling rank* variable was found not to have a statistically significant effect ($p = .13$) on the students’ responsibility scores and was excluded from the model. The significant variables are presented in Table 3.

Table 3. Results from the random coefficient regression model

Fixed Effect	Coefficient	se	df	p
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Average of all schools, γ_{00}		21.11	.18	27	.00
Gender, γ_{10}		.39	.16	972	.01
Class, γ_{20}		-.22	.10	972	.01
Family, γ_{30}		.50	.19	972	.00
Internet γ_{40}		-1.28	.17	972	.00
Help γ_{50}		.85	.21	972	.00
Note γ_{60}		.05	.01	972	.00
Self-control γ_{70}		3.90	.16	972	.00
Random Effect	Variance Component	SD	df	χ^2	p
School average, u_{0j}	.60	.77	27	133.06	.00
Level-1 effect, r_{ij}	5.22	2.29			

Note: $p < .05$, se= standard error, df= degrees of freedom, SD = standard deviation.

As seen in Table 3, the Chi-square test is statistically significant ($\chi^2_{(27)} = 133.06$, $p < .05$), and the average responsibility score of the students is 21.11. The estimated reliability coefficient for the model was calculated as adequate ($\lambda = .80$).

Among the variables, gender ($\gamma_{10} = .39$, $p < .05$), family structure ($\gamma_{30} = .50$, $p < .05$), parents asking their children for help with housework ($\gamma_{50} = .85$, $p < .05$), students' first semester social studies grades ($\gamma_{60} = .05$, $p < .05$) and students' self-control status ($\gamma_{70} = 3.90$, $p < .05$) predict students' responsibility scores positively and significantly. These findings show that girls have higher responsibility scores than boys, those living in a nuclear family have higher scores than those in an extended family, students whose parents ask for help in housework have higher scores than those who do not, those who have a high grade on the first semester social studies course have higher responsibility scores than those whose course grades are low, and those with high self-control have higher responsibility scores than those with low control. Moreover, the students' self-control status, with a 3.90-point increase, had the greatest effect on their responsibility scores, and the least effect was the first semester social studies course grades of the students with an increase of .05 points. Furthermore, the grade level variable predicted students' responsibility scores negatively ($\gamma_{20} = -.22$, $p < .05$), which indicates that as the grade level rises, the responsibility scores of the students decrease. There is a similar effect when daily internet usage time is analyzed ($\gamma_{40} = -1.28$, $p < .05$). When students' daily internet usage time is three hours or more, a decrease of -1.28 points is observed in their responsibility scores.

To calculate how much the variance at the student-level is reduced, the σ^2 values of Model 1 and Model 2 are examined. [$(\sigma^2 \text{ ANOVA} - \sigma^2 \text{ Random Coefficient Regression Model}) / \sigma^2 \text{ ANOVA} = (11.79 - 5.22) / 11.79 = .56$]. This finding demonstrates that 56% of the 97% variance at the student-level can be explained.

Means as outcomes regression model

In this model, the answer to the question “Do the school-level variables predict the responsibility scores of secondary school students?” was sought. Whether there is a values education club at the school ($p = .63$), type of school ($p = .43$), location of the school ($p = .14$), the number of social studies teachers at the school ($p = .60$), and the number of students enrolled at the school ($p = .18$) variables were not found to have a statistically significant effect on students' responsibility scores and were excluded from the model. The only significant variable is presented in Table 4.

Table 4. Results from the means as outcomes regression model

Fixed Effect		Coefficient	se	t	p
Average of all schools, γ_{00}		21.31	.14	151.90	.00
Hwk-Act, γ_{01}		.56	.20	2.85	.01
Random Effect	Variance Component	SD	df	χ^2	p
School average, u_{0j}	.26	.51	26	46.67	.00
Level-1 effect, r_{ij}	11.79	3.43			

Note: $p < .05$, se= standard error, df= degrees of freedom, SD= standard deviation

As seen in Table 4, it is found that the Chi-square test is statistically significant ($\chi^2_{(26)} = 46.67$, $p < .05$). Also, the school's average score of responsibility is 21.31. Estimated reliability coefficient for the model was calculated as adequate ($\lambda = .44$). Social studies teachers' doing activities related to values education and giving regular homework predicted students' responsibility scores positively and significantly ($\gamma_{01} = .56$, $p < .05$). Moreover, this effect creates .56-point increase in students' responsibility scores. In addition, this effect caused an increase of .56 points in students' responsibility scores.

