# The effect of emotional intelligence on behavioral satisfaction: the mediating effect of recycle behavior

**Mehpare Tokay Argan[1] , Metin Argan[2] , Mehmet Tahir Dursun[3]\* **

[1] Bilecik Seyh Edebali University, Bilecik, Turkey;
[2] Eskisehir Technical University, Eskisehir, Turkey;
[3] Pamukkale University, Denizli, Turkey.

**\***Correspondence: mtdursun@pau.edu.tr; Tel.+90 551 704 95 09 (TR)

**Abstract:** Environmental behavior and recycle behavior both are related to having emotional intelligence by the way of thinking environment. Recent studies about the environment and recycle behavior paid attention to human's individual sensitiveness as environmental value, west management, or environmental protection. However, the influences of emotional intelligence on behavioral satisfaction were left out. To fill this gap, the current study investigates the association emotional intelligence on behavioral satisfaction among university students, and recycle behavior mediates this association. The model is empirically tested with data collected from 477 participants of university students by questionnaire. Dataset adopts the method of structural equation modeling to explore the mediating role of recycle behavior between emotional intelligence and behavioral satisfaction. Results indicate that participants' emotional intelligence toward environmental behaviors positively affects their behavior satisfaction, and in this result, recycle behavior has mediating affect between emotional intelligence and behavior satisfaction.

## 1. Introduction

The concept of environmentalism is frequently associated with issues of responsibility towards nature, limited consumption, controlled waste management, and recyclable consumption (Carrington et al., 2010; Anantharaman, 2014; Seacat & Boileau, 2018; Yasin & Sun, 2019). Being sensitive to the social and natural environment and engaging in recycle behavior with a sustainable consumption approach make people happy, which leads them to adopt environmentalist attitudes (Trudel, 2019). The negative reaction that environmentalist individuals show to the destruction of nature and overconsumption results from the emotional attitudes they have. Given the negative consequences of irresponsible consumption and waste, they believe that measures should be taken for waste management and recycling. According to the affective events theory, emotions have a direct effect on behavior (Weiss & Beal, 2005; Cropanzano & Dasborough, 2015). Emotional behavior is frequently seen in people with high levels of awareness and insight, and emotionally intelligent people are found to have consistent spending and consumption habits (Robina-Ramirez et al., 2020). Emotionally intelligent people take initiative so that the best decisions can be made for themselves and people around them, are more successful in business life (Lund & Thomas, 2012; Schutte & Loi, 2014; Furnham & Taylor, 2020), and make smart recommendations to offer suggestions and solutions to problems (Barling et al., 2000; Goleman, 2005).

In our contemporary world, excessive overconsumption accompanies problems of limited resources and scarcity (Gao & Tian, 2016). Rapid changes in fashion, tastes, and habits result in what can only be described as wastefulness. Environmental and social problems are thought to arise from the consumption habits and behaviors of new generations (Kadic-Maglajlic et al., 2019). These habits and behaviors have the potential

to end or destroy the social and ecological environment and let to passed down to them by earlier generations. With technological advances, people started to destroy and make irresponsible use of nature without respecting any limits. Resources vanishing over time led to further deprivation for people and concerns for the future (George et al., 2018; Bengston, 2019). This played a role in the emergence of environmental awareness and recycle behavior and created an imperative to raise awareness among young people. Goleman et al. (2010) note that developing the emotional intelligence of young people as part of their education is important to help them better understand the relationship between nature and human behavior. Through education, people can learn about the emergence of nature, gain environmental awareness, and acquire protection and recycling values (Chow et al., 2016; Varela-Candamio et al., 2018). Previous studies in the literature have examined recycling people in terms of their socio-demographic characteristics, economic status, environmental attitudes, beliefs, values, and personal and social norms (Coggins, 1994; Martin et al., 2006; Barr, 2017; Poškus & Žukauskienė, 2017). In a study on emotional intelligence and ethics based on environmentally friendly consumption, people with high levels of emotional intelligence were found to prefer recyclable products out of a concern for the future (Can & Ozdemir, 2019). In another study on ethical consumption (Chowury, 2017), a significant relationship was found between emotional intelligence characterized by a concern for others and a preference for environmentally friendly products. Lambrechts et al. (2013) found that emotional intelligence was related to sustainable development. As was mentioned above, there are numerous studies on various characteristics of recycling individuals, but very few on emotional intelligence-based recycle behavior. Therefore, the present study examines the relationships between emotional intelligence, recycle behavior, and behavior satisfaction.

## 2. Theoretical background and hypotheses

The following sub-sections provide a theoretical grounding that helped us to derive the hypotheses for the present paper.

### 2.1. Relationship between emotional intelligence and behavior satisfaction

Studies in the literature show that emotional intelligence has a protective influence regarding on environmentalism, waste prevention, and how to behave in daily routines (Furnham & Petrides, 2003; Mayer & Salovey, 2009; Aguilar-Luzón et al., 2014, Robinson et al. 2019). Emotionally intelligent people have a better awareness of mental processes such as having a positive mood all the time, experiencing different emotions, and comparing them with others, depression and anger management, and being satisfied with a behavior (Schutte et al., 2001; Carmeli, 2003; Lopes et al., 2004). There are few studies examining the relationship between emotional intelligence and satisfaction, but Diehl et al. (2011) examined the link between emotional intelligence and satisfaction. The results showed that there is an increase in satisfaction by the positive effect of emotional intelligence among young adults. So, adults are happy and satisfied with their life and behave, because of emotional intelligence as Sánchez-Álvarez et al., (2016) confirmed. Emotional intelligence acts as a mental mechanism that makes people happier about the decisions, they make about their lives based on an environmentalist vision (Smith et al., 2008; Ghahramani et al., 2019). Another study found that emotionally intelligent people had a sense of duty and social awareness, which affected their personalities and changed their behaviors (Furnham & Petrides, 2003). Emotionally intelligent people's attitudes toward life allow them to be satisfied after engaging in a behavior (Ozer et al., 2016). Hence, this has been hypothesized here as:

**Hypothesis 1.** *Emotional intelligence has a positive effect on behavioral satisfaction.*

*2.2. Relationship between emotional intelligence and recycle behavior*

Emotional intelligence is defined as a form of social intelligence that involves the ability to observe one's own and others' emotions, manage thoughts and actions, and regulate one's own and others' emotions (Mayer & Salovery, 1993; Joseph et al., 2015; Serrat, 2017; Mattingly & Kraiger, 2019). People with high levels of emotional intelligence find it easier to deal with difficulties and obstacles in daily life (Peterson, 2019). Some studies report that emotional intelligence is associated with altruism, empathy, optimism, and social responsibility (Castillo et al., 2013; Aguilar-Luzón et al., 2014; Robinson et al., 2019). Emotional intelligence equips a person with awareness of oneself, others, the environment, and one's lifestyle. Sensitivity towards the environment affects the consumption habits of a person regarding issues of waste prevention and reusability, as well as recycle behavior (Japutra & Loureiro, 2020). For example, Abdollahi and Abu Talib (2015) report that emotional intelligence is directly related to waste prevention. Emotionally intelligent people feel responsible for preventing wear and tear and damage to the products they use so that they can be reused by themselves or others (Abdollahi et al., 2015). In addition to people's sensitivities, recycle behavior is supported by culture and social and individual norms in society as well (Bratt, 1999; Kautish et al, 2019). If in their places of residence, people feel social pressure for recycling and individually know that this is the right thing to do, they recycle the products they use. Social and personal norms are seen in people who have emotional thoughts about reusing products (Bissing-Olson et al., 2016). It can be argued that emotional intelligence would be important in the case of recycling, which concerns the social environment, and they would have a stronger tendency to display environmentally sensitive behavior. Thus, the following hypothesis is presented:

