

Role of Green Marketing Mix and Attitude toward Green Marketing on Buyer's Behavior and Brand Loyalty

Raheel Farooqi

raheelf82@gmail.com

PhD Scholar, IQRA University, Karachi.

Reema Frooghi

reema.frooghi@iqra.edu.pk

Assistant Professor, IQRA University, Karachi.

Muhammad Hamza Farooqui

Mhamzafarooqui@gmail.com

Assistant Professor, BAHRIA University, Karachi.

Syed Ali Nabeel Naqvi

alinabeel@msn.com

PhD Scholar, IQRA University, Karachi.

Muhammad Sufyan Ramish

smsufyan@gmail.com

Associate Professor (IBHM) Dow University of Health Sciences, Karachi.

Corresponding Author: * Raheel Farooqi raheelf82@gmail.com

Received: 13-07-2025

Revised: 24-08-2025

Accepted: 04-09-2025

Published: 17-09-2025

ABSTRACT

The current study aims to examine the impact of attitude toward green marketing and the elements of the green marketing mix—product, price, place, promotion, and packaging—on green purchase intention, as well as its subsequent influence on green purchase behavior, willingness to pay a premium, and green brand loyalty. The study also examines the moderating role of demographic factors in the context of textile firms in Pakistan. Adopting a quantitative research approach, the study is based on a deductive reasoning framework and follows an explanatory research design. Data were collected using a structured questionnaire through a convenience sampling technique, targeting 200 respondents from the textile industry. The survey data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via Smart PLS software. The results revealed a significant positive impact of attitude toward green marketing ($\beta = 0.416$, $p = 0.0001$) on green purchase intention. Additionally, all GMM elements—price ($\beta = 0.247$), place ($\beta = 0.1163$), promotion ($\beta = 0.2722$), and packaging ($\beta = 0.227$)—were found to significantly influence green purchase intention. GPI further exhibited strong positive effects on GPB ($\beta = 0.6371$), willingness to pay premium ($\beta = 0.5574$), and green brand loyalty ($\beta = 0.2209$). Demographics showed a significant moderating effect between GPI and green brand loyalty ($\beta = 0.2651$, $p = 0.0001$), while the moderation between GPI and behavior was weak and negative ($\beta = -0.0462$, $p = 0.2823$). The study offers valuable insights for green marketing strategies in the textile sector.

Keywords: Green Marketing Mix, Attitude toward green marketing, Green purchase intention, Willingness to pay premium, Brand loyalty

INTRODUCTION

The rising ecological disquiets have resulted in transformation of production and distribution practices not only but its correlation with other business operations (Ahmed et al, 2023). The idea of sustainable practices has coupled with environmental concerns and expansion of GMP in diversified field of human life and businesses. This has also resulted in growing scope of Green Marketing Practices (GMP) in different business dimensions including textile industry (Khan et al, 2024). There is significant input of green practices in production process in textile industry and mitigation of environmental concerns along with its use in marketing message to gain customer's attention (Qadir et al, 2023). Textile firms with promotion of eco-conscious inputs, ecological production procedures, and right labor performs can input to address growing consumer's concerns and grow environmentally conscious clientele toward offers through employing GMP (Salam et al, 2022).

Furthermore, GMP can help textile industry to enhance brand reputation, attracts environmentally conscious buyers, and opens access to global markets with strict sustainability standards for firms operating in Pakistan (Irshad, 2025). In addition, GMP also encloses innovation in recycling, organic fabrics, and energy efficiency operations. The input of GMP can help textile firms to gain strategic edge with contribution toward long-term environmental and economic sustainability (Iqbal et al, 2023). Another study also stated with the part of customer's awareness toward GMP and its scope strategically toward business defined goals. Literature has described GMP as promotion and selling of products and services considering environmental benefits (Akbar et al, 2021). The key input of green textile products may include eco-friendly attributes through use of biodegradable inputs and application of sustainable resources (Majeed et al, 2022).

In addition, Literature also described with the key input of attitude in examination of effectiveness of green marketing with definition of consumer responsiveness (Jabeen et al, 2023). The positive environmental attitude receptive to green marketing campaigns helps to describe consumer and building up purchase of eco-conscious textile brands (Qureshi et al, 2023). Furthermore, the input of awareness and preferences also found its impact on consumer attitude with determination of purchasing decisions. This clearly highlights the need to align strategies with consideration of consumer values and beliefs toward environmentally responsible product offers in textile industry (Hassan et al, 2025). GMP also need to marketers to understand and align their strategies with consideration of consumer values and beliefs toward their environmental responsibilities (Iqbal et al, 2023). Another study also revealed that positive consumer attitude comes up with environmental conservation and has its significant impact in enhancing green marketing efforts (Sadiq et al, 2022).

However, the indifferent behavior of consumer toward environmental concerns possibly results in less effective outcome of GMP (Ahmad et al, 2025). An increasing awareness of consumer toward green practices with education and reinforcement of positive attitudes result in successful green marketing outcomes also in case of developing countries. This may come up with awareness campaigns and transparent practices (Bhutto et al, 2022). Literature has reported Green Marketing Mix (GMM) as eco-friendly adaptations of the traditional 4Ps that includes product, price, place and promotion along with application of sustainable material in green product (Sajid et al, 2022). The pricing of green product offer considers with long-term environmental values and optimization of distributional outcomes (Yousaf, 2022). The recent work goals to discover the input of attitude toward GMP and role of marketing mix in determination of Green Purchase Intention (GPI) toward Green Purchase Behavior (GPB), willingness to pay premium price (WPPP) and green brand loyalty in textile industry along with moderating input of demographic factors (Siyal et al, 2021).

Textile industry of Pakistan under significant competition in its regional scope from neighboring countries (Aslam et al, 2022). Textile industry in Pakistan has been facing with considerable challenges like energy crises, reforms, supportive policies and technological lags (Shafiq et al, 2023). In addition, the industry also reported with old production practices with lack of power to gain environmentally conscious customer's attention (Khan et al, 2024). Furthermore, textile industry of the country also reported with a strong pro-environmental attitude hence has potential to significantly elevates GPI (Salam et al, 2022). The industry also lacks with low level of adoption of GMP with potential to gain from adoption of GMP through offering sustainable textile products (Iqbal et al, 2023). Literature also reported with the necessity to examine the part of green marketing combination in textile industry with need to explore its association to GPI among buyers in Pakistan (Majeed et al, 2022).

Another study reported with the input of deficient marketing mix in the form of poor eco-promotion and high prices in weakening purchasers' intention among environmentally concerned buyers (Qureshi et al, 2023). Similarly, the textile sector of Pakistan also found with lack of studies to understand the association of GPI to GPB as the existence of such weak behavior may results in undermined outcomes of GMP and need of empirical investigation to explore trust gaps and eco-buying dwindles that have limiting effect on behavioral outcomes in textile industry (Iqbal et al, 2023). In addition, the input of awareness also found critical in determination of behavior toward GPI with WPPP. This has also potential input in overcoming price sensitivity and reducing WPPP for sustainable garments (Sadiq et al, 2022).

Furthermore, in long term perspective green purchase also found critical to determine green brand loyalty however, textile industry of the Pakistan has apparently reported with its non-existence with lack of focused studies to make explicit this dimension (Bhutto et al, 2022). However, it has found critical in determination of customer's perception toward green product offers and term of relationship. Another study revealed that any deficiency in intention prevents the formation of repeat purchases and ethical brand attachment that diminishes long-term loyalty (Sajid et al, 2022). Similarly, another important area is of demographic factors in bridging the correlation of GPI toward GPB as younger generation has found more intended toward green product offers as compare to older one along with proportional tendency to pay higher price and loyalty to brand hence an exploration of demographic factor also found critical to explore this critical relationship within the scope of current study. In this context, the problem statement of the current study has been summarized below.

"To examine empirically the input of buyer's attitude toward GMP along with the input of GMM in determination of GPI and its leading role toward green purchase behavior, brand loyalty and WPPP along with moderating input of demographic factors."

Literature has reported with limited studies to correlate buyer's attitude and input of GMP in determination of GPI in case of Pakistan (Yousaf, 2022). There is lack of study in case of textile industry in Pakistan to explore the implications of 4Ps along with attitude toward GMP in determination of GPI (Ahmed et al, 2023). Although green fashion brands are investigated in determination of GPB however its input in determination of social capita and knowledge have found missing with moderating input of demographic factors in case of textile industry of Pakistan (Khan et al, 2024). In addition, literature also reported with missing investigation in translating the impact of GPI on green purchase behavior, green brand loyalty and WPPP (Qadir et al, 2023).

In addition, the critical mediating input of GPI also found less explored in determination of purchase behavior, brand loyalty, and WPPP in case of Pakistan and not evident in case of textile industry in Pakistan (Salam et al, 2022). Majorly conducted studies are reported with treatment of behavior and intention in separate investigations (Irshad, 2025). The growing literature also found missing with the

moderating role of demographic factors like gender, income and education in determination of the effectiveness of attitude and purchase intention through its implications on brand loyalty and WPPP (Iqbal et al, 2023). Demographic factors include living dimension to make explicit the role of this critical information in building up consumer green buying behavior, intention to pay higher and loyalty toward green product offers (Akbar et al, 2021). In this context, the current study explores this undermined area in case of textile industry in Pakistan to enrich the existing body of literature with key finding and assist in policy making process. The set of research questions for the current are designed based on the above discussion and mentioned below.

