Measuring the Impact of Green Brand Positioning on Green Brand Attitudes in the Context of Pakistan

Neelam Akbar Marwat^{*}, Muhammad Tariq Yousafzai[†], Shabana

Akbar ‡

Abstract

A comprehensive investigation of refrigerant emission ozone-depleting substances used in the manufacture of household appliances has a negative influence on the environment. Consumption patterns must shift from traditional brand positioning of household appliances to energy-saving inverters and low-emission refrigerant systems, which must be integrated into the firms' corporate brand umbrella. Keeping in view the same scenario, the current research aims to examines the impact of functional and emotional green brand positioning on green brand attitude in the setting of a developing market, Pakistan, using low-emission refrigerant and inverter systems. The current study is quantitative in nature and used survey instruments with a sample size of 320, which was chosen using snowball sampling approach. Data was collected from consumers of sustainable household appliances (lowemission refrigerant and inverter systems in Pakistan) via a personally administered questionnaire, which was validated using AMOS and SPSS using structural equation modelling. According to the findings, there is a strong and positive association between functional and emotional green brand positioning and green brand attitude. As a result, the study's two hypotheses are supported. This study adds to the literature on green brand management by demonstrating a positive and substantial association between functional and emotional green brand positioning and green brand attitude. Marketing and brand practitioners should create integrated marketing communication strategies focusing on green functional and emotional features to aid in the development of green brand attitudes toward environmentally safe home appliances. Finally, peak seasons demands differential positioning strategies in the context of inverters home appliances technologies. This limitation may be taken into account as a worthy recommendation in potential research with regard to longitudinal data analysis of seasonal products.

Keywords: functional & emotional green brand positioning, green brand attitude. low-emission refrigerant

Introduction

In response to increasing socio-cultural pressure embedded with environmental code of conducts, firms are trying to merge the sustainability phenomenon into their corporate and strategic visions of

^{*}Lecturer at Centre for Management and Commerce, University of Swat, Email: <u>neelammarwat@uswat.edu.pk</u>

[†]Assistant Professor at Centre for Management and Commerce, University of Swat, Email: <u>muhmmadtariq@uswat.edu.pk</u>

[‡]Assistant professor BS-Coordinator Khyber Pakhtunkhwa, Email: Shabana.management@gmail.com

| Measuring | the Impac | t of Green Bra | nd Positioning |
|-----------|-----------|----------------|----------------|
| | | | |

their firm (C. Wang, Ghadimi, Lim, & Tseng, 2019). Renowned brands are taking initiatives to highlight the eco-based strategic concerns for executing their organizational processes in line with green production and manufacturing (Govindan, 2018; Schmuck, Matthes, Naderer, & Beaufort, 2018). As highlighted by Camilleri (2018) Customers are exhibiting heightened concerns for sustainable products and services. Thus, green brands are marked as the supreme source of competitive advantage that guides the company for long term survival in a specific industry (Park & Lin, 2020). Policymakers in the context of ecological concerns focuses on the role of individual consumers with specific reference to the unhealthy consumption behaviours and their detrimental influence on the environment (C. Wang et al., 2019). Green brand positioning, as a key component of green marketing, is the combination of decisive benefits such as occupying significant space in consumers' minds regarding the worth of green brands (C. Wang et al., 2019), disseminating strong environmental appeal, and achieving maximum market share over number of rivalry firms by communicating a unique sense of sustainable market positioning (Sharma & Joshi, 2019). As a result, well-executed green brand positioning strategies assist companies in reaching the top of the market ladder (Alamsyah, Othman, & Mohammed, 2020).

The concept of positioning was first coined in (1969) in seminal work of Al rise and Trout (Yousafzai, Khan, & Khan, 2017). Green brand positioning is extensively studied in the context of advance countries; as reported by Schmuck et al. (2018). the composite of functional and emotional benefits has positive impact on green purchase behavior of consumers. Functional green brand positioning tactics emphasize the importance of brand associations in the context of basic information about green offerings that depict the core benefits of green products (H.-J. Wang, 2016); it refers to the operational procedures and the use of products that can minimize the emissions and dangers to the surroundings (Gong, Sheng, Peverelli, & Dai, 2020). However, green functional positioning is not enough for the survival of the brand in the long run. Moreover, Lin, Lobo, and Leckie (2017) delineated that positioning on the basis of functional attributes diminishes the chances for brand differentiation. As a reciprocal plan, an emotional brand positioning strategies open multiple avenues for brand success (Simão & Lisboa, 2017); Similarly, Aulina and Yuliati (2017) described that when consumers adopt environmentally safe consumption practises, emotional benefits generate the highest perceptual benefits, which drives the feeling of well-being and personal satisfaction. Thus, the advantages associated with nature

Measuring the Impact of Green Brand PositioningNeelam, Tariq, Shabanamotivate environmentally concerned customers to contribute to naturesafety initiatives (Hartmann, Ibáñez, & Sainz, 2005).

Huang, Yang, and Wang (2014) revealed that agile commuting campaigns as the part of corporate brand positioning strategies guides in shaping consumer attitude towards green consumption. However, contemporary studies are not sufficient to construct ambient conceptual paradigm in explaining how functional and emotional green brand positioning strategies influence the brand attitude in developing countries (Ali, Danish, Khuwaja, Sajjad, & Zahid, 2019). Green brand positioning of household appliances that emit halogenated gases composed of chlorofluorocarbons, contributing to ozone depletion and global warming (Ul-Haq, Ali, Batool, Tariq, & Qayyum, 2016). As reported by Kharat, Mate, and Kathwate (2018) ozone layer is being depleted as a result of chlorine substance in the environment emitted by refrigerants system used in manufacturing home appliances. Given the dangers posed by these products, companies are making deliberate decisions to replace bromine, iodine, and fluorine (halogenated gases) in their production processes with environmentally benign components such as oxygen, nitrogen, and hydrogen (Raiyan & Rehman, 2017). The adoption of ecologically friendly technologies with reduced refrigerant emissions saves power. As a result, worldwide concerns for brand positioning have shifted from traditional to green energy efficient branding tactics (Waris & Hameed, 2020a).