**Hypothesis 2.** *Emotional Intelligence has a positive effect on Recycle behavior.*

*2.3. Mediator effect of recycle behavior between emotional intelligence and behavior satisfaction*

Recycle behavior is affected by emotions and beliefs (McCarty & Shrum, 2001). People's worldviews and cognitive abilities are known to affect their behaviors concerning reduction, reuse, and recycle (Oskamp, 2000; Swami et al., 2011). According to Schultz et al., 2004, environmental belief linked with emotional components could motivate pro-environmental behaviors. Barr, 2007 found that the setting in which people lived, attitudes toward the environment, and psychological traits were important factors affecting waste and recycle behaviors. Through emotional intelligence, people can intentionally reduce their consumption, prevent waste, and feel happy for engaging in these behaviors. Aguilar-Luzon et al., 2014 found that emotional intelligence influenced recycle behavior. The study conducted by Aguilar-Luzon et al., 2014 confirmeat the emotional attention increased the attitude potential for recycling behavior. Few studies recommend examining the relationship between natural environmental behavior and emotional intelligence (Mirrahimi et al., 2011; Robina-Ramirez et al., 2020). Just as one can accept that waste prevention is a recycle behavior, Abdollahi et al., 2015 examined if emotional intelligence influences waste prevention or not. In the scope of this study's background, the studies on recycling norms examine personal and social norms as mediating variables (Schwartz, 1977; Hopper and Nielsen, 1991; Valle et al., 2005). And the studies test the effect of recycle behavior between environmental awareness and environmentally friendly shopping (Kautish et al., 2019). So, there can be sought to find an effect of recycle behavior on behavior satisfaction and mediating role of it between emotional intelligence and behavior satisfaction variables. The present study develops hypotheses to test mediating effect in the relationship between emotional intelligence and behavior satisfaction.

**Hypothesis 3.** *Recycle behavior has a positive effect on Behavior Satisfaction.*

*Hypothesis 4.* *Recycle behavior has mediator effect on the relation between Emotional Intelligence and Behavior Satisfaction.*

## 3. Methodology

### 3.1. Data collection

Eskisehir city was chosen for the study as it has been accepted as the city of students and has a big rate for the young population. Data was collected by the method of convenience sampling. Before the final data collection, a preliminary survey was distributed to 20 questionnaires to university students, with a preliminary study and a few changes included according to their recommendations. The reason for selecting university's students was that they ought to have relevant and more appropriate information about the emotional intelligence, recycle behavior norms and environmental consciousness. The data were collected over a three-month period between 1st Feb-1st Oct 2019. A total of 550 respondents were contacted out of which 477 willingly filled up the questionnaire resulting in 92.7 percent response rate.

**Table 1.** Demographic characteristics of respondents

| Characteristic | Items | Frequency | Percentage |
|---|---|---|---|
| Gender | Female | 256 | 53.7 |
| | Male | 221 | 46.3 |
| Age | 18 | 37 | 7.8 |
| | 19-20 | 194 | 40.7 |
| | 21-22 | 168 | 35.2 |
| | Above 23 | 78 | 16.4 |
| Class | Prep School | 46 | 9.6 |
| | 1 | 78 | 16.4 |
| | 2 | 123 | 25.8 |
| | 3 | 89 | 18.7 |
| | 4 | 141 | 29.5 |
| Education | Vocational | 85 | 17.8 |
| | High School | 49 | 10.3 |
| | Faculty | 342 | 71.7 |
| Income Status | Bad | 183 | 38.4 |
| | Medium | 249 | 52.2 |
| | Good | 43 | 8 |

Table 1 contains the demographic details of the respondents. The participants were 477 students (221 males and 256 females) from four high schools in Eskisehir, a mid-sized city in the interior part of Turkey. The age range was 18–26 (M= 20.64, Std. D.= 0.88) and most of the participants (75%) ranged from 20 to 22 years old and many of students are in 2. and 4. class. 71% of participants study at faculty. A total of 52.2% (n=249) of the participants expressed their income status as medium.

### 3.2. Measurement

The study conducted on quantitative research method and questionnaire technic was used to gather data from participants. The questionnaire was depended on the research design, and the variables were extracted from the past studies which are related to literature. According to Williams et al., 2010 the selection of measurement scale to use in study is a function of the amount of available information on a given variable, the nature of the variable intending to measure, and anticipated statistical techniques for the analysis. The questionnaire was divided into four constructs; first; emotional intelligence (16 items) has four dimensions as self-emotion appraisal (SEA), others'

emotion appraisal (OEA), use of emotion (UOE) and regulation of emotion (ROE) extracted from Wong and Law's (2002) study. In the second part, the recycle behavior scale (17 items) covers social norm, awareness, and personal norm factors, adopted from Hopper and Nielsen's study (1991). In the third part, one-dimensional behavior satisfaction was adapted from (Oliver, 2014) and modified to fit the context. A Likert scale is an interval scale for the purpose of statistical analysis (De Vaus, 2001). A 5-point Likert scale type (1=strongly disagree, 5= strongly agree) was used to enable ease of completion of the questionnaire and to assist in the effective analysis of the collected data. Nunnally and Berstein, 1994 contented those summated scales are reliable, valid, and precise to measure. In the last part of the questionnaire, questions regarding the demographic characteristics of the students are included.

### 3.3. Data analysis

The data analysis for the present study is explained in the following subsections. To analyze the hypothesized relationships, path analyses were used to evaluate the relationships among the variables. To evaluate the mediating effects of the recycle behavior between the emotional intelligence and the behavior satisfaction of respondents, structural equation modeling was implemented. The mediating analysis follows the procedure suggested by Baron and Kenny, 1986. The levels of analysis performed were (1) regression of the mediators on the independent variables, (2) regression of the dependent variables on the independent variables and (3) regression of the dependent variables on both the independent variables and the mediators. Also, mediator effect of recycle behavior between environmental intelligence and behavior satisfaction was analyzed (4), (See Table 6).

