

Young people's awareness, perception, and attitude towards Sustainable Development Goals in India

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Keywords: Sustainable development goals; awareness; attitude; perception; value propositions; worldviews; ecocentrism; anthropocentrism.

Abstract. *To understand how young people's attitudes toward sustainable development goals (SDGs) are formed, this research examines the roles that awareness, perception, and personal value propositions play. We have also tried to investigate the role that worldviews play in young people's attitude development. Our research showed that, in addition to people's knowledge, which is important in fostering a better attitude toward the SDGs, their value*

propositions and worldviews are also essential in understanding it. We found that people with anthropocentric worldviews will specifically have a better attitude toward and perception of sustainable development goals. The study's findings add to the body of knowledge already available on sustainable development goals by offering empirical proof of the relationship between knowledge, perception, value propositions, worldviews, and attitudes toward such goals. This study also revealed that young people's value propositions have a significant impact on how they feel about and perceive sustainable development goals. Therefore, it is crucial to develop policy-level interventions that could result in better human values among young people.

1. Introduction

Sustainable Development Goals are the global goals for ensuring sustainable development. These integrated goals aim to create a better and sustainable world by the year 2030. Ending poverty, fighting against inequality, ensuring good health and well-being, providing quality education, facilitating decent work and economic growth, etc. are some of the ways through which the world can move towards sustainability. Business organizations, Governments, and individuals need to work together to create a better future for everyone on this planet. It is imperative to raise the awareness of these global goals among the public and to create partnerships for the implementation of various activities targeting the attainment of these goals. Integrated efforts are required to address the concerns raised by these goals. In this context, higher educational institutions have to play a significant role in spreading the awareness of SDGs among youngsters and in molding their attitude and perception of sustainable development goals. It is against this background the current study attempted to assess the awareness, attitude, and perspectives of young people towards sustainable development goals.

Awareness is a mental ability that allows one to selectively focus attention into specific moments in the past, present, or future (Eileen, 1968). It is an emotion that transcends the degree of sensitivity that directs behavior (Suzanne, 1967). According to Funk and Wagnalls (1968), awareness is knowledge derived from sensory or intellectual evidence, and they contend that the term "concept" refers

to more than merely a cursory recording of a sensation, perception, or situation. Awareness of SDGs indicates the level of information possesses by someone regarding the concept of sustainable development goals, as a result they assign importance to SDG practices (Jati et al., 2019). According to Gutwin and Greenberg (1999) Awareness is information regarding a particular environment, and changes in that environment. The term awareness is defined in the current study as the extent of information possessed by someone about something.

The way one sees the world is perception. According to Markus and Kitayama (1991), people from different cultures perceive things very differently. As Singer (1987) points out, "We experience everything in the world not as it is—but only as the world comes to us through our sensory receptors," we selectively process and only take in a portion of the information from our surroundings. According to Nurohman (2018), "perception is a word that is directly related to human psychology." It has been described in a variety of ways, such as an intentional act of observing one's environment through physical experiences, demonstrating one's ability to perceive. According to Sahal (2010), perception manifests as a viewpoint regarding a phenomenon and is an actualization of the human brain process. We have adopted the definition of perception as in Sahal (2010) in this study. So, by perception we mean the viewpoints of people about something.

An individual's attitude refers to their perspective and assessment of something or someone, their inclination or propensity to react favorably or unfavorably to a particular concept, item, person, or circumstance. It is typically organized into three categories: behavioral (actions or stated intentions toward the object based upon the "cognitive" and "affective" responses) and cognitive (perceptions and beliefs). Affective (likes and dislikes, feelings, or evoked emotions) is another dimension (Vargas-Sanchez, Plaza-Mejia, and Porras-Bueno, 2016). According to Venes (2001), attitude is behaviour based on conscious or unconscious mental views developed through cumulative experience." Three crucial characteristics of a "attitude" are that it is bipolar, contains a cognitive, affective, and behavioral component, and is a reaction to a stimulus. These qualities cover every facet of cognition and conduct (Altmann, 2008). Unal and Iseri (2012), claimed that attitude is a condition of mental and emotional readiness that is developed via experiences and that has a guiding or dynamic influence on a person's behaviors toward everything and everyone. In this study, attitude is taken as the perspective and behavior of people based on their experiences.

Value proposition in this study is taken as the personal values possessed by people. It is about what we do and how we do it (Kelly, 1979). According to Schwartz (2012) there are 10 basic human values such as universalism, self-

direction, tradition, security, power, achievement, hedonism, stimulation, conformity and benevolence. Individual values, in Schwartz's view, are responses to the three universal needs of human existence—the need for people to survive and thrive as groups, the need for agreement in social actions, and the needs of people as biological organisms (Schwartz, 1992).

Worldviews is all about how one perceives the world around him/her. Two type of worldviews are dealt with in this study. They are ecocentricism and anthropocentricism. Ecocentricism in this study encompasses the concern for the environment and the ecosystem, while anthropocentricism is used to denote concern for human welfare (Kopnina and Cocis, 2017).