Energy is the primary component that serves as the economy's backbone; it is essential for generating electricity, cooling, heating, cooking food, and mobilising (Economidou et al., 2020). Technological revolutions and consumer behaviour in embracing such technology have an impact on energy use (Belussi et al., 2019). As evidenced by Malmodin and Lundén (2018) and Ahmad and Zhang (2020), there has been an exponential increase in energy consumption in the home sector in the form of electric appliances. It is anticipated that by 2035, progressive worldwide investment would total \$48 trillion, of which \$ 40 trillion will be required for supply and the remainder for energy efficiency. This is troublesome and not sustainable (Stikvoort, Juslin, & Bartusch, 2018). In the context of Pakistan, the residential sector demands 47% electricity in comparison with 29% of the industrial needs (Hameed & Khan, 2020). Globally, this comparative percentage is ranked as highest in energy consumption between domestic and industrial usage. As reported by Jan and Mutalib (2013) 38% of household energy consumption comes from the use of air conditioners, fans, and air coolers. Pakistan is listed fifth that demands air conditioning in potential future; consumers are

| Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana | | | | | | | |
|--|--|--|--|--|--|--|--|
| willingly transforming their energy consumption habits from | | | | | | | |
| conventional to energy efficient tools such as LED lights and inverter | | | | | | | |
| air conditioning technologies(Lange, Pohl, & Santarius, 2020). | | | | | | | |

Energy demand is raising exponentially; as a key indicator of economy, household consumption needs strategic concerns from marketers and brand managers in devising their marketing communications that can assist them in analyzing the significant results of sustainable consumption (Asif, 2009). Inability to understand the deep-rooted perceptual human mechanism towards environmentally safe consumption create а composite of environmental threats to the masses and general public (Hassan, Abbas, Zainab, Waqar, & Hashmi, 2018). According to Waris and Hameed (2020b) efficient energy devices that are sustainable in nature saves resources. The main problems that are equipped with household appliances are hazardous chlorocarbon emissions that pollute the environment (Ali et al., 2019). The current research fills the gap in previous research by taking into account the energy saving modes of consumption from the marketing lens; to assess the functional and emotional green brand positioning on green brand attitude. Prior research has focused on the positioning green products in advance countries (Aulina & Yuliati, 2017; Chin, Sulaiman, Mas'od, Muharam, & Tat, 2019; Mohd Suki, 2016). However, in emerging economies rare studies have been carried out to assess the green brand positioning relevant to the functional and emotional benefits of low inverters technology in attitude formation of environmental concerns. Thus, the current research fills the gap in prior studies by assessing the consumer cognitive, and perceptual thinking of green attitudinal response towards functional and emotional based positioning of green products.

Hameed and Khan (2020) reported that savings in energy sector contributes 20 to 25 percent to the economy of the country. Furthermore, energy efficient system can save USD ten billion per year for the national economy until 2030 (Bank, 2019). Household users in Pakistan employ low-emission refrigerants in the form of (inverter air conditioners, inverter refrigerators, and inverter washing machines). Consumption patterns of home appliances needs revision in the form of sensible energy efficient devices that contributes to lowering carbon emission in the environment (Butt, Naeem, Ali, & Hameed, 2022). Unexplored in Pakistan is a comprehensive research of how consumers' cognitions, perceptual ideas, and affiliations with green brand positioning of low emission refrigerants depend on functional qualities or emotional constructs. The Construal level theory developed by Liberman, Trope, and Wakslak (2007) yields a

| Measuring | the Im | pact of | Green | Brand | Positioning | 5 |
|-----------|--------|---------|-------|-------|-------------|---|
| - | | | | | | |

useful framework that explains how consumer perceives the outcome of environmental stimuli based on their psychological distance with that particular object or scenario; how their perceptual mechanism shapes their behavioral responses. Sustainable consumption is the outcome of psychological distance that identify the main factors which regulates consumers behavior (Gong et al., 2020). Low-construal level rationalizes the significance of functional brand positioning strategies while high-construal levels focus on the emotional aspects of green brand positioning strategies. The core objective of this research is to identify the impact of green brand functional and emotional positioning strategies on brand attitude in the context of low emission refrigerant home appliances inverters system in Khyber Pakhtunkhwa region of Pakistan.

Literature Review

Green Functional, Emotional Brand Positioning and Green Brand Attitude

Brand positioning, as one of the most significant components of branding strategies, demonstrates the brand's identity to customers. Brand positioning is a step-by-step process for achieving brand differentiation (H.-J. Wang, 2016). As reported by Gong et al. (2020), green brand positioning is an integrated marketing communication strategy that focuses on the distinctive value, centered on environmentally friendly features. Green brands cannot skim revenues from the market unless their attributes are strategically articulated (H.-J. Wang, 2017). Furthermore, the preceding study has discussed the significance of green brand functional features and revealed them as competitive advantage in the market. Green brand is the prime source of healthy cash inflows for majority of the ventures. Liberman et al. (2007) established the Construal level theory, which gives strong grounds for assessing the cognitive human mechanisms that stimulate judgments, representations, and responses by establishing a strategic link between the construal level and psychological distance. Psychological distance indicates how distant an element is viewed in relation to physical, temporal, and social distance (Liberman et al., 2007). According to the preceding debates, the construal level represents the functional and emotional benefits in green brand positioning strategies.

Reczek, Irwin, Zane, and Ehrich (2018) show that in the field of green brand positioning, the self-expression and ethics-based principles underlined by green emotional positioning are inextricably linked to a high degree of construal. The functional aspects of the green brand positioning domain that describe the major benefits of the green

| Measuring | the | Impact | of Green | Brand | Positioning |
|-----------|-----|--------|----------|-------|-------------|
| | | _ | | | |

products and services are highlighted at a low degree of construal. Functional green positioning techniques emphasise the usefulness of low-constructal-level green items (Gong et al., 2020). The author in the preceding research has revealed that functional and emotional green brand positioning must be interwoven in a firms corporate strategic branding plans in order to stand on a strong position for a long period. Emotional positioning in the context of green marketing is based on the societal benefits of sustainable consumption, which is based on high-level perceptual human mechanisms, whereas functional positioning strategies aid in the alleviation and resolution of environmental problems, which has a direct link to low-level concrete thinking procedures (Kim & John, 2008).

Green brand positioning attributes are classified into two types: functional positioning and emotional positioning (Hartmann et al., 2005). Y. M. Wang, Zaman, and Alvi (2022) proposed that the utility of sustainable consumptions such as efficiency gains, minimal carbon emissions, and recyclability are based on functional qualities while emotional green branding refers to a brand's social desirability in terms of pleasant sentiments of giving, and environmental responsibility. Moreover, the author discussed the advantageous continuum of sustainable consumption practices from both consumption and production perspectives. The long-term effects of recycling in the manufacturing process equipped with energy saving modes of production can be beneficial to the society in general. According to the preceding debate, it is determined that focusing just on functional aspects would not generate the desired results; thus, both functional and emotional branding techniques must be addressed in strategic corporate branding campaigns(Sarkar, Sarkar, & Yadav, 2019).