### 3.3.1. Data fit and factor analysis

Quantitative data is typically based on some unit of measure, which needs to be uniform across the data for analyses to be meaningful (Hellerstein, 2008). For this reason, before analyzing, dataset was controlled whether expressions related to scales show normal distribution or not (Hair et al., 2013). Using statistical SPSS, the mean, standard deviation, skewness, and kurtosis (Groeneveld and Meeden, 1984) were examined to confirm the normal distribution of the collected data. The highest point for skewness was *1.970*, while kurtosis was calculated as *4.970.* Skewness and kurtosis were within the acceptable range (Curran, West & Finch, 1996). In addition, a correlational analysis was conducted among the variables.  Exploratory factor analysis (EFA) was conducted to identify the dimensions underpinning recycle behavior, emotional intelligence, and the behavior satisfaction. The techniques were employed to determine the reliability of the structure using principal component analysis with varimax rotation to all the observable variables (sub-constructs) to test for inter-item correlation (Boley et al., 2016). Within the scope of the research, each scale was subjected to exploratory factor analysis and Cronbach Alpha values were examined to determine the reliability of the factors. Furthermore, confirmatory factor analysis (CFA) was applied to all factor items to confirm after the explanatory factor analysis. The Kaiser-Meyer-Olkin (KMO) is performed to examine the sample adequacy for the variables. The KMO value of the scales is *.812* (EI), *.816* (BS), *.812* (RB) and explained variance value is *.69* (EI), *.69* (BS), *.69* (RB) and Bartlett's Test of Sphericity is significant *(p< .01),* above the acceptable threshold. The fitted measurement model was tested by using correlation analysis. The To analyze mediating role of recycle behavior between emotional intelligence (EI) and behavioral satisfaction (BS) structural equation modeling was used. The indirect effect shows the results demonstrate a decrease or change in the relationship between the dependent and independent variable after the intermediary variable is added to the research model. The results were evaluated at a 95% confidence interval and *p < .05* significance level.

### 3.3.2. Reliability and construct validity

This study tests the reliability of emotional intelligence, recycle behavior and behavioral satisfaction to control for internal consistency between sub-dimensions of construct. Cronbach's Alpha is recommended to test reliability (Churchill, 1979; Nunnally & Bernstein, 1994; Hair et al., 2013). For each of the sub-dimensions for EI, RB and BS were tested whether correlated. The result of Cronbach's alpha indicates the level of convergence changed between .73 and .93 which according to Molina et al. (2007) should be above .70. Convergence validity factor loads were determined using the mean-variance (AVE) values and composite reliability (CR) values. Confirmatory factor loads, t values and cronbach alpha values are shown in Table 2. Composite reliability (CR) of all structures ranges between 0.76 and .91 as recommended by Bagozzi and Yi (1988). In this research, the convergent validity was assessed based on the values of average variance extracted (AVE) and the results of AVE values are between .45 and .77 which shows Convergence validity confirmed to be valid.

**Table 2.** Details about confirmatory factor loadings

|  |  | Std. Loads | t | alpha |
|---|---|---|---|---|
| **SEA** | I have a good sense of why I have certain feelings most of the time. | .82 | 15.70 | |
| | I have good understanding of my own emotions. | .88 | 17.50 | .81 |
| | I really understand what I feel. | .77 | 14.28 | |
| | I always know whether I am happy. | .49 | 8.21 | |
| **OEA** | I always know my friends' emotions from their behavior. | .67 | 11.46 | |
| | I am a good observer of others' emotions. | .73 | 12.67 | |
| | I am sensitive to the feelings and emotions of others. | .50 | 8.12 | .78 |
| | I have good understanding of the emotions of people around me. | .84 | 15.15 | |
| **UOE** | I always set goals for myself and then try my best to achieve them. | .57 | 9.40 | |
| | I always tell myself I am a competent person. | .77 | 13.30 | .73 |
| | I am a self-motivated person. | .82 | 14.32 | |
| | I would always encourage myself to try my best. | .76 | 12.23 | |
| **ROE** | I can control my temper and handle difficulties rationally. | .76 | 14.24 | |
| | I am quite capable of controlling my own emotions. | .82 | 15.33 | .80 |
| | I can always calm down quickly when I am very angry. | .51 | 8.39 | |
| | I have good control of my own emotions. | .74 | 13.30 | |
| **SN** | Friends expect recycling | .50 | 8.10 | |
| | Expect friends to recycle | .72 | 12.56 | .87 |
| | Neighbors expect recycling | .60 | 10.01 | |
| | Expect neighbors to recycle | .82 | 14.63 | |
| **AW** | Recycling helps conserve natural resources | .66 | 11.89 | |
| | Recycling helps reduce litter | .78 | 15.06 | .81 |
| | Recycling helps save energy | .91 | 18.73 | |
| | Recycling helps reduce use of landfills/dumps | .86 | 14.63 | |
| **INC** | To throw away newspaper does bother me | .80 | 15.49 | |
| | To throw away glass does bother me | .61 | 10.79 | |
| | To throw away aluminum does bother me | .79 | 15.32 | .87 |
| | To throw away paper does bother me | .77 | 14.57 | |
| | To throw away motor oil does bother me | .61 | 10.72 | |
| | To throw away cardboard does bother me | .83 | 16.47 | |

| | | Std. Loads | t | alpha |
|---|---|---|---|---|
| **RSP** | I feel responsibility to recycle newspaper | .92 | 19.72 | |
| | I feel responsibility to recycle cans | .96 | 20.28 | .91 |
| | I feel responsibility to recycle glass | .76 | 14.77 | |
| **BS** | I will be happy when I act ideally | .56 | 9.68 | |
| | It makes me happy to exhibit behavior that will not disturb the society | .66 | 11.70 | |
| | I feel more comfortable when those around me act according to the rules | .77 | 14.53 | .91 |
| | I feel good when I act in accordance with social rules | .89 | 18.07 | |
| | Being an example to those around me with my behavior makes me peaceful. | .76 | 14.14 | |

Abbreviations: SEA= Self-emotion appraisal; OEA=Others' emotion appraisal; UOE=Use of emotion; ROE= Regulation of emotion; SN= Social norm; AW= Awareness; INC= Inconvenience; RSP= Responsibility; BS= Behavioral satisfaction.

Correlations among the nine elements of EI, RB and BS are at moderate degree that correlations range from .12 to .63 and each correlation is significant (p<.01) as can be seen from Table 3. The pattern of correlations confirms the convergent validity of measurements. Convergent validity and discriminant validity have been determined to ensure structural validity. For this test a construct must have higher variance with its indicators than others. The same, when the square roots of the AVE values have higher correlations among the dimensions, it confirms the discriminant validity (Fornell & Larcker, 1981). These values just as seen in table are range from .67 to .87. The output for each variable is provided in Table 3.