- What is the impact of attitude toward green marketing in determination of GPI in textile industry in Pakistan?
- What is the impact of GMM (product, place, price, promotion and packaging) in determination of GPI in textile industry in Pakistan?
- What is the impact of GPI in green purchase behavior, WPPP and green brand loyalty in textile industry in Pakistan?
- What is the moderating input of demographic factors like age, gender and academic qualification between GPI and green purchase behavior, WPPP and green brand loyalty in textile industry in Pakistan?

The set of research objectives for the current are designed based on the above discussion and mentioned below.

- To examine impact of attitude toward green marketing in determination of GPI in textile industry in Pakistan.
- To examine the impact of GMM (product, place, price, promotion and packaging) in determination of GPI in textile industry in Pakistan.
- To examine the impact of GPI in green purchase behavior, WPPP and green brand loyalty in textile industry in Pakistan.
- To examine the moderating input of demographic factors like age, gender and academic qualification between GPI and green purchase behavior, WPPP and green brand loyalty in textile industry in Pakistan.

The significance of the current study based on the above scope and objective is described below.

- This research study helps to the student of the marketing to understand with the role of GMP and buyer's attitude in determination of GPI with an understand to this association not only but it's also in determination of green purchase behavior, willing to pay premium price and green brand loyalty through moderating input of demographics.
- This research study also in its comprehensive scope attract the attention of scholars and researchers to come up with more dimension to extend the scope of this study with more valuable insight and input to the literature and assist in policy making process.
- This study also helps market practitioner to understand complex association in an easier manner to come up with better line of action to mitigation market challenges and optimize results.
- This study also helps policy makers to come up with improvements in policy direction along with its role in determination of better market practices.

LITERATURE REVIEW

Theory of Planned Behavior

The implications of the theory of planned behavior (TPB) has found well expected in literature with its use in translating the correlation of environmental and consumer behavior related concerns toward GPI and marketing practices as inducement (Majeed et al, 2022). TPB has described with most immediate predictor of actual behavior and reported with its correlation to three different factors including attitude toward the behavior, subjective norms, and perceived behavioral control (Jabeen et al, 2023). The current study aims to examine the buyer's attitude toward GMP hence this in line with the attitude component of the TPB that influencer buyer's intention to purchase green products (Qureshi et al, 2023). In addition, the input of GMM like product, price, place, and promotion can be integrated to TPB as an external stimulus that has its role in shaping both attitudes and perceived behavioral control of buyers (Hassan et al, 2025).

TPB explains that well-promotion of green product with consideration of their affordability and accessibility helps to come up with positive affect of it in promotion of perceived ease of use and value to green product users with enhanced behavioral intention (Iqbal et al, 2023). TPB also explains GPI as central part in determination of outcomes of psychological and marketing mix that has an influence in determination of GPB and loyalty (Sadiq et al, 2022). TPB explains that input of this association in determination of actual green purchase behavior. This relationship further extends to enclose brand loyalty and WPPP. Similarly, TPB also found with its enablement to address the role of demographic factors as stimulus in the form of age, education, income and gender to understand the strength of association between GPI and behavior (Ahmad et al, 2025).

TPB particularly helps to determine attitudes and marketing mix in shaping of purchase intention and translation of it into behavior. This significant highlights the strength of the TPB in definition of robustness of the theory in building up structured framework of the current study and structuring relationships in conceptual framework to perform the empirical study (Bhutto et al, 2022).

Attitude Toward Green Marketing

Literature has extensively investigated with the role of attitude in determination of GMP with consideration of both positive and negative consumer evaluations in light of environmentally responsible marketing strategies adopted by businesses (Sajid et al, 2022). Green marketing attitudes also comes in with degree to which individual value and support green marketing initiatives considering eco-friendly product design, sustainable packaging, ethical sourcing, and green promotional campaigns (Yousaf, 2022). Another study also revealed that favorable attitude toward green marketing increases the likelihood that consumers prefer and choose products aligned with environmental values in the context of purchasing behavior. An input of environmental awareness, personal values, social influence, and trust in green claims comes up with definition of buyer's attitude (Siyal et al, 2021).

Literature also reported with the role of consumers' perceived green marketing efforts as genuine, transparent, and impactful in determination of buyer's attitudes to become more favorable that leads to stronger green purchase intentions (Aslam et al, 2022). Developing countries like Pakistan are reported with awareness of green issues in growing phase with limited exposure to consistent and credible green marketing along with its effect on consumer attitudes (Shafiq et al, 2023). Another study also revealed that skepticism due to greenwashing or lack of clear information may lead to neutral or negative attitudes (Ahmed et al, 2023). Business are needed to communicate environmental benefits effectively and maintain authenticity to build trust. Literature also reported with the role of GMP in shaping consumer

decision-making and fostering sustainable consumption (Khan et al, 2024). Furthermore, the input of positive attitudes found with increased willingness to engage in eco-friendly purchasing, pay a premium, and support green brands (Qadir et al, 2023).

Green Marketing Mix

Literature has described GMM as adaptation of tradition 4Ps i.e. product, price, promotion and place along with consideration of environmentally sustainable green practices (Salam et al, 2022). Another study also reported with critical role of GMM in determination of consumer perceptions and influencing GPI (Iqbal et al, 2023). GMM encloses with green product, green price, green place and green promotion (Irshad, 2025). A study revealed that green products involves with design of goods that are environmentally friendly, energy-efficient, biodegradable or made from recycled materials (Akbar et al, 2021). The input of organic fabrics, non-toxic dyes, and sustainable production methods in promotion of green textile products (Majeed et al, 2022). Similarly, green price translates with cost buyers are willing to pay for eco-friendly alternatives (Jabeen et al, 2023). Although green products are price higher as many consumers perceive that added value in green products comes in with environmental and health benefits (Qureshi et al, 2023).

Furthermore, literature also reported with green place as green marketing mid in determination of sustainable distribution channels such as local sourcing, eco-efficient logistics, and reduced carbon footprints during product delivery (Hassan et al, 2025). Similarly, green promotions are also found with communication along with environmental benefits of a product or service that clearly translates honesty with eco-labels, certifications, and awareness campaigns, avoiding misleading claims (Iqbal et al, 2023). GMM also determines effective implementation of GMM (Sadiq et al, 2022). GMM has found its influence on consumer attitudes and enhance green purchase intentions (Ahmad et al, 2025). Literature also reported with the role of strong GMM in supporting environmentally conscious consumer behavior, brand loyalty, and even WPPP for sustainable products (Bhutto et al, 2022).

Green Purchase Intention

Literature has described GPI as consumer's willingness and plot to buy products that are environmentally friendly, sustainable, and ethically produced (Yousaf, 2022). Literature has also reported with increased consumer attention due to growing environmental concerns and consumer awareness (Sajid et al, 2022). Another study also reported GPI with stronger prediction of stronger actual behavior and building up of GPI through shaping attitudes, perceived behavioral control, and social norms (Siyal et al, 2021). Similarly, literature also reported with an input of environmental awareness in determination of GPI and building up trust in green claims (Aslam et al, 2022). Furthermore, green value also found with its role in determination of impact of GPI (Shafiq et al, 2023).

Literature also reported with need of growing awareness on actual green purchases and practices while found with lack of trust, higher prices, and insufficient promotion (Ahmed et al, 2023). Another study also reported that factors such as green marketing practices, corporate social responsibility, and eco-labels influence consumer intention positively (Khan et al, 2024). The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Qadir et al, 2023). GPI also found a step toward sustainable consumption. In addition, the input of effective marketing strategies, education, and infrastructure also found its role in translation toward actual behavior (Salam et al, 2022).

Green Purchase Behavior

Literature has described GPB and its role in translating actual buying actions. Consumer often input with selection of environmentally friendly products and services with replacement of conventional alternatives (Irshad, 2025). GPB of buyer reflects a commitment to sustainability that is commonly influenced by factors such as environmental concern, awareness, personal values, and social responsibility (Iqbal et al, 2023). GPB is beyond purchase intention and representation of real-world implementation of eco-conscious decisions (Akbar et al, 2021). Furthermore, TPB also explained with the role of GPB as outcome of strong behavioral intention in shaping of positive attitude based on perceived control, and social norms (Majeed et al, 2022).

Literature also reported with the role of green practices that exhibits GPB with trust on green claims, perceive environmental benefits, and feel of empowered to make a difference adopting GMP (Jabeen et al, 2023). However, GPB has found with relatively limited expansion of GMP instead of growing green awareness (Qureshi et al, 2023). GMP found with barriers in the form of high prices, limited product availability, lack of reliable information, and skepticism toward green marketing claims. Such barriers have found its input in preventing consumer from acting on their green intentions (Hassan et al, 2025). Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices with encouragement of green behavior (Iqbal et al, 2023).