According to Us, Bilan, Pimonenko, Seliga, and Ostasz (2020), emotional brand positioning strategies must be integrated with firms' corporate goals in order to elicit appropriate customer environmental reactions. Green brand positioning based on functional qualities gives positive sensations of competence and performance in connection to lower hazards and harmful chemicals, as well as greater reusability and recyclability (Lin & Zhou, 2020). As described by Aulina and Yuliati (2017), green functional brand positioning is based on the perception that a company's environmental goals contribute to customer trust. In addition, green brand positioning on functional grounds implies that the firm is capable of addressing environmental challenges by investing heavily in sustainable development (Danciu, 2015). In addition, preceding research does not take into account the challenges associated with green environmental campaigns as

| Measuring the Impact of Green Brand Positionin | g Neelam, Tariq, Shabana |
|--|--------------------------|
| | |

consumer are not aware of the long term's benefits of green consumption. Furthermore, Green brand functional positioning is an important component of a company's green positioning plan since it illustrates the brand's functions and procedures for transmitting environmentally sound consent to the target consumer group (Suki, 2016). Attitudes toward green brand positioning, according to Aulina and Yuliati (2017), have changed as a result of cognitive and logical analysis of companies based on their eco-safe attributes. Similarly, da Luz, Mantovani, and Nepomuceno (2020), noted that companies try to move from traditional to green brand positioning strategies by emphasising the relevance of green elements in their market offers. Offering green incentives can influence customer attitudes toward purchasing green items (Sarkar et al., 2019).

According to the above ideas, customers create strong green brand attitudes as a result of enterprises' functional and emotional green brand strategic considerations. When it comes to selecting and purchasing green goods, consumers favour emotional components of green businesses, as reported by H.-J. Wang (2017), ecologically concerned emotional branding includes brand symbolic features, social acceptability, and being socially acceptable characteristics of branding. The green halo effect is achieved by emotive brand positioning techniques that drive favourable customer impressions, resulting in the development of a strong green brand attitude (Hartmann et al., 2005).

Consumers who are knowledgeable about green products are in a better position to make reasonable purchasing decisions (Akbar, Zeb, & Ahmad, 2017; Aulina & Yuliati, 2017; Marwat & Ahmad, 2022). According to Waris and Hameed (2020a), functional brand positioning demonstrates good ecological attitudes by offering fundamental informative materials on the benefits of green products. Prior research, however, has found just a few connections between functional brand attributes and customer green purchasing intentions. As a result, experts believe that emotional brand positioning has a significant influence in determining customer green buy intentions (Heinberg, Katsikeas, Ozkaya, & Taube, 2020). As stated by Panda, Panda, and Mishra (2013), green brand attitude stems from the emotional peripheral modes of persuasion towards green brand positioning strategies. Furthermore, the findings show that green brand positioning and customer value are strongly related to green purchasing intentions. Similarly, Huang et al. (2014) investigated the beneficial association between green brand positioning and green attitude. In addition, functional green brands combined with emotional

Measuring the Impact of Green Brand PositioningNeelam, Tariq, Shabanabrand positioning aid in the development of the best perceptual
outcomes.

Butt et al. (2022) identified the impact of greenwashing techniques on consumer green trust and brand attachment with special reference to home appliances industry in Pakistan; the findings show that green trust has strong and positive impact on green brand attachment. Furthermore. It is suggested in preceding study, that green brand trust is the primary motivator in establishing green brand attitude, and businesses should aim to include green brand positioning methods based on green emotional values. Likewise, Baiquni and Ishak (2019) discovered a strong and favourable relationship between green brand positioning, green brand knowledge, green brand attitude, and green purchase intentions. Furthermore, companies' marketing strategies must be designed in light of green brand positioning in order to raise their degree of awareness about green brands. Green branding has a substantial association with green product purchase intents; enterprises must use green technology in their product creation and manufacturing processes (Majeed, Aslam, Murtaza, Attila, & Molnár, 2022). Similarly, Chen, Chang, Li, and Chen (2020) identified that green brand attitude has full mediation impact on the relationship between green brand affect and green purchase intentions; it indicates the indirect positive relationship of green brand affect and green purchase intentions. Moreover, the forgoing research recommends that organizations should pursue the strategic green brand positioning practices that highlight their green brand affect, brand associations, and green brand attitude.

Conventional brand positioning has been transformed into the green brand positioning strategies that are centered on the long-term survival concerns from socio-cultural perspective (Aulina & Yuliati, 2017; Marwat, Ahmad, & Yousafzai, 2022). Green brand functional and emotional attributes need to be interwoven in a corporate branding strategy(Lin & Zhou, 2020). The construal theory provides logical foundation for explaining the environmental brand positioning strategies that explains the construal level and psychological distance between environmental stimulus and human perceptual mechanism; the closer the distance between green functional and emotional brand positioning strategies the stronger attitudinal response can be triggered in consumers. The wider gap between sustainable positioning concerns leads to weaker attitudinal response in consumers (Liberman et al., 2007). Attitude forms in light of green brand positioning methods may be explained using Cacioppo and Petty (1984) elaboration likelihood model, which describes the persuasion process in two ways: central and peripheral techniques. The central modes of persuasion are based

| Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana |
|--|
| on rational-based functional brand positioning features, whereas the |
| peripheral modes are based on emotional thought processes (Meng & |
| Choi, 2019). ELM shapes consumer attitudes through major paths of |
| cognitive elaboration. Peripheral modes, on the other hand, alter |
| customer attitudes as a result of sentiments and emotions linked with |
| a certain brand (Sarkar et al., 2019). With increased environmental |
| concerns, the cognitive domain in green brand positioning posits that |
| customers are heavily active in green purchasing (Lin & Zhou, 2020) |
| According to the preceding debate, it is determined that focusing just |
| on functional aspects would not generate the desired results; thus, both |
| functional and emotional branding techniques must be addressed in |
| strategic corporate branding campaigns(Sarkar et al., 2019). Based or |
| prior research following hypotheses are devised; |

H1: Functional green brand positioning has significant and positive relationship with green brand attitude

H2: Emotional green brand positioning has significant and positive relationship with green brand attitude

Figure #1 Theocratical Framework



Methodology

In line with this research's core objective of examining the relationship between green functional and emotional brand positioning strategies on consumer brand attitude, survey instrument was developed that comprised the items adapted from previous research in the field of brand positioning and attitude in developing country Pakistan. All the items were amended based upon the target market sustainable consumption needs with respect to low emission refrigerant and invertors home appliances. The current research is cross sectional in nature as the answers of the respondents were collected at one point in time. The current study employed positivism, quantitative approach by using the Cohen (1992) criteria for sample size estimation. Accordingly, 320 participants were recruited based on

