



JOURNAL OF SOCIAL RESEARCH DEVELOPMENT

www.jsrd.org.pk
editor@jsrd.org.pk


PRO-ENVIRONMENTAL BEHAVIOR OF FRONTLINE EMPLOYEES IN TOURISM INDUSTRY OF PAKISTAN

Mayen Khan¹, Zainab Bibi² & Ammarah Ahmed³

¹MS Scholar, Institute of Management Sciences, University of Balochistan, Quetta, Pakistan

²Professor, Institute of Management Sciences, University of Balochistan, Quetta, Pakistan

³Assistant Professor, Department of Management Sciences, BUIITEMS, Quetta, Pakistan

| KEYWORDS | ABSTRACT |
|---|---|
| Environmental Attitude (EA), Environmental Knowledge (EK), Pro-Environmental Psychological Climate (PEPC), Pro-Environmental Behavior (PEB) | <p>The organizational and institutional influence on environmental well-being depends largely on its employee's potential to act in the pro-environmental manner. The addition of sustainable environmentally concerned policies in the organization's policies is essential. Green or environmentally concerned policies are rapidly emerging and compelling organizations to participate in green activities. Pro-environmental behavior can help the organizations to adapt to and makes it able mitigate prevailing climate problems. This study seeks to thoroughly investigate role of following variables, which includes environmental attitudes, environmental knowledge, and pro-environmental psychological climate (PEPC) in fostering Pro-environmental behavior. The sample of study comprised tour operators and tourist guides. The survey's responses (n=232) were collected from a population (N) of 409. Data were collated via an online questionnaire and analyzed using SPSS and PROCESS macro. The results showed that EA, EK, and PEPC positively influenced PEB of tour operators and tourist guides. Further, PEPC positively moderated the EA-PEB and EK-PEEB relationships. The study offers several theoretical and practical insights.</p> <p> 2022 Journal of Social Research Development</p> |
| Corresponding Author | Mayen Khan |
| Email: | mayen.khan@buitms.edu.pk |
| DOI | https://doi.org/10.53664/JSRD/03-02-2022-03-143-159 |

INTRODUCTION

Pakistan is bestowed with immense natural resources which can be utilized for sustainable tourism. Global climate problems are the emerging crisis of recent decades that need to be concerned. After the United Nations finalized sustainable development goals, countries are increasing their climate change mitigation strategies. As seventeen sustainable goals (SGDs) proposed by United Nations, Environmental issues is one of most important that

need consideration (Braun & Dierkes, 2019). There are changes in global warming causing global warming which is leading to snow melting, higher sea levels and changes in weather that are extreme (Bøhlerengen & Wiium, 2022). Pro-environmental behavior is increasingly becoming a priority and it is the major public debate (Li, Zhao, Ma, Shao & Zhang, 2019). Organizations are increasingly taking the keen interest in improving their environmental management and performance (Zibarras & Coan, 2015). The PEB is one of most important factors that can assist in minimizing the negative effects of the tourist's actions (Hossain, Nekmahmud & Farkas, 2022).

The topic or area of pro-environmental behavior is the major and significant topic that is being researched (Paillé, Chen, Boiral & Jin, 2014). Thus, scholars that have an interest in environmental management have given a lot of attention to employees' roles and human resource management policies that are necessary for greening organizations for achieving sustainability development (Pinzone, Guerci, Lettieri & Huisinghc, 2019). It is known that workers or employees in organizations have a major role in implementing green policies to achieve the green/sustainable development goals (Saeed, Afsar, Shakir & Khan, 2019). Environmental knowledge alone is not enough, it requires green policies to foster a better environment friendly and concerned behavior, which shall be enhanced by a psychological green climate existing within organization (Naz, Jamshed, Nisar & Nasir, 2021). Tourism industry globally the most fastest growing business (Balmford, Beresford, Green, Naidoo, Walpole & Manica, 2009). The tourism development has given rise to its sustainability and harmful impact on natural environment (Avcikurt & Demirbulat, 2016) and there is a dire need to protect environment.

The process of protecting environment through human activities is known as pro or nature concerned environmental behavior (Foster et al., 2022). Tourism has immense privilege of enhancing the economic well-being, but non-sustainable tourism management could be threatening the wild habitats (Zeng, Wen, Bi & Feiock, 2020). In this connection, certain previous studies indicated that along with the many economic benefits of tourism, it has its pros and cons on the natural environment (Liao, Lin, & Hsieh, 2019). Due to negative environmental impact of the traditional tourism, sustainable tourism is getting attention, which includes eco-friendly tourism, that doesn't harm the natural environment (Jackson, 2007). Previous studies have shown that limited information is available regarding the environmental attitude and behavior of tourist guides and tour operators, i.e., most of the literature has focused upon perceptions of tourists in diverse situations around the globe (Peake et al., 2009; Kong, 2014). In this linking, Pakistan is filled with amazing destinations that are a source of awe and wonder for numerous tourists which include tourists from the abroad (Jalil et al., 2013).

Tourism sector is multidimensional business that can be source of economic development. Individuals will be concerned about environmental well-being only if they will be aware of

the environmental issues of their environment (Gifford & Nilsson, 2014). Climate change is causing major problems all over the world, therefore nature friendly behavior that helps to mitigate negative effects of individual's activity on environment is increasingly becoming a critical area to be researched. Tourism industry is on frontline of climate crisis because it is major industry and it is needed for workers in tourism industry to adopt pro-environmental practices. Some major factors that influence environment behavior of employees include environment friendly attitude, knowledge about environment, and psychological climate about environment in organization. Limited information was available in literature about tour operators' and tour guides' environmentally concerned behavior/pro-environmental behavior. The primary aim of research is that to thoroughly assess and examine the impact and influence of attitude, knowledge, and pro-environmental psychological climate from an environmental perspective on PEB of tour operators and tourist guides, while aiming to see and investigate the actual moderating role of pro-environmental psychological climate among aforesaid variables.

