International Journal of Research in Marketing Management and Sales

E-ISSN: 2663-3337
P-ISSN: 2663-3329
Impact Factor (RJIF): 5.95
www.marketingjournal.net
IJRMMS 2025; 7(2): 407-415
Received: 15-08-2025
Accepted: 18-09-2025

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The influence of consumer environmental awareness on green purchasing behavior for wood and furniture products and its impact on health-related quality of life

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DOI: https://doi.org/10.33545/26633329.2025.v7.i2e.311

Abstract
Consumer knowledge and awareness of the environment play a key role in shaping sustainable purchasing behavior in the wood and furniture sector. This study examines how environmental awareness influences Green Purchasing Behavior (GPB) and is potentially linked to health-related quality of life (HRQoL).
We used a GPB variable based on six questions about consumers' motivations, values and purchasing habits. These questions provide a holistic perspective on how behavioral patterns and values influence consumer purchasing behaviour. This study also explores the relationships between GPB, Demographic factors, Environmental awareness and the three HRQoL factors.
The results show that people with higher environmental awareness are significantly more inclined to buy environmentally friendly products (F=26.004, p=0.000). Although the overall correlation between GPB and HRQoL is weak, mental health appears to be more strongly affected than physical health, highlighting the role of sustainability in consumer well-being.
This study highlights the importance of consumer education and the role of product quality in promoting sustainable consumption. It also highlights the need for targeted Green Marketing Practices and campaigns to increase consumer awareness and awareness of green wood and furniture products. Finally, the research acknowledges its limitations and calls for longitudinal studies to further validate and extend these findings.

Keywords: Green products; consumer awareness; green marketing. GPB, QoL, HRQoL

Introduction
In recent years, environmental sustainability has emerged as a critical issue in global consumer behavior, particularly with regard to the choice of wood and furniture products. The concept of sustainable consumer behavior, also known as Green Purchasing Behavior (GPB), refers to the preference for products that have minimal environmental impact. This change in attitude is in line with the increasing awareness of the need to conserve natural resources, reduce our carbon footprint and use renewable materials. Among various consumer goods, wood and furniture products stand out for the significant environmental impacts associated with their production and disposal.
An eco-friendly product can be defined as a product that is made from materials and follows production practices throughout its life cycle that are recognized as socially and environmentally responsible [1]. However, despite the growing global focus on sustainability, limited attention has been paid to how GPB specifically affects consumer well-being in the wood and furniture sectors. Unlike other industries, this domain intersects both environmental and health-related dimensions, highlighting a need for integrated approaches.
Green Purchase Intention (GPI) is strongly influenced by consumers' attitudes and beliefs about green products, as well as their environmental concerns. Specifically, green product purchase intention is one of the most important predictors of green purchasing behavior [2]. Key factors shape green purchasing behavior include environmental awareness, social values, and consumers' perceptions of eco-labels and green advertising. Social influence, habit formation, individual self, feelings and cognition, and tangibility can be harnessed to encourage more sustainable consumer behaviors [3].

Moreover, examining the impact of eco-certifications, such as FSC and PEFC, could provide deeper insights into consumer trust and behavioral shifts [4].

Research Objectives

This study investigates the relationship between environmental awareness and green purchasing behavior. Understanding the factors that influence consumers' choice of green products has important implications for both businesses and policy makers seeking to promote sustainable consumption. In particular, analyzing the impact of environmental awareness on consumer purchasing behavior can provide valuable insights for businesses in the sector, helping them to adapt to the increased demand for environmentally friendly products.

Furthermore, this research explores the relationship between green purchasing behaviour and health-related quality of life (HRQoL), emphasizing its psychological and physical dimensions. This integration highlights the dual benefits of sustainable consumption, addressing both environmental impact and consumer well-being.

This research focuses on three main areas:

1. The correlation between consumers' environmental awareness and green purchasing behavior of wood and furniture products.
2. The role of demographic variables (age, gender, education, work status, income, place of residence) on green purchasing behavior.
3. The relationship between green purchasing behavior and health - related quality of life (HRQoL), focusing on consumers' physical and mental health.

This study contributes to the literature by highlighting the dual role environmental awareness in: a) Promoting sustainable consumption choices, b) Enhancing the quality of life of consumers.

Insights from related fields, such as the food and cosmetics industries, suggest that green purchasing choices can significantly contribute to psychological well-being and perceived health [5, 6]. These findings reinforce the relevance of investigating this relationship within the wood industry, where sustainability plays a critical role in both consumer satisfaction and environmental impact.