**Table 3.** Reliability, Validity, and Correlations

| | **Correlations of constructs** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **AVE** | **CR** | **SEA** | **OEA** | **UOE** | **ROE** | **SN** | **AW** | **INC** | **RSP** | **BS** |
| **SEA** | .58 | .84 | .76 | | | | | | | | |
| **OEA** | .49 | .78 | .28** | .70 | | | | | | | |
| **UOE** | .53 | .77 | .37** | .25** | .73 | | | | | | |
| **ROE** | .52 | .81 | .25** | .25** | .44** | .72 | | | | | |
| **SN** | .45 | .76 | .17** | .19** | .17** | .07 | .67 | | | | |
| **AW** | .65 | .88 | .12** | .16** | .11** | .01 | .38** | .81 | | | |
| **INC** | .55 | .88 | .04 | .08 | .13** | .02 | .31** | .22** | .74 | | |
| **RSP** | .77 | .91 | .05 | .20** | .14** | .11** | .35** | .15** | .63** | .87 | |
| **BS** | .54 | .85 | .16** | .31** | .25** | .21** | .34** | .23** | .28** | .27** | .73 |

AVE = average variance extracted; CR = composite reliability; Alpha = Cronbach's alpha; Diagonal elements in the correlation of constructs' matrix is the square root of AVE. (* < .05; ** < .01)

### 3.3.3. Measurement model

To examine the reliability and validity of the measurement items used in the analysis, this study conducted confirmatory factor analysis (CFA). For the measurement model some indicators determine the goodness of fit (Kaynak, 2003). These are chi-square to degree of freedom *(χ2/df)*, comparative fit index *(CFI)*, the goodness of fit index *(GFI)*, adjusted goodness of fit index *(AGFI)*, standardized root mean square residual *(SRMR)*, and root mean square error of approximation *(RMSEA)*. The χ2/df value for the measurement model is *1.523*, which complies with Byrne (2012) requirement of less than 2. In addition, the values for the other fit indices, such as *GFI (.85), AGFI (.82), NFI (.90), CFI (.93)* and IFI *(0.93)* are also well enough the recommended value of *0.85* suggested by Bagozzi and Yi (1988) and Bollen (1986). Furthermore, the values

of SRMR of *.055* and RMSEA of *.044* are also respectively well the limit of *.080* recommended by Steiger (2000) and McCallum et al. (1996).

**Table 4.** Model fit

| Model Goodness of fit Indexes | Recommended | Result |
|---|---|---|
| Chi-squared/degree of freedom | ≤3 | 1.523 |
| Goodness of Fit Index (GFI) | ≥ .90 | .85 |
| Adjusted Goodness of Fit Index (AGFI) | ≥ .80 | .82 |
| Normalized Fit Index (NFI) | ≥ .90 | .90 |
| Comparative Fit Index (CFI) | ≥ .90 | .93 |
| Incremental Fit Index (IFI) | ≥ .90 | .93 |
| Root Mean Squared Error of Approximation (RMSEA) | .05- .08 | .055 |

All factor-loading values of the items in the confirmatory factor analysis were acceptable, ranging from .82 to .93 (Table 4). In this study, although the GFI and AGFI values are lower, the other indicators are generally good, which is a relatively acceptable model. The results indicated the adequate validity of all the factors in the measurement model.

Assessment for discriminant analysis named as the heterotrait–monotrait (HTMT) has recently been revealed as a better criterion than others. Previous studies have calculated construct ratios of .85 and .91 for HTMT to state discriminant validity (Henseler, Ringle, & Sarstedt, 2015). For the current study, the HTMT ratios have been shown in the table below. The results for HTMT indicate that each dimension of model possesses acceptable discriminant validity.

**Table 5.** Discriminant Validity- Heterotrait–Monotrait (HTMT) Ratios

| Constructs | 1 | 2 | 3 |
|---|---|---|---|
| Emotional Intelligence | | | |
| Recycle Behavior | .365 | | |
| Behavioral Satisfaction | .482 | .526 | |

### 3.3.4. Test of the hypotheses

To control mediating effect, in studies must be checked the direct effect of the independent variable on the dependent variable (Snell, 1992). The effects of emotional intelligence (EI) and recycle behavior (RB) on behavioral satisfaction (BI) were investigated by structural equation modeling. To determine whether there is multiple-collinearity problem; tolerance and VIF values were examined. As the result shows, tolerance value is .949 and the VIF value is 1.05, the model confirmed that no include multi-collinearity problem. Regression and mediating effect analysis were performed just as there was no linear connection and autocorrelation problem.

The effect of the emotional intelligence on the behavioral satisfaction and the effect of the emotional intelligence on the behavioral satisfaction through recycle behavior; the four hypotheses of the research were tested. According to findings, there are direct effects between the measurement models constructed of the latent variables in the path diagram. The mediating effects were analyzed by AMOS. It was found that the effect of emotional intelligence on behavioral satisfaction through recycle behavior was significant and positive.

The study followed the four procedures that are recommended by Baron and Kenny (1986). All conditions for mediating effect in this study, were tested by using separate regressions (Table 6). First, a significant relationship was found between emotional intelligence and behavioral satisfaction (Std. R2 =.334, p < .01). For this reason, that can be seen as H1 hypothesis was accepted. Secondly, there must be a significant relationship between emotional intelligence (independent) and recycle behavior

(mediator). The result showed that there is a relationship between independent and mediator variable (Std. R2 =.222, p< .01). So, the H2 hypothesis is also accepted. Thirdly, the mediator must significantly predict the dependent variable after controlling for the independent variable. It was found that the H3 hypothesis accepted that there is significant relationship between recycle behavior (mediator) and emotional intelligence (dependent), (Std. R2 =.327, p< .01). By the last step, the relationship value must be larger than the coefficient in the model.   As can be seen from the results, after adding the mediator variable (RB), the result changed (Std. R2 =.261, p< .01), so a partial mediation effect can be assumed for recycle behavior between (EI) and (BS). In the mediation test, the standardized R2 coefficients in the regression model are examined and the standardized R2 coefficients should decrease with the addition of the mediator variable (Baron & Kenny, 1986; Hoyle, 1995). For the mediation test, recycle behavior was included in the model as the mediator affect between emotional intelligence and behavioral satisfaction. So, model fit result shows that point fall to .261 that means there is partial mediating effect between variables (see figure 2).

**Table 6.** Basic and Mediation Model Values

| Analysis | Std. $R^2$ | S.E. | t |
|---|---|---|---|
| H1 Behavioral Satisfaction <--Emotional Intelligence | .334 | .056 | 7.72* |
| H2 Recycle Behavior <--Emotional Intelligence | .222 | .045 | 4.97* |
| H3 Behavioral Satisfaction <--Recycle Behavior | .327 | .053 | 7.84* |
| H4 Behavioral Satisfaction <--Recycle Behavior$_{med}$ <--Emotional Intelligence | .261 | .054 | 6.25* |