Willingness to Pay Premium

Literature also reported with the role of WPPP for green products through intention and awareness of customer to spend on green product and services (Shafiq et al, 2023). Another study also reported with the role of green products in translation of premium price payment for environmentally friendly, sustainable and ethical products (Aslam et al, 2022). There is significant correlation of green consumer behavior and WPPP premium price with environmental awareness, personal values, perceived product quality, and trust in eco-labels (Siyal et al, 2021). Another study also reported with the findings that consumers with strong environmental concerns and positive attitudes toward sustainability are more likely to exhibit higher WPPP for green alternatives (Yousaf, 2022). Literature also reported that WPPP is driven by the perceived benefits such as health safety, social responsibility, and ecological impact (Sajid et al, 2022).

Literature also reported that WPPP for green products often comes up with its correlation to price sensitivity, limited awareness, and skepticism toward green claims (Bhutto et al, 2022). Another study also reported that urban consumer is demonstrated with greater WPPP when brands clearly communicate their environmental commitments and offer value (Ahmad et al, 2025). Literature also reported with the potential input of WPPP for businesses have built up with consumer trust and translation of product information transparently (Sadiq et al, 2022). WPPP comes up with high-quality and value-driven approach. In addition, the input of government incentives and certifications can also support WPPP (Iqbal et al, 2023).

Green Brand Loyalty

Literature also reported with the role of green brand loyalty in determination of consumer's consistent preference and repeated purchase behavior toward brands that demonstrate a commitment to environmental sustainability (Hassan et al, 2025). Green brand loyalty also involves higher than satisfaction with product performance among the users. Green brand loyalty also describes buyer's emotional attachment, ethical alignment, and trust on the brand's green values and practices (Qureshi et al,

2023). Another study also revealed that consumer who are loyal to green brands are found with continue buying of green products and avocation of positive word-of-mouth and brand endorsement (Jabeen et al, 2023). Similarly, literature also reported with the input of green brand loyalty in shaping through several factors like green brand image, perceived environmental performance, transparency, and consumer trust (Majeed et al, 2022).

Literature also reported with consumer believe in managing brands genuinely to contribute with environmental protection as such brands are more found committed over the long term (Akbar et al, 2021). Green brand loyalty also experiences with positive green purchase experiences and strong green purchase intentions with furthermore, reinforcement of green brand loyalty (Iqbal et al, 2023). Brand loyalty has also found less explored with limited consumer awareness and incredulity about green claims. Another study also revealed that lack of credible eco-labels hinders the growth of loyalty toward green brands (Irshad, 2025). Literature also reported with intensity of young and educated consumers as more inclined toward loyal green brands with proven environmental responsibility (Salam et al, 2022). Literature also reported with the role of green brand loyalty in fostering consistent green practices and promotion of transparent communication and delivery of both environmental and functional product value (Qadir et al, 2023).

Empirical Review

Literature has reported that there is significant role of attitude toward green marketing in determination both positive and negative consumer evaluations along with its contribution toward determination of GPI (Khan et al, 2024). Another study also reported with the role of environmental awareness, personal values, social influence, and trust in determination of consumer attitude toward green products in definition of GPI (Qadir et al, 2023). Developing countries like Pakistan are reported with awareness of green issues in growing phase with limited exposure to consistent and credible green marketing along with its effect on consumer attitudes (Salam et al, 2022). Furthermore, the input of positive attitudes found with increased willingness to engage in eco-friendly purchasing, pay a premium, and support green brands (Irshad, 2025).

A study revealed that attitude toward green marketing significantly input toward consumer's green purchase intention as a favorable attitude eco-friendly marketing content results in higher probability among consumer's adoption of sustainable green products and buying behavior (Biswas & Roy, 2015). Another study also revealed that Consumer who perceives that green marketing campaigns as trustworthy and value-driven to them and demonstrate with stronger purchase intentions toward green product offers (Chen & Tung, 2014). Similar study also revealed that positive consumer attitude also mediates the association between environmental concern and actual consumer behavior with determination of green product purchase intention (Joshi & Rahman, 2015). Another study also reported that consumers' environmental oriented attitudes results in willingness to pay a premium price for green products the translate intention to buy green products as compare to traditional offers (Nguyen et al., 2020). Furthermore, another study also found that attitude toward green marketing emerged as a significant determinant of green consumption in 21st century (Paul et al., 2016).

H1: There is significant impact of attitude toward green marketing on green purchase intention.

Literature has described GMM as adaptation of tradition 4Ps i.e. product, price, promotion and price along with consideration of environmentally sustainable green practices with it role in determination of GPI (Iqbal et al, 2023). Another study also revealed that green products involves with design of goods that are environmentally friendly, energy-efficient, biodegradable or made from recycled materials that comes up with buyer's intention to get attended toward green products and intention to purchase green

products (Akbar et al, 2021). Although green products are price higher as many consumers perceive that added value in green products comes in with environmental and health benefits however, its correlation to GPI are found less explored (Majeed et al, 2022).

Furthermore, a study revealed product as key part of the green marketing mid that significantly determines consumer's green purchase intention with translation of environmentally friendly practices that includes durability, recyclability, and eco-labeling. These inputs results in fostering of positive perceptions and sustainable buying behavior (Chen & Chang, 2012). Another study also revealed that that quality and innovative aspects of green products result in an enhanced consumer trust and strengthen purchase intention among buyers (Yadav & Pathak, 2017). Literature also found that eco-designed products matches with consumer values that result in an increased intention to adopt with green consumption practices (Dangelico & Vocalelli, 2017). Furthermore, literature also reported with credibility of green products to overcome skepticism that helps to positively influences purchase intention (Nguyen et al., 2020). Another study also reported that an effective input of product strategies in green marketing mix results in shaping green purchasing intention and behavior among buyers (Biswas & Roy, 2015).

H2: There is significant impact of product as GMM toward green marketing on green purchase intention.

Furthermore, literature also reported with green place as green marketing mid in determination of sustainable distribution channels such as local sourcing, eco-efficient logistics, and reduced carbon footprints during product delivery along with its role in determination of GPI (Jabeen et al, 2023). GMM also determines effective in implementation of GMM with its role in determination of GPI (Qureshi et al, 2023). Literature also reported with the role of strong GMM in supporting environmentally conscious consumer behavior, brand loyalty, and even WPPP a premium for sustainable products as also found with its association to GPI (Hassan et al, 2025). A study revealed that price is critical to determine the success factor of green marketing mix and contribute an input in shaping green purchase intention. Consumer often found in application of price lens in analyzing eco-friendly products in understanding its fairness and value for money.

Furthermore, this also significantly influence buying decisions and purchase intention (Biswas & Roy, 2015). Another study also revealed that willingness to pay a premium is usually higher in case green products are perceived among buyers to be beneficial and trustworthy (Nguyen et al., 2020). Literature also found that an input of perceived price fairness overcome the skepticism and enhances the sustainable purchase behavior and building up intention to purchase green offers (Suki, 2016). Another study also revealed that competitive green pricing strategies improves purchase intention in emerging and developing markets (Yadav & Pathak, 2017). Literature also found that pricing strategies also directly influences consumers' adoption of green products (Gleim et al., 2013).

H3: There is significant impact of price as GMM toward green marketing on green purchase intention.

Literature has described GMM as adaptation of tradition 4Ps i.e. product, price, promotion and price along with consideration of environmentally sustainable green practices in determination of GPI (Iqbal et al, 2023). A study revealed that green products involves with design of goods that are environmentally friendly, energy-efficient, biodegradable or made from recycled materials that helps to produce green products and its role in promotion of GPI (Sadiq et al, 2022). Similarly, green price translates with cost buyers are willing to pay for eco-friendly alternatives that comes up with GPI (Ahmad et al, 2025). Similarly, green promotions are also found with communication along with environmental benefits of a

product or service that clearly translates honesty with eco-labels, certifications, and awareness campaigns, avoiding misleading claims as found its impact on GPI (Bhutto et al, 2022).

A study revealed that place determines distribution and accessibility for green products in green marketing mix with its significant influence over consumers' green purchase intentions. The study also found that accessibility to green products result in an enhanced convenience and overcoming of purchase barriers to strengthen consumers' willingness to purchase green products (Mahmoud, 2018). Another study also reported that in emerging economies an effective placement of the green products promotes environmental friendly attitudes and building up of purchase intention for green products (Su & Li, 2024). Similarly, another study also found that an effective application of distribution strategy has significant influence in shaping green purchase intention (Khatun & Roy, 2022). Another Meta-analysis also revealed that marketing channels and trust has mediating role in in determination of green purchase intention (Zhuang et al., 2021). Literature also found that strategic green communication supports in placement of green product offers in competitive business environment and determination of purchase intention (Correia et al., 2023).

H4: There is significant impact of place as GMM toward green marketing on green purchase intention.