To find the rate of variance reduction at school-level, τ_{00} values from a One Way ANOVA model were compared with an averaged regression model [$(\tau_{00} \text{ ANOVA} - \tau_{00} \text{ Means as Outcomes Regression Model}) / \tau_{00} \text{ ANOVA} = (.38 - .26) / .38 = .46$], and it explains 46% of the 3% variance at the school-level.

Discussion and Conclusions

In this study, HLM analysis was conducted to see the effect of the student- and school-related variables on the responsibility value of secondary school students. Drawing on the relevant literature, eight student-related and six school-related variables were selected. Considering the adult role attributed to the older child in the family and given more responsibility than other children (Gürsoy & Coşkun, 2004, p. 23), it was assumed that the sibling rank variable might have an effect on the responsibility value, but the status of being an older or younger sibling did not have any statistically significant effect on students' responsibility scores. However, among the variables considered at the student level; gender, family structure, daily internet usage time, parents asking their children for help with housework, students' first term social studies course grades, students' self-control status made students' responsibility scores positive, whereas the grade level variable predicted responsibility negatively.

Self-control positively correlated responsibility, which confirms the findings obtained from other studies (Ahmadi Joybar, 2017; Gökalp et al., 2021; Temel, 2022). Self-control should be leveraged to instill responsibility in students (Krug & Carter, 2010). In addition, Barrick & Mount (1991) and MacDonald (1995), who conducted studies on the big five personality traits, job performance and personality levels, revealed that individuals with strong self-control are patient, success-oriented, and reliable as well as behaving responsibly. The reason for this may be that self-control individuals have more control over their internal and external environment and thus are more capable of fulfilling their responsibilities. These findings suggest that self-control may be an important factor in developing students' sense of responsibility.

One of the other important variables on students' responsibility scores is the duration of daily

internet usage time. When students' internet usage time during the day increases to three hours or more, a decrease of -1.28 points is observed in their responsibility scores. According to the Turkish Statistical Institute data, internet usage in Türkiye is increasing year by year, and while the rate of individuals using the internet was 45% in 2011, this rate rose to 90% in 2021 (Turkish Statistical Institute [TSI], 2021). These numbers show that the rate of individuals using the internet in Türkiye has doubled in the past 10 years. Apparently, this has caused some problems because the Information Technologies and Communications Authority [ICTA] in Türkiye has made some recommendations about internet usage. In this period when children aged 10-13 step into adolescence, families are advised to be aware of the possibilities offered by the internet and may want to use it to the fullest, so that the time that children should spend at the computer should not exceed two or three hours (ICTA, 2019). It was also observed that the skills and values of the students begin to be affected depending on the duration of internet use. Studies have reported the negative effect of internet use on the empathy skill (Chopik et al., 2017; Gökalp & İnel, 2022), whose relationship with the value of responsibility was revealed by other studies (Sanmartín et al., 2011; Yontar & Yel, 2018; Gökalp & İnel, 2021a). In addition, students' patience and helpfulness scores differ significantly between using the Internet for two hours or less a day and using the Internet for three hours or more, and this difference is in favor of using the Internet for two hours or less (Gökalp, 2022b; Gökalp, 2022c). Hence, daily internet usage time is a factor affecting the empathy skills of students as well as helpfulness, patience and responsibility values, and that parents are responsible for their children's using the internet at home in a controlled manner within the recommended period of time.

The national curriculum in Türkiye has been revised to keep up with the advances in science and technology. Media and digital literacy skills were integrated into the social studies course curriculum, which aims to enable students to use ICTs in a safe, healthy, appropriate and critical way for daily life, work and communication (MoNE, 2018a; 2024). Therefore, social studies teachers are responsible for how and in what way students can benefit from the Internet. Another variable that has a significant effect is gender. This effect, which is in favor of female students, created a difference of .39 between female and male students' responsibility scores. Some studies have reported higher responsibility scores for female students than males (Çalışkan et al., 2019; Gökalp et al., 2021; Kesici, 2018; Yontar & Yel, 2018). In addition, some studies show that girls approach values education at school more positively than boys, and that girls' value levels are higher than boys (Aktepe & Yalçınkaya, 2016; Coşkun & Yıldırım, 2009). Referring to the fact that social roles are strongly linked to culture, Sosik et al. (2016) reported in their research that girls have higher social responsibilities than boys. Furthermore, Kesici (2018) found that girls are given more duties in housework and sibling care, and therefore, their sense of responsibility may be higher than boys. Taken together, gender is a significant factor on responsibility; female students behave more responsibly than males.