Measuring the Impact of Green Brand Positioning

Neelam, Tariq, Shabana

snowball sampling technique during based on their purchasing history or potential buyers of home appliances (August-October 2022). Snowball is employed as the response rate is quick. The rational for employing snowball sampling technique in current research is to access the household respondents who use inverters and low emission home appliances. The current respondents assisted in searching the other population that were using similar energy saving devices nearby their localities. Snowball sampling helps researchers in picking out the potential users in the same area of interest (Parker, Scott, & Geddes, 2019). The selected sample guided in searching the respondents who were using the inverters air conditioners, LED bulbs, low emission washing machines and other related energy saving devices. Moreover, sample adequacy was measured with Kaiser-Meyer-Olkin and Bartlett's test of Sphericity. The KMO is carried out for sample adequacy; the minimum acceptable criteria for sample adequacy were determined to be more than 0.6 in order to yield finer results for factor analysis(Zhang, 2006). The KMO value for current sample adequacy was ascertained as 0. 93 that was above than threshold level of sample adequacy.

The survey was carried out in urban areas of Peshawar, Swat, and Dera Ismail Khan cities of Khyber Pakhtunkhwa, Pakistan. The rationale for choosing these cities rests upon its division as central, northern, and southern region. Dera Ismail Khan comes under the boundaries of southern region of KPK, Swat being the northern part, and Peshawar is the central region of KPK. Representation of south, north and central part can assist in fair generalizability of the findings of the study. Urban regions were chosen because their exposure to and usage of home appliances is higher than in rural areas (Butt et al., 2022); in addition, the education level of general household consumers guides in accurate response rate. All the participants were equally split on the basis of south, north, and central region of the KPK province. Measures of green brand functional and emotional positioning strategies were adapted from the study conducted by (Gong et al., 2020) and the measures of green brand attitude were adapted from the study conducted by (Huang et al., 2014). Structural equation modelling with AMOS was used for examining the relationship between green functional and emotional brand positioning with green brand attitude. SEM is employed for assessing the nexus between hypothesized connections based on previous studies; it is widely used for scrutinizing the causal relationships through covariance examinations, path analysis, structured and measurement model fitness, and conformity factor analysis(Cheung, 2015). The current research followed the SEM technique as it tries to identify connection between

| Measuring the Impact of Green Brand Positioning | Neelam, Tariq, Shabana |
|---|------------------------|
| | |

green brand functional and emotional positioning on green brand attitude. SEM is used for investigating the model from simple to complexed hypothesized relationships based on previous research (Sardeshmukh & Vandenberg, 2017). Validity of the study was assessed with goodness of model fit indices. Based on convenient and snowball sampling approaches the data was collected from the household consumers on the basis of following demographic variables; age, gender, income level, education level, and marital status. Finally, naivete from ethical aspects of research is unethical in itself (Iqbal et al., 2018). Hence, due attention was paid to the ethical aspects of research during project design approval from research board and informed consent from participants were solicited.

Results

Demographic Profile

The gender demographic breakdown of the respondents (as shown in table 1) was as follows: Males composed 48% of responses, while females constituted 52%. The age demographics were as follows: under 21 (9.37 percent), 21-25 (21.56 percent), 25-35 (21.87 percent), 35-45 (16.56 percent), and 45 and over (30.62 percent). Table 1 of the research reveals the participants profile on the basis of education, income level, and marital status. The correlation table 2 reports that correlation between functional green brand positioning and emotional green brand positioning was found as 0.829**; the correlation between functional green brand positioning and green brand attitude was found as 0.798**; the correlation between emotional green brand positioning and green brand attitude was found as 0.831**. Convergent validity of the constructs was checked with average variance extracted and composite reliability. Convergent validity takes into account the correlation level of items that covers single construct under observation (Duckworth & Kern, 2011). The minimum acceptable criteria for composite reliability are 0.7 or above (Alarcón, Sánchez, & De Olavide, 2015). However, the threshold level for average variance extracted is determined as 0.5 or above (Ab Hamid, Sami, & Sidek, 2017). The values of composite reliability for functional green brand positioning was determined as 0.80, for emotional green brand positioning 0.86, and for green brand attitude the value of composite reliability was found 0.83. Likewise, the average variance extracted for functional green brand positioning was ascertained as 0.74, the AVE for emotional green brand positioning was revealed as 0.71. While, the value of AVE for green brand attitude was found as 0.77. All the values of composite reliability and AVE indicates that model has internal consistency.

| Demographics | Description | Number | Percentage |
|-----------------|------------------|--------|------------|
| Gender | Male | 154 | 48% |
| | Female | 166 | 52% |
| | Total | 320 | 100.0 |
| Age | | | |
| | Under 21 | 30 | 9.37% |
| | 21-25 | 69 | 21.56% |
| | 25-35 | 70 | 21.87% |
| | 35-45 | 53 | 16.56% |
| | 45 and above | 98 | 30.62% |
| | Total | 320 | 100 |
| Education level | | | |
| | Below BBA | 72 | 22.5% |
| | BA Level | 125 | 39.1% |
| | Masters Level | 47 | 14.7% |
| | MS Level | 64 | 20.0% |
| | PHD | 12 | 3.8% |
| | Total | 320 | 100.0 |
| Income level | | | |
| | Less than 20,000 | 21 | 6.60% |
| | 20,000-40,000 | 84 | 26.3% |
| | 40,000-60,000 | 60 | 18.8% |
| | 60,000-80,000 | 41 | 12.8% |
| | 80,000 and above | 114 | 35.6% |
| | Total | 320 | 100.0 |
| Marital status | | | |
| | Single | 139 | 43.43% |
| | Married | 181 | 56.56% |
| | Total | 320 | 100.0 |

Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana Table 1

Table 2

|--|

| | FGBP | EGBP | GBA |
|--------------------------|---------|---------|-----|
| FGBP Pearson Correlation | 1 | | |
| Sig. (2-tailed) | | | |
| N | 320 | | |
| EGBP Pearson Correlation | 0.829** | 1 | |
| Sig. (2-tailed) | 0.000 | | |
| N | 320 | 300 | |
| GBA Pearson Correlation | 0.798** | 0.831** | 1 |
| Sig. (2-tailed) | 0.000 | 0.000 | |
| N | 320 | 320 | 320 |