The results of the study are expected to benefit businesses, policy makers and researchers by providing them with useful information for understanding and exploiting trends in sustainable consumer behavior.

Literature review and research hypotheses

In the wood and furniture industry, consumer environmental awareness has proven to be an important factor in shaping green purchasing behavior, which in turn influences health-related quality of life (HRQoL). This literature review explores the theoretical underpinnings and empirical findings related to these relationships.

Environmental Awareness and Green Purchasing Behavior (GPB)

Environmental awareness is one of the key factors influencing the formation of green purchasing behavior. Environmental awareness consists of knowledge and understanding of environmental challenges and often leads to more conscious consumption choices. According to Wijekoon & Sabri [6], high environmental awareness is directly related to green purchasing behavior, as consumers who understand the environmental impacts of products tend to choose more environmentally friendly alternatives. Research shows that consumers who have developed environmental awareness demonstrate an increased preference for products that are sustainably produced and have reduced eco-system impacts [7, 8].

In particular, the promotion of eco-labels by businesses in the wood and furniture sector has been shown to enhance consumer confidence and purchasing frequency. These labels highlight sustainable practices, such as reduced carbon emissions and the use of non-toxic materials, making green products more attractive to environmentally conscious consumers [9, 10]. Customers' green awareness positively influences their intention to make green purchases, while corporate image has been found to play a positive mediating role in the relationship and can help build consumer trust in companies and influence their intention to purchase their products [11].

Environmental awareness is not limited to knowledge alone, but also includes the willingness of individuals to contribute to environmental protection through their consumption choices [12]. Studies show that altruistic values and environmental responsibility play a key role in shaping the intention to buy green products [13, 14]. Citizens who are actively involved in environmental actions show an increased interest in sustainable business practices and are more willing to support companies that promote sustainability [15]. Environmental attitudes and concerns influence green purchasing behavior among young consumers [16]. Companies that promote their commitment to sustainability can enhance consumer awareness and encourage the purchase of environmentally friendly products [11]. Furthermore, companies that incorporate eco-certifications and emphasize sustainable sourcing in their promotional strategies often experience enhanced consumer loyalty and greater willingness to pay a premium for their products [17].

The effect of environmental awareness on purchasing behavior is further enhanced by factors such as social influence and perception of eco-labels. Consumers who recognize the importance of certifications such as PEFC and FSC tend to have more confidence in wood products from responsibly managed forests [4, 9, 10]. Enhancing trust through such mechanisms can be a catalyst for increasing markets for environmentally friendly products.

The market for green products in the wood and furniture sector is constantly growing, as consumers place increasing emphasis on the origin and sustainability of materials. The need for responsible management of natural resources and the protection of biodiversity has led to the development of new wood processing technologies that contribute to the sustainability of the sector [9].

An important issue that has emerged in the literature concerns the so-called "attitude intention-behavior gap" in sustainable consumption. ElHaffar *et al*. [18] reviewed 58 studies on this issue, concluding that despite increased environmental awareness, consumers do not always make green purchases. This phenomenon is attributed to factors such as financial constraints. lack of accessibility to sustainable products and doubts about the credibility of companies' green claims. Skepticism toward environmental claims is negatively related to consumers' intention to purchase green products [19]. Environmental concern is one of the strongest determinants of attitude towards green products and green purchase intention according to many

studies in the field of green consumer psychology, [20, 21, 2].

Hypothesis 1: There is a positive relationship between environmental awareness and green purchasing behavior of consumers of wood and furniture products.

Demographic Influences on Green Purchasing Behavior

Demographic factors play an important role in shaping green purchasing behavior, as they can influence the relationship between environmental awareness and consumer decisions. Factors such as gender, age, educational level and income have been extensively studied in the literature, with conflicting findings as to their importance [22].

Studies have shown that gender influences purchasing behavior, with women being more likely to demonstrate environmentally responsible attitudes and choose environmentally friendly products [23-25]. This behavior may be due to greater social awareness and sense of responsibility towards sustainability and health. For instance, women often prioritize product safety and sustainability certifications, such as FSC labels, when purchasing wood products, further showcasing their environmental responsibility [4, 9]. However, other research does not identify a strong link between gender and green consumption, suggesting that variations depend on cultural and social characteristics [22, 26, 27].

In terms of age younger consumers, although cautious, [23] may show an increased preference for green products due to greater exposure to environmental issues through education and media [28]. However, older consumers often exhibit more stable and long-lasting green purchasing habits that stem from personal values and experiences [29].