LITERATURE REVIEW

Pro-Environmental Behavior (PEB):

The pro-environmental behavior are the actions that are directed toward the enhancement and betterment environment's quality (Steg, 2014). The terminology of pro-environmental behavior also has its alternative types, which include the green purchase behavior, and environmental (Adrita & Mohiuddin, 2020). The research that is based primarily on PEB is getting among the researchers those who are concerned about environmental well-being (Barbarossa & Pelsmacker, 2016). The pro-environmental behavior within an organization highlights its combination of effectiveness in improving environmental well-being (Naz et al., 2021). People having higher level of environment-friendly attitude can predominantly perform a better PEB, when they perceived that the opportunity cost is low (Farjam et al., 2019). In this connection, the theory that is very much known and it is called as "Value, Belief and Norm (VBN)" was firstly and initially given by Stern and Dietz (1994), the value, belief and norm is considered as the that is about the environmentalism, and according to VBN and pro-environmental behavior is influenced by beliefs and environmental attitudes (Milfont, Duckitt, & Wagner, 2010).

Environmental Attitude (EA)

An environment-friendly attitude can be described as a belief or behavioral intentions that an individual holds about the environment (Schultz, Shriver, Tabanico, & Khazian, 2004). EA has been referred to as a person's concern for the nourishment of natural environment which surrounds us all (Gifford & Sussman, 2012). According to Ajzen (1991), the attitude actually plays the key role in various theories that are aimed at understanding behavior, which include Theory of Reasoned Action (TRA) which is a well-known theory and Theory of Planned Behavior (TPB) which is also a very much well-known theory. The use of EA as a

pre-requisite of nature friendly or environmentally concerned behavior is one of widely applied approaches (Li et al., 2019). There exists is the link between the knowledge about environment and environmentally friendly behavior, and this is primarily because of the attitudes (Francisco et al., 2020). Holding a positive attitude doesn't unfortunately always result in prop-environmental behavior (Wyss et al., 2022). There is a gap between EA and environment friendly behavior, and it is gaining attention of scientists (Gifford & Sussman, 2012). Still people have positive attitude to environment, yet such attitude still not result in PEB (Wyss et al., 2022).

Environmental Knowledge (EK)

The knowledge regarding the environment and the issues faced by the environment and devising mitigation strategies is known to be EK (Paço & Lavrador, 2017). It is important variable that can help explain PEB since it indicates a person's environmental awareness, knowledge regarding eco-system (Fryxell & Lo, 2003). Account to Young, Boerschig and Young (1993) EK consists of three important dimensions: like issues, strategies, and action skills. The best way to describe knowledge in environmental context is that is accumulated information an individual acquired about the environment, primarily including knowledge about climate change (Hamzah, 2021). In this connection, based on existing research, the pro-environmental behavior within an organization is vital and highlights its combination of effectiveness in improving environmental well-being. Environmental knowledge has been described as individual's capability and ability to be able to identify and clearly understand the concepts that are precisely associated to the protection of the environment (Vicente-Molina et al., 2013).

Environmental Attitude and Pro-Environmental Behavior:

EA can have a positive impact on environmentally concerned behavior or PEB. The research has shown that EA can be an important and very essential predictor of PEB when the opportunity cost of that behavior is low (Wyss et al., 2022). Certain other researchers are of the view that EA does not result in desired friendly behavior towards the environment (Li et al., 2019). However, EA has been shown to be positively correlated with PEB (Farjam, Nikolaychuk, & Bravo, 2019). Studies focused on the attitudes of people regarding the environment have shown that an individual's attitude is likely to have a major and key role in developing a good environmental behavior (Duarte et al., 2017). Hence, it can logically be predicted that environment-friendly attitude could be a major determinant of PEB (Li et al., 2019). Thus, we propose that:

H1: Environmental Attitude Will Positively Impact Pro-Environmental Behavior

Environmental Knowledge & Pro-Environmental Behavior

According to Duan and Sheng (2018), employees' friendly environmental behaviors can be predicted based on their knowledge regarding the environment. An individual is mostly very unlikely to perform friendly environmental behavior when they lack knowledge about

the environment (Gifford & Nilsson, 2014). However, environmental knowledge has been shown to be positively correlated with pro-environmental behavior. However, people who have knowledge regarding the environment and relevant issues are more likely to adopt a nature-friendly lifestyle and show PEB (Duan & Sheng, 2018). Consequently, based upon this support, it is proposed that:

H2: Environmental knowledge will positively impact pro-environmental behavior.

Pro-environmental Psychological Climate & Pro-Environmental Behavior

The pro-environmental psychological climate can be described as individuals' perception regarding organizational policies (Dumont, Shen, & Deng, 2017). Organizational policies are added with green standards by organizations that want to contribute to ecological well-being (Naz et al, 2021). To meet environmental standards, organizations promote green policies to promote green climate (Saeed et al., 2019). Organizations try and attempt to have positive influence on mindsets of their employees by starting friendly environmental objectives to enhance the behavior of employees and make it environmentally concerned (Naz et al., 2021). If organization does not prioritize environmental policies, its employees may perceive that the organization doesn't care about the environment, which may result in negative environmental behavior. When organizations set environmental standards, it gives employees a basic awareness of responsibilities that are necessary to contribute to environmental well-being (Pinzone et al., 2019). Thus, it was hypothesized that PEPC has a positive impact on PEB.