Garcia-Feijoo, Eizaguirre & Rica-Aspiunza (2020) conducted a systematic review of sustainable development goals deployment in B-schools using the web of science, Scopus, and Eric databases. After applying the multi-stage exclusion process, they have concluded that business schools play a significant role in attaining sustainable development goals. The study also provides insights into how business schools can integrate SDGs into their core activities. The authors recommended more proactive responses integrating the creation of awareness, generating paradigm shifts in attitude, facilitating cooperation, partnerships, etc. through clubs run by students, innovative teaching-learning methodologies, and student co-curricular activities. The study also provides the existing gaps in the literature and directions for future research.

Existing literature revealed that most studies are conducted at regional as well as international levels to assess the attitude of public towards the sustainable development goals (GlobeScan, 2016) A survey conducted among 28 European Union member states in the year 2015 reported that around 36 percent of the Europeans are aware of sustainable development goals (Eurobarometer, 2016). According to Devcom (2017) among the general public, young people are more aware of sustainable development goals. Guan et al. (2019) investigated the public support for sustainable development goals in China. They have used the heuristic–systematic model of Chaiken (1980) for understanding how the value prepositions and knowledge levels of the general public lead to public support towards sustainable development goals. Based on a survey conducted among the public in 5 cities in China, they concluded that public support for SDGs in China is primarily determined by demographic factors such as age, gender, and educational qualifications. Value propositions and knowledge levels of the public interact with each other and acts as a decisive factor in their support of SDGs. The study also revealed that Chinese people predominantly views sustainable development goals as part of developmental policy initiative rather than

considering them as part of environmental policy initiative. Guan et al. (2019) concluded that most of the studies exploring the support for SDGs are reporting either the status-quo or the trends over some time and are not driven by theoretical support. Most of the studies are focusing one or two of the goals specifically and are not covering SDGs as a whole.

Attitude is a concise assessment of a psychological object that can be expressed in continuums of harmful-beneficial, pleasant-unpleasant, good-bad, and likable-dislikable (Ajzen and Fishbein 2000, Eagly and Chaiken 2007, Petty, Wegener and Fabrigar, 1997). People generate attitudes towards a topic or a concept by following either the heuristic processing approach or the systematic processing approach. While the heuristic processing approach explains how value prepositions influence the attitude, the systematic processing approach reinforces the role of awareness and knowledge in forming the attitude (Guan et al., 2019). Value propositions of individuals towards nature and society can be either derived from their worldviews like anthropocentrism or ecocentrism, post-materialist values, and altruistic values. Anthropocentrism holds the view that human beings are the most important on the earth, while ecocentric people believe in the importance of nature. So, ecocentric people are said to have a better attitude toward the environment (Schultz et al., 2004; Thompson and Barton, 1994; Kopnina, 2013). Hence, we propose that:

H1: Young people with ecocentric worldviews exhibit a positive attitude towards sustainable development goals.

H2: Young people with anthropocentric worldviews exhibit a negative attitude towards sustainable development goals.

H3: Young people with ecocentric worldviews exhibit a better attitude towards sustainable development goals.

Relying on the systematic processing view of attitude formation as proposed by Guan et al. (2019), we hypothesized that:

H4: Young people's awareness of SDGs will have a positive effect on their attitude towards sustainable development goals.

H5: Young people's perception of SDGs will have a significant effect on their attitude towards sustainable development goals.

H6: Young people's attitude toward SDGs will have a significant effect on their perception of sustainable development goals.

Extant studies also revealed that the personal values of individuals play a significant role in formulating their attitude towards sustainable development goals (Cirnu and Kuralt, 2013; Xu and Fox, 2014; Bruno and Lay, 2008). Personal values have a big impact on how people feel about sustainable development and its underlying principles (Schultz and Zelezny, 1999; Stern, 2000; Tuziak, 2010; Hards, 2011; Bernat, 2012). In 2005, Hemingway made the argument that personal morality, motivated by a person's own socially conscious personal beliefs, may also play a role in the promotion of social responsibility. Personal values are the subjective beliefs people have that they are connected to affect, referring to objectives that inspire action, transcending particular circumstances, serving as standards of evaluation, ranked in order of relative importance, and directing people's behaviour (Schwartz, 2012). Personal values, in Schwartz's view, are answers to three universal conditions for human existence: the need for people as biological beings, the need for social agreement, and the need for group survival and well-being (Schwartz, 1992). Ten fundamental individual values have been theorized by Schwartz and colleagues, and empirical evidence has been provided to support their claims (Schwartz, 1992; Schwartz and Boehnke, 2004). These include Universalism, Self-Direction, Tradition, Security, Power, Achievement, Hedonism, Stimulation, Conformity, and Benevolence. Values have particular motivations and objectives; therefore, the substance of any given value is compatible with some and incompatible with others. The circumplex paradigm, in which compatible values border on each other and oppose those that are incompatible, is the most frequently acknowledged way to describe individual values. The paradigm emphasizes the conflict between maintaining the status quo and changing it while also simplifying these compatibility-incompatibility relations within a two-dimensional structure, notably Self-Enhancement vs. Self-Transcendence and Conservation vs. Openness (emphasizing the dichotomy between personal- and other-related interests) and, thus, we propose that:

H7: Personal values of young people will have a positive effect on their attitude toward sustainable development goals.