Educational attainment is also linked to environmental awareness and green consumption. Studies show that individuals with higher education tend to have more knowledge about environmental issues and are more willing to pay for sustainable products [25]. In addition, some studies show that consumers with higher education are less price sensitive to green products and more active in environmental organizations, which enhances sustainable consumption [30].

Income is also a key factor, as economic opportunities influence access to green products. Higher income levels are associated with greater purchasing power and increased willingness to pay for green products [28, 31-33]. However, high price can be a barrier for lower income consumers, especially in times of economic uncertainty, thus limiting the adoption of green purchasing behavior [7]. Consumers are willing to pay more for furniture made from wood produced through sustainable forest management [22]. Consumers are willing to pay an additional percentage of about 6% in price in order to buy certified timber products [17]. This sense of control is often enhanced by transparent communication from companies, such as showcasing the environmental benefits of their supply chains [9].

Understanding demographic influences on green purchasing behavior is vital for businesses and policy makers seeking to enhance market sustainability. Targeted communication with based on the consumer profile can raise awareness and promote a shift to greener purchasing practices. For example, targeted advertisements highlighting eco-certifications and sustainability benefits can be tailored to highly educated or high-income consumers, while affordable options and subsidies could encourage adoption among lower-income demographics [7, 30].

Hypothesis 2: There are significant demographic differences in green purchasing behavior between consumers of wood and furniture products.

Health Related Quality of Life (HRQoL) and Green Markets

Quality of life (QOL) is a multidimensional and long-standing research field that has been extensively studied in various disciplines, such as medicine, psychology, sociology, economics and environmental sciences. Despite the extensive literature, the concept of quality of life remains subjective, as it varies according to personal experiences, social conditions and cultural perceptions. ln order to focus exclusively on the relationship between quality of life and health issues. The term Health-Related Quality of Life (HRQoL) was coined to allow a more explicit and scientifically defined study of the interaction between environmental awareness. consumer choices and health.

The concept of HRQoL encompasses both physical and mental health and can be positively influenced by sustainable consumption practices. Adopting green purchasing behavior can offer multiple benefits, promoting psychological satisfaction and a sense of well-being. Consumers who engage in environmentally responsible practices and contact with nature, often experience an increased sense of purpose, mental clarity, and reduced stress which contributes to their overall health [37]. Additionally, the perception of contributing to global environmental efforts reinforces a sense of community belonging and shared responsibility, further enhancing HRQoL. Health consciousness is an important motivator in explaining attitudes, intentions, and behaviors toward green products [5].

The link between HRQoL and green purchasing behavior is particularly evident among consumers who care about their health. These individuals are more aware of environmental and health risks and. Consequently, they have stronger incentives to improve or maintain their quality of life through their consumption choices [5]. According to Xie *et al*. [32], health maintenance and promotion are key factors in organic and environmentally friendly product purchase decisions. For instance, consumers who choose low-emission furniture report improved indoor air quality, which directly impacts respiratory health and overall physical well-being [34], Health awareness is an important positive factor for purchase intention (GPI) and green purchasing behavior (GPB) [6].

Green Consumption and its Impact on Health and Well-being

Adopting sustainable consumption patterns not only benefits the environment but can also have a direct impact on consumers' quality of life. People who choose to consume in an environmentally responsible way often report increased levels of life satisfaction and improved overall health. Studies have shown that green purchasing behavior is associated with the perception of health as part of a broader philosophy of well-being, which also includes the mental dimension (psychological benefit) of health [35]. For example, studies show that green consumption, such as consuming organic and green products, enhances psychological well-being, as individuals feel healthier and

safer due to the improved quality of the products they consume. This experience is associated with increased levels of psychological satisfaction and well-being. [36].
Consumers who are highly environmentally conscious tend to choose products that are ecological and safe for health, such as furniture made from natural materials or low toxicity products. This choice is not only based on concern for the environment, but also on the belief that using sustainable products can improve their quality of life. For example, using wooden furniture from sustainable sources free of harmful chemicals has been linked to lower exposure to toxic pollutants and higher perceived quality of life [6]. Moreover, eco-labels such as FSC and PEFC help consumers identify products that minimize environmental and health risks, further increasing their trust and satisfaction with their purchases [4, 9].
Environmental awareness influences consumer behavior, reinforcing not only the choice of green products, but also the general attitude towards sustainability and personal well-being. Consumers who choose sustainable practices tend to develop behaviors that contribute to their overall quality of life, such as reducing the use of natural resources. recycling and supporting businesses that promote sustainability [36]. These practices. in addition to environmental benefits, are often accompanied by psychological satisfaction and a sense of personal responsibility, enhancing consumers' mental well-being. Such behaviors are also linked to greater long-term happiness, as individuals perceive themselves as contributing positively to future generations [35].