H3: The Pro-Environmental Psychological Climate Will Positively Impact Pro-Environmental Behavior.

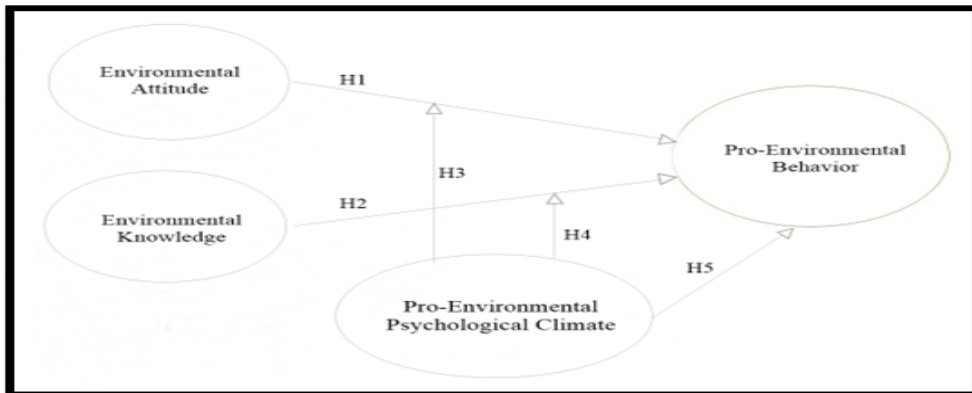
Moderating Role of Pro-Environmental Psychological Climate

The PEPC is best described as an individuals' perceptions regarding organization and its policies and rules concerning environmental well-being (Boxall et al., 2016). The presence of environmentally friendly policies can result in the psychological climate that can have an impact that is positive on the environmental behavior (Beermann, 2011). An environment-friendly psychological climate also means that employees view organizational potential to have a positive influence on the environment (Dumont et al., 2017). Environment-friendly human resources policies are followed by those organizations that want to contribute to ecological well-being, and they look beyond economic perspective (Chatelain et al., 2018). In this connection, through the implementations of green policies organizations induces environmental awareness among their staff (Saeed et al., 2019). Thus, various previously conducted studies have also identified that the climate of an organization and employee's behavior are strongly related (Schneider, 2013). The employees perceive its organizational main policies and the working environment, so it has an impact on employee behavior as well (Burke, 2002).

The green policies of an organization are mostly very likely to impact pro-environmental behavior of employees (Renwick, 2013). If green or pro-environmental policies are not prioritized the employees may not hold a positive attitude about or toward environmental wellbeing which may result in a negative pro-environmental psychological climate (Chou, 2014). Organizational climate can have significant impacts on the attitudes and behaviors of workers (Schneider et al., 2013). A green psychological climate where the environmental policies are strictly followed can give cues to the staff about the behaviors valued and can have a positive effect on rewarded system (Norton et al., 2014). The presence of a complex relationship that exists between the attitude regarding the environment and environmental behavior can also be moderated by numerous other influences (Nauges & Wheeler, 2019). Similarly, in an organizational context, when there is an active environment-friendly climate employees performed better environmentally behavior (Norton et al., 2014). Therefore, we hypothesize that:

H4: Pro-Environmental Psychological Climate Will Positively Moderate Relationship Amid Environmental Attitude & Pro-Environmental Behavior.

Figure 1 Conceptual Model



Organizational green policies create PEPC and increase environmental concern among the employees (Saeed et al., 2019). Employees who are inclined towards knowledge seeking regarding environment tend to be more supportive of PEB (Zareie & Navimipour, 2016). Impact of knowledge about environment of individual on their environmental behavior can be better and enhanced in the presence of green organizational policies resulting in a pro-environmental psychological climate. If PEPC exists within an organization, it can play a positive role for employees to act upon their EA and take green action (Wu et al., 2018). The organizations that prioritize green policies and management practices provide their work staff with the opportunity to apply their knowledge regarding the environment to PEB (Pham, 2019). Thus, studies have identified, highlighted, and showed that PEPC can strengthen the impact of EA on PEB (Norton, Parker, Zacher, & Ashkanay, 2015). Thus, it is hypothesized that:

H5: Pro-Environmental Psychological Climate Will Positively Moderate Relationship Amid Environmental Knowledge & Pro-Environmental Behavior

RESEARCH METHODOLOGY

A conceptual model that was based on theory of reasoned action and theory of planned behavior was firstly developed. The nature of this study was quantitative with the cross-sectional time frame. The research philosophy adopted in this study was epistemology and positivism. It was a causal study that investigated the impact of EA and EK on PEB, while also considering the moderating role and effect of PEPC on relationship between EA and PEB. Causal research is quite helpful in models where the relationship between variables is accessed (Saunders & Lewis, 2018). The data for the study was gathered via an online self-administered questionnaire.

Population & Sampling

The targeted population for this study consisted tourism sector employees working under Pakistan tourism development corporation, department of tourist service Islamabad and provincial tours operator agencies. Sample included tour operators and tourist guides. The total population of tourist guides in Pakistan according to online database of department of tourist service Islamabad is 409. According to Saunders, Lewis and Thornhill, (2009), when population size is known, using a 95% level of confidence and 5% error margin, the size of sample for our study was estimated to be 196. Data were collected from 232 respondents through random sampling.