Journal of Managerial Sciences 58 Volume 18 Issue 1

Jan-March 2023

Measurement Model

The current study was assessed in two steps; the measurement and structured models. Confirmatory factor analysis was carried out to estimate the model fit of both measurement and structured model. The findings depicted the fitness of measurement model (as reported in table 3 of the study) (CMIN = 640.981), df = 183, p 0.001, CMIN/df = 3.503, NFI = 0.90, TLI = 0.91, CFI = 0.92, RFI=.88, IFI = 0.92, RMSEA = 0.08), and the SRMR value was 0.030. The value of SRMR predicts the variance between the sample covariance and the proposed ones initiating from the parameters; the threshold value for SRMR indicates as adequate fit when it is close to zero (Cho, Hwang, Sarstedt, & Ringle, 2020). The values of Cronbach alpha as recommended by Brown (2002) shows that values above than 0.70 depicts moderate to good reliabilities. The values for Cronbach alpha for the study items were as follows. Functional green brand positioning =0. 92, emotional green brand attitude= 0.89, and green brand attitude= 0.93

Table 3

| Measureme | nt Model | | | |
|-------------------|------------|---------------------------|---------------------------|-----------|
| Goodness index | of the fit | Structural model | Cut-off value | |
| CMIN | | x 2=640.981 (df = 183) | N/A | |
| Normed | Chi-square | 3.503 | 1.0 TO 5.0 | |
| CMIN/df | _ | | | |
| NFI | | 0.90 | >0.90 | |
| TLI | | 0.91 | >.90 | |
| CFI | | 0.92 | >.90 | |
| IFI | | 0.92 | >.90 | |
| RFI | | 0.88 | >.90 | |
| RMSEA | | 0.08 | <0.08: Good fit | |
| SRMR | | 0.03 | Close to zero good fit | indicates |

Table 4

Reliability Statistics, Factor Loadings

| Constructs | | | Items | Cronback | h Standard loadings of |
|--------------------------------|-------|-------|-----------|------------------------|------------------------|
| | | | | alpha | items |
| Functional | Green | Brand | 7 | 0.92 | FGBP1=0.72 |
| Positioning | | | | FGBP2=0.81 | |
| _ | | | | | FGBP3=0.88 |
| Journal of Managerial Sciences | | 59 | Volume 18 | Issue 1 Jan-March 2023 | |

| FGBP4=0.87FGBP5=0.83FGBP6=0.78FGBP7=0.65EmotionalGreenBrand70.89EGBP1=0.76FGBP2=0.72 | Measuring the Impact of Green Brand Positioning | | | Neelam, Tariq, Shabana | |
|--|---|-------|---|------------------------|------------|
| Emotional Green Brand 7 0.89 EGBP1=0.76 Positioning EGBP2=0.72 | | | | | FGBP4=0.87 |
| FGBP6=0.78FGBP7=0.65Emotional Green Brand 70.89EGBP1=0.76PositioningFGBP2=0.72 | | | | | FGBP5=0.83 |
| FGBP7=0.65Emotional Green Brand 70.89EGBP1=0.76PositioningEGBP2=0.72 | | | | | FGBP6=0.78 |
| Emotional Green Brand 7 0.89 EGBP1=0.76 Positioning EGBP2=0.72 | | | | | FGBP7=0.65 |
| Positioning ECBP2-0.72 | Emotional Green | Brand | 7 | 0.89 | EGBP1=0.76 |
| EODF 2–0.72 | Positioning | | | | EGBP2=0.72 |
| EGBP3=0.47 | | | | | EGBP3=0.47 |
| EGBP4=0.79 | | | | | EGBP4=0.79 |
| EGBP5=0.80 | | | | | EGBP5=0.80 |
| EGBP6=0.81 | | | | | EGBP6=0.81 |
| EGBP7=0.83 | | | | | EGBP7=0.83 |
| Green Brand Attitude 7 0.93 GBA1=0.71 | Green Brand Attitude | | 7 | 0.93 | GBA1=0.71 |
| GBA2=0.88 | | | | | GBA2=0.88 |
| GBA3=0.91 | | | | | GBA3=0.91 |
| GBA4=0.91 | | | | | GBA4=0.91 |
| GBA5=0.82 | | | | | GBA5=0.82 |
| GBA6=0.78 | | | | | GBA6=0.78 |
| GBA7=0.71 | | | | | GBA7=0.71 |

Figure 2 Measurement Model



Structured Model

The structured model was examined by employing conformity factor analysis, which was used to assess the model fit indices of the structured model (as presented in table 5 of the study) (CMIN =510.937, df = 172, p 0.001, CMIN/df = 2.971, NFI = 0.92, TLI = 0.93, CFI = 0.94, RFI=.90, IFI = 0.94, RMSEA = 0.07), and the SRMR value was determined to be 0.02.

Hypotheses Testing

The major objective of the study was to examine the relationship between functional green brand positioning and emotional

Journal of Managerial Sciences 60 Volume 18 Issue 1 Jan-March 2023

| Measuring the Impact of Green Brand Positioning | Neelam, Tariq, Shabana |
|--|--------------------------|
| green brand positioning with green brand | attitude. The findings |
| showed (beta coefficient value =0.35 with critical | itical ratio = 6.699, p- |
| value 0.000) (as reported in figure 3; table 6 o | f the study) significant |
| and positive relationship between functional g | reen brand positioning |
| and green brand attitude. Thus, accepting the | first hypothesis of the |
| study. In the second phase, the findings also rev | vealed (beta coefficient |
| value =0.54 with critical ratio = 10.364, p-value | e 0.000) significant and |
| positive ties between emotional green brand | positioning and green |
| brand attitude. | |

| Table | 5 |
|-------|---|
| Lable | Э |

| Structured | Model | Fit | Indicas |
|------------|-------|-----|---------|
| Siruciurea | woaei | ги | inaices |

| Goodness index | of the fit | Structural model | Cut-off value |
|-------------------|------------|------------------|-------------------------|
| CMIN | | x 2=510.937(df = | N/A |
| | | 172) | |
| Normed | Chi-square | 2.971 | 1.0 TO 5.0 |
| CMIN/df | | | |
| NFI | | 0.92 | >0.90 |
| TLI | | 0.93 | >.90 |
| CFI | | 0.94 | >.90 |
| IFI | | 0.94 | >.90 |
| RFI | | 0.90 | >.90 |
| RMSEA | | 0.07 | <0.08: Good fit |
| SRMR | | 0.02 | Close to zero indicates |
| | | | good fit |

Table 6

| Hypothesis Testing | | | | | | |
|---|-----------------------------------|-----------|------|------------|-------------|------------------|
| Predictor | Standard ized Estimate s | β | SE | CR | P- Value | Relationshi p |
| (Functional Green Brand Positioning). FGBP | .353 | 0.3 25 | .053 | 6.699 | 0.000 | Significant |
| (Emotional Green Brand Positioning). EGBP | .541 | 0.5 99 | .056 | 10.36 4 | 0.000 | Significant |