The current study is an attempt to understand the awareness, attitude, and perception of young people on sustainable development goals. The study attempts to answer specifically, the research questions such as, How their attitude toward SDGs are formulated? How precisely the awareness and attitude influence their perspectives? and whether their attitude towards sustainable development goals is influenced by the nature of their world views. How personal values of young people impacted their attitude toward sustainable development

goals? It was also attempted to identify the influence of demographic factors on young people's attitude towards sustainable development goals.

2. Materials and Methods

The overall purpose of this study was to explore the awareness, perception, and attitude of young people towards sustainable development goals. The participants for this study were young people in India. The youth population is taken as those belonging 18 to 28 years of age. An online survey method was used for this study. The study used a descriptive research design to carry out research. The constructs used in this study were world views, awareness, perception, and attitude. These constructs were measured using a five-point Likert scale with responses ranging from strongly disagree to strongly agree. The construct's awareness and world views in this study were measured using a five-item scale as in Guan et al. (2019), The constructs attitude and perception were measured using a 12-item scale developed by Balakrishnan, Tochinai, and Kanemitsu (2020). Personal values were assessed using a 21-item version of the Portrait Value Questionnaire developed by Schwartz (2003). So, the survey instrument used was a questionnaire with 50 indicators. Questionnaires were sent through e-mail to the participants. Validity and reliability were tested through a pilot survey among 30 young people from various parts of the country, before conducting the original study. Data were collected from 640 young people from March – April 2022. Around 9 questionnaires were found to have inconsistent information or mistakes in responses and hence, were removed from the sample. So, the final sample size for this study is taken as 631 respondents. All statistical analysis was carried out with IBM SPSS Statistics 25.0 and Stata 17.0 software. We have used multiple regression analysis to explore the relationship between the variables (see Annex 1).

The regression models to test the relationship between the dependent and independent variables are as follows:

$$\text{Att_Sdg} = \beta_0 + \beta_1 \text{Aw_Sdgt} + \beta_2 \text{Per_Sdg} + \beta_3 \text{World_ViewEcot} + \beta_4 \text{Per_Valut} + \beta_5 \text{Aget} + \beta_6 \text{Gender} + \beta_7 \text{Edut} + \beta_8 \text{Strem_edut} + \text{et (1)}$$

$$\text{Per_Sdg} = \beta_0 + \beta_1 \text{Aw_Sdgt} + \beta_2 \text{Att_Sdg} + \beta_3 \text{World_ViewEcot} + \beta_4 \text{Per_Valut} + \beta_5 \text{Aget} + \beta_6 \text{Gender} + \beta_7 \text{Edut} + \beta_8 \text{Strem_edut} + \text{et (2)}$$

$$\text{Att_Sdg} = \beta_0 + \beta_1 \text{Aw_Sdgt} + \beta_2 \text{Per_Sdg} + \beta_3 \text{World_ViewAnthrot} + \beta_4 \text{Per_Valut} + \beta_5 \text{Aget} + \beta_6 \text{Gender} + \beta_7 \text{Edut} + \beta_8 \text{Strem_edut} + \text{et (3)}$$

$$\text{Per_Sdg} = \beta_0 + \beta_1 \text{Aw_Sdgt} + \beta_2 \text{Att_Sdg} + \beta_3 \text{World_ViewAnthro} + \beta_4 \text{Per_Valu} + \beta_5 \text{Age} + \beta_6 \text{Gender} + \beta_7 \text{Edut} + \beta_8 \text{Strem_edut} + \epsilon \quad (4)$$

Where Att_Sdg = attitude towards SDGs, Aw_Sdg = level of awareness, Per_Sdg = perception of SDGs, World_ViewEco = ecocentric worldview, World_ViewAnthro = anthropocentric worldview, Per_Valu = personal values

3. Results

We examined the nexus between youth's awareness, perceptions, personal value propositions, and attitudes toward sustainable development. The data collection instrument consisted of various constructs to indicate the constructs such as awareness, perception, personal values worldview, and attitude. Table 1 gives the descriptive statistics of these constructs.

Constructs	N	Minimum	Maximum	Mean	SD
Worl_ViewEco	631	1.00	5.00	2.300	0.49142
Worl_ViewAnthro	631	1.00	5.00	3.300	0.49142
Per_Valu	631	1.00	5.00	3.247	0.00245
Aw_Sdg	631	1.00	5.00	2.828	0.44989
Att_Sdg	631	1.00	5.00	3.619	0.31233
Per_Sdg	631	1.00	5.00	2.058	0.32940
Age	631	17.00	28.00	19.54	1.41

Table 1. Descriptive Statistics of the constructs

It is evident from Table 1 that the mean awareness level of participants is 2.83, which is indicative of the fact that the participants are aware of sustainable development goals to a considerable extent. For the construct ecocentric worldview, the mean value is 2.3 which means that even though they are aware of sustainable development goals, they tend towards human orientation, rather than environmental orientation. The construct anthropocentric worldview also is having an average value of 3.3, which is above the middle value that is 2.50,

and, hence confirming the earlier finding that the participants are more oriented toward anthropocentrism. The average attitude of the participants towards sustainable development goals is favourable with a mean value of 3.619, while most of them perceive sustainable developmental goals positively with an average perception level of 2.058. The average age of the participants was 19.54.