Instrument & Measurements

Eight items were adopted from Boschett, Richert, Walker, Price and Dutra (2012) to measure EA, while EK variable was thoroughly measured by using a nine-item scale by (Gatersleben, Steg, & Vlek 2002). PEPC was measured by using the five items by (Chou, 2014). Further, thirteen items by (Graves, Sarkis, & Zhu 2013) were used to gauge the pro-environmental behavior. A five-point Likert scale which initiates from (strongly agree to final option that is strongly disagree) was used.

ANALYSIS AND RESULTS

First row of Table 1 describes details of each demographic question used in questionnaire. There were 224 male and 8 female respondents. As can be seen in Table 1, 77 respondents were actually aged between 20 to 30 years, 130 were aged in-between 31 to 40 years, 23 were aged in-between 41 to 50 years and 2 respondents were 51 years old. Table highlights the level of education of respondents, which included one Ph.D. degree holder, and two respondents with MS/M. Phil while 115 of them had master degree, 98 had done bachelors, only twelve of the respondents had HSSC degree and four had the SSC degree. 78 of the respondents had work experience between 1-5 years, 77 of them had their work experience between 6-10 years, 51 respondents had their work experience in-between 11 and 15

years, 18 of them had 16 to 20 years of experience in working and finally, 8 respondents had eight or more years of working experience.

Table 1 Demographic Information

| Demographics | Types | Responses | Percentage (&) |
|---------------------|--------------------|-----------|----------------|
| Gender | Male | 224 | 96.6 % |
| | Female | 8 | 3.4 % |
| Age | 20-30 | 77 | 0.33 % |
| | 31-40 | 130 | 0.56 % |
| | 41-50 | 23 | 0.099 % |
| | 51 & above | 2 | 0.0086 % |
| | Level of Education | Ph.D. | 1 |
| | MS/M.Phil. | 2 | 0.86 % |
| | Masters | 115 | 49.5 % |
| | Bachelors | 98 | 42.2 % |
| | HSSC | 12 | 5.17 % |
| | SSC | 4 | 1.7 % |
| Years of Experience | 1 - 5 Years | 78 | 33.6 % |
| | 6 - 10 Years | 77 | 33.2 % |
| | 11 - 15 Years | 51 | 22 % |
| | 16 - 20 Years | 18 | 7.7 % |
| | 21 & above | 8 | 3.4 % |

Table 2 Descriptive Statistics

| Variables | Sample | Minimum | Maximum | Mean | SD | Skewness | Kurtosis |
|-----------|--------|---------|---------|--------|---------|----------|----------|
| EA | 232 | 1.00 | 4.00 | 1.7220 | .61778 | .625 | .732 |
| EK | 232 | 1.00 | 4.00 | 1.7759 | .67098 | .831 | 1.204 |
| PEPC | 232 | 1.00 | 5.00 | 2.1664 | 1.00082 | .946 | .356 |
| PEB | 232 | 1.00 | 5.00 | 1.9483 | .75960 | 1.117 | 2.311 |

The descriptive statistics provides information in describing research issues from different parameters. The actual value of Skewness and value we got of kurtosis of all the variables were in the threshold and acceptable range (± 2), indicating a normal distribution (George & Mallery, 2010).

Table 3 Reliability Statistics

| | Cronbach's Alpha | Number of Items |
|---|------------------|-----------------|
| Environmental Attitude | .944 | 8 |
| Environmental Knowledge | .959 | 9 |
| Pro-Environmental Psychological Climate | .971 | 5 |
| Pro-Environmental Behavior | .975 | 13 |

As can be seen in Table 3, that values of Cronbach’s alpha being checked for all the scales were greater than 0.70 (threshold value), and this is clearly indicating the higher internal consistency (Benevene1 et al., 2018).

Table 4 Correlation Analysis

| Pearson Correlation | PEB | PEPC | EA | SE | EK |
|---|--------|--------|--------|--------|----|
| Pro-Environmental Behavior | 1 | | | | |
| Pro-Environmental Psychological Climate | .510** | 1 | | | |
| Environmental Attitude | .721** | .387** | 1 | | |
| Environmental Knowledge | .760** | .390** | .820** | .663** | 1 |

Correlation is said to be significant at the level of 0.01 (2-tailed). N=232

In Pearson correlation the value of r varies between +1 and -1, +1 value of r is considered to be a positive perfect correlation, and r value that is -1 is considered the perfect negative correlation. Correlation results are clearly showing a very a positive relationship between the PEB and PEPC (r = .510, p < .001). Therefore, the correlation table is also showing the positive existence of the relationship between EA and PEB (r = .721, p < .001). The relation between EK and PEB was also positive (r = .760 p < .001). Hence, the effect size for all the relationships was large.

Table 5 Coefficients of Regression

| Model | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
|--------------|-----------------------------|---------------------------|------|-------|
| | B | Std. Error | Beta | |
| 1 (Constant) | .103 | .096 | | 1.080 |
| PEPC | .176 | .032 | .232 | 5.427 |
| EK | .524 | .078 | .463 | 6.709 |
| EA | .309 | .085 | .251 | 3.645 |

Dependent variable: PEB

When the independent variables are kept at zero in that case PEB will be at .103 on average. When PEPC on average changes by 1 unit, in that case, this independent variable will cause a (.176) percent increase on average in PEB while keeping the two other independents constant. As per the 2-t thumb rule when the t value is more than 2 at the five percent significance level, in that case, the null hypothesis is being rejected. In the table, the t value is (5.427) which is statistically quite significant, with 0.000% level of significance. There is a clearly a statistically very significant positive impact of PEPC on PEB. Results also showed that if EK changes by 1 unit, then, on average PEB will increase by (.524) percent on an average while strictly keeping PEPC and EA constant. It is statistically quite significant as per the 2-t rule thumb if value

of t comes as greater or more than 2 at 5% significance of level, we in that particular case reject null hypothesis.

