



Research Article

**AN INVESTIGATION OF TOURISM STUDENTS ATTITUDES TOWARD ECOLOGICAL  
DILEMMAS AND THEIR PERCEPTIONS OF SOCIAL RESPONSIBILITY IN TERMS OF  
SOCIAL VALUE ORIENTATION**

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**Abstract**

Social value orientation is an important determinant of cooperative motives, strategies, and behavior choices. It reflects individuals' consistent preferences for specific outcome patterns for themselves and others. Understanding social value orientation is key to comprehending individuals' behavior regarding social and ecological issues. Therefore, it can significantly shape individuals' perceptions of social responsibility and their attitudes toward ecological dilemmas. Examining whether the attitudes of tourism students differ in terms of environmental and social responsibility based on their social value orientation is important for developing educational policies and the sector's sustainability vision. This study aims to determine the social value orientations of tourism students, examine their attitudes toward ecological dilemmas, and test whether their attitudes and understanding differ according to their social value orientations. To this end, 280 questionnaires were collected from students at Nevşehir Hacı Bektaş Veli University Faculty of Tourism using the survey technique and analyzed. The Three Dominant Social Value Orientation Scale, the Attitude Scale Regarding Ecological Dilemmas, and the Social Responsibility Scale were used for measurement. The results revealed that prosocial orientation was the most embraced social value orientation among the participating students. Furthermore, students with prosocial value orientations were found to be more sensitive to ecological dilemmas. Finally, the study found that students' attitudes toward ecological dilemmas differed according to their social value orientations. The study found that participating students' attitudes toward ecological dilemmas differed according to their social value orientations. However, their perception of social responsibility did not differ according to their social value orientation. The results of the study reveal that the social value orientations of students studying tourism education influence their perception of ecological dilemmas and environmental sensitivity. However, the understanding of social responsibility is influenced by more complex factors. In this respect, the study contributes to the development of sustainability and social awareness strategies in tourism education.

**Keywords:** Social Value Orientation, Ecological Dilemmas, Social Responsibility, Tourism Education

**Introduction**

Decision-making in complex social settings affects not only one's own well-being but also has important consequences for others. Sometimes, people must choose between improving the welfare of others and giving up resources without expecting any direct benefits. For example, one might have to decide whether to donate money to a stranger in need, volunteer at a nursing home, or return a lost item to its owner. Purely selfish, money-maximizing behavior would strictly choose the option with the highest personal return while disregarding the consequences for others (Fiedler, Glöckner, Nicklisch, and Dickert, 2013). Social psychologists have long examined the consequences of individual differences in social value orientation (SVO). SVO refers to people's tendency to prioritize the well-being of others over their own. In other words, it refers to people's preferences for themselves versus others (Bogaert, Boone, and Declerck, 2008).

In the related literature, social value orientation is generally associated with social dilemmas. This is because social value orientation is one of the factors that determine individuals' goals in social dilemmas (Boaert et al., 2008; Messick and McClintock, 1968). A social dilemma is a situation in which a group of individuals ( $N > 2$ ) must choose between maximizing their own interests or the common interest. While it is usually more profitable for each person to maximize selfish interests, if everyone chooses to do so, they will be worse off than if they had chosen to maximize common interests (Komorita and Park, 2018). Ecological dilemmas are

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social dilemmas whose object is nature and whose subject is the individual. Therefore, people's attitudes and behaviors toward nature are effective in ensuring the sustainable use of resources.

Since the middle of the last century, our planet has experienced an increasing number of environmental issues that endanger nature and human life (Hoffman and Sandelands, 2005; Manoli, Johnson and Dunlap, 2007). Rapid industrialization, technological advances, and urbanization have led to ecological issues such as deforestation, species extinction, freshwater resource depletion, reduced agricultural land, soil and air pollution, and global warming (Kortenkamp and Moore, 2007). Humans are the most influential species in shaping the world to suit their needs and comfort (Gifford and Nilsson, 2014). Therefore, ecological problems are mostly caused by human activities and are long-term. Any human interaction with the environment that alters the ecosystem has consequences, which can accumulate. Before the 20th century, it was believed that the environment could regenerate and reach equilibrium under low-stress conditions (Koval et al., 2019). However, the natural environment lacks sufficient resources for regeneration and is continuously impoverished (Mowforth and Munt, 2015). Therefore, individual decisions play a crucial role in mitigating negative human-induced situations that could lead to significant destruction in the future. In these situations, individuals can prioritize their own interests or the common interest. If everyone prioritizes their own interests, it could lead to global destruction.