The Role of Eco-Products in Improving Health

The use of environmentally friendly products, such as low-toxicity furniture, can reduce consumer exposure to chemical pollutants and other harmful substances, helping to improve physical and mental health [34]. Consumers who choose green products often do so to avoid exposure to synthetic substances that may have negative health effects. For instance, furniture manufactured using water-based adhesives and low-VOC (volatile organic compound) finishes have been linked to reduced respiratory irritation and improved indoor air quality, providing direct health benefits [9].
In addition, the use of sustainable furniture and other green products is associated with psychological benefits such as increased life satisfaction and a sense of moral satisfaction. Consumers who engage in purchasing practices consistent with their environmental values often experience greater harmony and self-esteem, which positively affects their mental well-being. This psychological benefit is further enhanced when consumers perceive their choices as contributing to broader environmental goals, such as reducing deforestation or carbon emissions [5, 6].
Research has shown that consumers with a high level of environmental awareness are more likely to buy products that they perceive as contributing not only to protecting the environment but also to improving personal and social well-being. For example, consumers who purchase FSC-certified wood products often report higher levels of trust in the sustainability of their purchases, which can reinforce their sense of environmental responsibility and satisfaction [4]. The fact that green choices influence quality of life explains why sustainable consumption is emerging as an integral part of modern perceptions of health and well-being [6].

Conclusion and Hypothesis Formulation

Green purchasing behavior appears to be linked to quality of life. particularly in relation to health. as consumers who choose sustainable products tend to have higher levels of life satisfaction and a better perception of their personal health. Adopting green practices not only benefits the environment, but also contributes to psychological and physical well-being, shaping a pattern of consumer behavior that focuses on holistic well-being. Future research could investigate the long-term impacts of green purchasing on mental health and chronic disease prevention, further validating its role in improving quality of life [37, 35].

Hypothesis 3: Green purchasing behavior is positively associated with health- related quality of life, especially mental health.

Materials and Methods

Data collection

The survey was based on the collection of data from a random sample of 604 participants belonging to different demographic groups. The sample was designed to include a balanced representation of genders, age groups, and education levels to enhance generalizability. Data was collected through a structured questionnaire, which was distributed online and via in-person interviews to ensure accessibility for participants with different technological capabilities. The structured questionnaire was designed to measure three key dimensions:

- Environmental awareness
- Green purchasing behavior
- Health-related quality of life indicators (HRQoL)

The Green Purchasing (GPB) variable was calculated as the average of responses to six (6) questions that assessed participants' environmental values and product choices that align with sustainability. These six questions were adapted from validated scales used in previous studies on green purchasing behavior [41].
Participants were provided with a brief explanation of the terms used in the questionnaire to reduce ambiguity and enhance comprehension.
Statistical analysis was performed with SPSS 22.0.0.0 software. Due to the sample size (N = 604), it is assumed that the data follow an approximate normal distribution, which allows the use of parametric statistical tests. Normality assumptions were verified using Shapiro-Wilk tests and Q-Q plots to ensure the validity of parametric analyses.
No missing values were observed as all questionnaires were fully completed. To describe the demographic characteristics of the sample, frequency tables were calculated and appropriate visualization graphics were created using descriptive statistics methods.
For the reliability of the data. Cronbach's alpha (a) analysis was performed for each section of the questionnaire. Values of a > 0.7 were taken as an indication of high internal consistency and reliability of the data. In particular, the GPB section achieved a Cronbach's alpha of 0.83, indicating strong reliability consistent with prior research [6]. In addition, descriptive statistical measures such as minimum value, maximum value, mean and standard deviation were calculated for each questionnaire section and presented through respective charts.

Variables and Measurement

The key variables examined in this study include:

- **Green Purchasing Behavior (GPB):** Calculated by averaging the responses to six questions, which assessed participants' purchasing decisions based on their environmental beliefs. The questions were derived from previously validated tools, ensuring comparability with other studies in the field [2].
- **Environmental Awareness:** Assessed through a self-assessment question where participants were asked to select the statement that best described their environmental awareness. The self-assessment approach was supported by scales such as those proposed by Dunlap & Jones [12].
- **HRQoL (Related Quality of Life):** measured through three individual dimensions: Physical Health, Mental Health and Total HRQoL score. These dimensions were measured using standardized tools like the SF-12 survey, which has been extensively validated in health-related research [38].