Consequently, here it is clearly significant because value for t is more than 2 which is (6.709) along with 0.000% significance of level. There is statistically clearly significant positive impact of EK on PEB. When EK sees a change that is 1 unit, in that case then, on average PEB will increase by (.309) percent on an average meanwhile keeping PEPC and EK constant. It is actually significant in a statistic manner that as per the 2-t thumb rule if t value comes up to be greater than 2 at a 5% significance of level, we reject the null hypothesis. So, it is statistically considered significant as the t-value is actually higher than 2 which is (3.645) along with a 0.000% significance level. There is a statistically clearly significant positive impact of Environmental Attitude on Pro-Environmental Behavior.

Table 6 Model Summary

| Model | R | R Square | Adjusted R Square | Std. error of Estimate |
|-------|-------|----------|-------------------|------------------------|
| 1 | .807* | .652 | .647 | .45135 |

a. Predictors: (Constant), EA, EK, PEPC

b. Dependent Variable: PEB

Multiple linear regression is the technique in statistics which is employed to determine the variation in model and the contribution of each explanatory variables in the total variance. Furthermore, it describes the amount of variance that occurred in our dependent variable, which were clearly caused because of our predictor variables. The adjusted R square and the R square are the variances caused in the dependent variable. The value of adjusted R-square which is (.647) means 64.7%, change is caused by all the predictors in the pro-environmental behavior.

Table 7 ANOVA

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|---------|-------|
| Regression | 86.838 | 3 | 28.946 | 142.090 | .000b |
| Residual | 46.447 | 228 | .204 | | |
| Total | 133.285 | 231 | | | |

a. Dependent Variable: PEB

b. Predictors: (Constant), EK, EA, PEPC

The results of ANOVA provide significant information in reaching the decision. The F value in the table is 142.090 (P < 0.05) at .000 significance level indicating this model is fit. dependent variable pro-environmental behavior was found having a very significant and quite positive relationship with the environmental knowledge, environmental attitude and pro-environmental psychological climate.

Moderating Effects

Hayes PROCESS macro (2018) was employed to evaluate the moderating role of the PEPC. Results of moderation analysis are given in table 4.7 and table 5.8. The interaction effects were found to be statistically significant.

Table 8 Moderation Analysis for PEPC between EA & PEB (N=232)

| | ΔR^2 | F | P |
|-----------|--------------|--------|--------|
| EA X PEPC | .0132 | 7.4649 | 0.0068 |

Change in R-square value that is (.0132), at less than 0.05 significance value, means PEPC moderates the relationship between EA & PEB. There is a moderating role of the pro-environmental psychological climate between EA & PEB as the sig. value = 0.0068 less than 0.05%. Thus, according to Preacher and Hayes, (2012), when values come a non-zero between the lower and upper limits, thus, it indicates that the moderator is moderating the relationship that exists between the dependent and independent variables. Hence, the H4 is accepted.

Table 9 Moderation Analysis for PEPC between EK and PEB (N=232)

| | ΔR^2 | F | P |
|-----------|--------------|---------|-------|
| EK X PEPC | .0192 | 12.4645 | .0005 |

Change in R-square value that is (.0192), at less than 0.05 significance value, indicates that PEPC moderates the relationship between EK & PEB. There is the moderating role of PEPC in-between EK & PEB as sig. value = 0.0005 less than 0.05%. As per guidelines provided by Preacher and Hayes, (2012), non-zero presence in-between the lower limit and upper limits indicates that the relationship in-between independent and the dependent variable is being moderated by the moderating variable. The non-zero presence in-between the lower and upper limits can be confirmed from the above table. Hence, the H5 was also accepted.

Figure 2 Moderation Effects of PEPC In-Between EA & PEB

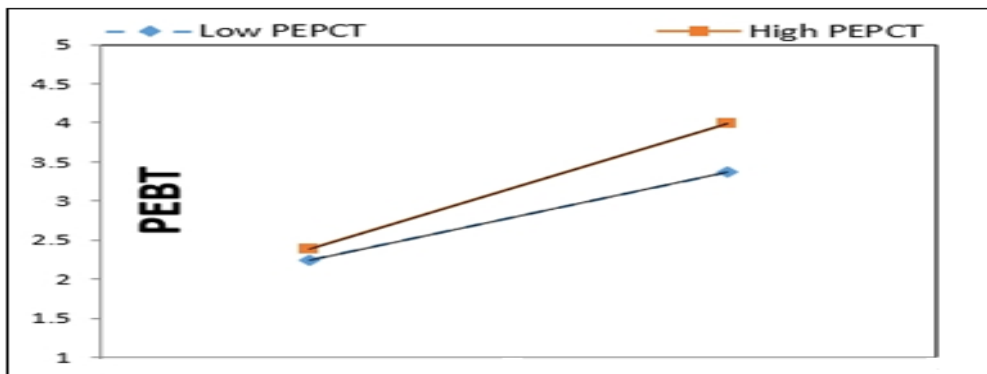
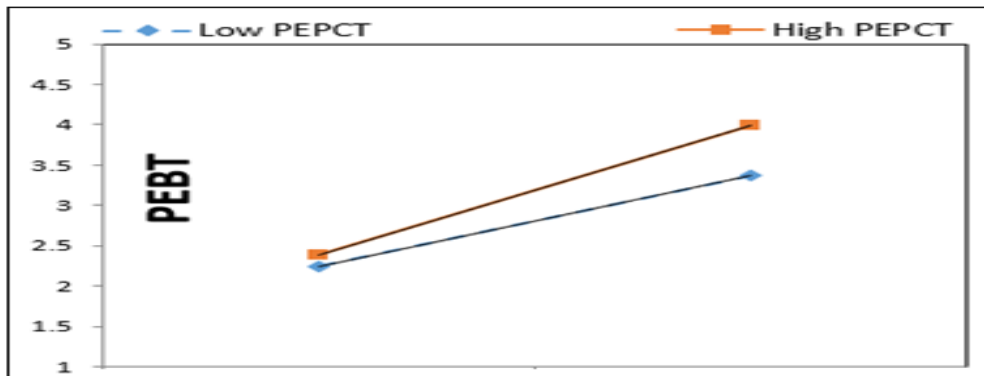