However, solving society's ecological problems depends largely on individuals' willingness to engage in environmentally responsible behavior. In recent years, political authorities and environmental groups have tried to encourage individuals to save energy, recycle, and buy products with recycled content. For such incentives to be successful, though, it is important to understand the social psychological processes that affect individuals' attitudes and behaviors toward the environment. For instance, Stern (1992) asserts that individual values and motives, such as individualism or altruism, may influence environmental behaviors; however, the relationship between these social values and decision-making remains unclear. Therefore, it is important to examine the factors influencing individuals' attitudes toward ecological issues and their perceptions of social responsibility. Studies in the literature (Dunlap, Grieneeks and Rokeach, 1983; Naess, 1989) also emphasize the importance of examining the relationship between human values and environmental behavior. In this study, therefore, attitudes toward ecological dilemmas and perceptions of social responsibility will be examined in terms of social value orientation.

Tourism is one of the largest and fastest-growing industries in the global economy. It utilizes the natural environment as an input. This rapid and sometimes uncontrolled growth has significant positive and negative impacts. Since the tourism sector is directly related to the natural environment, the impacts are mostly seen and felt by the environment itself. If not planned properly, tourism can cause ecological problems, especially through the misuse of natural resources, such as freshwater, forests, and marine life. For instance, in some destinations, tourism development has led to severe water shortages, affecting local communities and industries. Forests and agricultural areas have also been damaged. Biological and physical resources attract tourists. However, the pressure that tourism activities exert on fragile ecosystems accelerates their depletion. Paradoxically, therefore, the success of tourism can lead to the degradation of the natural environment. Conversely, tourism can deplete natural resources and diminish a destination's appeal (Gazta, 2018). A large number of tourists can contribute to negative environmental impacts at a destination, such as pollution of natural areas like national parks and beaches, increased energy demand, destruction of coral reefs and natural vegetation, and deforestation. These issues raise environmental concerns. Concerns about the environmental and natural resource impacts of tourism activities are part of the ecological dilemma related to these activities. Since the tourism industry relies on the natural environment, which is not a limitless resource, it is crucial to use resources sustainably to ensure they are available for future generations. Given these issues, it is important to understand future tourism managers' attitudes and perceptions of social responsibility when faced with ecological dilemmas and to evaluate their social value orientation. Such analyses are necessary to improve tourism education, create sustainable, ethical industry policies, contribute to students' personal development, and raise social awareness.

### **Social Value Orientation (SVO)**

Values are closely related to people's feelings, thoughts, and behaviors. According to social scientists, values are fundamental to explaining human behavior (Kuşdil and Kağıtçıbaşı, 2000). In this context, individual differences in social value orientation, which refers to people's preferences for themselves and others, have been examined for a long time. SVO refers to a person's preference for their own outcome and the outcome of others (Messick and McClintock, 1968) and is an important determinant of cooperative motives, strategies,

and choice behavior (Kollock, 1998; McClintock and Van Avermaet, 1982). SVO reflects stable preferences for certain outcome patterns for oneself and others (Van Lange, Otten, De Bruin, and Joireman, 1997). Some authors claim that SVO is a basic, stable personality trait, accepting the idea that different social value orientations can be partially explained by biological differences (De Cremer and Van Lange, 2001; Van Lange et al., 1997). However, other studies suggest that SVO is related to individuals' genetic characteristics and childhood experiences (Van Lange et al., 1997).

Early research on social value orientation was inspired by Messick and McClintock (1968), who pioneered a technique for measuring motives in social dilemmas known as decoupled play. In a decoupled game, participants choose between options that award points to themselves and another person. They are instructed to imagine that they will never meet or interact with the other person and will never receive feedback about their choices. These conditions remove strategic considerations from the choice. Consequently, choices in decoupled games are often considered an indicator of a person's social values or motives (Balliet, Parks, and Joireman, 2009).

The literature frequently uses the following classifications of social value orientation: prosocial, individualistic, and competitive. These three SVOs are the most frequently cited values due to the ease with which they can be evaluated using the partially decomposed games technique (Kuhlman and Marshello, 1975; Messick and McClintock, 1968). Prosocial individuals positively value their own and others' outcomes; therefore, they aim to maximize the sum of their and others' gains, i.e., the community's welfare. Van Lange (1999) has shown that prosocial individuals also value equality between their outcomes and those of others. Thus, they aim to maximize equality of gains. Individualists place a positive value on their own outcomes but do not value the outcomes of others; therefore, they only aim to maximize their own outcomes. Competitors, on the other hand, value their own outcomes positively but negatively value the outcomes of others. Thus, they aim to maximize the difference between their own gains and the gains of others (Au and Kwong, 2004; Bogaert et al., 2008; Karagonlar and Kuhlman, 2013).