Figure 3 Structured Model

Journal of Managerial Sciences 61 Volume 18 Issue 1



Discussion

The construal level theory and elaboration likelihood frameworks are used in this research to study how functional and emotional green brand positioning influences green brand attitude in the context of low-emission emission refrigerant household appliances such as inverters and energy-saving saving technologies. The results of confirmatory factor analysis demonstrated a favorable and significant association between functional, emotional, and green brand positioning and as well as green brand attitude. The study's hypotheses H1 and H2 are accepted since the relationship between the pproposed hypotheses was determined to be strong and positive. The findings are consistent with the previous study by Y. M. Wang et al. (2022), which examined the function of attitude as a mediator and green trust as a moderator between green brand positioning and green customer value with green purchase intentions. The outcomes of the preceding study demonstrated that green brand positioning and green customer value have a substantial influence on green purchasing intentions. Furthermore, the data indicate that green trust has a strong moderating impact, as well as a partial mediation effect of attitude toward green brand for the relationship between green brand positioning and green customer value and green purchase intentions. Similarly, the findings were similar with a prior study conducted by Hartmann et al. (2005), which found a positive association between green brand positioning and green brand attitude; both functional and emotional factors played a role in moulding customers' pro-environmental attitudes. As predicted, functional and emotional brand positioning resulted in increased cognition of green brand reaction. The emotive green brand positioning, on the other hand, had a significantly greater impact on green brand attitude as compare to functional green brand positioning. Moreover, structural analysis supported the hypotheses of the study. Since, both elements of green brand positioning have significant impact on green brand attitude. The findings of the current study

| Measuring | the Im | pact of | Green | Brand | Positioning | Į. |
|-----------|--------|---------|-------|-------|-------------|----|
| - | | | | | | |

support the construal level theory that was based on how consumer's perceptual cognition works in assessing the psychological distance between objects of environmental interests. Firms environmental campaigns can trigger the consumer positive and favorable brand attitude towards sustainable offerings. Functional and emotional green brand positioning strengthen the attitudinal tendencies of environmental conscious consumers. The feeble attitudinal response is associated with huge distance from functional and emotional environmental stimulus. However, the firms that focus on green functional and emotional green branding strategies can win the hearts of their consumers in the form of favorable attitudinal tendencies towards green branding. Consumers develop strong attitude towards green brand when the distance between sustainable functional and emotional brand element is less. Company's advertising campaigns should focus on all the green brand positioning perspective for closing the gap between consumers perception and attitudinal brand responses.

Conclusions

The main objective of the study was to identify the impact of functional and emotional green brand positioning on green brand attitude in the context of Khyber Pakhtunkhwa, Pakistan with special reference to low-emission hydrogenated gases used in electric home appliances to save energy and boost the ecologically clean consumption practices. Using AMOS structural equation modeling, it was evaluated that both functional and emotional brand positioning are significantly related to green brand attitude. Furthermore, the findings indicated that in case of high involvement products such as inverters Air conditioners, Refrigerators, washing machines, and energy saving tools; functional and emotional brand positioning attributes are complementarity considered as safe consumption that develop favorable attitude towards ecologically sound green products. Hydrogenated gases used in manufacturing home appliances that deplete ozone layers; causing harm to the surroundings needs to be fully replaced with green revolutionary technological system. Consumers develop construal favorable attitude towards products that are equipped with sustainable technology in manufacturing process. Global ozone loss involves bromine, chlorine, iodine, and fluorine that multiplies the negative impact of hydrogenated gases used in the production process of home appliances.

Theoretical Implications

The current research contributes to the marketing and consumer behavior literature by proving meaningful impact of

Journal of Managerial Sciences 63 Volume 18 Issue 1 Jan-March 2023

| Measuring the Impact of Green Brand Positioning | Neelam, Tariq | , Shabana |
|---|---------------|-----------|
| | - | |

functional and emotional green brand positioning on green brand attitude with respect to high involvement electric home appliances in the context of Pakistan. Prior studies focused on developed countries in diverse cultural setups. Recent technological advancements guide in transitional phase from conventional manufacturing to green technological procedures that helps in alleviating the use of harmful gases in emerging home appliances markets. Rare studies have been carried out in developing countries in the context of high involvement sustainable products used for household consumption. The study advances theoretical contribution by adding evidence that support the positive impact of functional and emotional green brand positioning on green brand attitude in low-income countries like Pakistan with respect to industrial setups which is deemed responsible for creating environmental hazards.

Managerial Implications

Results of the study offer meaningful implications for strategic green brand management. The current study yields meaningful insight that developing green manufacturing plants helps in building green identity for brands via functional and emotional green brand positioning. Green brand positioning is one of the important factors of green marketing strategies that assists in developing positive attitude towards green brands. Thus, brand managers should exert high level of energies in devising a marketing plan that disseminate the idea of green brand positioning in emerging markets. The findings of this research indicate positive relationship between green brand positioning and green brand attitude. Therefore, integrated marketing communication mix campaigns should insert comprehensive green brand positioning strategies that complement both the functional branding attributes such as low emission refrigerants, recyclable materials, inverters technology, and energy saving devices along with emotional branding dimensions such as emotional affinity towards nature preservations. Advertising and communication messages should highlight the significance of functional as well as emotional concerns to enhance the consumers brand attitude towards green brands. Policy makers should accelerate the green technological plans to commercialize super-efficient home appliances in order to achieve the national energy reduction milestones for contributing to sustainable developmental goals.

Limitations and Future

The current study has certain shortcomings that point to future research directions. This study was conducted in the setting of

| Measuring the Impact of Green Brand Positioning | Neelam, Tariq, Shabana |
|---|------------------------|
| | |

Pakistan. To provide more relevant insights into the green brand literature, potential researchers may examine cultural diversity, socioeconomic status, and a variety of other aspects. In addition, the current study relied on cross-sectional data analysis. As a result, future study should use longitudinal data analysis approaches to better understand the seasonal impact of invertors Air conditioners, energy savers, refrigerant systems, and other cyclical goods in peak summer months that can have a substantial impact on green brand sentiments among residential consumers. The survey approach was based on the electric household appliance industry; future research could look at a variety of other product classes in different industrial settings to improve the generalizability of findings. The current study used a survey approach to obtain data. As a result, future researchers might use the experimentation processes to acquire faster and more precise insights into the impact of green brand positioning in influencing the final attitude toward green brands