Figure 3 Moderation Effects of PECT in-between EK & PEB



DISCUSSION

Our research probed into topic of environmental wellbeing in terms of an organizational view, it was identified that the staff of organization will perform a better PEB when there are environmental wellbeing-oriented policies. In our research the tourism industry was studied, and we found out that the employees in this industry exhibit a quite positive and good environmental attitude, which is furthermore enhanced by the other variables we identified. It was found in this study that EA, EK and PEPC have positive effects on PEB with the R-square value of (.647), 64.7 %. It was found that a PEPC moderated the relationship in-between EA and PEB and PEPC also moderated the relationship in-between EK and PEB. [Shafiei and Maleksaeidi, \(2020\)](#) found that a positive attitude towards environmental wellbeing had a positive impact on outcome which is PEB. Thus, the study results revealed that knowledge regarding the environment plays a main and a very important role in fostering PEB.

Thus, behaving in environment friendly manner requires understanding of environmental knowledge, therefore those people who have such knowledge were found to perform a better pro-environmental behavior ([Braun & Dierkes, 2019](#)). Therefore, the current research highlights the importance of a pro-environmental psychological climate in enhancing PEB. Current study also confirmed that PEPC has a positive impact on PEB. Green psychological climate was found to have a significant relationship with PEB ([Naz et al., 2021](#)). A PEPC makes the difference by its moderating effect in the shape of strengthening the impact of environmental knowledge on PEB ([Wu et al., 2018](#)). Thus, existence of pro-environmental organizational policies that is environment friendly organizational climate was found to positively affect attitude and ultimately enhance pro-environmental behavior ([Norton et al., 2014](#)).

CONCLUSION

The study findings highlighted that workers in tourism industry can be actively involved in promoting green organizational policies and involve tourists in pr-environmental behavior.

This study fills literature gap by evaluation of the moderating effect of the PEPC between relationship amid employees' EA, EK and PEB. In order to attain sustainable development, creating awareness about environmental issues among tourists to foster pro-environmental behavior. This research findings imparted major theoretical insights to prevailing literature on the pro-environmental behavior of employees of tourism departments. This study is contributing to the literature by taking an insightful approach to the factors that enhance pro-environmental behavior. Environmental attitude and environment-related knowledge may better utilize to enhance pro-environment behavior in presence of green organization policies. The result of this study also adds more information to literature about PEB and contributing factors to enhancing environmental behavior. This study bridges literature gap about moderating effect of psychological climate on employee's PEB. The PEPC can be beneficial, and it can have a good influence on performance in terms of environmental well-being (Dumont et al., 2017).

REFERENCES

- Francisco, D., Charry, A., Sellitti, S., Ruzzante, M., & Burkart, S. (2020). Psychological Factors Influencing Pro-Environmental Behavior in Developing Countries: Evidence from Colombian and Nicaraguan Students. *Environmental Psychology*, 11, 580730.
- Hossain, I., Nekomahmud, M., & Farkas, M. F. (2022). How Do Environmental Knowledge, Eco-Label Knowledge, and Green Trust Impact Consumers' Pro-Environmental Behaviour for Energy-Efficient Household Appliances? *Sustainability*, 14.
- Lovrentjev, S. (2015). Education of Tourist Guides: Case of Croatia. *Procedia Economics and Finance*, 23, 555-562.
- Adrita, U. W., & Mohiuddin, M. (2020). Impact of opportunity and ability to translate environmental attitude into ecologically conscious consumer behavior. *Journal of Marketing Theory and Practice*, 28(2), 173-186.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Avcikurt, C., & Demirbulat, O. G. (2016). Tourist guides' attitude towards sustainable tourism. *Journal of Tourism Theory and Research*. 247, 98-111
- Balmford, A., Beresford, J., Green, J., Naidoo, R., Walpole, M., & Manica, A. (2009). A Global Perspective on Trends in Nature-Based Tourism. *PLoS Biol*, e1000144.
- Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera a new meta-analysis of psycho-social determinants of pro-environmental behavior. *Journal of Environmental Psychology*, 27, 14-25.
- Barbarossa, C., & Pelsmacker, P. D. (2016). Positive and Negative Antecedents of Purchasing Eco-friendly Products: A Comparison Between Green and Non-green Consumers. *Journal of Business Ethics*, 134, 229-247.
- Beermann, M. (2011). Linking corporate climate adaptation strategies with resilience thinking. *Journal of Cleaner Production*, 19(8), 836-842.