### **Ecological Dilemmas**

People experience conflicts and dilemmas regarding many issues because they are caught between their own desires and societal expectations in all their decisions throughout their lives. One issue that leads individuals to dilemmas is the conflict over natural resources. Attitudes and values toward the environment affect individuals' decisions in ecological dilemmas. Yalçın (2009) states that these attitudes can be defined as ecological dilemmas because they reflect a social dilemma involving multiple people. For this reason, he defines ecological dilemmas as social dilemmas in which individuals think they can influence others and nature when they perceive themselves as subjects and think others can influence them and nature when they perceive others as subjects. In other words, ecological dilemmas are social dilemmas in which the specific object is nature and the specific subject is the individual (Yalçın, 2009).

According to Aykal, Gümüş, and Akça (2009), the environmental dilemma of human beings dates back 10,000 years, to when they began settling and using forest areas for agriculture. They also state that this process started on a small scale and accelerated with socioeconomic and cultural developments, reaching larger dimensions with the Industrial Revolution. A Danish proverb aptly describes this situation: Do not despise a small wound, a poor relative, or a humble enemy (Hardin, 1970). Thus, natural resources and the environment have sustained irreparable damage from this sharp transformation, during which humankind gained cognition and realized the agricultural revolution (Çalışkan, 2017).

According to Hardin (1968), many ecological dilemmas arise from the conflict between personal and common interests. Hardin exemplifies this idea in "The Tragedy of the Commons" with a resource dilemma. In this example, a shepherd believes that the benefits of having an additional animal outweigh the negative effects of increasing the total number of animals grazing in the commons. After considering all the factors, the rational shepherd concludes that the only rational course of action is to add one more animal to his herd. However, every rational shepherd who shares the same commons reaches this same conclusion. This is where the tragedy arises. Every human is locked into a system that forces them to increase their herds indefinitely in a world with limited resources. In a society that believes in the freedom of the commons, destruction is the inevitable result of everyone pursuing their own self-interest. Freedom in the commons leads to the destruction of all. Assuming that humans are inherently selfish, Hardin sees no solution to this dilemma other than government-imposed restrictions on freedom or mutual coercion by agreement.

Hardin (1970) argue that the beauty of ecology as a cause is that everyone is guilty because everyone consents to the system of regulations and practices that create ecological crises. For example, replacing "pesticide" with "biocide" does not make chlorinated hydrocarbons any more innocent. However, dams do not actually accomplish their intended purpose when they are built to provide a reliable water supply for irrigation and to generate electricity. The floodplains below the dam will be deprived of fertile alluvium due to alluvium accumulating behind the dam and will have to be artificially fertilized. Without the washing effect of periodic floods, the irrigated plains will become saline and eventually unusable unless expensive countermeasures are taken. Irrigation substitution will also favor the proliferation of water snails. This will result in a reduction and loss of nutrients in already limited productive agricultural areas. The initial intention was to do one good thing. Therefore, interventions in nature should always be viewed with skepticism.

### **Social Responsibility**

Responsibility involves accepting the consequences of one's actions, being reliable and trustworthy, and having a sense of obligation to the group. According to Gough, McClosky and Meehl (1952), it does not require the individual to lead or direct group activities. Harris (1957) defines responsibility as a combination of attitudinal elements reflecting behaviors classified as reliable, accountable, loyal, or effective work. According to Çankaya (2010), responsibility is an aspect of being human and relating to society. For this reason, responsibility includes taking into account the psychological, social, and emotional needs of others, comparing one's expectations with societal expectations, and considering social interests when acting.

Social responsibility is the awareness individuals have of social problems. Depending on the needs and demands of the group or society in which actions are carried out, its scope may vary. Therefore, social responsibility is the voluntary activity of individuals acting in accordance with the societal values and norms without expecting any benefit (Eraslan, 2011). Although social responsibility is understood as a responsibility imposed by values, it gains value itself when it transforms from potential meaning into action. For example, "not evading taxes" is an acceptance of responsibility based on principles. When this becomes a widespread action accompanied by the appropriate attitudes and behaviors, it becomes a value (Özkul, 2010).

Social responsibility is defined as an attitude toward behavior (Yalçın, 2009) and a phenomenon that shapes individuals' behavior (Ergül and Kurtulmuş, 2014). Gough, McClosky, and Meehl (1952) define a socially responsible individual as someone who accepts the consequences of their behavior, is reliable and honest, and has obligations to the group. Thus, individuals acting with social responsibility consider the possible effects of their behavior on society or the environment (Ergül and Kurtulmuş, 2014). According to Berkowitz and Daniels (1964), people tend to help those dependent on them achieve a goal when they believe it is socially responsible behavior, i.e., when they feel socially responsible.

According to Berman (1990), social responsibility is a personal investment in the well-being of others and the planet, and it does not just happen. A culture that values intention, attention, time, empowerment, cooperation, compassion, and respect is necessary. According to Eraslan (2011), social responsibility is voluntary. It involves being aware of what is happening in social life and an emotional process. It can be taught and is oriented toward all areas of society, both public and private.