* *p < .01*
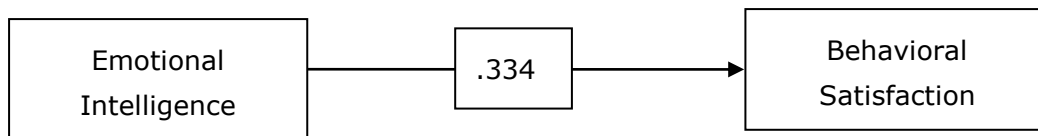


**Figure 1.** Model of relationship between EI and BS
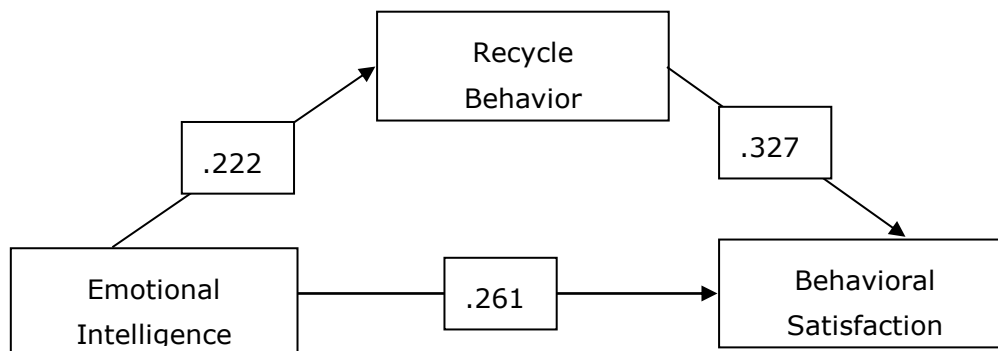


**Figure 2.** Model of relationship between EI and BS (Mediating)

## 4. Conclusions and implications

The aim of this study was to investigate the relationships between emotional Intelligence, recycle behavior and behavioral satisfaction, and to test recycle behavior as mediator between input and output variables. The results highlight that emotional intelligence and recycle behavior affect behavioral satisfaction. In particular, the current study has found a mediating effect of recycle behavior between emotional intelligence and behavioral satisfaction. The mediating effect of environmental-friendly behaviors concur with evidence from past studies on behaviors related to environment sustainability (Liu, Teng & Han, 2020). As one of the environment attitudes, recycle behavior is already exist as a mediator in the studies that confirms the relationship

between environmental attitudes and intention to recycle (Aguilar-Luzón et al., 2014; Rajapaksa et al., 2019).

The study found a relationship between emotional intelligence and behavioral satisfaction. That means when one behaves sensitive and emotional towards an environmental issue strongly, it may influence his/her environmental beliefs on behavioral satisfaction related to environmental issues as recycle and waste prevention (Chiang et al, 2019) Just because the relationship between emotional intelligence and behavior is strong enough to balance the direct effect of recycle behavior (Aziz et al., 2019, 2021).

As part of social intelligence, emotional intelligence refers to a person's ability to control other people's emotions when managing their own decisions and actions. In other words, emotional intelligence involves the ability to motivate oneself, keep going when faced with setbacks, control urges and delay personal satisfaction, make sure distress doesn't affect one's judgment, put oneself in someone else's shoes, and have hope (Goleman, 2019). People with high levels of emotional intelligence are assumed to display ideal behaviors by rules and expectations of society. This study aimed to explain the mediating effects of recycle behavior on the relationship between college student's emotional intelligence and behavior satisfaction. As expected, correlation findings of the study showed that recycle behavior had mediate and significant role in emotional intelligence and behavior satisfaction. Thus, the hypotheses that emotional intelligence affects behavior satisfaction (H2) and affects recycle behavior (H1) were tested and found to be supported by data. The model also examined the mediating effect of the recycle variable on the relationship between emotional intelligence and behavior satisfaction (Table 7).

**Table 7.** The results of the hypotheses

| Hypotheses | Outcome |
| --- | --- |
| H1 = Emotional intelligence → Behavioural satisfaction | Supported |
| H2 = Emotional intelligence → Recycle behaviour | Supported |
| H3 = Recycle behaviour → Behavioural satisfaction | Supported |
| H4 = Emotional intelligence → Recycle behaviour $_{med}$ → behavioural satisfaction | Supported |

The findings of the study show that emotionally intelligent people have a stronger tendency and desire to recycle behavior and feel satisfied with this behavior. The hypothesis regarding the effect of recycle behavior on behavior satisfaction (H3) was found to be supported. This effect is consistent with the findings of previous studies on recycle and satisfaction (Lee & De Young, 1994; Welsch & Kühling, 2010; Tsaur, 2014; Ertz & Sarıgöllü, 2019). Studies that examine the effects of emotional intelligence on recycle behaviors (Russel & Griffiths, 2008; Aguilar-Luzon et al., 2014) also support hypothesis H2. Relationships between behavior satisfaction on the one hand and recycling norms (Abdollahi & Abu Talib, 2015) and emotional intelligence on the other (Cazana & Năstasă, 2015; Runcan & Iovu, 2013; Schutte, et al. 2001) are also consistent. Even after controlling for emotional intelligence, recycling norms remain an important predictor of behavior satisfaction. Recycle behavior was found to have a mediating effect on emotional intelligence and behavior satisfaction (H4). In other words, higher levels of emotional intelligence were associated with higher levels of behavior satisfaction, and recycling norms mediated this relationship. This finding is consistent with the findings of studies that show recycling norms have a mediating effect on relationships between other variables (social norms, empathy, emotions, etc.) like emotional intelligence and behavior satisfaction (Harland et al., 2007; Kerret et al., 2016). Positive attitudes towards recycling norms would make it easier for college students to know themselves, understand others, empathize, and control and manage emotions, and would improve their emotional intelligence or facilitate its more active

use. Thus, emotional intelligence can have a positive effect on behavior satisfaction through the mediation of recycling norms. Moreover, individuals with high levels of recycling awareness and a strong sense of responsibility, who follow social norms and feel deeply troubled by wrong behaviors regarding recycling, would be expected to have high levels of emotional intelligence, especially in high education (Pena et al., 2018; Xia et al., 2021). Finally, this study offers an empirical framework for future researchers by examining the relationships between college students' emotional intelligence, norms regarding environmentally sensitive behaviors and recycling, and behavior satisfaction. The findings of the study show that, in the relationship between adolescents' emotional intelligence and behavior satisfaction, there can be another potential mechanism stronger than recycling norms.

## 5. Limitations and proposals for future studies

This study has certain limitations. The first limitation is that participants in the study consisted of students living in a Turkish city, which limits the generalizability of the findings. Therefore, future studies on the relationships between emotional intelligence, recycling norms, and behavior satisfaction among adolescents from different cultures could help generalize the findings of the present study. the second limitation is that it is difficult to reach any conclusions about cause and effect because this is a cross-sectional study. Future experimental studies could shed better light on causal relationships. Finally, data in this study were collected only using self-report scales. Emotional behavior on the part of students regarding issues of waste management, recycling, and reuse provides evidence that future generations may create environmentally friendly societies. Therefore, environmentally friendly education and practices in education life should be offered with emotion-oriented messages, which can contribute to the adoption of recycling behavior. Moreover, civil society organizations and school administrations can make recycling programs more effective by running campus campaigns to create recycling norms. Future studies can come up with different findings by including variables such as job satisfaction, life satisfaction, and well-being in their models, in addition to emotional intelligence. Another suggestion may be to conduct a study with the participation of service sector employees using the model that includes emotional intelligence, recycling, and satisfaction variables, and compare its results with the findings of the present study. Testing the model of this study in other universities or other fields besides education would also enrich the literature in different ways.

## References

1. Abdollahi, A.; Abu Talib, M. (2015) Emotional intelligence moderates perfectionism and tests anxiety among Iranian students. *School Psychology International*, *36*(5), 498-512. https://doi:10.1177/0143034315603445

2. Abdollahi, A., Mobarakeh, M.R.V.; Karbalaei, S. (2015) Locus of control, Hardiness, and Emotional Intelligence as Predictors of Waste Prevention Behaviours. *Romanian Journal of Psychology*, *17*(1).