References

- Ab Hamid, M., Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. Paper presented at the Journal of Physics: Conference Series.
- Ahmad, T., & Zhang, D. (2020). A critical review of comparative global historical energy consumption and future demand: The story told so far. *Energy Reports*, *6*, 1973-1991.
- Akbar, N., Zeb, A., & Ahmad, S. (2017). The impact of brand rejuvenation on consumer purchase intention: brand attitude as mediator. *Global Regional Review*, 2(1), 197-210.
- Alamsyah, D., Othman, N., & Mohammed, H. (2020). The awareness of environmentally friendly products: The impact of green advertising and green brand image. *Management Science Letters*, 10(9), 1961-1968.
- Alarcón, D., Sánchez, J. A., & De Olavide, U. (2015). Assessing convergent and discriminant validity in the ADHD-R IV rating scale: User-written commands for Average Variance Extracted (AVE), Composite Reliability (CR), and Heterotrait-Monotrait ratio of correlations (HTMT). Paper presented at the Spanish STATA meeting.
- Ali, S., Danish, M., Khuwaja, F. M., Sajjad, M. S., & Zahid, H. (2019). The intention to adopt green IT products in Pakistan: Driven by the modified theory of consumption values. *Environments*, 6(5), 53.

Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana

- Asif, M. (2009). Sustainable energy options for Pakistan. *Renewable* and Sustainable Energy Reviews, 13(4), 903-909.
- Aulina, L., & Yuliati, E. (2017). The effects of green brand positioning, green brand knowledge, and attitude towards green brand on green products purchase intention. Paper presented at the International Conference on Business and Management Research (ICBMR 2017).
- Baiquni, A. M., & Ishak, A. (2019). The green purchase intention of Tupperware products: the role of green brand positioning. *Jurnal Siasat Bisnis*, 1-14.
- Bank, W. (2019). Global financial development report 2019/2020: Bank regulation and supervision a decade after the global financial crisis: The World Bank.
- Belussi, L., Barozzi, B., Bellazzi, A., Danza, L., Devitofrancesco, A., Fanciulli, C., . . . Salamone, F. (2019). A review of performance of zero energy buildings and energy efficiency solutions. *Journal of building engineering*, 25, 100772.
- Brown, J. D. (2002). The Cronbach alpha reliability estimate. *JALT Testing & Evaluation SIG Newsletter, 6*(1).
- Butt, A., Naeem, M. S., Ali, P. I., & Hameed, S. (2022). Impact of firms' Greenwashing practices on customer green trust and green brand attachment: Pakistans home appliances consumers' perspective. *Pakistan Business Review*.
- Cacioppo, J. T., & Petty, R. E. (1984). The elaboration likelihood model of persuasion. *ACR North American Advances*.
- Camilleri, M. A. (2018). Closing the loop for resource efficiency, sustainable consumption and production: A critical review of the circular economy. *Sustainable Consumption and Production: A Critical Review of the Circular Economy.*
- Chen, Y.-S., Chang, T.-W., Li, H.-X., & Chen, Y.-R. (2020). The influence of green brand affect on green purchase intentions: The mediation effects of green brand associations and green brand attitude. *International Journal of Environmental Research and Public Health*, *17*(11), 4089.
- Cheung, M. W.-L. (2015). *Meta-analysis: A structural equation modeling approach*: John Wiley & Sons.
- Chin, T. A., Sulaiman, Z., Mas'od, A., Muharam, F. M., & Tat, H. H. (2019). Effect of green brand positioning, knowledge, and attitude of customers on green purchase intention. *Journal of Arts & Social Sciences, 3*(1), 23-33.
- Cho, G., Hwang, H., Sarstedt, M., & Ringle, C. M. (2020). Cutoff criteria for overall model fit indexes in generalized structured

Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana

component analysis. *Journal of Marketing Analytics*, 8(4), 189-202.

- Cohen, J. (1992). Statistical power analysis. *Current directions in psychological science*, 1(3), 98-101.
- da Luz, V. V., Mantovani, D., & Nepomuceno, M. V. (2020). Matching green messages with brand positioning to improve brand evaluation. *Journal of Business Research*, 119, 25-40.
- Danciu, V. (2015). Successful green branding, a new shift in brand strategy: Why and how it works. *Romanian Economic Journal*, 18(56).
- Duckworth, A. L., & Kern, M. L. (2011). A meta-analysis of the convergent validity of self-control measures. *Journal of research in personality*, 45(3), 259-268.
- Economidou, M., Todeschi, V., Bertoldi, P., D'Agostino, D., Zangheri, P., & Castellazzi, L. (2020). Review of 50 years of EU energy efficiency policies for buildings. *Energy and Buildings*, 225, 110322.
- Gong, S., Sheng, G., Peverelli, P., & Dai, J. (2020). Green branding effects on consumer response: examining a brand stereotypebased mechanism. *Journal of Product & Brand Management*.
- Govindan, K. (2018). Sustainable consumption and production in the food supply chain: A conceptual framework. *International Journal of Production Economics*, *195*, 419-431.
- Hameed, I., & Khan, K. (2020). An extension of the goal-framing theory to predict consumer's sustainable behavior for home appliances. *Energy efficiency*, *13*(7), 1441-1455.
- Hartmann, P., Ibáñez, V. A., & Sainz, F. J. F. (2005). Green branding effects on attitude: functional versus emotional positioning strategies. *Marketing Intelligence & Planning*.
- Hassan, H. A., Abbas, S. K., Zainab, F., Waqar, N., & Hashmi, Z. M. (2018). Motivations for green consumption in an emerging market. *Asian Journal of Multidisciplinary Studies*, 6(5).
- Heinberg, M., Katsikeas, C. S., Ozkaya, H. E., & Taube, M. (2020).
 How nostalgic brand positioning shapes brand equity: Differences between emerging and developed markets. *Journal of the Academy of Marketing Science*, 48(5), 869-890.
- Huang, Y.-C., Yang, M., & Wang, Y.-C. (2014). Effects of green brand on green purchase intention. *Marketing Intelligence & Planning*.
- Iqbal, T., Yousafzai, M. T., Ali, S., Sattar, K., Saleem, M. Q., & Habib, U. (2018). There's no such thing as free lunch but envy among young facebookers. *KSII Transactions on Internet and Information Systems (TIIS)*, 12(10), 4724-4737.