### **Social Value Orientation, Ecological Dilemmas and Social Responsibility**

Early research on social value orientation was inspired by Messick and McClintock (1968), who pioneered a technique for measuring motives in social dilemmas known as dissociated play (Balliet, Parks, and Joireman, 2009). Messick and McClintock first introduced the concept of SVO, and since then, it has been used to analyze "social values" (McClintock and Van Avermaet, 1982), "interpersonal orientation" (Swap and Rubin, 1983), and "social orientation" in child development (Kagan and Knight, 1981). It has evolved into similar constructs with different labels, such as "allocentrism/idiocentrism" in organizational studies (Triandis, Leung, Villareal, and Clack, 1985) and "strong reciprocity" in economics (Gintis, Bowles, Boyd, and Fehr, 2003). These constructs recognize that people differ in how they resolve social dilemmas because they differ in what they see as "just" or "rational" (Bogaert, Boone, and Declerck, 2008).

The basic assumption underlying research on social value orientation is that individuals consider not only their own outcomes in interdependent situations, but also the outcomes of others (Messick and McClintock, 1968) and value equitable outcomes (Van Lange, 1999). Thus, SVO reflects consistent individual differences in intrinsic fairness and equity (Pletzer et al. 2018). However, the SVO framework assumes that people's motivations or goals differ when evaluating various resource allocations between themselves and another person. For instance, an individual may seek to maximize their own payoff (individualistic), maximize

(competitive) or minimize (inequality averse) the difference between their payoff and the other person's payoff, or maximize joint payoff (prosocial) (Fiedler et al. 2013).

SVO provides a framework for characterizing how individuals value shared outcomes (Messick and McClintock, 1968). Studies have shown that a person's social value orientation significantly influences their behavior in social and ecological dilemmas (Au and Kwong, 2004; Balliet et al. 2009; Bogaert et al., 2008). In various social dilemma paradigms (e.g. prisoner's dilemma, public goods, and resource dilemmas), prosocial individuals have been observed to exhibit more cooperative behavior when considering the welfare of the community than proself individuals (Balliet et al. 2009). Additionally, pro-community individuals tend to contribute more to social campaigns (Van Lange, Bekkers, Schuyt, and Van Vugt, 2007), demonstrate greater environmental sensitivity (Van Vugt, Meertens, and Van Lange, 1995), and are more likely to fulfill their tax payment obligations (Brizi, Giacomantonio, Schumpe, and Mannetti, 2015). Compared to individuals, prosocial individuals are more likely to adopt justice and reciprocity norms (Van Lange, 1999) and have a greater awareness of social responsibility (de Cremer and Van Lange, 2001).

De Groot and Steg (2007) state that values influence people's awareness of the environmental consequences of their behavior. When important environmental values are threatened, awareness of these consequences increases, prompting people to adjust their behavior to reduce the threat. One of the most emphasized environmental behaviors today, for example, is choosing to commute to work by car or public transportation. This choice inherently involves a dilemma between immediate self-interest and long-term collective interests (Joireman, Van Lange, and Van Vugt, 2004). Individual concerns include travel time, convenience, and flexibility, while environmental pollution, traffic congestion, and public health are collective concerns. Research findings on social value orientation show that prosocials generally prefer public transportation, whereas individuals prefer commuting by car (Van Vugt, Van Lange, and Meertens, 1996). However, Cameron, Brown, and Chapman (1998) found that, when evaluating a transportation pollution reduction scheme, individuals perceived higher personal costs and showed less support than prosocials. Joireman et al. (2001) also emphasize that prosocial individuals tend to show greater willingness to engage in proenvironmental behavior.

Based on the above explanations, this study assumes that the attitudes of tourism students toward ecological dilemmas and their perceptions of social responsibility differ according to their social value orientations. The following hypotheses will be tested:

H1<sub>1</sub>: Students' attitudes toward ecological dilemmas differ according to their social value orientations.

H2<sub>1</sub>: The social responsibility perceptions of the students participating in the study differs according to their social value orientations.

Social value orientations (prosocial, individualist, or competitive) can significantly impact how individuals perceive social responsibility and their attitudes toward ecological dilemmas. Therefore, to improve educational policies and the sustainability vision of the tourism sector, it is important to examine whether the attitudes of tourism students differ according to their social value orientations in the context of environmental and social responsibility. The literature contains studies on the social value orientations, attitudes toward social dilemmas, and perceptions of social responsibility of students at the primary, high school, and university levels. However, no study has examined these three variables together among tourism students. Thus, this study aims to contribute to the development of value-based strategies for tourism education and sector policies by revealing the relationship between the social value orientations, ecological sensitivity, and social responsibility perceptions of future tourism professionals.