To understand the relationship between awareness, perception, worldview, and attitude towards sustainable development goals, the authors used regression analysis. Four regression models were run to explore the underlying relationships. The first model was to test the relationship between the participant's level of awareness, perception, personal values, and attitude toward sustainable developmental goals. The second model is intended to test how the participant's level of awareness, personal values, and attitude toward sustainable development goals influences their perception of sustainable development goals. The third model explores the relationship between the participant's level of awareness, perception, personal values, and attitude toward sustainable developmental goals when their worldview differs. The fourth model tested how the participant's level of awareness, personal values, and attitude toward sustainable developmental goals, influences their perception of sustainable development goals with differing worldviews.

In the first model – the attitude model, we examined how young people's awareness of SDGs, their value propositions, and perception of SDGs impact their attitude toward sustainable development goals. Our dependent variable in this model is young people's attitude towards Sustainable development goals, independent variables are awareness, perception, value propositions as indicated by their personal values, age, gender educational qualification and stream of education. The results are given in Table 2.

The R-squared and adjusted R-squared values are 0.482 and 0.467 respectively, indicating that around 47 percent variation in the dependent variable is explained by the independent variables together. The results indicate that the model proposed in the current study to examine the relationship between the variables is statistically significant (F statistic – 4.784, $p = 0.006$). All the independent variables together were capable of explaining young people's attitude toward sustainable development goals with an R squared value of 0.482 and an adjusted R-squared value of 0.467. Hence, it is assumed that all the independent variables together accounted for about half of the variation in the dependent variable. Young people's awareness of sustainable development goals, their perception of SDGs, and their value propositions are all significantly and positively influencing their attitude towards SDGs (coefficients: 0.535, 0.241, 0.358). It is also inferred

Dependent Variable: Young people's attitude towards sustainable development goals
Method: Least Squares Sample: 631

Independent Variables	R-squared & Adjusted R-sq.	F statistic & ModelSignificance	Coefficient	St. Error	t-Statistic	Sig.
Constant			10.540	8.923	0.986	0.004
Aw_Sdg			0.535	0.099	1.458	0.000**
Per_Sdg	0.482	4.784	0.241	0.126	1.234	0.034**
Per_Valu	(0.467)	(0.006)	0.358	0.432	1.065	0.000**
Age			0.344	1.055	2.867	0.078*
Gender			0.137	0.166	1.367	0.052*
Edu			0.456	1.149	1.316	0.000**
Strem_Edu			0.064	1.003	2.978	0.529

Table 2. Awareness, perception, value propositions and attitude towards sustainable development goals – Model 1. Source: Regression results. Note: Figures in parenthesis indicate the adjusted R-squared and model significance values. *significant at 10%, **significant at 5% level of significance.

that the constructs, awareness, perception, and personal values are statistically significant in explaining the participant's attitude towards sustainable development goals ($p < 0.05$). It was also attempted to find out how the demographic factors influence the attitude towards SDGs. The findings indicate that the demographic constructs, age, gender, and educational qualification are statistically significant in explaining young people's attitude toward sustainable development goals ($p = 0.078, 0.052, \text{ and } 0.000$). Overall results from Model 1 are indicative of the significant role of awareness, perception, and personal value propositions on attitude formation towards sustainable development goals.

In the second model, we examined how young people's awareness of SDGs, their value propositions, and attitude toward SDGs impacts their perception of sustainable development goals. The independent variables used in this model are awareness, attitude value propositions as indicated by the personal values, age, gender education and stream of education. The results are given in Table 3.

The results reveal that the model proposed in the current study to examine the relationship between the variables is statistically significant (F statistic – 7.129, $p < 0.05$). All the independent variables together were capable of explaining young people's perception of sustainable development goals with an R squared value of 0.327 and an adjusted R- squared value of 0.304. Hence, it is assumed that all the independent variables together accounted for about one-third of the variation in

Dependent Variable: Young people's perception of sustainable development goals
Method: Least Squares. Sample: 631

Independent Variables	R-squared & Adjusted R-sq	F statistic & Model Significance	Coefficient	St. Error	t-Statistic	Sig.
Constant			12.540	8.923	0.743	0.000
Aw_Sdg			0.473	0.099	1.378	0.007**
Att_Sdg	0.327	7.129	0.477	0.529	2.148	0.021**
Per_Valu	(0.304)	(0.000)	0.213	0.455	1.346	0.000**
Age			0.154	1.112	0.876	0.000**
Gender			0.912	0.050	2.867	0.062*
Edu			0.283	0.196	1.367	0.095*
Strem_Edu			0.645	0.173	1.316	0.038**