- Boerschig, S., & Young, R. (1993). Evaluation of Selected Recycling Curricula: Educating the Green citizen. *The Journal of Environmental Education*, 24(3), 17-22.
- Bøhlerengen, M., & Wiiium, N. (2022). Environmental Attitudes, Behaviors & Responsibility Perceptions in Norwegian Youth: Associations with Positive Youth Development Indicators. *Frontiers in Psychology*, 13.
- Boschett, F., Richert, C., Walker, I., Price, J., & Dutra, L. (2012). Assessing attitudes and cognitive styles of stakeholders in environmental projects involving computer modelling. *Ecological Modelling*, 247, 98-111.
- Boxall, P., Guthrie, J., & Paauwe, J. (2016). Editorial introduction: Progressing our understanding of the mediating variables linking HRM, employee well-being and organizational performance. *Human Resource Management Journal*, 26(2), 103-111.
- Braun, T., & Dierkes, P. (2019). Evaluating Three Dimensions of Environmental Knowledge and Their Impact on Behaviour. *Research in Science Education*, 49(5), 1347-1365.
- Bubeck, P., Botzen, W., Laudan, J., Aerts, J., & Thiek, A. (2018). Insights into Flood-Coping Appraisals of Protection Motivation Theory: Empirical Evidence from Germany and France. *Risk Analysis*, 38(6), 1239-1257.
- Burke, M., Borucki, C., & Kaufman, J. (2002). Contemporary perspectives on the study of psychological climate: A commentary. *European Journal of Work and Organizational Psychology*, 11(3), 325-340.
- Byrne, B. (2010). *Structural Equation Modeling with AMOS Basic Concepts, Applications, and Programming* (2 ed.). New York: Routledge.
- Chatelain, G., Hille, S. L., Sander, D., Patel, M., Hahnel, U. J., & Brosch, T. (2018). Feel good, stay green: Positive affect promotes pro-environmental behaviors and mitigates compensatory "mental bookkeeping" effects. *Journal of Environmental Psychology*, 56, 3-11.
- Chou, C. J. (2014). Hotels' environmental policies and employee personal environmental beliefs: Interactions and outcomes. *Tourism Management*, 40, 436-446.
- Duan, W., & Sheng, J. (2018). How can environmental knowledge transfer into pro-environmental behavior in Chinese individuals? Environmental pollution perception matters. *Journal of Public Health: From Theory to Practice*, 26, 289-300.
- Duan, W., & Sheng, J. (2018). How can environmental knowledge transfer into pro-environmental behavior among Chinese individuals? Environmental pollution perception matters. *Journal of Public Health*, 26(3).
- Duarte, R., Escario, J., & Sanagustín, M. (2017). The influence of the family, the school, and group on environmental attitudes of European students. *Environmental Education Research*, 23(1), 23.
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values. *Human Resource Management*, 56(4), 613-627.

- Farjam, M., Nikolaychuk, O., & Bravo, G. (2019). Experimental evidence of an environmental attitude-behavior gap in high-cost situations. *Ecological Economics*, 166, 106434.
- Fryxell, G., & Lo, C. (2003). The influence of environmental knowledge and values on. *Journal of Business Ethics*, 46(1), 45-69.
- Gatersleben, B., Murtagh, N., & Abrahamse, W. (2014). Values, identity and pro-environmental behaviour. *Contemporary Social Sciences*, 9, 374 - 392.
- George, D., & Mallery, P. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference*, (10a ed.). Boston: Pearson.
- Gifford, R., & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour. *International journal of psychology*, 49(3), 141-157.
- Gifford, R., & Sussman, R. (2012). Environmental Attitude. *The Handbook of the Environmental and Conservation Psychology*.
- Graves, L. M., Sarkis, J., & Zhu, Q. (2013). What a transformational leadership and employee motivation combine to predict employee PR environmental behaviors in China. *Journal of Environmental Psychology*, 35, 81-91.
- Hamzah, M. I. (2021). Do pro-environmental factors lead to purchase intention of hybrid vehicles? The moderating effects of environmental knowledge. *Journal of Cleaner Production*, 279, 123643.
- Jackson, S. (2007). Attitudes Towards the Environment and Ecotourism of Stakeholders in the UK Tourism Industry with Particular Reference to Ornithological Tour Operators. *Journal of Ecotourism*, 6(1), 34-66.
- Jalil, A., Mahmood, T., & Idrees, M. (2013). Tourism-growth nexus in Pakistan: Evidence from ARDL bounds tests. *Economic Modelling*, 35, 185-191.
- Keshavarz, M., & Karamib, E. (2016). Farmers' pro-environmental behavior under drought: Application of protection motivation theory. *Journal of Arid Environments*, 127, 128-136.
- Kim, S., Jeong, S.-H., & Hwang, Y. (2013). Predictors of Pro-Environmental Behaviors of American and Korean Students: The Application of the Theory of Reasoned Action and Protection Motivation Theory. *Science Communication*, 35(2), 168-188.
- Kong, H. (2014). Are Tour Guides in China Ready for Ecotourism? An importance-performance analysis of perceptions & performance. *Asia Pacific Journal of Research* 19(1), 17-34.
- Li, D., Zhao, L., Ma, S., Shao, S., & Lixiao Zhang, L. (2019). What influences an individual's pro-environmental behavior? A literature reviews. *Resources, Conservation & Recycling*, 146, 28-34.
- Liao, C. C., Lin, Y., & Hsieh, H. (2019). Satisfaction of Indigenous Tourism from Residents' Perspective: A Case Study in Nantou County, Taiwan. *Sustainability*, 11.