### **Research Methodology**

This study aims to determine the social value orientations of tourism students, examine their attitudes toward ecological dilemmas, and assess their perceptions of social responsibility. Additionally, it seeks to determine if students' attitudes toward ecological dilemmas and their perceptions of social responsibility differ according to their social value orientations. To achieve this aim, a questionnaire was used to collect data. The Triple Dominance Measure of Social Value was used to determine the social value orientation of the participants in the study. Van Lange et al (1997) developed this scale based on those used in previous studies (Van Lange, Agnew, Harinck, and Steemers, 1997; Van Lange and Kuhlman, 1994). Table 1 below provides an example of the three dominant social value orientation scales. Table 1 shows a sample item from each SVO measure. In each measure, participants distribute points between themselves and another hypothetical individual ("the

other"). As seen in the example, participants were told that the "other" was someone they did not know and would never meet.

**Table 1. Example of Three Dominant Social Value Orientation Scales**

	A	B	C
You get	500	500	550
Other gets	100	500	300

Furthermore, the instructions indicated that the other person could make a choice as well, ensuring that the choice situations were framed as involving interdependence between the participants. Finally, the results were presented in terms of points, and participants were asked to imagine that these points had value for both themselves and the other person. As the example shows, in SVO, participants chose from three options: Option A: 480 points for oneself and 80 points for the other person; Option B: 540 points for oneself and 280 points for the other person; and Option C: 480 points for oneself and 480 points for the other person. Option A represents a competitive choice because it provides a greater difference between one's own outcomes and those of the other person ( $480 - 80 = 400$ ) than Options B and C ( $540 - 280 = 260$  and  $480 - 480 = 0$ , respectively). Option B is an individualistic choice because one's outcomes (540) are greater than those of Options A and C (both 480). Option C is a prosocial choice because it yields a larger joint outcome ( $480 + 480 = 960$ ) than Options A ( $480 + 80 = 560$ ) and B ( $540 + 280 = 820$ ). Participants are classified as prosocial, individualistic, or competitive if they consistently make six out of nine choices that align with one of the three SVOs. In other words, participants are classified as prosocial, individualistic, or competitive if they make at least six consistent choices with one of these SVOs.

To measure students' attitudes toward ecological dilemmas, the seven-item, Likert-type Attitude Scale on Ecological Dilemmas (1 = strongly disagree, 4 = strongly agree) developed by Yalçın (2009) was used. Students' perception of social responsibility was measured using the eight-item, Likert-type Social Responsibility Scale (1 = strongly disagree, 4 = strongly agree) developed by Berkowitz and Lutterman (1968), based on Harris's (1957) scale.

The study's population consisted of undergraduate tourism students at Nevşehir Hacı Bektaş Veli University's Faculty of Tourism. The convenience sampling method was used, and the questionnaires were administered to students attending courses. Before administering the surveys, *an application was submitted to the Nevşehir Hacı Bektaş Veli University Ethics Committee to assess the form's compliance with ethical standards. The research was approved on February 28, 2025, with the approval number 2025.02.64.* Students were asked if they wanted to participate in the research. Students were asked if they wanted to participate in the study and were given instructions on how to complete it. As a result, a total of 280 usable responses were obtained.

## Findings

Before analyzing the data, we examined whether it met the conditions of a normal distribution and whether it was reliable and valid. Skewness and kurtosis coefficients were used to determine the normality of the data distribution. According to Hair et al. (2018), the kurtosis and skewness values should be between +1 and -1 in a normal distribution. In this study, the skewness and kurtosis values were found to be between -1 and +1. Additionally, factor analyses regarding the data's validity revealed a single-factor structure for ecological dilemmas (eigenvalue = 3.242, explained variance = 71.342%) and social responsibility perceptions (eigenvalue = 4.547, explained variance = 76.835%). The Cronbach's alpha scores for both scales exceeded the 0.70 score recommended by Nunnally (1967): ecological dilemma (0.862) and social responsibility perceptions (0.894).

**Table 2. Demographic Characteristics of Participants**

Demographic Characteristics	Frequency (f)	Percentage (%)
Gender	Female	181 64.6
	Male	99 35.4

<b>Department</b>	Gastronomy and Culinary Arts (GCA)	127	45.4
	Tourism Management (TM)	76	27.1
	Tourism Guidance (TG)	77	27.5
<b>Grade</b>	1	105	37.5
	2	64	22.9
	3	63	22.5
	4	48	17.1

Table 2 shows the demographic characteristics of the respondents. The sample contained a higher proportion of females (64.6%) than males (35.4%). The sample was distributed among the following departments: Gastronomy and Culinary Arts (45.4%), Tourism Guidance (27.5%), and Tourism Management (27.1%). Most of the sample was first-year students (37.5%).