Green marketing mix has found with its influence on consumer attitudes and enhancement green purchase intentions (Sajid et al, 2022). Literature also reported with the role of strong GMM in supporting environmentally conscious consumer behavior, brand loyalty, and even WPPP for sustainable products along with its role in determination of GPI (Yousaf, 2022). Another study also reported GPI with stronger prediction of stronger actual behavior and building up of GPI through shaping attitudes, perceived behavioral control, and social norms (Siyal et al, 2021). Furthermore, green value also found with its role in determination of impact of GPI (Aslam et al, 2022). A study also revealed promotion as key component of green marketing mix that helps to frame green advertising practices outcomes through application of eco-labeling and targeted promotional incentives for potential buyers (Guan, 2024).

Furthermore, green marketing promotional practices helps to input consistent consumers' intentions to green products and adoption of sustainable products by increasing awareness, perceived environmental benefits, and favorable attitudes toward green offerings (Mahmoud, 2018). Another study also revealed that there is positive impact of green promotion on purchase intention (Su, 2024). Literature also reported with the input of seasonal factors in promotional practices also comes up with stronger purchase intention for green products with translation of environmental concerns (Liang, 2022). Another study also revealed that persuasive green advertising and social-media promotion enhances the impact of green marketing practices on buyer's purchase intention (Ahmed et al., 2023). Another study also revealed that green promotional practices amplify the impact on consumer's attitude and translation of environmental knowledge toward purchase intention (Li, 2025)

H5: There is significant impact of promotion as GMM toward green marketing on green purchase intention.

Green marketing mix encloses with green product, green price, green place and green promotion. A study revealed that green products involves with design of goods that are environmentally friendly, energy-efficient, biodegradable or made from recycled materials (Shafiq et al, 2023). Furthermore, green value also found with its role in determination of impact of GPI (Ahmed et al, 2023). The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Khan et al, 2024). Business are needed to communicate environmental benefits effectively and maintain authenticity to build trust (Qadir et al, 2023).

Furthermore, the input of positive attitudes found with increased willingness to engage in eco-friendly purchasing, pay a premium, and support green brands (Salam et al, 2022).

H6: There is significant impact of packaging as GMM toward green marketing on green purchase intention.

The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Iqbal et al, 2023). Consumer often input with selection of environmentally friendly products and services with replacement of conventional alternatives (Irshad, 2025). The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Akbar et al, 2021). Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices. with encouragement of green behavior. GPI also found a step toward sustainable consumption (Majeed et al, 2022). In addition, the input of effective marketing strategies, education, and infrastructure also found its role in translation toward actual behavior. The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Jabeen et al, 2023).

H7: There is significant impact of GPI on green purchase behavior.

Green purchase intention also found a step toward sustainable consumption. In addition, the input of effective marketing strategies, education, and infrastructure also found its role in translation toward actual behavior (Hassan et al, 2025). Literature also reported with the role of green practices that exhibits GPB with trust on green claims, perceive environmental benefits, and feel of empowered to make a difference adopting GMP (Jabeen et al, 2023). Literature also reported with need of growing awareness on actual green purchases and practices while found with lack of trust, higher prices, and insufficient promotion (Qureshi et al, 2023). Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices. with encouragement of green behavior (Hassan et al, 2025).

H8: There is significant impact of GPI on willingness to pay premium.

Another study also reported GPI with stronger prediction of stronger actual behavior and building up of GPI through shaping attitudes, perceived behavioral control, and social norms (Iqbal et al, 2023). There is significant correlation of green consumer behavior and WPPP price with environmental awareness, personal values, perceived product quality, and trust in eco-labels (Sadiq et al, 2022). Another study also reported that urban consumer is demonstrated with greater WPPP when brands clearly communicate their environmental commitments and offer value (Ahmad et al, 2025). In addition, the input of government incentives and certifications can also support willingness to pay premium (Bhutto et al, 2022).

H9: There is significant impact of GPI on green brand loyalty.

Another study also reported GPI with stronger prediction of stronger actual behavior and building up of GPI through shaping attitudes, perceived behavioral control, and social norms (Sajid et al, 2022). GPB of buyer reflects a commitment to sustainability that is commonly influenced by factors such as environmental concern, awareness, personal values, and social responsibility (Yousaf, 2022). Such barriers have found its input in preventing consumer from acting on their green intentions (Siyal et al, 2021). Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices with encouragement of green behavior (Aslam et al, 2022).

H10: There is significant moderating impact of demographics between GPI and green purchase behavior.

Similarly, literature also reported with an input of environmental awareness in determination of GPI and building up trust in green claims (Shafiq et al, 2023). Furthermore, green value also found with its role in determination of impact of GPI (Akbar et al, 2021). Literature also reported with the potential input of WPPP for businesses have built up with consumer trust and translation of product information transparently. Another study also reported GPI with stronger prediction of stronger actual behavior and building up of GPI through shaping attitudes, perceived behavioral control, and social norms (Jabeen et al, 2023). Literature also reported that WPPP higher is driven by the perceived benefits such as health safety, social responsibility, and ecological impact (Hassan et al, 2025).

H11 There is significant moderating impact of demographics between GPI and willingness to pay premium.

Literature also reported with need of growing awareness on actual green purchases and practices while found with lack of trust, higher prices, and insufficient promotion (Irshad, 2025). Green brand loyalty also involves higher than satisfaction with product performance among the users (Salam et al, 2022). Another study also reported that factors such as green marketing practices, corporate social responsibility, and eco-labels influence consumer intention positively (Qadir et al, 2023). Another study also revealed that consumer who are loyal to green brands are found with continue buying of green products and avocation of positive word-of-mouth and brand endorsement (Khan et al, 2024). The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Ahmed et al, 2023). Similarly, literature also reported with the input of green brand loyalty in shaping through several factors like green brand image, perceived environmental performance, transparency, and consumer trust (Salam et al, 2022).

H12 There is significant moderating impact of demographics between GPI and green brand loyalty.

Conceptual Framework

The conceptual framework of the study is mentioned below.

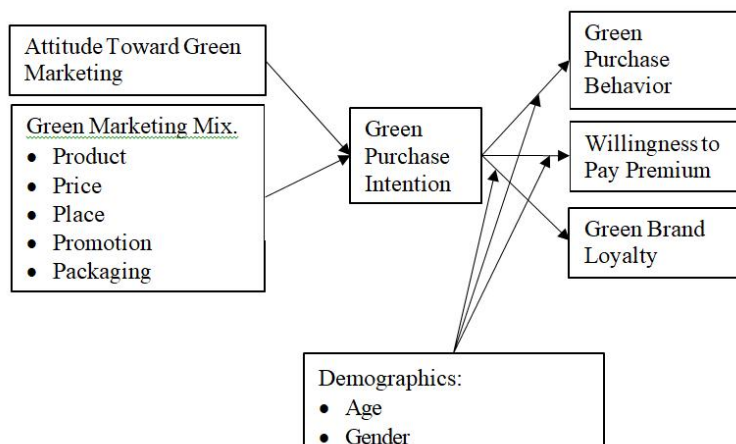


Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

The current research study has selected with the quantitative research approach as the study aims to empirically examine the impact of attitude toward green marketing and GMM like product, price, place, promotion and packaging on GPI along with its ultimate impact on green purchase behavior, WPPP and green brand loyalty along with moderating role of demographic factors in context of textile firms in Pakistan.

The study has developed with the research hypotheses based on deductive approach and selected with explanatory research type among research approaches. The study follows with the survey as research design and use questionnaire as data collection instrument to capture with the required number of responses i.e. 200 following convenience sampling technique. The study targeted textile industry and applies the collected responses using PLS Smart as software and application of structural equation modeling (SEM) on it.

DATA ANALYSIS

The demographics of the study are mentioned below.

Table 1: Demographics

	Demographics	Frequency	Percentage
Gender	Male	127	63.50
	Female	72	36.00
Age	18 to 28 years	76	38.00
	28 to 38 years	56	28.00
	38 to 48 years	45	22.50
	Above 48 years	23	11.50
Education	Bachelors	102	51.00
	Masters	67	33.50
	M.Phil.	13	6.50
	Ph.D.	8	4.00
	Other	10	5.00

Measurement Model

The below table shows that all the items that are retained within the model are observed higher than 0.70 while those with values less than 0.70 are dropped. It is evident from the below table. The below internal reliability test that used with Cronbach's Alpha, Roh A and Composite reliability found with values above 0.70. The Cronbach's Alpha value for latent variables attitude toward green marketing practice, demographics, GMM – product, GMM – package, GMM – place, GMM – price, GMM – promotion, green purchase behavior, green purchase intention, green brand loyalty and WPPP reported with values 0.7348, 0.8594, 0.7222, 0.7752, 0.7766, 0.8884, 0.7488, 0.7889, 0.7698, 0.8656 and 0.9445 respectively. The Rho A value for latent variables attitude toward green marketing practice, demographics, GMM – product, GMM – package, GMM – place, GMM – price, GMM – promotion, green purchase behavior, green purchase intention, green brand loyalty and wi reported with values 0.7799, 0.8743, 0.7600, 0.8045, 0.7858, 0.8965, 0.7680, 0.8115, 0.7830, 0.9001 and 0.9452 respectively.