Table 3. Awareness, perception, and attitude towards sustainable development goals – Model 2. Source: Regression results. Note: Figures in parenthesis indicate the adjusted R-squared and model significance values. *significant at 10%, ** significant at 5% level of significance

the dependent variable, perception of SDGs. Young people's awareness of sustainable development goals, their attitude toward SDGs, and their value propositions are all significantly and positively influencing their perception of SDGs (coefficients: 0.473, 0.477, 0.213). It is also inferred that the constructs, awareness, attitude, and personal values are statistically significant in explaining the participant's attitude towards sustainable development goals ($p < 0.05$). We also attempted to find out whether demographic factors influence young people's perception of SDGs. The findings indicate that the demographic constructs, age, stream of education, gender, and educational qualification are statistically significant in explaining young people's perception of sustainable development goals at 5% and 10% levels of significance respectively. Overall results from Model 2 are indicative of the crucial role of awareness, attitude, and personal value propositions in developing a positive perception of sustainable development goals.

The third model is intended to test how young people's awareness about SDGs, their value propositions, and perception of SDGs impacts their attitude towards sustainable development goals when they differ in their worldviews – ecocentric worldviews or anthropocentric worldviews. The results are given in Table 4.

Dependent Variable: Young people's attitude towards sustainable development goals

Method: Least Squares Sample: 631

Independent Variables	R-squared & Adjusted R-sq.	F statistic & Model Significance	Coefficient	Std. Error	t-Statistic	Sig.
Constant			10.094	5.560	1.704	0.000
Aw_Sdg			0.612	0.112	0.758	0.00**
Per_Sdg			0.540	0.656	1.878	0.000**
Worl_ViewEco	0.218	6.964	-0.267	0.003	0.718	0.032**
Worl_ViewAnthro	(0.201)	(0.000)	0.368	0.045	1.530	0.000**
Per_Valu			0.452	1.239	0.006	0.004**
Age			0.842	0.009	1.557	0.006**
Gender			0.123	0.271	2.333	0.065*
Edu			0.201	0.107	0.116	0.002**
Strem_Edu			0.058	1.006	1.124	0.274

Table 4. Awareness, perception, value propositions and attitude towards sustainable development goals – Model 3. Source: Regression results. Note: Figures in parenthesis indicate the adjusted R-squared and model significance values. *significant at 10%, ** significant at 5% level of significance.

The results are indicative of the fact that the model can examine the relationships envisaged in the model (F statistic – 6.964, $p < 0.05$). All the independent variables, together explain young people's attitude toward sustainable development goals very well (R squared- 0.218, adjusted R- squared - 0.201). Hence, it is assumed that all the independent variables together accounted for about 20% of the variation in the dependent variable, attitude towards SDGs. Young people's awareness of sustainable development goals, their perception of SDGs, and their value propositions are all significantly and positively influencing their attitude towards SDGs (coefficients: 0.612, 0.540, 0.452). It is also inferred that the constructs, awareness, perception, and personal value propositions are statistically significant in explaining the participant's attitude towards sustainable development goals ($p < 0.05$). Another important finding from this model is that young people's worldviews – whether they are more concerned towards the environment or human beings – also play a significant role in their attitude formation toward sustainable development goals. We found that people with more anthropocentric worldviews exhibit a more favourable attitude towards sustainable development goals (coefficients: 0.267, 0.368). We also confirmed that young people's worldviews are statistically significant in their attitude

formation towards SDGs ($p < 0.05$). Young people with ecocentric worldview exhibited a negative attitude towards sustainable development goals. We also tried to explore the role of demographic factors in determining young people's attitude toward SDGs. The findings indicate that the demographic constructs, age, educational qualification, and gender are statistically significant in explaining young people's attitude toward sustainable development goals at 5% and 10% levels of significance respectively. However, in this model, the stream of education is not at all relevant to attitude formation among young people. Overall results from Model 3 are indicative of the critical role of young people's awareness, perception, personal value propositions, and worldviews in developing a more favourable attitude towards sustainable development goals.

In the last model, we tried to explore how young people's awareness of SDGs, their value propositions, and attitude toward SDGs impacts their perception of sustainable development goals when they hold different worldviews – ecocentric worldviews or anthropocentric worldviews. The independent variables used in this model are awareness, perception, value propositions, world views (ecocentric as well as anthropocentric), age, gender, education, and stream of education. The results are given in Table 5.