**Table 3. Social Value Orientations of Students Participating in the Study**

<b>Social Value Orientation</b>	<b>f</b>	<b>%</b>
Prosocial	114	40,7
Individualist	81	28,9
Competitor	44	15,7
Unclassifiable	41	14,6

Table 3 presents the findings regarding the social value orientations of the students participating in the study. According to the table, the most adopted value orientation was prosocial (40.7%). Twenty-eight point nine percent (%28.9) of the students displayed an individualistic orientation. 15.7% of students displayed a competitive orientation. The table also shows that 14.6% of students could not be categorized in terms of any social value orientation. This may be due to inconsistent participant responses or a lack of clear orientation display. Overall, Table 3 shows that prosocial social value orientation is dominant among students, though individualism and competitiveness are also present. These findings demonstrate that individuals with various social value orientations coexist within the sample.

**Table 4. Social Value Orientations of Students by Department**

<b>Social Value Orientation</b>	<b>Department</b>					
	<b>GCA</b>		<b>TM</b>		<b>TG</b>	
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>
Prosocial	47	16.8	31	11.1	36	12.9
Individualist	36	12.9	23	8.2	22	7.9
Competitor	22	7.9	12	4.3	10	3.6
Unclassifiable	22	7.9	10	3.6	9	3.2

Table 4 shows the distribution of students' social value orientations by department. It shows that Gastronomy and Culinary Arts (GCA) students have higher rates of all social value orientations than students in other departments. The highest rate of prosocial orientation (16.8%) was observed in GMS students. The Tourist Guidance (TG) department followed with 12.9%, and the Tourism Management (TM) department followed with 11.1%. The highest rate of individualistic social value orientation (12.9%) was also observed in GCA students. The rates were 8.2% for TM students and 7.9% for TG students. GCA students stand out in this social value orientation with a rate of 7.9%. TM and TG students have lower rates of 4.3% and 3.6%, respectively. Finally, the highest percentage of students who could not be categorized in terms of any social value orientation was in the GCA department (7.9%). The TM and TG departments had rates of 3.6% and 3.2%, respectively.

**Table 5. Mean Scores and Standard Deviations by Ecological Dilemma and Social Responsibility**

Social Value Orientation	Ecological Dilemma <sup>1</sup>		Social Responsibility <sup>1</sup>	
	Mean	Std. Dev.	Mean	Std. Dev.
Prosocial	3.12	0.44	3.08	0.45
Individualist	3.10	0.35	3.07	0.36
Competitor	2.91	0.49	3.02	0.47
Unclassifiable	2.96	0.59	3.01	0.51
<b>Total</b>	3.06	0.46	3.06	0.44

<sup>1</sup>Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

Table 5 shows the mean and standard deviation values of students' attitudes toward ecological dilemmas and their perceptions of social responsibility. With 1 representing strongly disagree and 4 representing strongly agree, means and standard deviations were calculated for social dilemmas by ethical dimension. According to the table, students with prosocial social value orientation had the highest mean ( $\bar{x}$  = 3.12,  $sd$  = 0.44). This result indicates that students with prosocial SVO are more sensitive to environmental ethical issues. Individualistic students ( $\bar{x}$  = 3.10,  $sd$  = 0.35) and uncategorized students ( $\bar{x}$  = 2.96,  $sd$  = 0.59) had similar mean values. The lowest mean was observed in students with competitive SVO ( $\bar{x}$  = 2.91,  $sd$  = 0.49). The lower mean values of competitive students indicate that this group may be less sensitive to environmental ethical issues.

As shown in Table 5, a similar situation exists in terms of social responsibility. Prosocial students have the highest mean score for social responsibility perceptions ( $\bar{x}$  = 3.08,  $sd$  = 0.45), revealing that they are sensitive to both ecological and social responsibility issues. Students with individualistic ( $\bar{x}$  = 3.07,  $sd$  = 0.36) and competitive ( $\bar{x}$  = 3.02,  $sd$  = 0.47) social value orientations show similar results. Overall, students' levels of social responsibility perceptions are quite similar.

The first hypothesis of the study is that the attitudes of participating students toward ecological dilemmas differ significantly according to their social value orientations. A one-way analysis of variance (ANOVA) was conducted to test this hypothesis. The results are presented in Table 5.

**Table 6. One-Way Analysis of Variance**

SVO	N	$\bar{x}$	sd	f	P
Prosocial*	114	3.12	0.44	3.242	0.023
Individualist	81	3.10	0.35		
Competitor*	44	2.91	0.49		
Unclassifiable	41	2.96	0.59		
<b>Total</b>	280	3.06	0.46		



According to the results of the analysis, there is a significant difference in attitudes toward ecological dilemmas among students with different social value orientations ( $F = 3.242$ ,  $p < 0.05$ ). In other words, students' attitudes toward ecological dilemmas differ according to their social value orientations. These results support hypothesis H1<sub>1</sub>. Tukey test was conducted to determine which groups differed. The results of the Tukey test revealed a significant difference in attitudes toward ecological dilemmas between students with prosocial ( $\bar{x} = 3.12$ ,  $sd = 0.44$ ) and competitive ( $\bar{x} = 2.91$ ,  $sd = 0.49$ ) social value orientations.