3. Aguilar-Luzón, M.C.; Calvo-Salguero, A.; Salinas, J.M. (2014) Beliefs and environmental behavior: The moderating effect of emotional intelligence. *Scandinavian journal of psychology*, *55*(6), 619-629. https://doi:10.1111/sjop.12160

4. Anantharaman, M. (2014) Networked ecological citizenship, the new middle classes and the provisioning of sustainable waste management in Bangalore, India. *Journal of Cleaner Production*, *63*, 173-183. https://doi:10.1016/j.jclepro.2013.08.041

5. Aziz, F.; Mahadi, N.; Ariffin, Z.Z. (2019) The role of emotional intelligence in promoting environmental friendly behavior in organization. *Test engineering and management*, 81, 5985-5993.

6.  Aziz, F.; Md Rami, A.A.; Zaremohzzabieh, Z.; Ahrari, S. (2021) Effects of emotions and ethics on pro-environmental behavior of university employees: a model based on the theory of planned behavior. *Sustainabilit*y, *13*(13), 7062. https://doi:10.3390/su13137062

7.  Bagozzi, R.P.; Yi, Y. (1988) On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*(1), 74-94. https://doi:10.1007/BF02723327

8.  Barling, J.; Slater, F.; Kelloway, E.K. (2000) Transformational lead-ership and emotional intelligence: An exploratory study. *Leadership Org Dev J*, *21*, 157–161.

9.  Baron, R.M.; Kenny, D.A. (1986) The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Tactical Considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

10. Barr, S. (2017) *Household waste in social perspective: values, attitudes, situation, and behaviour*. Routledge; pp. 206.

11. Bengston, D.N. (2019) Futures research methods and applications in natural resources. *Soc Nat Resour*, *32*(10), 1099-1113. https://doi:10.1080/08941920.2018.1547852

12. Bissing-Olson, M.J.; Fielding, K.S.; Iyer, A. (2016) Experiences of pride, not guilt, predict pro-environmental behavior when pro-environmental descriptive norms are more positive. *Journal of Environmental Psychology*, *45*, 145-153. https://doi:10.1016/j.jen vp.2016.01.001

**13.** Bratt, C. (1999) The impact of norms and assumed consequences on Recycle behavior. *Environ behav*, *31*(5), 630-656. https://doi:10.1177/00139169921972272

14. Boley, B.; Strzelecka, M.; Woosnam, K.M (2016) Measuring Resident Perceptions of Economically Benefiting from Tourism. Tourism Travel and Research Association: *Advancing Tourism Research Globally*. 15.

15. Bollen, K.A. (1986) Sample size and Bentler and Bonett's nonnormed fit index. *Psychometrika*, *51*(3),375-377.

16. Byrne, B.M. (2012) *A primer of LISREL: Basic applications and programming for confirmatory factor analytic models*. Springer Science & Business Media.

17. Can, P.; Ozdemir, O. (2019) A Research Article on the Role of Emotional Intelligence on Consumer Ethical Behavior. *R&S-Research Studies Anatolia Journal,* 2(6), 286-302.

18. Carrington, M.; Neville, B.; Whitwell, G. (2010) Why ethical consumers don't walk their talk: towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97, 139–158. https://doi:10.1007/s10551-010-0501-6

19. Carmeli, A. (2003) The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers, *Journal of Managerial Psychology*, *18*(8), 788-813. https://doi:10.1108/02683940310511881

20. Castillo, R.; Salguero, J.M.; Fernández-Berrocal, P.; Balluerka, N. (2013). Effects of an emotional intelligence intervention on aggression and empathy among adolescents. *Journal of adolescence*, *36*(5), 883-892. https://doi:10.1016/j.adolescence.2013.07.001

21. Cazana, A.M.; Năstasă, L.E. (2015) Emotional intelligence, satisfaction with life and burnout among university students. *Procedia-Social and Behavioral Sciences*, *180*, 1574-1578. https://doi:10.1016/j.sbspro.2015.02.309

22. Chiang, Y.T.; Fang, W.T.; Kaplan, U.; Ng, E. (2019) Locus of control: The mediation effect between emotional stability and pro-environmental behavior. *Sustainability*, *11*(3), 820. https://doi:10.3390/su11030820

23. Chow, C.F.; So, W.M.W.; Cheung, T.Y. (2016) Research and development of a new waste collection bin to facilitate education in plastic recycling. *Applied Environmental Education & Communication*, *15*(1), 45-57. https://doi:10.1080/1533015X.2016.1141723

24. Chowdhury, R.M. (2017) Emotional intelligence and consumer ethics: The mediating role of personal moral philosophies. *Journal of Business Ethics*, *142*(3), 527-548. https://doi:10.1007/s10551-015-2733-y

25. Churchill Jr., G.A. (1979) A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, *16*(1), 64-73.

26. Coggins, P.C. (1994) Who is the recycler? *Journal of Waste Management and Resource Recovery*, *1*(2), 1-7.

27. Cropanzano, R.; Dasborough, M.T. (2015) Dynamic models of well-being: Implications of affective events theory for expanding current views on personality and climate. *European Journal of Work and Organizational Psychology*, *24*(6), 844-847. https://doi:10.1080/1359432X.2015.1072245

28. Curran, P.J.; West, S.G.; Finch, J.F. (1996) The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*(1), 16–29.

29. De Vaus, D. (2001) *Research design in social research*. Sage: United Kingdom.

30. Diehl, M.; Hay, E.L.; Berg, K.M. (2011) The ratio between positive and negative affect and flourishing mental health across adulthood. *Aging and Mental Health*, 15, 882–893. https://doi:10.1080/13607863.2011.569488

31. Ertz, M.; Sarigöllü, E. (2019) The behavior-attitude relationship and satisfaction in pro environmental behavior. *Environment and Behavior*, *51*(9-10), 1106-1132. https://doi:10.1177/0013916518783241

32. Fornell, C.; Larcker, D.F. (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39-50.

33. Furnham, A.; Petrides, K.V. (2003) Trait emotional intelligence and happiness. *Social Behavior and Personality: an international journal*, *31*(8), 815-823.

34. Furnham, A.; Taylor, N. (2020) The relationship between emotional intelligence and occupational personality scales in senior management. *Personality and Individual Differences*, *154*, 109647. https://doi:10.1016/j.paid.2019.109647

35. Gao, J.; Tian, M. (2016). Analysis of over-consumption of natural resources and the ecological trade deficit in China based on ecological footprints. *Ecological Indicators*, *61*, 899-904. https://doi:10.1016/j.ecolind.2015.10.044

36. George, G.; Schillebeeckx, S.J.; Liak, T.L. (2018) The management of natural resources: An overview and research agenda. In *Managing Natural Resources*. Edward Elgar Publishing: United Kingdom, 2018.