Housework is not only for girls, but boys should also be given duties and responsibilities in housework because if an individual grows up in an environment where s/he can take responsibility, s/he becomes responsible. If the necessary environment and opportunities are not provided, a sense of responsibility can hardly develop (Cüceloğlu, 2001). An increase of approximately one point (.85) in the responsibility scores of the children of parents who ask their children for help in housework also supports this conclusion. Therefore, without discrimination between boys and girls, children should be given tasks appropriate to their age and developmental period in the home environment. The age and developmental period here can be seen as an important factor for secondary school students to take responsibility because the ages of the students who make up the sample of the current study correspond to the

beginning of the adolescence period. Children of this period are busier with themselves, not only creating their own value system, but tend to act independently (Berk, 2012). For this reason, in Aslan's (2007) study, responsibility was reported as another value imparted by teachers at the lowest level. These discussions about age and developmental period can be expanded with the findings obtained about the grade level variable.

A negatively significant correlation was observed between the students' responsibility scores and their grade level. From the fifth grade to the seventh grade, a decrease of -.22 was observed in the students' responsibility scores. Considering the studies (Çalışkan et al., 2019; Yıldırım, 2014) showing that students' responsibility scores decrease as the grade level rises, grade level can be considered as an effective factor on the responsibility value of secondary school students.

Another family-related variable that significantly affects students' responsibility scores is the family structure. This effect, which is in favor of students living in nuclear families, caused a difference of .50 between the responsibility scores of students living in nuclear and extended families. Arguing that family structures also change with social changes, Gürsoy & Coşkun (2004, p. 18), who state that the nuclear and extended family are the most important family types brought about by the changes, and they define the nuclear family as a family consisting of parents and a child, and the extended family as a large multi-generational family. In extended families, the authority is in the elders and the spouses may not have the sole say in the education of their own children. In the nuclear family, the opposite is the case: not only authority but also responsibilities are equally distributed. Although children living in extended families have better social skills than those in nuclear families, they have been shown to have increased behavioral problems (Çetin, 2019). On the other hand, it has been observed that parents' inability to spare enough time for their children, conflicts with their own parents and different attitudes in the family may cause children living in extended families to view the family environment negatively (Gürsoy & Coşkun, 2004). These reasons may have affected the students' responsibility scores. Thus, students living in nuclear families have a higher potential to display responsible behaviors than those living in extended families. The last variable that has positively and significantly influences the students' responsibility scores, is the students' first semester social studies course grades. Although an increase is found in the responsibility scores of the students as their social studies course grades increase, the effect seems weak (.05). Therefore, it is difficult to conclude that a student with a high grade in the social studies course also has a very well-developed sense of responsibility. No research claiming otherwise could be found in the literature either. Moreover, there is no evidence regarding how social studies teachers evaluate whether students have gained the value of responsibility, whether questions related to this value are used in the assessment-evaluation tools they use in written exams, so research is needed to enlighten these points.

The data were collected from 28 secondary schools that offer education in the fifth, sixth, and seventh grades and the total number of students in these classes varies between 30 and 897. The location of the schools (village, small town, city center) plays a role in the variation in the total number of students, and the number of social studies teachers for each school varied between 1 and 4. The location of the school, the number of social studies teachers in the school, and the number of students in the school were found to have no statistically significant effect on the students' responsibility scores. The literature on this topic is fairly limited. For example, Sezer's (2008) study, in which a total of 95 social studies teachers, 25 working in a city center, 21 working in a small town, and 49 working in a rural area participated, social studies teachers considered themselves sufficient to teach the value of responsibility. In

addition, it the views of teachers on teaching the value of responsibility were similar regardless of the place of residence. As such, working in a city center or in a village does not change social studies teachers' views on teaching the value of responsibility, and thus have no significant effect on students' responsibility scores.

However, social studies teachers' organizing activities related to values education and assigning homework to students caused an increase of .56 in students' responsibility scores. Therefore, the factor that affects students' responsibility value is not the quantitative characteristics of schools but the qualification of the social studies teacher working in schools. A teacher should have competence in professional knowledge, skills, attitudes, and behaviors in many subjects, ranging from subject knowledge to pedagogical knowledge, from planning instructional processes to assessment-evaluation, including self-assessment (MoNE, 2017a, p. 8). Social studies teachers must have the aforementioned qualifications when it comes to teaching values. 51 curricula in Türkiye were renewed in 2018. Since the curricula applied in schools are crucial for the development of students' value systems by setting social behavior models, values education has been the main focus of schools' curricula, unlike previous curricula (MoNE, 2017b). Unlike the previous curriculum, the content of the 2018 curriculum has been simplified. For example, unlike that of 2005, in the 2018 social studies course curriculum, both learning-teaching and testing situations in the curriculum were left flexible to allow for authenticity and abilities of the teacher. Although examples of activities are not included in the curriculum, teachers were asked to carry out in-class and out-of-class activities (MoNE, 2024; 2018a; 2005). Considering that activities are important in values education (Aktepe, 2015; Purnamasari et al., 2019), and that developing activities and assigning performance tasks are important in teaching the value of responsibility at all levels (Aladağ, 2012; Çetin et al., 2020; Karim & Mustadi, 2018; Onay & Çelik, 2022; Yalçın & Güleç, 2022; Yaman & Anılan, 2021), social studies teachers should be competent in preparing activities, and in this regard, the responsibility falls on 60 universities in Türkiye that train social studies teachers (Higher Education Council [CoHE], 2022).