- Liobikien, G., & Poškus, M. S. (2019). The Importance of Environmental Knowledge for Private and Public Sphere Pro-Environmental Behavior: Modifying the Value-Belief-Norm Theory. *Sustainability*, 11(12), 3324.
- Liu, X., Zou, Y., & Wu, J. (2018). Factors Influencing Public-Sphere Pro-Environmental Behavior among Mongolian College Students: A Test of Value-Belief-Norm Theory. *Sustainability*, 10(5), 1384.
- Milfont, T., Duckitt, J., & Wagner, C. (2010). A Cross-Cultural Test of the Value-Attitude-Behavior Hierarchy. *Journal of Applied Social Psychology*, 40(11), 2791 - 2813.
- Nauges, C., & Wheeler, S. A. (2019). The Complex Relationship Between Households' Climate Change Concerns and Their Water & Energy Mitigation Behaviour. *Ecological Economics*, 141, 87-94.
- Naz, S., Jamshed, S., Nisar, Q. A., & Nasir, N. (2021). Green HRM, psychological green climate and pro-environmental behaviors: Efficacious drive towards environmental performance in China. *Current Psychology*. 23, 65-70
- Norton, T., Parker, S., Zacher, H., & Ashkanay, N. (2015). A multilevel review of employee green behavior. *Organization & Environment*, 28, 103-125.
- Norton, T., Zacher, H., & Ashkanasy, N. (2014). Organisational sustainability policies and employee green behaviour: The mediating role of work climate perceptions. *Journal of Environmental Psychology*, 38, 49-54.
- Paço, A. M., & Lavrador, T. (2017). Environmental knowledge and attitudes and behaviours towards energy consumption. *Journal of Environmental Management*, 197, 384-392.
- Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee level study. *Journal of Business Ethics*, 121(3), 451 - 466.
- Peake, S., Innes, P., & Dyer, P. (2009). Ecotourism and conservation: Factors influencing effective conservation messages. *Journal of Sustainable Tourism*, 17(1), 107-127.
- Pham, N. T., Tučková, Z., & Thi Phan, Q. P. (2019). Greening Human Resource Management and Employees Commitment Towards the Environment: An Interaction Model. *Journal of Business Economics and Management*, 20(3), 446-465.
- Pinzone, M., Guerci, M., Lettieri, E., & Huisinghc, D. (2019). Effects of 'green' training on pro-environmental behaviors and job satisfaction: Evidence from the Italian healthcare sector. *Journal of Cleaner Production*, 226(20), 221-232.
- Qian, C., Yu, K., & Gao, J. (2019). Understanding Environmental Attitude and Willingness to Pay with an Objective Measure of Attitude Strength. *Environment and Behavior*, 53, 001391651985514.
- Renwick, D., Redman, T., & Maguire, S. (2013). Green human resource management: A review & research agenda. *International Journal of Management*, 15(1), 1-14.
- Saeed, B. B., Afsar, B., Shakir, H., & Khan, I. (2019). Promoting employee's PR environmental behavior through green human resource management practices. *Corporate Social Responsibility & Environmental Management*, 26.

- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students (5 ed.). Pearson Education Limited 2.
- Saunders, M., & Lewis, P. (2018). Doing Research in Business and Management (2 ed.). Harlow: Pearson.
- Schneider, B., Ehrhart, G. M., & Macey, H. W. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64, 361-388.
- Schultz, P., Shriver, C., Tabanico, J., & Khazian, A. (2004). Implicit connections with nature. *Journal of Environmental Psychology*, 24, 31-42.
- Shafiei, A., & Maleksaeidi, H. (2020). Pro-environmental behavior of university students: Application of protection motivation theory. *Global Ecology and Conservation*, 22, e00908.
- Smith, K. C., Burke, M., & Landis, R. (2003). Organizational climate as a moderator of safety knowledge-safety performance relationships. *Journal of Organizational Behavior*, 24, 861-876.
- Steg, L., Willem, J. B., Keizer, K., & Perlaviciute, G. (2014). An Integrated Framework for Encouraging Pro-environmental Behaviour: The role of values, situational factors and goals. *Journal of Environmental Psychology*, 38, 104-115.
- Stern, P., & Dietz, T. (1994). The Value Basis of Environmental Concern. *Journal of Social Issues*, 50(3), 65-84.
- Tudor, T. L., Barr, S. W., & Gilg, A. W. (2007). A Novel Conceptual Framework for Examining Environmental Behavior in Large Organizations: A Case Study of the Cornwall National Health Service (NHS) in the United Kingdom. *Environment and Behavior*, 40(3), 426-450.
- Vicente-molina, M. a., Fernández, A. S., & Izagirre, J. O. (2013). Environmental knowledge and other variables affecting pro-environmental behaviour: Comparison of university students from emerging and advanced countries. *Journal of Cleaner Production*, 61.
- Walumbwa, F., Hartnell, C., & Oke, A. (2010). Servant Leadership, Procedural Justice Climate, Service Climate, Employee Attitudes & Organizational Citizenship Behavior: A Cross-Level Investigation. *Journal of Applied Psychology*, 95(3), 517-529.
- Wu, F., Tang, G., & Sun, W. (2018). Exploring 'new generation' employees' green tactics in environmental protection in China. *Asia Pacific Business Review*, 24(4), 510-527.
- Zareie, B., & Navimipour, N. J. (2016). The impact of electronic environmental knowledge on the environmental behaviors of people. *Computers in Human Behavior*, 59, 1-8.
- Zeng, J., Wen, Y., Bi, C., & Feiock, R. (2020). Effect of tourism development on urban air pollution in China: The moderating role of tourism infrastructure. *Journal of Cleaner Production*, 280, 124397.
- Zibarras, D. L., & Coan, P. (2015). HRM practices used to promote pro-environmental behavior. A UK surveys. *The International Journal of Human Resource Management*, 26(16), 2121 - 2142.