As previously mentioned, the second hypothesis of the study is that the perceptions of social responsibility among students participating in the research will show significant differences according to their social value orientations. A one-way analysis of variance was conducted to test this hypothesis. According to the results of the analysis, no significant difference was found in the students' perceptions of social responsibility according to their social value orientations ( $F = 0.363$ ,  $p > 0.05$ ). In other words, the social responsibility perceptions of the students does not differ according to their social value orientations. According to these results, hypothesis H2<sub>0</sub> was supported.

## Conclusion

People experience a wide range of diverse and interdependent situations with others in their daily lives. In these situations, each person's decisions and actions can affect their own and others' outcomes. Having expectations about how others will behave in interdependent situations is necessary to ensure successful coordination, prevent abuse, and achieve mutually beneficial outcomes. This is especially true in situations involving conflicting interests, such as social dilemmas. Social value orientation is an important personality dimension for understanding individuals' behavior in social and ecological dilemmas. The behaviors of prosocial individuals who prioritize the common good make them socially responsible, increasing their sensitivity to environmental problems. Social responsibility is an individual virtue and a basic building block of a sustainable environment and society. In this context, understanding individuals' SVO can guide the development of environmental policies and education programs.

This study examined the attitudes of tourism students toward ecological dilemmas and their perceptions of social responsibility according to their social value orientations. First, the social value orientations, attitudes toward ecological dilemmas, and levels of perceptions of social responsibility of the students were determined. The findings revealed that the most prevalent social value orientation among the participating tourism students was prosocial SVO. This indicates that tourism students value cooperation, solidarity, and collective benefit. It can be said that individuals who grow up in societies with a strong culture of social solidarity, such as Turkey, are expected to adopt a prosocial orientation. However, the presence of students with individualistic social value orientations indicates that they care about both the common good and individual interests. This may indicate that today's youth also value personal development, freedom, and individual success. Although competitive SVO is lower than the other SVOs, it is still considerable. This may indicate that pressure to succeed and a performance orientation are effective in today's societies. However, the significant proportion of students who cannot be categorized according to any social value orientation is another finding of the study that should be considered. The absence of a clear social value orientation among participants may be due to conflicting responses to the instrument, indecisiveness, or an absence of a clearly defined sociocultural value system. Additionally, it should be noted that these students may have complex or multiple value orientations (e.g., prosocial and individualistic). These findings suggest that, although values of solidarity and social benefit are strong among young people, values of individual achievement and competition are also internalized.

The study also examined the social value orientations of tourism students according to their departments. The research findings revealed that GCA students exhibited a stronger presence in all three social value orientations compared to students in other departments. This indicates that students in this department develop more diverse social value structures. Notably, the higher proportion of GCA students with a prosocial value orientation indicates a strong tendency toward cooperation, solidarity, and social benefit. Due to the nature of the GCA department, teamwork, customer satisfaction, and continuous communication are at the forefront in the field of culinary arts, which may have increased the tendency of students to adopt prosocial values. The lower rates of prosocial value orientation in the TG and TM departments compared to the GCA department suggest that these departments may be more oriented towards individual achievement and business management. The competitive nature of the tourism sector may have led to different social value priorities among students in these departments.

The study found that students with a prosocial value orientation had higher attitudes toward ecological dilemmas and a better perceptions of social responsibility. In other words, the research revealed that students

with prosocial values were more sensitive to environmental and social issues. These results suggest that prosocial students consider social and environmental benefits beyond individual interests. The fact that students with competitive social value orientations had the lowest mean scores on ecological dilemma questions suggests that this group may be less sensitive to environmental ethical issues.

The study's findings revealed that participating students' attitudes toward ecological dilemmas differed according to their social value orientations. The analysis revealed significant differences in attitudes toward ecological dilemmas according to social value orientations. Notably, there were statistically significant differences between prosocial and competitive groups. Individuals with a high prosocial orientation have the potential to exhibit more sensitive and responsible behaviors toward environmental problems, such as cooperation, empathy, and social benefit. They tend to consider not only their own interests when faced with ecological dilemmas but also the benefit to society and future generations. These results align with social value orientation theory (Messick and McClintock, 1968) and existing literature (Cameron, Brown, and Chapman, 1998; Joireman et al., 2001; Van Vugt, Meertens, and Van Lange, 1995). The theory suggests that social value orientations adopted in decision-making processes affect interpersonal relationships and social and environmental sensitivity levels. Prosocial individuals tend to look out for the well-being of others and increase cooperation. Thus, the fact that individuals with a prosocial orientation exhibit higher levels of environmental sensitivity suggests that ethical concerns are reflected in environmental situations as well. On the other hand, one could argue that students with a competitive social value orientation tend to prioritize individual gain or superiority when evaluating environmental decisions. Since environmental problems require collective action rather than individual action, this orientation may be an obstacle to developing pro-environmental behaviors. Therefore, social value orientations should be considered when achieving the sustainability goals of the tourism sector.