Furthermore, the composite reliability value for latent variables attitude toward green marketing practice, demographics, GMM – product, GMM – package, GMM – place, GMM – price, GMM – promotion, green purchase behavior, green purchase intention, green brand loyalty and willingness to pay premium reported with values 0.8464, 0.9139, 0.8425, 0.8646, 0.8687, 0.9470, 0.8581, 0.8736, 0.8664, 0.9177 and 0.9730 respectively. In addition, the composite reliability value for latent variables attitude toward green marketing practice, demographics, GMM – product, GMM – package, GMM – place, GMM – price, GMM – promotion, green purchase behavior, green purchase intention, green brand loyalty and willingness to pay premium reported with values 0.6490, 0.7797, 0.6420, 0.6806, 0.6882, 0.8993, 0.6702, 0.6974, 0.6842, 0.7884 and 0.9474 respectively.

Table 2: Measurement Model

Latent Variables	Items	Outer Loadings	Cronbach's Alpha	Rho A	Composite Reliability	Average Variance Extracted (AVE)
Attitude Toward Green Marketing Practice	ATGMK1	0.7227	0.7348	0.7799	0.8464	0.6490
	ATGMK2	0.8034				
	ATGMK3	0.8828				
Demographics	DEMGPI	0.9063	0.8594	0.8743	0.9139	0.7797
	DEMGPI2	0.8734				
	DEMGPI3	0.8688				
Green Marketing Mix - Product	GMMPD1	0.8814	0.7222	0.7600	0.8425	0.6420
	GMMPD2	0.7355				
	GMMPD3	0.7799				
Green Marketing Mix - Package	GMMPK1	0.8237	0.7752	0.8045	0.8646	0.6806
	GMMPK2	0.7980				
	GMMPK3	0.8524				
Green Marketing Mix - Place	GMMPL1	0.8129	0.7766	0.7858	0.8687	0.6882
	GMMPL2	0.8637				
	GMMPL3	0.8110				
Green Marketing Mix - Price	GMMPR2	0.9424	0.8884	0.8965	0.9470	0.8993
	GMMPR3	0.9542				
	GMMPT1	0.7278				
Green Marketing Mix - Promotion	GMMPT2	0.9108	0.7488	0.7680	0.8581	0.6702
	GMMPT3	0.8072				
	GPBEH1	0.8598				
Green Purchase Behavior	GPBEH2	0.8123	0.7889	0.8115	0.8736	0.6974
	GPBEH3	0.8325				
	GPINT1	0.8030				
Green Purchase Intention	GPINT2	0.8820	0.7698	0.7830	0.8664	0.6842
	GPINT3	0.7938				
	GRBNL1	0.8681				
Green Brand Loyalty	GRBNL2	0.8447	0.8656	0.9001	0.9177	0.7884
	GRBNL3	0.9476				
	WTPPR1	0.9725				
Willingness to Pay Premium	WTPPR3	0.9742	0.9445	0.9452	0.9730	0.9474

Discriminant Validity

The below Fornell Larcker table shows that all the diagonal values found above respective vertical values hence revealed that discriminant validity is reported evident and also showed that there is no incidence of multi-collinearity.

Table 3: Discriminant Validity – Fornell Larcker

Fornell-Larcker Criterion	ATGMK	DEMGP	GRBNL	GMMPK	GMMPL	GMMPR	GMMPD	GMMPT	GPBEH	GPINT	WTPPR
Attitude Toward Green Marketing Practice (ATGMK)	0.8056										
Demographics (DEMGP)	0.5616	0.8830									
Green Brand Loyalty (GRBNL)	0.6528	0.8666	0.8879								
Green Marketing Mix - Package (GMMPK)	0.4003	0.0568	0.1490	0.8250							
Green Marketing Mix - Place (GMMPL)	0.5210	0.3901	0.4114	0.3458	0.8296						
Green Marketing Mix - Price (GMMPR)	0.2426	-0.1824	-0.1139	0.4869	0.1180	0.9483					
Green Marketing Mix - Product (GMMPD)	0.6063	0.4044	0.5654	0.3190	0.3068	0.2374	0.8013				
Green Marketing Mix - Promotion (GMMPT)	0.3744	0.5361	0.6252	0.3323	0.5012	0.0943	0.4966	0.8187			
Green Purchase Behavior (GPBEH)	0.6843	0.4604	0.5099	0.4462	0.6196	0.1547	0.3337	0.3503	0.8351		
Green Purchase Intention (GPINT)	0.7221	0.4079	0.4955	0.6418	0.5756	0.4969	0.5456	0.5793	0.7256	0.8272	
Willingness to Pay Premium (WTPPR)	0.5423	0.6304	0.6647	0.3064	0.2300	0.0954	0.5549	0.5136	0.4089	0.6664	0.9734

The below table also shows that HTMT table also support the evidence in favor of discriminate validity.

Table 4: Discriminant Validity – HTMT

	HTMT										
	ATGMK	DEMGP	GRBNL	GMPKP	GMMPL	GMPRP	GMPPD	GMMPT	GPBEH	GPINT	WTPPR
Attitude Toward Green Marketing Practice (ATGMK)											
Demographics (DEMGP)	0.7250										
Green Brand Loyalty (GRBNL)	0.8005	0.9838									
Green Marketing Mix - Package (GMPKP)	0.5038	0.2593	0.2960								
Green Marketing Mix - Place (GMMPL)	0.7095	0.4824	0.4812	0.4501							
Green Marketing Mix - Price (GMPRP)	0.3596	0.2053	0.1788	0.6101	0.2256						
Green Marketing Mix - Product (GMPPD)	0.8257	0.5251	0.7131	0.4639	0.4052	0.4046					
Green Marketing Mix - Promotion (GMMPT)	0.5048	0.6798	0.7780	0.4071	0.6523	0.1449	0.6482				
Green Purchase Behavior (GPBEH)	0.8907	0.5138	0.5669	0.4786	0.8092	0.2009	0.4423	0.4502			
Green Purchase Intention (GPINT)	0.9034	0.4659	0.5804	0.7904	0.7049	0.6157	0.7196	0.7480	0.8616		
Willingness to Pay Premium (WTPPR)	0.6420	0.6992	0.7309	0.3326	0.2550	0.1022	0.6751	0.6110	0.4127	0.7764	

Model Fit & R-Square

The below table shows that the impact green brand loyalty, green purchase behavior, GPI and willingness to pay premium observed with R-square value of 0.8400, 0.5606, 0.7880 and 0.7017 respectively. All found with values that shows strong impact of independent variables expect GPB that observed with moderate impact while overall model also accepted with significance value of 4503.99.

Table 5: Model Fit & R-Square

	R Square	R Square Adjusted	Chi-Square
Green Brand Loyalty	0.8400	0.8375	
Green Purchase Behavior	0.5606	0.5539	
Green Purchase Intention	0.7880	0.7814	
Willingness to Pay Premium	0.7017	0.6972	4503.99

Path Coefficient

The study clearly revealed that there is a significant impact of Attitude Toward Green Marketing Practice on Green Brand Loyalty with significance value of 0.0001 and coefficient value of 0.0915. There is also a significant impact of Attitude Toward Green Marketing Practice on GPB with significance value of 0.0001 and coefficient value of 0.2643. There is also a significant impact of Attitude Toward Green Marketing Practice on GPI with significance value of 0.0001 and coefficient value of 0.416. There is also a significant impact of Attitude Toward Green Marketing Practice on Willingness to Pay Premium with significance value of 0.0001 and coefficient value of 0.232. There is also a significant impact of Demographics on Green Brand Loyalty with significance value of 0.0001 and coefficient value of 0.8088. There is also a significant impact of Demographics on GPB with significance value of 0.0001 and coefficient value of 0.195.

There is also a significant impact of Demographics on Willingness to Pay Premium with significance value of 0.0001 and coefficient value of 0.4412. There is a significant moderating impact of demographics between green brand loyalty and brand purchase intention with significance value of 0.0001 and coefficient value of 0.2651. There is also an insignificant moderating impact of demographics between GPB and brand purchase intention with significance value of 0.2823 and coefficient value of -0.0462. There is a significant impact of GMM - Package on Green Brand Loyalty with significance value of 0.0006 and coefficient value of 0.0506. There is a significant impact of GMM - Package on GPB with significance value of 0.0001 and coefficient value of 0.145. There is a significant impact of GMM - Package on GPI with significance value of 0.0001 and coefficient value of 0.227.

There is a significant impact of GMM - Package on Willingness to Pay Premium with significance value of 0.0001 and coefficient value of 0.1267. There is a significant impact of GMM - Place on Green Brand Loyalty with significance value of 0.0238 and coefficient value of 0.0256. There is a significant impact of GMM - Place on GPB with significance value of 0.0228 and coefficient value of 0.074. There is a significant impact of GMM - Place on GPI with significance value of 0.0219 and coefficient value of 0.1163. There is a significant impact of GMM - Place on Willingness to Pay Premium with significance value of 0.0214 and coefficient value of 0.0646.