The results are indicative of the fact that the model can explain the relationships envisaged in the study (F statistic – 6.532, $p < 0.05$). All the independent variables, together explain young people's perception of sustainable development goals very well (R squared- 0.412, adjusted R- squared - 0.402). Hence, it is assumed that all the independent variables together accounted for nearly half of the variation in the dependent variable, perception of SDGs. Young people's awareness of sustainable development goals, their attitude toward SDGs, and their value propositions are all significantly and positively influencing their perception of SDGs (coefficients: 0.473, 0.514, 0.597). The model also revealed that young people holding ecocentric worldviews are exhibiting less favourable perceptions of SDGs as the regression coefficient is negative. It is also inferred that the constructs, awareness, attitude, and personal value propositions are

statistically significant in explaining the participant's perception of sustainable development goals ($p < 0.05$). Another important finding from this model is that young people's worldviews – whether they are more concerned about the environment or human beings – also play a significant role in determining their perception of sustainable development goals. We found that people with more anthropocentric worldviews exhibit a more favourable attitude towards sustainable development goals (coefficients: -0.362, 0.368). We also confirmed that young people's worldviews are statistically significant in determining their

Dependent Variable: Young people's perception of sustainable development goals						
Method: Least Squares. Sample: 631						
Independent Variables	R-squared & Adjusted R-sq.	F statistic & Model Significance	Coefficient	Std.Error	t-Statistic	Sig.
Constant			12.540	8.923	0.743	0.000
Aw_Sdg			0.473	0.099	1.378	0.007**
Att_Sdg			0.154	1.112	0.876	0.000**
Worl_ViewEco	0.412	6.532	-0.362	0.095	0.233	0.029**
Worl_ViewAnthro	(0.402)	(0.000)	0.597	1.411	0.084	0.000**
Per_Valu			0.389	1.104	2.117	0.037**
Age			0.912	0.050	2.867	0.034**
Gender			0.283	0.196	1.367	0.065*
Edu			0.645	0.173	1.316	0.002**
Strem_Edu			0.097	1.045	2.978	0.616

Table 5. Awareness, perception, value propositions and attitude towards sustainable development goals – Model 4. Source: Regression results. Note: Figures in parenthesis indicate the adjusted R-squared and model significance values. *significant at 10%, ** significant at 5% level of significance

perception of SDGs ($p < 0.05$). We also tried to explore the role of demographic factors in determining young people's perception of SDGs. The findings indicate that the demographic constructs, age, educational qualification, and gender are statistically significant in explaining young people's perception of sustainable development goals at 5% and 10% levels of significance respectively. However, in this model also, we found that the stream of education is not at all relevant in explaining the perception of young people. Overall results from Model 4 are indicative of the crucial role of young people's awareness, attitude, personal value propositions, and worldviews in developing a more positive perception of sustainable development goals.

4. Discussion

Based on the results from various models, used in this study, the authors, inferred that the relationship between young people's awareness of SDGs, their perception, value propositions, worldviews, and attitude towards sustainable development goals is statistically significant. It is also confirmed that young people's awareness, attitude, personal values, and worldviews significantly

contribute to their perception of sustainable development goals. These results conform with the findings of Guan et al. (2019); Devcom (2017); Chaiken (1980); Cirnu & Kuralt (2013); Xu and Fox (2014); and Bruno & Lay (2008). However, it contradicts the findings of Schultz et al. (2004); Thompson & Barton (1994); and Kopnina (2013), who argued that people holding more ecocentric worldviews will have a more positive attitude and perception toward the environment and thus, towards sustainable development goals also. The hypothesis testing results are summarized in the following Table 6.

No.	Hypotheses	Status
H1	Young people with ecocentric worldviews exhibit a positive attitude towards sustainable development goals.	Not Supported
H2	Young people with anthropocentric worldviews exhibit a negative attitude towards sustainable development goals.	Not Supported
H3	Young people with ecocentric worldviews exhibit a better attitude towards sustainable development goals.	Not Supported
H4	Young people's awareness of SDGs will have a positive effect on their attitude towards sustainable development goals.	Supported
H5	Young people's perception of SDGs will have a significant effect on their attitude towards sustainable development goals.	Supported
H6	Young people's attitude toward SDGs will have a significant effect on their perception of sustainable development goals.	Supported
H7	The personal values of young people will have a positive effect on their attitude towards sustainable development goals.	Supported

Table 6. Summary of Hypotheses Testing Results.

The unique value proposition of this study is that it contributes to the existing body of knowledge on sustainable development goals, by providing empirical evidence for the nexus among awareness, perception, value propositions, worldviews, and attitude toward sustainable development goals. It also provides substantial evidence that people with more anthropocentric worldviews will have a better attitude towards SDGs. This finding is confirming the results of the Bill & Melinda Gates Foundation that people in the United States of America ranked "end hunger and end poverty" as the most important goal among the 17 sustainable development goals. This may be attributed to the fact that while

expert researchers and academia care more about the environment, young people care more about basic human needs. More importantly, young people, perceive sustainable development goals as a policy- level intervention for the upliftment of human society, through the upgradation of various environmental, social, and governance infrastructure, and hence, it is not always necessary that ecocentric people care more about sustainable developmental goals. Moreover, it is logical to understand that people who consider other human beings will naturally be concerned about sustainable development goals.

The study also contributes to the finding that the personal value propositions of young people contribute much to their attitude and perception of sustainable development goals. So, it is imperative to formulate some kind of interventions that may lead to better human values among young people, which in turn will reflect on their attitude towards sustainable development goals and their attainment. The finding also confirmed the interaction between young people's attitudes towards sustainable development goals and their perception of SDGs.