According to the information obtained from the school administration and teachers during the data collection phase, it was learned that the decision on whether to open a values education club in schools was taken by the school administration together with the teachers. For this reason, some schools were observed to have a values education club, while some others did not. In addition, although some activities used to be carried out in the existing values education clubs before Covid-19, these have been stopped for the last three years due to the pandemic. Moreover, no special time is set aside for club activities in schools. These reasons may help explain why the values education club variable does not significantly affect on the students' responsibility scores.

The final variable that did not have a significant effect on the school level is the school type. Being an Islamic vocational middle school or middle school did not have a statistically significant effect on students' responsibility scores. This can be explained by the implementation of the same curricula in the teaching of basic courses such as social studies, Turkish, Religious culture and Moral Knowledge, although Islamic vocational middle secondary schools in Turkey have compulsory religion courses like the Holy Quran and Arabic, unlike other secondary schools (MoNE, 2018a; 2018b).

No research could be detected on secondary school students regarding this point. However, the study conducted by Kesici (2018) with high school students, revealed that students in vocational high schools and Islamic vocational high schools had significantly higher



responsibility scores than their peers in Anatolian high schools, but the effect of the school type variable on responsibility was low ($\eta^2 = 0.01$). This study has a number of limitations. It is difficult to say that the method used in the research yields a cause-effect relationship between the variables. Conducting a meta-analysis of studies on responsibility education, Öztürk and Güven (2020), concluded that the applied studies on the value of responsibility are limited.

Although schools are important in value education, parents have a responsibility to ensure that their children receive appropriate guidance at home. It is vital for parents to be an example for their children, give them responsibilities in household chores, and make time for them by reducing the time they spend on social media. In addition, it is also seen that both parents and teachers have difficulties in teaching children the value of responsibility; among the reasons why parents do not teach this value is the use of the internet and social media (Çelikkaya & Yılmaz, 2017).

In this study, the effects of variables determined at the student and school level on the responsibility value of secondary school students were analyzed using two-level HLM analysis. Self-control, daily internet usage time, parents' giving responsibility to children in housework and gender are the prominent factors on students' responsibility value. The variable that is effective at school level is social studies teachers' organizing activities on values and responsibility value and giving homework. Research results show that both social studies teachers and student families were found to influence the responsibility value of secondary school students, as well as personal factors. Considering that values education begins in the family and then carries on at school, requiring school-family cooperation, raising a responsible youth is the duty of both parents and social studies teachers. In view of the evaluations and findings of the research, the following are suggested:

- ✓ Experimental studies aiming at revealing the effect on the responsibility value of secondary school students can be planned by developing curriculum related to self-control.
- ✓ In the current study, only the effect of social studies teachers on their students' responsibility value was studied. However, since responsibility is one of the core values taught in all curricula in Türkiye, the effect of different secondary school teachers teaching various other subjects such as Turkish and Religious Culture and Moral Knowledge on students' internalization of the responsibility value can be examined.
- ✓ Considering the finding that self-control, daily internet usage time, parents' giving responsibility for housework and gender are important factors on students' responsibility values, awareness-raising activities can be carried out in these areas.
- ✓ Considering that the effective factor at the school level is that social studies teachers organize activities and assign homework on values and responsibility, the competencies of social studies teachers on this issue can be supported.
- ✓ Considering that the method used in this study has limitations in establishing a cause-and-effect relationship between variables, meta-analysis studies can determine the general trends of studies on responsibility education.
- ✓ Seminars on how students can benefit from the internet and social media can be given in schools, including parents.