The final finding of the study shows that students' social value orientations do not significantly affect their perceptions of social responsibility. In other words, students' levels of social responsibility are similar regardless of their social value orientation. This finding differs from previous studies (De Cremer and Van Lange, 2001). In fact, explaining a multidimensional concept such as social responsibility, which is subject to sociocultural influences, solely in terms of social value orientations may be a limited approach. Social responsibility behaviors can be shaped by many variables, including family structure, education level, school and environment, social influences, and personal experiences. Based on these findings, it can be concluded that social responsibility perceptions depends on complex structural factors, with social value orientation representing only one dimension of this structure.

### **Practical Implications**

Tourism is an industry where human relations are at the center and intercultural interaction is intense, directly impacting the social structure. Since SVO is an important element in understanding the decisions and behaviors of individuals, especially in complex situations, it significantly shapes the behaviors, decisions, and understanding of service of individuals working in tourism. Considering the effects of tourism on the environment and society, it is especially important to examine the social value orientations of individuals and how they influence decisions and behaviors regarding environmental and social issues. Therefore, examining the social value orientations, attitudes toward ecological dilemmas, and perceptions of social responsibility of students who will be future tourism professionals is strategically important for both sectoral and social sustainability. Social value orientation is an important factor that shapes the ethical decision-making processes and relationships of future tourism professionals with society.

Students studying tourism will be the future managers, entrepreneurs, and employees of the sector. Therefore, their values, ethics, and environmental and social sensitivities will directly affect their future decisions in the field. For this reason, it is important to include content in the tourism education curriculum that strengthens social value orientations and ecological and social sensitivities, especially regarding sustainability, environmental ethics, and social responsibility. Additionally, supporting applied studies integrated with environmental education and social responsibility projects that encourage students to consider ecological issues can help them make more informed decisions when faced with such issues. Such training may also facilitate the transformation of prosocial values into behaviors. Participating in social responsibility projects, volunteering, and environmental campaigns, especially during university, can increase students' sensitivity to environmental and social issues. However, care should be taken to ensure that social projects bridge the gap between students' social value orientations and their attitudes toward ecological issues and perceptions of social responsibility. Additionally, case studies, sustainable entrepreneurship projects, and environmental

leadership programs that demonstrate how individual gains can align with social benefits can be developed to enhance the ecological awareness of students with competitive and individualistic social value orientations. As a result, more sensitive individuals can be trained in tourism education, thus supporting social and environmental sustainability in the tourism industry.

### Theoretical Implications

This study contributes to the existing literature by examining how the concept of social value orientation affects tourism students' perceptions of ecological dilemmas and social responsibility. This study, conducted on tourism students, systematically examines how SVO is shaped in the context of tourism education. In this respect, the study provides an interdisciplinary perspective by applying the concept of social value orientation (SVO), which originates from social psychology, to the field of tourism. Furthermore, the findings suggest that SVO should not be overlooked in tourism education and sustainability literature. Additionally, conducting the study in the Turkish context provides a cultural perspective to the literature. In societies such as Turkey, where social solidarity is highly valued, prosocial orientations are more prevalent, suggesting that SVO cannot be considered independently of cultural influences. The study revealed that individuals with prosocial value orientations are more sensitive to ecological dilemmas. This finding aligns with social dilemma theory (Messick and McClintock, 1968) and existing literature indicating that prosocial tendencies foster cooperative behavior. Thus, the study reveals that SVO is decisive in both interpersonal relationships and environmental issues. However, the study found that tourism students' understanding of social responsibility did not differ significantly based on their SVOs. This suggests that the concept of social responsibility is influenced by more than just individuals' social value orientations; cultural, educational, and social factors also play a role. Therefore, SVO alone is insufficient to explain individuals' perceptions or behaviors regarding social responsibility.

### Future Research

This study was conducted using a limited sample. Therefore, the study can be expanded to include a large number of tourism faculty students, allowing the findings to be generalized. This study found that social value orientation was only associated with attitudes toward ecological dilemmas and social responsibility. Further research could investigate how variables such as social belonging, moral identity, and environmental concern affect social value orientations and perceptions of social responsibility. Longitudinal studies can analyze how social value orientation, attitudes toward ecological dilemmas, and perceptions of social responsibility change over time. Thus, causal relationships can be established more accurately. Finally, it was found that students' perceptions of social responsibility did not differ according to social value orientation. Consequently, individual interviews, focus group studies, or life story analyses could be conducted to determine why social responsibility levels develop independently of SVO.

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