There is a significant impact of GMM - Price on Green Brand Loyalty with significance value of 0.0001 and coefficient value of 0.0545. There is a significant impact of GMM - Price on GPB with significance value of 0.0001 and coefficient value of 0.1573. There is a significant impact of GMM - Price on GPI with significance value of 0.0001 and coefficient value of 0.247. There is a significant impact of GMM - Price on Willingness to Pay Premium with significance value of 0.0001 and coefficient value of 0.1376. There is an insignificant impact of GMM - Product on Green Brand Loyalty with significance value of 0.9013 and coefficient value of -0.0012. There is an insignificant impact of GMM - Product on GPB with significance value of 0.9022 and coefficient value of -0.0041.

There is a insignificant impact of GMM - Product on GPI with significance value of 0.9027 and coefficient value of -0.0073. There is an insignificant impact of GMM - Product on Willingness to Pay Premium with significance value of 0.9031 and coefficient value of -0.004. There is a significant impact of GMM - Promotion on Green Brand Loyalty with significance value of 0.0001 and coefficient value of 0.0598. There is a significant impact of GMM - Promotion on GPB with significance value of 0.0001 and coefficient value of 0.1729.

There is a significant impact of GMM - Promotion on GPI with significance value of 0.0001 and coefficient value of 0.2722. There is a significant impact of GMM - Promotion on Willingness to Pay

Premium with significance value of 0.0001 and coefficient value of 0.1512. There is a significant impact of GPI on Green Brand Loyalty with significance value of 0.0001 and coefficient value of 0.2209. There is a significant impact of GPI on GPB with significance value of 0.0001 and coefficient value of 0.6371. There is a significant impact of GPI on Willingness to Pay Premium with significance value of 0.0001 and coefficient value of 0.5574. There is a significant moderating impact of demographics between willingness to pay premium price and GPI with significance value of 0.0001 and coefficient value of 0.3366.

Table 6: Path Coefficient

	Estimated Value	Standard Deviation	T Statistics	P Values
Attitude Toward Green Marketing Practice -> Green Brand Loyalty	0.0914	0.0138	6.6471	0.0000
Attitude Toward Green Marketing Practice -> Green Purchase Behavior	0.2642	0.0295	8.8610	0.0000
Attitude Toward Green Marketing Practice -> Green Purchase Intention	0.4159	0.0448	9.1744	0.0000
Attitude Toward Green Marketing Practice -> Willingness to Pay Premium	0.2320	0.0318	7.1844	0.0000
Demographics -> Green Brand Loyalty	0.8088	0.0241	33.5762	0.0000
Demographics -> Green Purchase Behavior	0.1949	0.0482	4.0564	0.0001
Demographics -> Willingness to Pay Premium	0.4412	0.0467	9.4997	0.0000
GBL,GPI & DEM -> Green Brand Loyalty	0.2650	0.0345	7.7424	0.0000
GPB,GPI & DEM -> Green Purchase Behavior	-0.0461	0.0401	1.0763	0.2823
Green Marketing Mix - Package -> Green Brand Loyalty	0.0505	0.0145	3.4875	0.0005
Green Marketing Mix - Package -> Green Purchase Behavior	0.1450	0.0356	4.0659	0.0001
Green Marketing Mix - Package -> Green Purchase Intention	0.2270	0.0505	4.4991	0.0000
Green Marketing Mix - Package -> Willingness to Pay Premium	0.1267	0.0305	4.1552	0.0000
Green Marketing Mix - Place -> Green Brand Loyalty	0.0255	0.0119	2.2683	0.0237
Green Marketing Mix - Place -> Green Purchase Behavior	0.0739	0.0336	2.2843	0.0228
Green Marketing Mix - Place -> Green Purchase Intention	0.1162	0.0525	2.2999	0.0219
Green Marketing Mix - Place -> Willingness to Pay Premium	0.0645	0.0291	2.3094	0.0213
Green Marketing Mix - Price -> Green Brand Loyalty	0.0544	0.0100	5.5484	0.0000
Green Marketing Mix - Price -> Green Purchase Behavior	0.1572	0.0239	6.6001	0.0000
Green Marketing Mix - Price -> Green Purchase Intention	0.2470	0.0328	7.5704	0.0000
Green Marketing Mix - Price -> Willingness to Pay Premium	0.1376	0.0207	6.6867	0.0000
Green Marketing Mix - Product -> Green Brand Loyalty	-0.0012	0.0095	0.1241	0.9013

Green Marketing Mix - Product -> Green Purchase Behavior	-0.0041	0.0273	0.1230	0.9021
Green Marketing Mix - Product -> Green Purchase Intention	-0.0073	0.0432	0.1224	0.9027
Green Marketing Mix - Product -> Willingness to Pay Premium	-0.0040	0.0241	0.1218	0.9031
Green Marketing Mix - Promotion -> Green Brand Loyalty	0.0597	0.0099	6.0240	0.0000
Green Marketing Mix - Promotion -> Green Purchase Behavior	0.1728	0.0239	7.1687	0.0000
Green Marketing Mix - Promotion -> Green Purchase Intention	0.2722	0.0375	7.1691	0.0000
Green Marketing Mix - Promotion -> Willingness to Pay Premium	0.1511	0.0201	7.4594	0.0000
Green Purchase Intention -> Green Brand Loyalty	0.2209	0.0314	7.0807	0.0000
Green Purchase Intention -> Green Purchase Behavior	0.6370	0.0506	12.5769	0.0000
Green Purchase Intention -> Willingness to Pay Premium	0.5573	0.0432	12.8889	0.0000
WTPPR,GPI & DEM -> Willingness to Pay Premium	0.3365	0.0284	11.8895	0.0000

Hypotheses Summary

The below table shows the summary of developed hypotheses.

Table 7: Hypotheses Summary

Sr.	Hypotheses	Sign. Value	Comments
1	H1: There is significant impact of attitude toward green marketing on green purchase intention.	0.0000	Hypo. Accept.
2	H2: There is significant impact of product as GMM toward green marketing on green purchase intention.	0.9027	Hypo. Reject.
3	H3: There is significant impact of price as GMM toward green marketing on green purchase intention.	0.0000	Hypo. Accept.
4	H4: There is significant impact of place as GMM toward green marketing on green purchase intention.	0.0219	Hypo. Accept.
5	H5: There is significant impact of promotion as GMM toward green marketing on green purchase intention.	0.0000	Hypo. Accept.
6	H6: There is significant impact of packaging as GMM toward green marketing on green purchase intention.	0.0000	Hypo. Accept.
7	H7: There is significant impact of GPI on green purchase behavior.	0.0000	Hypo. Accept.
8	H8: There is significant impact of GPI on willingness to pay premium.	0.0000	Hypo. Accept.
9	H9: There is significant impact of GPI on green brand loyalty.	0.0000	Hypo. Accept.
10	H10: There is significant moderating impact of demographics between GPI and green purchase behavior.	0.2823	Hypo. Reject.
11	H11: There is significant moderating impact of demographics between GPI and willingness to pay premium.	0.0000	Hypo. Accept.
12	H12: There is significant moderating impact of demographics between GPI and green brand loyalty.	0.0000	Hypo. Accept.

COMPARATIVE DISCUSSION

There is significant impact of attitude toward green marketing on green purchase intention with significance value of 0.0001 and found with coefficient value of 0.416. Literature also supported with similar findings. A study revealed that attitude toward green marketing significantly input toward consumer's green purchase intention as a favorable attitude eco-friendly marketing content results in higher probability among consumer's adoption of sustainable green products and buying behavior (Biswas & Roy, 2015). Another study also revealed that Consumer who perceives that green marketing campaigns as trustworthy and value-driven to them and demonstrate with stronger purchase intentions toward green product offers (Chen & Tung, 2014).

Similar study also revealed that positive consumer attitude also mediates the association between environmental concern and actual consumer behavior with determination of green product purchase intention (Joshi & Rahman, 2015). Another study also reported that consumers' environmental oriented attitudes results in willingness to pay a premium price for green products the translate intention to buy green products as compare to traditional offers (Nguyen et al., 2020). Furthermore, another study also found that attitude toward green marketing emerged as a significant determinant of green consumption in 21st century (Paul et al., 2016).

There is significant impact of product as GMM toward green marketing on green purchase intention. with significance value of 0.9027 and found with coefficient value of -0.0073. Literature also supported with similar findings. A study revealed product as key part of the green marketing mid that significantly determines consumer's green purchase intention with translation of environmentally friendly practices that includes durability, recyclability, and eco-labeling. These inputs results in fostering of positive perceptions and sustainable buying behavior (Chen & Chang, 2012). Another study also revealed that that quality and innovative aspects of green products result in an enhanced consumer trust and strengthen purchase intention among buyers (Yadav & Pathak, 2017). Literature also found that eco-designed products matches with consumer values that result in an increased intention to adopt with green consumption practices (Dangelico & Vocalelli, 2017). Furthermore, literature also reported with credibility of green products to overcome skepticism that helps to positively influences purchase intention (Nguyen et al., 2020).

Another study also reported that an effective input of product strategies in green marketing mix results in shaping green purchasing intention and behavior among buyers (Biswas & Roy, 2015). The study also reported that there is significant impact of price as GMM toward green marketing on green purchase intention with significance value of 0.0001 and found with coefficient value of 0.247. Literature also supported with similar findings. A study revealed that price is critical to determine the success factor of green marketing mix and contribute an input in shaping green purchase intention. Consumer often found in application of price lens in analyzing eco-friendly products in understanding its fairness and value for money. Furthermore, this also significantly influence buying decisions and purchase intention (Biswas & Roy, 2015).