References

Ahmadi Joybari, M. (2017). The relationship between self-control and responsibility of the sixth grade girl elementary school students (Case Study: Babolsar City). *Psychology, Social Sciences and Educational Sciences Quarterly Specialized Journal*, 2(1), 63-70. Retrieved from <http://www.Tajournals.com>

- Aktepe, V. (2015). A performance task implementation to improve the responsibility value of 5th graders. *Kastamonu Education Journal*, 23(4), 1511-1534.
- Aktepe, V., & Yalçınkaya, E. (2016). The evaluation of values education at school according to students' views regarding various variables. *Ahi Evran University Journal of Kırşehir Education Faculty*, 17(2), 113-131.
- Aladağ, S. (2012). The effect of values education approaches on students gaining responsibility value in cognitive level in primary school social studies education. *The Journal of Turkish Social Research*, 16(1), 123-146.
- Anderson, L. M., & Prawat, R. S. (1983). Responsibility in the classroom: A synthesis of research on teaching self-control. *Educational Leadership*, 40(7), 62-66.
- Aslan, R. (2007). *Levels of acquiring basic knowledge, skills and values of primary school children according to the viewpoints of their teachers*. (Unpublished master's thesis). Anadolu University.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five Personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1-26. <http://doi.org/10.1111/j.1744-6570.1991.tb00688.x>
- Bazarkulov, S. (2008). Teaching values and learning from religion [Unpublished doctoral dissertation]. Ankara University.
- Berk, L. E. (2012). *Infants and children: Prenatal through middle childhood* (7th ed.). Pearson.
- Berkowitz, M. W., & Bier, M. C. (2005). Character education: Parents as partners. *Educational Leadership*, 63(1), 64-69.
- Bosacki, S. L., Moore, K., Talwar, V., & Park-Saltzman, J. (2011). Preadolescents' gendered spiritual identities and self-regulation. *Journal of Beliefs & Values*, 32(3), 303-316. <http://doi.org/10.1080/13617672.2011.627679>
- Brannon, D. (2008). Character education: It's a joint responsibility: instilling positive character traits in children requires teachers, parents, and administrators to work together. *Kappa Delta Pi Record*, 44(2), 62-65. <http://doi.org/10.1080/00228958.2008.10516496>
- Chamberlin, L. J., & Chambers, N. S. (1994). Developing responsibility in today's students. *The Clearing House: The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 67(4), 204-206. <http://doi.org/10.1080/00098655.1994.9956066>
- Chopik, W. J., O'Brien, E., & Konrath, S. H. (2017). Differences in empathic concern and perspective taking across 63 countries. *Journal of Cross-Cultural Psychology*, 48, 23-38. <http://doi.org/10.1177/0022022116673910>
- CoHE (2022). *All universities with social studies teaching programme*. Available at: <https://yokatlas.yok.gov.tr/lisans-bolum.php?b=10192>
- Coşkun, Y., & Yıldırım, A. (2009). Examining the value levels of university students' in terms of some variables. *Van Yuzuncu Yıl University Journal of Faculty of Education*, 6(1), 311-328.
- Cüceloğlu, D. (2001). *Fighter for a meaningful and enthusiastic life*. Remzi Bookstore.
- Cüceloğlu, D. (2002). *Communication equipment for a life without regrets* (5th ed.). Remzi Bookstore.
- Çalışkan, H., Yıldırım, Y., & Kılınc, G. (2019). Examination of the responsibility and tolerance of students raised in families with different cultural structures. *Education and Science*, 44(199), 353-372. <http://doi.org/10.15390/EB.2019.7986>
- Çelikkaya, T., & Yılmaz, T. (2017). Teachers, students and parents' mutual expectations about value education. *Researcher: Social Science Studies*, 5(9), 395-416.
- Çelikkaya, T., Başarmak, U., Filoğlu, S., & Şahin, B. (2014). Teacher-parents' relations in the efficiency of the value education. *Procedia-Social and Behavioral Sciences*, 116, 1106-1113. <http://doi.org/10.1016/j.sbspro.2014.01.353>