37. Ghahramani, S.; Jahromi, A.T.; Khoshsoroor, D.; Seifooripour, R.; Sepehrpoor, M. (2019) The relationship between emotional intelligence and happiness in medical students. *Korean journal of medical education*, *31*(1), 29. https://doi:10.3946/kjme.2019.116

38. Goleman, D. (2005) Emotional intelligence: Why it can matter more than IQ?. Bentham: New York, USA, 2005.

39. Goleman, D.; Barlow, Z.; Bennett, L. (2010) Forging New Norms in New Orleans: From Emotional to Ecological Intelligence. *Teacher Education Quarterly*, *37*(4), 87-98.

40. Goleman, D. (2019) Emotional Intelligence (Translator: Banu S. Yuksel). 50. Ed., Varlik Istanbul, Turkey, 2019.

41. Groeneveld, R.A.; Meeden, G. (1984) Measuring skewness and kurtosis. *Journal of the Royal Statistical Society: Series D (The Statistician)*, *33*(4), 391-399. https://doi:10.2307/2987742

42. Hair, J.F.; Ringle, C.M.; Sarstedt, M. (2013) Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, *46*(1-2), 1-12. https://doi.org/10.1016/j.lrp.2013.01.001

43. Harland, P.; Staats, H.; Wilke, H.A. (2007) Situational and personality factors as direct or personal norm mediated predictors of pro-environmental behavior: Questions derived from norm-activation theory. *Basic and applied social psychology*, 29(4), 323-334. https://doi.org/10.1080/01973530701665058

44. Hellerstein, J.M. (2008) Quantitative data cleaning for large databases. *United Nations Economic Commission for Europe (UNECE)*, *25*, 1-42.

45. Henseler, J.; Ringle, C.M.; Sarstedt, M. (2015) A new criterion for assessing discriminant validity in variance-based structural equation modeling, *Journal of the Academy of Marketing Science*, 43 (1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

46. Hopper, J.; Nielsen, J.M. (1991) Recycling as altruistic behavior: Normative and behavioral strategies to expand participation in a community recycling program. *Environment and Behavior*, 23, 195-220. https://doi.org/10.1177/0013916591232004

47. Hoyle, R.H. (1995) *Structural equation modeling: Concepts, issues, and applications*. Sage.

48. Japutra, A.; Loureiro, S.M.C. (2020) Destination's efforts and commitment towards recycling. *Current Issues in Tourism*, 1-12.

49. Joseph, D.L.; Jin, J.; Newman, D.A.; O'Boyle, E.H. (2015) Why does self-reported emotional intelligence predict job performance? A meta-analytic investigation of mixed EI. *Journal of Applied Psychology, 100*(2), 298-342. https://doi.org/10.1080/13683500.2020.1734549

50. Kadic-Maglajlic, S.; Arslanagic-Kalajdzic, M.; Micevski, M.; Dlacic, J.; Zabkar, V. (2019) Being engaged is a good thing: Understanding sustainable consumption behavior among young adults. *J Bus Res*, *104*, 644-654. https://doi.org/10.1016/j.jbusres.2019.02.040

51. Kautish, P.; Paul, J.; Sharma, R. (2019) The moderating influence of environmental consciousness and recycling intentions on green purchase behavior. *Journal of Cleaner Production*, 228, 1425-1436. https://doi.org/10.1016/j.jclepro.2019.04.389

52. Kaynak, H. (2003) The relationship between total quality management practices and their effects on firm performance. *Journal of operations management*, *21*(4), 405-435. https://doi.org/10.1016/S0272-6963(03)00004-4

53. Kerret, D.; Orkibi, H.; Ronen, T. (2016) Testing a model linking environmental hope and self-control with students' positive emotions and environmental behavior. *The Journal of Environmental Education, 47*(4), 307-317. https://doi.org/10.1080/00958964.2016.1182886

54. Lambrechts, W.; Mulà, I.; Ceulemans, K.; Molderez, I.; Gaeremynck, V. (2013) The integration of competences for sustainable development in higher education: an analysis of bachelor programs in management. *Journal of Cleaner Production*, *48*, 65-73. https://doi.org/10.1016/j.jclepro.2011.12.034

55. Lee, Y.J.; De Young, R. (1994) Intrinsic satisfaction derived from office Recycle behavior: A case study in Taiwan. *Soc Indic Res*, *31*(1), 63-76. https://doi.org/10.1007/BF01086514

56. Liu, P.; Teng, M.; Han, C. (2020) How does environmental knowledge translate into pro-environmental behaviors? The mediating role of environmental attitudes and behavioral intentions. *Sci Tot Env*, *728*, 138126. https://doi.org/10.1016/j.scitotenv.2020.138126

57. Lopes, P.N.; Brackett, M. A.; Nezlek, J.B.; Schütz, A.; Sellin, I.; Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and social psychology bulletin*, *30*(8), 1018-1034. https://doi.org/10.1177/0146167204264762

58. Lund, B.L.; Thomas, R.E. (2012) Advice for Tomorrow's Leaders: Millennial Leadership during the Leadership Succession Crisis. *Leadership Org Manag J*, *2012*(2), 92-104.

59.  Martin, M.; Williams, I.D.; Clark, M. (2006) Social, cultural and structural influences on household waste recycling: A case study. *Resources, conservation and recycling*, *48*(4), 357-395. https://doi.org/10.1016/j.resconrec.2005.09.005

60.  Mattingly, V.; Kraiger, K. (2019) Can emotional intelligence be trained? A meta-analytical investigation. *Hum Resour Manage Rev*, *29*(2), 140-155. https://doi.org/10.1016/j.hrmr.2018.03.002

61.  Mayer, J.D.; Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, *17*(4), 433–442.

62.  MacCallum, C.R.; Browne, M.W.; Sugawara, H.M. (1996) Power Analysis and Determination of Sample Size for Covariance Structure Modeling. *Psychological Methods, 1*, 130-149.

63.  McCarty, J.; Shrum, L.J. (2001) The Influence of Individualism, Collectivism, and Locus of Control on Environmental Beliefs and Behavior. *Journal of Public Policy & Marketing*, *20*(1), 93-104. https://doi.org/10.1509/jppm.20.1.93.17291

64.  Mirrahimi, S.; Tawil, N.M.; Abdullah, N.A.G.; Surat, M.; Usman, I.M.S. (2011) Developing conducive sustainable outdoor learning: The impact of natural environment on learning, social and emotional intelligence. *Procedia Engineering*, *20*, 389-396. https://doi.org/10.1016/j.proeng.2011.11.181

65.  Molina, L.M.; Lloréns-Montes, J.; Ruiz-Moreno, A. (2007) Relationship between quality management practices and knowledge transfer. *Journal of operations management*, *25*(3), 682-701. https://doi.org/10.1016/j.jom.2006.04.007

66.  Nunnally, J.C.; Bernstein, I.H. (1994) *Psychometric theory*. New York: McGraw-Hill, Inc.

67.  Oliver, R.L. (2014) *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw-Hill.

68.  Oskamp, S. (2000) A sustainable future for humanity. How can psychology help? *American Psychologist, 55*(5), 496-508. https://doi.org/10.1037/0003-066X.55.5.496

69.  Ozer, E.; Hamarta, E.; Deniz, M.E. (2016) Emotional intelligence, core-self evaluation, and life satisfaction. *Psychology*, *7*(2), 145-153. https://doi.org/10.4236/psych.2016.72017

70.  Peña, P.N.; Macale, A.M.; Largo, N.N. (2018) Environmental awareness and pro-environmental behaviors of high school students in Los Baños, Laguna. *Journal of Nature Studies*, *17*(1), 56-67.