Another study also revealed that willingness to pay a premium is usually higher in case green products are perceived among buyers to be beneficial and trustworthy (Nguyen et al., 2020). Literature also found that an input of perceived price fairness overcome the skepticism and enhances the sustainable purchase behavior and building up intention to purchase green offers (Suki, 2016). Another study also revealed that competitive green pricing strategies improves purchase intention in emerging and developing markets (Yadav & Pathak, 2017). Literature also found that pricing strategies also directly influences consumers' adoption of green products (Gleim et al., 2013).

There is also significant impact of place as GMM toward green marketing on green purchase intention. with significance value of 0.0219 and found with coefficient value of 0.1163. Literature also supported with similar findings. A study revealed that place determines distribution and accessibility for green products in green marketing mix with its significant influence over consumers' green purchase intentions. The study also found that accessibility to green products result in an enhanced convenience and overcoming of purchase barriers to strengthen consumers' willingness to purchase green products (Mahmoud, 2018). Another study also reported that in emerging economies an effective placement of the green products promotes environmental friendly attitudes and building up of purchase intention for green products (Su & Li, 2024). Similarly, another study also found that an effective application of distribution strategy has significant influence in shaping green purchase intention (Khatun & Roy, 2022).

Another Meta-analysis also revealed that marketing channels and trust has mediating role in in determination of green purchase intention (Zhuang et al., 2021). Literature also found that strategic green communication supports in placement of green product offers in competitive business environment and determination of purchase intention (Correia et al., 2023). There is significant impact of promotion as GMM toward green marketing on green purchase intention. with significance value of 0.0001 and found with coefficient value of 0.2722. Literature also reported with similar findings. A study also revealed promotion as key component of green marketing mix that helps to frame green advertising practices outcomes through application of eco-labeling and targeted promotional incentives for potential buyers (Guan, 2024).

Green marketing promotional practices helps to input consistent consumers' intentions to green products and adoption of sustainable products by increasing awareness, perceived environmental benefits, and favorable attitudes toward green offerings (Mahmoud, 2018). Another study also revealed that there is positive impact of green promotion on purchase intention (Su, 2024). Literature also reported with the input of seasonal factors in promotional practices also comes up with stronger purchase intention for green products with translation of environmental concerns (Liang, 2022). Another study also revealed that persuasive green advertising and social-media promotion enhances the impact of green marketing practices on buyer's purchase intention (Ahmed et al., 2023). Another study also revealed that green promotional practices amplify the impact on consumer's attitude and translation of environmental knowledge toward purchase intention (Li, 2025)

There is also significant impact of packaging as GMM toward green marketing on green purchase intention. with significance value of 0.0001 and found with coefficient value of 0.227. Furthermore, green value also found with its role in determination of impact of GPI (Ahmed et al, 2023). The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Khan et al, 2024). Business are needed to communicate environmental benefits effectively and maintain authenticity to build trust (Qadir et al, 2023). Furthermore, the input of positive attitudes found with increased willingness to engage in eco-friendly purchasing, pay a premium, and support green brands (Salam et al, 2022).

There is significant impact of GPI on green purchase behavior. with significance value of 0.0001 and found with coefficient value of 0.6371. Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices. with encouragement of green behavior. GPI also found a step toward sustainable consumption (Majeed et al, 2022). In addition, the input of effective marketing strategies, education, and infrastructure also found its role in translation toward actual behavior. The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Jabeen et al, 2023).

There is significant impact of GPI on WPPP. with significance value of 0.0001 and found with coefficient value of 0.5574. Literature also reported with the role of green practices that exhibits GPB with trust on green claims, perceive environmental benefits, and feel of empowered to make a difference adopting GMP (Jabeen et al, 2023). Literature also reported with need of growing awareness on actual green purchases and practices while found with lack of trust, higher prices, and insufficient promotion (Qureshi et al, 2023). Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices. with encouragement of green behavior (Hassan et al, 2025).

There is significant impact of GPI on green brand loyalty. with significance value of 0.0001 and found with coefficient value of 0.2209. There is significant correlation of green consumer behavior and WPPP price with environmental awareness, personal values, perceived product quality, and trust in eco-labels (Sadiq et al, 2022). Another study also reported that urban consumer is demonstrated with greater WPPP when brands clearly communicate their environmental commitments and offer value (Ahmad et al, 2025).

There is significant moderating impact of demographics between GPI and green purchase behavior. with significance value of 0.2823 and found with coefficient value of -0.0462. GPB of buyer reflects a commitment to sustainability that is commonly influenced by factors such as environmental concern, awareness, personal values, and social responsibility (Yousaf, 2022). Such barriers have found its input in preventing consumer from acting on their green intentions (Siyal et al, 2021). Firms are needed to trust through transparent labeling, certifications, and genuine eco-friendly practices with encouragement of green behavior (Aslam et al, 2022).

There is significant moderating impact of demographics between GPI and WPPP. with significance value of 0.0001 and found with coefficient value of 0.3366. Literature also reported with the potential input of WPPP for businesses have built up with consumer trust and translation of product information transparently. Another study also reported GPI with stronger prediction of stronger actual behavior and building up of GPI through shaping attitudes, perceived behavioral control, and social norms (Jabeen et al, 2023). Literature also reported that WPPP is driven by the perceived benefits such as health safety, social responsibility, and ecological impact (Hassan et al, 2025).

There is significant moderating impact of demographics between GPI and green brand loyalty. with significance value of 0.0001 and found with coefficient value of 0.2651. The input of demographic factors like age, income, and education observed with its role, as moderator, in affecting consumer response toward green purchase intentions (Ahmed et al, 2023). Similarly, literature also reported with the input of green brand loyalty in shaping through several factors like green brand image, perceived environmental performance, transparency, and consumer trust (Salam et al, 2022).

CONCLUSION & RECOMMENDATIONS

Conclusion

The current study aims to examine the impact of attitude toward green marketing and GMM like product, price, place, promotion and packaging on GPI along with its ultimate impact on green purchase behavior, WPPP and green brand loyalty along with moderating role of demographic factors in context of textile firms in Pakistan. The current research study has selected with the quantitative research approach. The study has developed with the research hypotheses based on deductive approach and selected with explanatory research type among research approaches. The study follows with the survey as research design and use questionnaire as data collection instrument to capture with the required number of responses i.e. 200 following convenience sampling technique. The study targeted textile industry and

applies the collected responses using PLS Smart as software and application of structural equation modeling (SEM) on it. The results of the study revealed that there is significant impact of attitude toward green marketing on green purchase intention with significance value of 0.0001 and found with coefficient value of 0.416. There is significant impact of price as GMM toward green marketing on green purchase intention with significance value of 0.0001 and found with coefficient value of 0.247.

Furthermore, the study also revealed that there is significant impact of place as GMM toward green marketing on green purchase intention with significance value of 0.0219 and found with coefficient value of 0.1163. There is significant impact of promotion as GMM toward green marketing on green purchase intention with significance value of 0.0001 and found with coefficient value of 0.2722. There is significant impact of packaging as GMM toward green marketing on green purchase intention with significance value of 0.0001 and found with coefficient value of 0.227. There is significant impact of GPI on green purchase behavior with significance value of 0.0001 and found with coefficient value of 0.6371. There is significant impact of GPI on WPPP with significance value of 0.0001 and found with coefficient value of 0.5574. There is significant impact of GPI on green brand loyalty with significance value of 0.0001 and found with coefficient value of 0.2209. There is significant moderating impact of demographics between GPI and green purchase behavior with significance value of 0.2823 and found with coefficient value of -0.0462. There is significant moderating impact of demographics between GPI and green brand loyalty with significance value of 0.0001 and found with coefficient value of 0.2651.

Recommendations

The set of recommendation designed based on the above findings are comprehensively designed. Firms should design campaigns that positively shape consumer attitudes toward green marketing through education, transparency, and environmental storytelling. Firms must adopt competitive pricing strategies for green products, highlighting cost savings, durability, and environmental value to consumers. Firms should ensure eco-friendly availability by improving sustainable distribution and ensuring green products are accessible in major consumer markets. Firms must invest in impactful green promotions showcasing certifications, environmental benefits, and sustainability through multi-channel advertising. Firms should use sustainable packaging that's biodegradable or recyclable, clearly labeled to reflect eco-friendliness and environmental commitment. Firms must facilitate green purchasing behavior by improving product visibility, availability, and simplifying the green buying process. Firms should target premium segments by offering high-quality green products and emphasizing environmental impact and ethical production. Firms must build loyalty by delivering consistent green product performance and engaging loyal customers through eco-rewards and brand communities. Firms should segment customers by demographics and personalize green marketing strategies to meet diverse values and preferences. Firms must address demographic barriers by understanding limitations in access, affordability, and designing inclusive green marketing interventions.