- Çetin, B. (2019). *Comparison of social skill levels and behavioral problems of pre-school children who live in extended and nuclear families*. (Unpublished master's thesis). Beykent University.
- Çetin, F., Bingöl, A. S., Çetin, Ş. (2020). Developing a “values teaching responsibility perception scale” for prospective teachers. *International Journal of Curriculum and Instruction*, 12(2), 457-473.
- Demircioğlu, İ. H., & Tokdemir, M. A. (2008). The role of history education in the process of constructing values: Aims, functions and content. *Journal of Values Education*, 6(15), 69-88.
- Demircioğlu, İ. H., Mutluer, C., & Demircioğlu, E. (2011). The perceptions of the social studies student teachers about democratic teacher. *Kastamonu Education Journal*, 19(2), 577-586.
- Dinç, E., & Üztemur, S. (2016). An investigation of 8th grade students' perceptions of democratic values through cartoons. *Elementary Education Online*, 15(3), 974-988. <http://doi.org/10.17051/ieo.2016.79948>
- Duke, D. L., & Jones, V. F. (1985). What can schools do to foster student responsibility? *Theory into Practice*, 24(4), 277-285. <https://doi.org/10.1080/00405848509543187>
- Ekşi, H., & Katılmış, A. (2020). Conceptual framework: Basic concepts. In H. Ekşi & A. Katılmış (Eds.), *Character and values education (pp. 1-26)*. Nobel.
- Elban, M., & Aslan, S. (2023). The role of constructive patriotism in the relationship of basic human values and active citizenship for emerging adults in Türkiye. *BMC Psychol* 11, 206. <http://doi.org/10.1186/s40359-023-01233-z>
- Espinoza, V. F., & González, J. L. (2023): Virtues and values education in schools: A study in an international sample, *Journal of Beliefs & Values*, 45(1), 69-85. <https://doi.org/10.1080/13617672.2022.2158018>
- Fein, M. D. C. (2000). *Comparison of HLM and Mlwin multilevel analysis software packages: a monte carlo investigation into the quality of the estimates*. (Unpublished doctoral dissertation). University of Maryland.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education*. McGraw-Hill.
- George, D., & Mallery, M. (2010). *SPSS for Windows step by step: A simple guide and reference*. (10th ed.). Pearson.
- Glasser, W. (2002). The effect of a reality therapy programme on responsibility for elementary school children in Korea. *International Journal of Reality Therapy*, 22(1), 33-38.
- Golzar, F.A. (2006). *Development of a responsibility scale for 5th grade elementary students and investigating the relationship of responsibility and gender, locus of control, and academic achievement*. (Unpublished master's thesis). Hacettepe University.
- Gökalp, A. (2021). Responsibility scale: Validity and reliability study. *Future Visions Journal*, 5(1), 31-38. <https://doi.org/10.29345/futvis.175>
- Gökalp, A. (2022a). Examining the factors on the patience value of secondary school students. *Journal of Innovative Research in Social Studies*, 5(1), 34-50. <https://doi.org/10.47503/jirss.1103744>
- Gökalp, A. (2022b). An analysis of the predictive role of love and respect values over the value of fellowship. *Third Sector Social Economic Review*, 57(2), 1364-1374. <https://doi.org/10.15659/3.sektor-sosyal-ekonomi.22.06.1811>
- Gökalp, A. (2022c). Investigation of benevolence value of secondary school students. *Journal of Anatolian Cultural Research*, 6(1), 59-73. <https://doi.org/10.15659/ankad.v6i1.192>