Journal of Managerial Sciences 67 Volume 18 Issue 1 Jan-March 2023

Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana

- Jan, F., & Mutalib, A. (2013). Mitigation of energy crisis in Pakistan through energy conservation in residential sector. *International Journal of Research in Engineering and Technology (IJRET)*, 2(4), 169-173.
- Kharat, A., Mate, D., & Kathwate, S. (2018). Experimental study of alternative refrigerants to replace R134a in a domestic refrigerator. *International Journal of Academic Research and Development*, *3*(4), 28-35.
- Kim, H., & John, D. R. (2008). Consumer response to brand extensions: Construal level as a moderator of the importance of perceived fit. *Journal of consumer psychology*, 18(2), 116-126.
- Lange, S., Pohl, J., & Santarius, T. (2020). Digitalization and energy consumption. Does ICT reduce energy demand? *Ecological Economics*, 176, 106760.
- Liberman, N., Trope, Y., & Wakslak, C. (2007). Construal level theory and consumer behavior. *Journal of consumer psychology*, *17*(2), 113-117.
- Lin, J., Lobo, A., & Leckie, C. (2017). Green brand benefits and their influence on brand loyalty. *Marketing Intelligence & Planning*.
- Lin, J., & Zhou, Z. (2020). The positioning of green brands in enhancing their image: the mediating roles of green brand innovativeness and green perceived value. *International Journal of Emerging Markets*.
- Majeed, M. U., Aslam, S., Murtaza, S. A., Attila, S., & Molnár, E. (2022). Green Marketing Approaches and Their Impact on Green Purchase Intentions: Mediating Role of Green Brand Image and Consumer Beliefs towards the Environment. *Sustainability*, 14(18), 11703.
- Malmodin, J., & Lundén, D. (2018). The energy and carbon footprint of the global ICT and E&M sectors 2010–2015. *Sustainability*, *10*(9), 3027.
- Marwat, N. A., Ahmad, D. S., & Yousafzai, M. T. (2022). Examining the Impact of Environmental-Beliefs on Green Purchase Intentions Via Price Sensitivity as Moderator. *City University Research Journal*, *12*(1).
- Marwat, N. A., & Ahmad, S. (2022). The Moderating Effect of Price Sensitivity on the Relationship between Consumers Environmental Knowledge and Green Purchase Intentions. *Journal of Managerial Sciences, 16*(3), 110-125.
- Meng, B., & Choi, K. (2019). Tourists' intention to use location-based services (LBS): Converging the theory of planned behavior

Journal of Managerial Sciences 68 Volume 18 Issue 1 Jan-March 2023

Measuring the Impact of Green Brand Positioning Neelam, Tariq, Shabana

- (TPB) and the elaboration likelihood model (ELM). International Journal of Contemporary Hospitality Management.
- Mohd Suki, N. (2016). Green product purchase intention: impact of green brands, attitude, and knowledge. *British Food Journal*, *118*(12), 2893-2910.
- Panda, T. K., Panda, T. K., & Mishra, K. (2013). Does Emotional Appeal Work in Advertising? The Rationality Behind Using Emotional Appeal to Create Favorable Brand Attitude. *IUP Journal of Brand Management*, 10(2).
- Park, H. J., & Lin, L. M. (2020). Exploring attitude–behavior gap in sustainable consumption: Comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623-628.
- Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. SAGE research methods foundations.
- Raiyan, M. F., & Rehman, O. A. (2017). Effects of Chlorine based refrigerants on atmosphere and search for alternative refrigerants-A review. *Contemporary Problems of Power Engineering and Environmental Protection*.
- Reczek, R. W., Irwin, J. R., Zane, D. M., & Ehrich, K. R. (2018). That's not how I remember it: Willfully ignorant memory for ethical product attribute information. *Journal of Consumer Research*, 45(1), 185-207.
- Sardeshmukh, S. R., & Vandenberg, R. J. (2017). Integrating moderation and mediation: A structural equation modeling approach. *Organizational Research Methods*, 20(4), 721-745.
- Sarkar, J. G., Sarkar, A., & Yadav, R. (2019). Brand it green: Young consumers' brand attitudes and purchase intentions toward green brand advertising appeals. *Young Consumers*.
- Schmuck, D., Matthes, J., Naderer, B., & Beaufort, M. (2018). The effects of environmental brand attributes and nature imagery in green advertising. *Environmental Communication*, *12*(3), 414-429.
- Sharma, M., & Joshi, S. (2019). Brand sustainability among young consumers: an AHP-TOPSIS approach. *Young Consumers*.
- Simão, L., & Lisboa, A. (2017). Green marketing and green brand-The Toyota Case. *Procedia manufacturing*, *12*, 183-194.
- Stikvoort, B., Juslin, P., & Bartusch, C. (2018). Good things come in small packages: is there a common set of motivators for energy behaviour? *Energy efficiency*, 11(7), 1599-1615.
- Suki, N. M. (2016). Green product purchase intention: impact of green brands, attitude, and knowledge. *British Food Journal*.

Journal of Managerial Sciences 69 Volume 18 Issue 1 Jan-March 2023

- Ul-Haq, Z., Ali, M., Batool, S. A., Tariq, S., & Qayyum, Z. (2016). Emission quantification of refrigerant CFCs, HCFCs and HFCs in megacity Lahore (Pakistan) and contributed ODPs and GWPs. *Journal of Earth System Science*, *125*(6), 1273-1284.
- Us, Y. O., Bilan, S., Pimonenko, T. V., Seliga, R., & Ostasz, G. (2020). Green brand for sustainable business: bibliometric analysis.
- Wang, C., Ghadimi, P., Lim, M. K., & Tseng, M.-L. (2019). A literature review of sustainable consumption and production: A comparative analysis in developed and developing economies. *Journal of Cleaner Production*, 206, 741-754.
- Wang, H.-J. (2016). Green brand positioning in the online environment. *International Journal of Communication*, 10, 23.
- Wang, H.-J. (2017). A brand-based perspective on differentiation of green brand positioning: A network analysis approach. *Management Decision*.
- Wang, Y. M., Zaman, H. M. F., & Alvi, A. K. (2022). Linkage of green brand positioning and green customer value with green purchase intention: the mediating and moderating role of attitude toward green brand and green trust. *Sage Open*, 12(2), 21582440221102441.
- Waris, I., & Hameed, I. (2020a). An empirical study of purchase intention of energy-efficient home appliances: The influence of knowledge of eco-labels and psychographic variables. *International Journal of Energy Sector Management*.
- Waris, I., & Hameed, I. (2020b). Promoting environmentally sustainable consumption behavior: an empirical evaluation of purchase intention of energy-efficient appliances. *Energy Efficiency*, 13(8), 1653-1664.
- Yousafzai, M. T., Khan, M., & Khan, U. (2017). Positioning of Private Sector Business Schools in Khyber Pakhtunkhwa: A Multidimensional Positioning Study. *Journal of Managerial Sciences*, 11(1).
- Zhang, X. (2006). Factor analysis of public clients' best-value objective in public–privately partnered infrastructure projects. *Journal of Construction Engineering and management*, 132(9), 956-965.