This is indicative of the role of policymakers in envisaging, developing, and implementing more educational programmes that can influence the attitude and perception of young people on SDGs and thus, to the accomplishment of the goals and for the betterment of society at large. The findings of this study would be useful for corporates when they plan for their corporate social responsibility activities. They would be able to select the most appropriate Corporate Social Responsibility activities, based on the understanding that young people will be attracted more to human-oriented activities while perceiving sustainable development goals.

5. Conclusions

This study explored the nexus among young people's awareness, perception, personal values worldviews, and attitude toward sustainable development goals. Our results revealed that not only the knowledge of people is significant in developing a better attitude toward SDGs but also their values and worldviews play a crucial role in explaining it. Specifically, the study concluded that people with anthropocentric worldviews will have a better attitude and perception of sustainable development goals. It is also significant to have better awareness and personal value propositions to appreciate and contribute to sustainable development goals. The study also reported that there is an interaction between attitude and perception of sustainable development goals. Young people's ecocentric worldviews were negatively related to sustainable development goals,

while their anthropocentric worldviews were positively associated with attitude and perception of Sustainable development goals. This may be because the focus of sustainable development goals is on the interconnectedness of humans and the environment. Though, the focal point of ecocentrism is the environment, it never considers the human-beings and their interconnectedness with the environment and hence may not be suited to promote sustainable behavior. However, according to anthropocentric viewpoints, technological advancement can provide solutions to sustainability problems and humans can exert control over their environment (Kopnina, 2014). Nevertheless, people would recognize that the ecosystem supports life if they were genuinely anthropocentric. Norton (1984) also pointed out that self-interest is the best justification for adopting a sustainable lifestyle. Hence it is even more important to understand that the way to promote SDGs is to appreciate the interconnectedness of humans and their environment. Despite the common understanding that the involvement of people from various walks of life, is crucial for the accomplishment of sustainable development goals, very few studies have done empirical research on this. Our study targeted to cover this research gap and thus, contributes to the existing literature. This study never attempted to explore the willingness of young people to participate in the implementation of sustainable development goals. Future researchers can consider this as a research gap and can work on this. Though this study considered the variable personal value propositions, as a determinant of attitude towards SDGs, we have not attempted to find out the impact of each category of personal value propositions on young people's attitude towards SDGs. This also can be explored by further researchers. This study is conducted in the Indian context, and thus, we have not incorporated the cultural context in this research. However, future researchers can investigate this further and identify how socio-cultural aspects impact people's attitudes towards sustainable development goals.

References

- Ajzen I., and Fishbein M. (2000). Attitudes and the attitude-behavior relation: reasoned and automatic processes. In *European Review of Social Psychology*, ed. W Stroebe, M Hewstone. Chichester, England: Wiley.
- Altmann, T. (2008). *Attitude: A Concept Analysis*. *Nurs. Forum*. 43(3), 144-50. 10.1111/j.1744-6198.2008.00106.x.
- Balakrishnan, B., Tochinai, F., and Kanemitsu, H. (2020). Perceptions and attitude towards sustainable development among Malaysian undergraduates. *Int. J. High. Educ.*, 9(1), 44-51.

- Bernat, P. (2012). Sustainable Development and the Values We Share – Sustainability as the Confluence of Islamic and Western Frameworks, *Probl. Ekorozejnu*, 7 (1), 33-41.
- Bruno, L. F. C., and Lay, E. G. E. (2008). Personal values and leadership effectiveness. *J. Bus. Res.*, 61(6), 678-683.
- Chaiken, S. (1980). Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion. *J. Pers. Soc. Psychol.*, 39(5), 752- 766. Retrieved from SocINDEX database.
- Cirnu, C.E., and Kuralt, B. (2013). The impact of employees' personal values on their attitudes toward sustainable development: Cases of Slovenia and Romania. *Manag.*, 18(2), 1–20. <https://hrcak.srce.hr/file/166307> (accessed on 25 July 2022).
- DevCom (2017). What People Know and Think About the Sustainable Development Goals. 2017. Available online: https://www.oecd.org/development/pgd/International_Survey_Data_DevCom_June%202017.pdf/ (accessed on 17 July 2022).
- Eagly, A.H., and Chaiken, S. (2007). The advantages of an inclusive definition of attitude. *Soc. Cogn.*, 25(5), 582–602.
- Eileen, J. G. (1968). Awareness. Berkeley Medallion Book, Berkeley Publishing Company: New York. 24
- Eurobarometer (2016). The European Year for Development-Citizens' Views on Development, Cooperation and Aid. Available online: https://ec.europa.eu/commfronto_ce/publicopinion/archives/ebs/ebs_421_en.pdf/ (accessed on 15 July 2022).
- Funk and Wagnalls (1968). Modern Guide to Synonyms and Related Words, New York, p. 31.
- GlobeScan (2016). Awareness of Sustainable Development Goals (SDGs) vs Millennium Development Goals (MDGs). (2016). Available online: <https://globescan.com/awareness-of-sustainable-development-goals-sdgs-vs-millennium-development-goals-mdgs/> (accessed on 15 July 2022).
- Garcia-Feijoo, M., Eizaguirre, A., and Rica-Aspiunza, A. (2020). Systematic Review of Sustainable- Development-Goal Deployment in Business Schools. *Sustainability*, 12, 440. <https://doi.org/10.3390/su12010440>
- Gutwin, C., and Greenberg, S. (1999). A framework of awareness for small groups in sharedworkspace groupware. (Technical Report 99-1), Department of Computer Science, University of Saskatchewan, Canada.
- Hards, S. (2011): Social Practice and the Evolution of Personal Environmental Values, *Environ. Values*, 20 (1), 23-42.
- Hemingway, C. A. (2005). Personal Values as a Catalyst for Corporate Social Entrepreneurship. *J. Bus. Ethics*, 60 (3), 233–249.