- Gökalp, A., & İnel, Y. (2021a). The mediating role of responsibility and friendship between empathy skill and benevolence. *Journal of Education and Learning (EduLearn)* 15(2), 202-212. <https://doi.org/10.11591/edulearn.v15i2.20168>
- Gökalp, A., & İnel, Y. (2021b). Self-control scale: A validity and reliability analysis. In T. Çetin, Y. İnel & F. Gürgil (eds.), *The pandemic process and new horizons in educational sciences* (pp. 193-207). SRA Academic Publishing.
- Gökalp, A., & İnel, Y. (2022). An analysis of secondary school students' empathy skills in terms of student- and school-related variables. *Educational Policy Analysis and Strategic Research*, 17(1), 40-57. <https://doi.org/10.29329/epasr.2022.248.3>
- Gökalp, A., Uluçınar, U., Değirmenci, N., & Yüksel, K. (2021). A study on the relationship between self-control and responsibility. *Eskisehir Osmangazi University Journal of Social Sciences*, 22(2), 715-726. <https://doi.org/10.17494/ogusbd>.
- Gürsoy, F., & Coşkun, T. (2004). The study of the perception of family life among children living in extended and nuclear families. *Community and Social Work*, 15(2), 17-29.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Prentice Hall.
- Halstead, J. M. (2005). Values and values education in schools. In J.M. Halstead & M.J. Taylor (eds.), *Values in education and education in values* (pp. 2-13). The Falmer Press.
- Hitlin, S. (2003). Values as the core of personal identity: drawing links between two theories of self. *Social Psychology Quarterly*, 66, 118-137. <https://doi.org/10.2307/1519843>
- Hox, J. J. (2010). *Multilevel analysis: Techniques and applications* (2nd ed.). Routledge.
- ICTA (2019). *Child and family relationship in Internet use*. Available at: <https://internet.btk.gov.tr/internet-kullaniminda-cocuk-ve-aile-iliskisi>
- Janakiraman, N., Meyer, R. J., & Hoch, S. J. (2011). The psychology of decisions to abandon waits for service. *Journal of Marketing Research*, 48(6), 970-984. <https://doi.org/10.1509/jmr.10.0382>
- Karim, I., & Mustadi, A. (2018). Training discipline and responsibility: The implementation of values clarification model. *Jurnal Pena Sains*, 5(1), 37-48. <https://doi.org/10.21107/jps.v5i1.3883>
- Kesici, A. (2018). An examination of high school students' level of responsibility according to several variables. *Gazi University Journal of Faculty of Education*, 38(3), 965-985. <https://doi.org/10.17152/gefad.380376>
- Kılcan, B., & Akbaba, B. (2014). Examining students' perceptions on esthetic value in social studies teaching program. *Journal of Theory and Practice in Education* 10(4), 1047-1076. <https://doi.org/10.17244/eku.23868>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). The Guilford Press.
- Krug, M. K., & Carter, C. S. (2010). Anterior Cingulate Cortex contributions to cognitive and emotional processing: A general purpose mechanism for cognitive control and self-control. In R. Hassin, K. Ochsner & Y. Trope (Eds.), *Self-control in society, mind, and brain* (pp. 3-26). Oxford University Press.
- Leyland, A. H., & Groenewegen, P. P. (2023). Hierarchical Linear Modeling. In Maggino, F. (eds), *Encyclopedia of quality of life and well-being research* (pp. 3119-3121). Springer, Cham.
- Lickona, T. (2009). *Educating for character how our schools can teach respect and responsibility*. Bantam Books.
- MacDonald, K. (1995). Evolution, the five-factor model, and levels of personality. *Journal of Personality*, 63(3), 525-567. <https://doi.org/10.1111/j.1467-6494.1995.tb00505.x>
- MoNE (2005). *Primary school social studies course curriculum and guide (Grades 6-7)*. Presidency of the Board of Education and Discipline, State Books Directorate Press House.

- MoNE (2017a). *General competences of teaching profession*. General Directorate of Teacher Training and Development.
- MoNE (2017b). *On our efforts to renew and change the curriculum*. Available at: https://ttkb.meb.gov.tr/meb_iys_dosyalar/2017_07/18160003_basin_aciklamasi-program.pdf
- MoNE (2018a). *Social studies course curriculum (primary and secondary school 4th, 5th, 6th, and 7th grades)*. Ministry of National Education.
- MoNE (2018b). *Imam Hatip secondary schools weekly timetable*. Available at: https://dogm.meb.gov.tr/meb_iys_dosyalar/2018_04/10184831_20180015_06_YHO_Haftalilik_Cizelge_2018-2019.pdf
- MoNE (2024). *Social studies course curriculum (primary and secondary school 4th, 5th, 6th, and 7th grades): Türkiye Century Education Model*. Ministry of National Education.
- Nazirova, Z., & Borbala, S. (2024). Values, attitudes and the behaviour paradigm: a Systematic Literature Review. *Journal of Human Values*, 30(2), 214-239. <https://doi.org/10.1177/09716858241236902>
- NCSS (2002). *National Standards for Social Studies Teachers. National Council for the Social Studies*. Available at: <https://www.socialstudies.org/sites/default/files/NCSSTeacherStandardsVol1rev2004.pdf>
- Onay, İ., & Çelik, Y. (2022). The effect of responsibility value activities on the responsibility acquisition levels of primary school 4th grade students. *Journal of Kazım Karabekir Education Faculty*, 44, 77-89. <https://doi.org/10.54614/AUJKKEF.2022.888282>
- Öner, N. (1987). *Human freedom*. Ministry of Culture and Tourism Publications.
- Oyserman, D. (2015). Values, psychology of. *International Encyclopedia of the Social & Behavioral Sciences*, 25, 36-40. <https://doi.org/10.1016/b978-0-08-097086-8.24030-0>
- Özen, Y. (2015). *Responsibility training*. Vize.
- Öztürk, A., & Güven, S. (2020). Analysing studies conducted on responsibility education in Türkiye: A meta-synthesis study. *Elementary Education Online*, 19(2), 865-888. <https://doi.org/10.17051/ilkonline.2020.695280>
- Purnamasari, H., Asrori, A., & Warneri, W. (2019). The development of learning module in social knowledge on economic activity based on living value education of responsibility value. *Journal of Education, Teaching and Learning*, 4(2), 389-394. <https://doi.org/10.26737/jetl.v4i2.1922>
- Raudenbush, S.W., & Bryk, A.S. (2002). *Hierarchical linear models* (2nd ed.). Sage.
- Rokeach, M. (1973). *Nature of human values*. The Free Press.
- Sanmartín, M. G., Carbonell, A. E., & Baños, C. P. (2011). Relaciones entre empatía, conducta prosocial, agresividad, autoeficacia y responsabilidad personal y social de los escolares. *Psicothema*, 23(1), 13-19.
- Schwartz, S. H. (1992). Universals in the content and structure of values, theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Edt.), *Advances in experimental social psychology*, 25 (pp. 1-65). Academic Press.
- Selanik-Ay, T., & Dal, S. (2014). Primary school students' perceptions of responsibility value with their written expression products. *Journal of Dicle University Ziya Gökalp Faculty of Education*, 22, 78-93.
- Sezer, A., & Çoban, O. (2016). Responsibility value perception of secondary school students. *Uşak University Journal of Educational Research*, 2(1), 22-39. <https://doi.org/10.29065/usakead.232420>
- Sezer, T. (2008). *The view of teachers about teaching the value of responsibility in social studies lesson in the 6th grade of primary education*. (Unpublished master's thesis). Gazi University.