71.  Peterson, M. (2019). The influence of emotional intelligence, adaptation, and homesickness toward stress level. *Journal of Management and Leadership*, *2*(1), 25-35.

72.  Poškus, M.S.; Žukauskienė, R. (2017) Predicting adolescents' recycle behavior among different big five personality types. *Journal of Environmental Psychology*, *54*, 57-64. https://doi.org/10.1016/j.jenvp.2017.10.003

73.  Rajapaksa, D.; Gifford, R.; Torgler, B.; Garcia-Valiñas, M.; Athukorala, W.; Managi, S.; Wilson, C. (2019) Do monetary and non-monetary incentives influence environmental attitudes and behavior? Evidence from an experimental analysis. *Resources, Conservation and Recycling*, *149*, 168-176. https://doi.org/10.1016/j.resconrec.2019.05.034

74.  Robina-Ramírez, R.; Merodio, J.A.M.; McCallum, S. (2020) What role do emotions play in transforming students' environmental behaviour at school?. *Journal of Cleaner Production*, *258*, 120638. https://doi.org/10.1016/j.jclepro.2020.120638

75.  Robinson, A.C.; Downey, L.A.; Ford, T.C.; Lomas, J.E.; Stough, C. (2019) Green teens: Investigating the role of emotional intelligence in adolescent environmentalism. *Personality and Individual Differences*, *138*, 225-230. https://doi.org/10.1016/j.paid.2018.10.009

76. Runcan, P.L.; Iovu, M.B. (2013) Emotional intelligence and life satisfaction in romanian university students: the mediating role of selfesteem and social support. *Revista de Cercetare si Interventie Sociala*. *40*, 137-148

77. Russell, S.; Griffiths, A. (2008) The role of emotions in driving workplace pro-environmental behaviors. *Emotions, Ethics and Decision-Making, Research on Emotion in Organizations, (4)*, 83-107. https://doi.org/10.1016/S1746-9791(08)04004-2

78. Sánchez-Álvarez, N.; Extremera, N.; Fernández-Berrocal, P. (2016) The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology*, *11*(3), 276-285. https://doi.org/10.1080/17439760.2015.1058968

79. Schutte, N.S.; Malouff, J.M.; Bobik, C.; Coston, T.D.; Greeson, C.; Jedlicka, C.; ... & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *The Journal of social psychology*, *141*(4), 523-536. https://doi.org/10.1080/00224540109600569

80. Schutte, N.S.; Loi, N.M. (2014) Connections between emotional intelligence and workplace flourishing. *Pers Individ Differ*, *66*, 134-139. https://doi.org/10.1016/j.paid.2014.03.031

81. Schultz, P.W.; Shriver, C.; Tabanico, J.J.; Khazian, A.M. (2004) Implicit connections with nature. *J Environ Psychol*, *24*, 31–42. https://doi.org/10.1016/S0272-4944(03)00022-7

82. Schwartz, S.H. (1977) *Normative influences on altruism. In L. Berkowitz (Ed.), Advances in experimental social psychology*. Academic Press: New York, USA, 1977.

83. Seacat, J.D.; Boileau, N. (2018) Demographic and community-level predictors of Recycle behavior: A statewide, assessment. *Journal of Environmental Psychology*, *56*, 12-19. https://doi.org/10.1016/j.jenvp.2018.02.004

84. Serrat, O. (2017) *In Knowledge solutions*, Singapore: Springer.

85. Smith, L.; Heaven, P.C.; Ciarrochi, J. (2008) Trait emotional intelligence, conflict communication patterns, and relationship satisfaction. *Personality and Individual differences*, *44*(6), 1314-1325. https://doi.org/10.1016/j.paid.2007.11.024

86. Snell, S.A. (1992) Control theory in strategic human resource management: The mediating effect of administrative information. *Academy of management Journal*, *35*(2), 292-327.

87. Steiger, J.H. (2000) Point estimation, hypothesis testing, and interval estimation using the RMSEA: Some comments and a reply to Hayduk and Glaser. *Structural Equation Modeling*, *7*(2), 149-162. https://doi.org/10.1207/S15328007SEM0702_1

88. Swami, V.; Chamorro-Premuzic, T.; Snelgar, R.; Furnham, A. (2011) Personality, individual differences, and demographic antecedents of self-reported household waste management behaviours. *J Environ Psychol*, *31*(1), 21–26. https://doi.org/10.1016/j.jenvp.2010.08.001

89. Trudel, R. (2019) Sustainable consumer behavior. *Consumer psychology review*, *2*(1), 85-96. https://doi.org/10.1002/arcp.1045

90. Tsaur, R.C. (2014) Analysis of the relationships among motivation to recycle, willingness to recycle, and satisfaction with recovery stations in Taiwan. *WSEAS Transactions on Environment and Development*, *10*, 26-34.

91. Valle, P.O.D.; Rebelo, E.; Reis, E.; Menezes, J. (2005) Combining behavioral theories to predict recycling involvement. *Environment and behaviour*, *37*(3), 364-396. https://doi.org/10.1177/0013916504272563

92. Varela-Candamio, L.; Novo-Corti, I.; García-Álvarez, M.T. (2018) The importance of environmental education in the determinants of green behavior: A meta-analysis approach. *J Cleaner Production*, *170*, 1565-1578. https://doi.org/10.1016/j.jclepro.2017.09.214

93. Weiss, H.M.; Beal, D. (2005) Reflections on affective events theory. *Research on Emotion in Organizations, 1*, 1–21. https://doi.org/10.1016/S1746-9791(05)01101-6

94.  Welsch, H.; Kühling, J. (2010). Pro-environmental behavior and rational consumer choice: Evidence from surveys of life satisfaction. *Journal of Economic Psychology*, *31*(3), 405-420.

95.  Williams, L.J.; Hartman, N.; Cavazotte, F. (2010) Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational research methods*, *13*(3), 477-514. https://doi.org/0.1177/1094428110366036

96.  Wong, C.S.; Law, K.S. (2002) The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The leadership quarterly*, *13*(3), 243-274. https://doi.org/10.1016/S1048-9843(02)00099-1

97.  Xia, Z.; Zhang, S.; Tian, X.; Liu, Y. (2021) Understanding waste sorting behavior and key influencing factors through internet of things: Evidence from college student community. *Resources, Conservation and Recycling*, *174*, 105775.

98.  Yasin, S.; Sun, D. (2019) Propelling textile waste to ascend the ladder of sustainability: EOL study on probing environmental parity in technical textiles. *Journal of Cleaner Production*, *233*, 1451-1464. https://doi.org/10.1016/j.jclepro.2019.06.009