- Jati, H. F., Darsono, S. N. A. C., Hermawan, T., Yudhi, W. A. S., and Rahman, F. F. (2019). Awareness and Knowledge Assessment of Sustainable Development Goals Among University Students. *Jurna. Ekonomi. and Studi. Pembangunan*, 20(2), 163-175.
- Kelly, J. G. (1979). 'T'Aint what you do, it's the way you do it. *Am. J. Community Psychol.*, 7, 244- 258.
- Kopnina, H. (2013). Evaluating education for sustainable development (ESD): Using Ecocentric and Anthropocentric Attitudes toward the Sustainable Development (EAATSD) scale. *Environ. Dev. Sustain.* 15(3), 607–623.
- Kopnina, H. (2014). Revisiting education for Sustainable Development (ESD): Examining anthropocentric bias through the transition of environmental education to ESD. *Sustain. Dev.*, 22(2), 73–83. <https://doi.org/10.1002/sd.529>.
- Kopnina, H., and Cocis, A. (2017). Testing Ecocentric and Anthropocentric Attitudes toward the Sustainable Development (EAATSD) Scale with Bachelor Students. *Eur. J. Soc. Anthropol.*, 2(1), 1-16. <https://doi.org/10.20897/ejsa.201702>.
- Markus, H.R., and Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychol. Rev.*, 98(2), 224-253.
- Norton, B. G. (1984). Environmental ethics and weak anthropocentrism. *Environ. Ethics*, 6(2), 131 -148.
- Petty, R.E., Wegener, D.T., and Fabrigar L.R. (1997). Attitudes and attitude change. *Annu Rev. Psychol.*, 48(1), 609–47.
- Schultz, P.W., Shriver, C., Tabanico, J.J. & Khazian, A.M. (2004). Implicit connections with Nature. *J. Environ. Psychol.*, 24 (1), 31–42.
- Schultz, W., and Zelezny, L. (1999). Values as predictors of environmental attitudes: evidence for consistency across 14 countries, *J. Environ. Psychol.*, 19 (3), 255-265.
- Schwartz, S. H. (1992). Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Adv. Exp. Soc. Psychol.* 25, 1–65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6).
- Schwartz, S. H. (2012). [An Overview of the Schwartz Theory of Basic Values](https://doi.org/10.9707/2307-0919.1116). *Online Readings in Psychol. Cult.* 2 (1). [doi:10.9707/2307-0919.1116](https://doi.org/10.9707/2307-0919.1116).
- Singer, M. (1987). *Intercultural communication: A perceptual approach*. Englewood Cliffs, NJ: Prentice-Hall.
- Stern, P. (2000). New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior, *J. Soc. Issues*, 56 (3), 407-424.
- Suzanne, K. L. (1967). *Mind: An Essay on Human Feel*. Baltimore: The Johns Hopkins Press, 425
- Thompson, S.C.G., and Barton, M.A. (1994). Ecocentric and anthropocentric attitudes toward the environment. *J. Environ. Psychol.*, 14(2), 149–157.
- Tuziak, A. (2010). Socio-Economic Aspects of Sustainable Development on Global and Local Level, *Probl. ekorozwoju*, 5(2), 39-49.

- Unal, E., and İseri, K. (2012). Analysis of the Relationship between Reading and Writing Attitudes of Teacher Candidates and Their Academic Achievements through the Structural Equation Model. *İlkogretim Online*. 11(4), 1066-1076.
- Vargas-Sanchez, A., Plaza-Mejia, M.A., and Porras-Bueno, N. (2016). Attitude. In: Jafari, J., Xiao, H. (eds) *Encyclopedia of Tourism*. Springer, Cham. https://doi.org/10.1007/978-3-319-01384-8_11.
- Venes, D. (Ed.). (2001). *Taber's cyclopedic medical dictionary* (19th ed.). Philadelphia: F. A. Davis.
- Xu, F., and Fox, D. Modelling attitudes to nature, tourism and sustainable development in national parks: A survey of visitors in China and the UK. *Tour. Manag.* 2014, 45, 142–158.

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