- Snijders, T., & Bosker, R. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Sage.
- Sosik, J. J., Koul, R., & Cameron, J. C. (2016). Gender and contextual differences in social responsibility in Thai schools: a multi-study person versus situation analysis. *Journal of Beliefs & Values*, 38(1), 45-62. <https://doi.org/10.1080/13617672.2016.1237251>
- Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Pearson.
- Temel, A. (2022). *Investigation of secondary school student's value perceptions and attitudes regarding physical education and sports lesson*. (Unpublished doctoral dissertation). Niğde Ömer Halis Demir University.
- Tokdemir, M. A. (2016). Values or skills: History teacher candidates' perceptions about objectives of teaching of history. *Turkish Studies -International Periodical for the Languages, Literature and History of Turkish or Turkic-* 11(3), 2225-2242. <https://doi.org/10.7827/TurkishStudies.9027>
- Tonga, D. (2017). Social Studies Teacher as a Role Model. *Kırıkkale University Journal of Social Sciences*, 7(2), 17-30. <https://dergipark.org.tr/en/pub/kusbd/issue/30549/303901>
- TSI (2021). *Household information technology (IT) usage survey*. Available at: [https://data.tuik.gov.tr/Bulten/Index?p=Survey-on-Information-and-Communication-Technology-\(ICT\)-Usage-in-Households-and-byIndividuals-202137437](https://data.tuik.gov.tr/Bulten/Index?p=Survey-on-Information-and-Communication-Technology-(ICT)-Usage-in-Households-and-byIndividuals-202137437)
- Ulusoy, K., & Dilmaç, B. (2018). *Values education* (5th ed.). Pegem Academy.
- Ülken, H. Z. (2016). *Knowledge and value* (3rd ed.). Doğu Batı Publications.
- Yalçın, A. & Güleç, S. (2022). The effect of responsibility-based activities in social studies course on gaining the value of responsibility to students. *European Journal of Educational Sciences*, 9(22), 74-89.
- Yaman, E. (2016). *Values education: New horizons in education* (4th ed.). Akçağ Publications
- Yaman, H. & Anılan, B. (2021). Values education in science lessons with activities: Responsibility value. *Science Education International*, 32(3), 237-247. <https://doi.org/10.33828/sei.v32.i3.7>
- Yavuzer, H. (1998). *Child education handbook*. Remzi Bookstore.
- Yıldırım, Y. (2014). *Analysis of moral maturity levels and social attitudes of the 5th and 6th grades of secondary school*. (Unpublished master's thesis). Erzincan University.
- Yontar, A., & Yel, S. (2018). The relationship between empathy and responsibility levels of 5th grade students: A sample from Türkiye. *International Journal of Education & Literacy Studies*, 6(4), 76-84. <https://doi.org/10.7575/aiac.ijels.v.6n.4p.76>
- Yontar, A., & Yurtal, F. (2009). Investigation of sanctions used by teachers for improving responsibility. *Education and Science*, 34(153), 144-156.
- Zajda, J. (2023). *Discourses of globalisation, cultural diversity and values education*. Springer.

Declarations

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Conflict of Interest: The authors declare that they have no conflict of interest.

Informed Consent: All procedures followed were by the ethical standards of the committee responsible on human experimentation (institutional and national) and with



the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants for being included in the study.

Data availability: *The original form and data of this study are available from the corresponding author upon reasonable request.*