FUTURE PROSPECT OF STUDIES

The upcoming studies may explore additional variables such as environmental knowledge, social influence, and perceived consumer effectiveness to better understand green purchase behavior. Examining the role of government regulations, cultural values, and corporate social responsibility could provide deeper insights. Longitudinal studies may also reveal how attitudes evolve over time. Including psychological factors like environmental concern and personal norms can further enrich green marketing and sustainability research in diverse consumer contexts.

REFERENCES

- Ahmad, M. B., Zulfikar, S., Shaukat, F., & Rizvi, F. (2025). Inspecting the Consequences of the Green Marketing Utensils and Tools to Check the Purchase Intention of the Young Adults through the Moderating Role of Green Conscious Attitude: An Empirical Study. *Policy Journal of Social Science Review*, 3(7), 145-165.
- Ahmed, R. R., Streimikiene, D., Qadir, H., & Streimikis, J. (2023). Effect of green marketing mix, green customer value, and attitude on green purchase intention: evidence from the USA. *Environmental Science and Pollution Research*, 30(5), 11473-11495.
- Akbar, K., Yongsheng, J., Waheed, A., Afzal, F., & Mahsud, M. (2021). Impact of green practices on consumers' sustainable purchase intentions: Humans' management adopting green strategies in Pakistan. *Human Systems Management*, 40(3), 339-351.
- Aslam, W., Razzaque, O., Arif, I., & Farhat, K. (2022). Impact of spirituality, religiosity, knowledge and attitude on GPI in Pakistan. *International Journal of Green Economics*, 16(4), 331-354.
- Bhutto, M. H., Tariq, B., Azhar, S., Ahmed, K., Khuwaja, F. M., & Han, H. (2022). Predicting consumer purchase intention toward hybrid vehicles: testing the moderating role of price sensitivity. *European Business Review*, 34(1), 62-84.
- Hassan, M., Mahmood, Z., & Khakwani, I. (2025). Impact of religiosity on Pakistani youth green purchase intentions and behavior: extending theory of planned behavior. *Journal of Islamic Marketing*, 16(1), 1-25.
- Hussain, F., Siddiqui, H. M. A., Ullah, D. M. F., Zafar, F., Liaquat, F., & Dero, S. *Relevance of Consumer Generated Content in Food Industry Of Pakistan-Vol. 21 NO. S11 (2024): ISSN 1741-8992, 1741-8984.*
- Iqbal, A. I., Iqbal, M. S., Athar, A., & Khan, S. A. (2023). Impact of green marketing on consumer purchase intention: The moderating role of environmental knowledge. *Journal of Social & Organizational Matters*, 2(2), 43-58.
- Iqbal, A., Kazmi, S. Q., Anwar, A., Ramish, M. S., & Salam, A. (2023). Impact Of Green Marketing On GPI And Green Consumption Behavior: The Moderating Role Of Green Concern. *Journal of Positive School Psychology*, 7(2).
- Irshad, M. (2025). Examining the role of GMM elements on green purchase behavior. *Management of Environmental Quality: An International Journal*, 36(3), 815-832.
- Jabeen, R., Khan, K. U., Zain, F., & Atlas, F. (2023). Buy green only: Interplay between green marketing, corporate social responsibility and green purchase intention; the mediating role of green brand image. *Business Strategy & Development*, 6(3), 503-518.
- Khan, S., Shah, F., Haq, F., Nazir, M. W., & Bangash, S. A. (2024). Exploring GMM and Purchase Intentions in Diary Product: Mediating Role of Green Innovation. *Policy Journal of Social Science Review*, 2(4), 610-626.

- 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.
- Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Khan, K. A. (2023). Factors influencing GPB among millennials: the moderating role of religious values. *Journal of Islamic Marketing*, 14(6), 1417-1437.
- Sajid, K. S., Hussain, S., Hussain, R. I., & Mustafa, B. (2022). The effect of fear of COVID-19 on GPB in Pakistan: A multi-group analysis between infected and non-infected. *Frontiers in Psychology*, 13, 826870.
- Salam, M. T., Smith, K. T., & Mehboob, F. (2022). Purchase intention for green brands among Pakistani millennials. *Social Responsibility Journal*, 18(3), 469-483.
- Shafiq, M. A., Ziaullah, M., Siddique, M., Bilal, A., & Ramzan, M. (2023). Unveiling the sustainable path: Exploring the nexus of green marketing, service quality, brand reputation, and their impact on brand trust and purchase decisions. *International Journal of Social Science & Entrepreneurship*, 3(2), 654-676.
- Siddiqui, H. M. A., & Zafar, F. (2023). Riding the Waves of COVID-19: How the Pandemic Shook Up Financial Assets like Bitcoin, Crude Oil, Gold, and SandP500. *KASBIT Business Journal*, 16(4).
- Siddiqui, H. M. A., Zafar, F., & Bano, A. (2023). Exploring the Effects of Audit Committee Size, Board Size, Female Directors, and Tax Aggressiveness on Firm Profitability. *GISRAS Journal of Management & Islamic Finance (GJMIF)*, 3(3).
- Siyal, S., Ahmed, M. J., Ahmad, R., Khan, B. S., & Xin, C. (2021). Factors influencing green purchase intention: Moderating role of green brand knowledge. *International Journal of Environmental Research and Public Health*, 18(20), 10762.
- Tan, Z., Sadiq, B., Bashir, T., Mahmood, H., & Rasool, Y. (2022). Investigating the impact of green marketing components on purchase intention: The mediating role of brand image and brand trust. *Sustainability*, 14(10), 5939.
- Yousaf, U. (2022). Green consumer behaviour: studying factors influencing consumers' green purchase intentions, and the relationship between intentions and actual purchases (Doctoral dissertation, University of Tasmania).
- Zafar, F., Sabri, R., Siddiqui, H. M. A., & Masood, I. (2024). Emerging Issues in Management Accounting: Digital Technologies, Governance, and Sustainability. *Bulletin of Business and Economics (BBE)*, 13(1).

QUESTIONNAIRE

Gender: ☐ Male ☐ Female

Age: ☐ 18 to 28 years ☐ 28 to 38 years ☐ 38 to 48 years

☐ Above 48 years

Education: __ Bachelors __ Masters __ M.Phil. __ Ph.D.

__ Other

Note:

(SDA = Strongly Disagree, DA = Disagree, NU = Neutral, AG = Agree, SAG = Strongly Agree)

		SDA	DA	NU	AG	SAG
	Attitude Toward Green Marketing					
ATTGMK1	Our firm values environmental responsibility in all marketing decisions made.					
ATTGMK2	Green marketing improves our company's brand image and public perception.					
ATTGMK3	We believe adopting green marketing is vital for future success.					
	Green Marketing Mix – Product					
GMMPR1	We design textile products using environmentally sustainable raw materials.					
GMMPR2	Our product development focuses on reducing environmental impact consistently.					
GMMPR3	Green product quality meets or exceeds non-green alternatives we offer.					
	Green Marketing Mix – Price					
GMMPC1	Our green products are fairly priced for their environmental benefits.					
GMMPC2	We set prices to reflect sustainability and ethical sourcing practices.					
GMMPC3	Customers accept premium pricing for green textile product lines offered.					
	Green Marketing Mix – Place					
GMMPL1	We distribute our green textile products through eco-friendly channels.					
GMMPL2	Our supply chain includes partners committed to environmental sustainability practices.					
GMMPL3	We prioritize local distribution to reduce carbon emissions from transport.					
	Green Marketing Mix – Promotion					
GMMPM1	We promote our eco-friendly products through green advertising campaigns regularly.					
GMMPM2	Our promotions highlight sustainability features of textile products effectively.					
GMMPM3	Green certifications are featured prominently in our marketing communications strategy.					
	Green Marketing Mix – Packaging					
GMMPG1	We use recyclable or biodegradable materials for textile product packaging.					

GMMPG2	Our packaging decisions consider environmental impact at every stage.					
GMMPG3	We minimize packaging waste in line with green marketing strategies.					
	Green Purchase Intention					
GPRIN1	Our customers intend to buy green textile products when available.					
GPRIN2	Green product awareness increases customers' intentions to purchase sustainably.					
GPRIN3	Customers are likely to choose eco-friendly options in future purchases.					
	Green Purchase Behavior					
GRPBH1	Customers have purchased our eco-friendly textile products in recent months.					
GRPBH2	Green product availability influences customer buying decisions positively.					
GRPBH3	Our sales show increasing preference for environmentally responsible textile products.					
	Willingness to Pay Premium					
WLTPP1	Customers are willing to pay extra for sustainable textile products.					
WLTPP2	We believe premium pricing is justified for green product offerings.					
WLTPP3	Green-conscious buyers support higher prices for eco-friendly textile options.					
	Green Brand Loyalty					
GNBNL1	Our customers repeatedly purchase green products due to brand trust.					
GNBNL2	Environmental commitment strengthens loyalty to our textile product brand.					
GNBNL3	Green branding enhances long-term customer relationships and repeat purchase behavior.					
	Demographics					
DEMGRP1	Younger customers are more responsive to our green textile marketing.					
DEMGRP2	Educated buyers show greater interest in sustainable textile products.					
DEMGRP3	Female customers often prioritize environmental responsibility in textile purchases.					