Statistical Analysis

To investigate the relationships between the variables, the following methods were applied statistical methods:

Table 1: Summary of the Methodology

Statistical Method	Purpose of Use
one-way ANOVA	Analysis of differences between levels of environmental awareness and green purchasing behavior
Independent t-test	Comparison of green purchasing behavior between genders
Post-Hoc Analysis	Analysis of differences in age. education, income, employment and place of residence
Pearson correlation	Relationship between green purchasing and HRQoL indicators[1]

Results

Environmental Awareness and Green Purchasing Behavior

The analysis of the data showed that there is a significant positive relationship between environmental awareness and GPB, ($r = 0.63$, $p<0.001$), confirming that increased environmental awareness is associated with a greater preference for green products. Consumers with a high environmental awareness were more likely to prefer products with environmentally friendly features, such as those made from recycled materials and with a low environmental footprint. The descriptive analysis revealed that participants who stated that they were aware of the environmental impacts of wood and furniture products showed a greater preference for certified green products (Mean = 4.12, SD = 0.85). The difference between participants with high and low environmental awareness was statistically significant. Consumers with high environmental awareness had significantly higher Green Purchasing Behavior (Mean = 3.98, SD = 0.63) compared those with lower awareness, the difference was statistically significant (p=0.000).

Product Purchase Intention in relation to· Environmental Awareness

The following table shows the average levels of intention to purchase green products in relation to the level of environmental awareness of the participants:

Table 2: Environmental awareness

Statement that best describes the consumer	N	Average	St. Deviation
I only buy green products. I actively participate in environmental activities (e.g. recycling).	173	4.17	0.693
I am able to buy green products, I do not participate in environmental activities.	109	3.94	0.773
I occasionally buy green products, but I do not participate in environmental activities.	216	3.65	0.669
I am less concerned with environmental issues, I believe that individual action is not very important.	70	3.41	0.729
I don't buy green products. I believe that business and government need to solve environmental problems.[2]	36	3.05	1.046
Total	604	3.89	0.992

The highest mean score was observed among participants who exclusively buy green products and actively participate in environmental activities (M.O.= 4.17, SD= 0.693). While the lowest score was observed among those who do not buy green products and believe that the responsibility belongs to businesses and the state (31.0. = 3.05, SD = 1.046).

Environmental Concerns of Consumers

Participants ranked their environmental concerns by rating various environmental problems on a scale of 1-5 (1= Not at all serious. 5= Very serious).

Table 3: Environmental concerns

Environmental Problem	Minimum Price	Maximum Price	Average	Standard Deviation
Contamination of drinking water	1	5	4.68	0.757
Hazardous waste	1	5	4.57	0.798
Industrial Water pollution	1	5	4.55	0.830
Industrial Air Pollution	1	5	4.53	0.819
The pesticides in food	1	5	4.53	0.835
Pollution of the oceans	1	5	4.52	0.857
Disaster rainforest	1	5	4.48	0.880
Global warming	1	5	4.45	0.939
Endangered species	1	5	4.44	0.893
Ozone destruction	1	5	4.35	0.961

All environmental issues were classified as very serious, as all mean scores were >4.0. The most serious concerns were drinking water contamination (M = 4.68) and hazardous waste (M = 4.57).

Demographic Factors and Green Purchasing Behavior
Analysis of the data revealed that certain demographic characteristics influence green purchasing behavior, although no statistically significant differences were found across all variables.
Gender and Green Purchasing Behavior

- Independent t-Test analysis showed that there is no statistically significant difference between men and women in terms of green purchasing behavior (t= -0.957, p=0.339).
- However, women (66.4%) showed higher levels of environmental awareness and green purchasing behavior (Mean= 4.05) compared to men (33.6%) (= 3.78, p<0.05).
- Although the difference is not statistically significant, these findings are consistent with previous studies suggesting that women tend to be more sensitive to environmental issues.

Age and Green Purchasing Behavior
One-Way ANOVA analysis showed a statistically significant difference in green purchasing behavior in relation to age (F=5.359, p=0.000). The 18-30 age group showed lower green purchasing behavior (Mean = 3.41). compared to the older age groups. The post-hoc analysis revealed that younger consumers (18-30 years old) showed a significantly lower preference for green products, possibly due to reduced purchasing power or different consumption priorities. Beyond financial constraints, younger consumers may also be influenced by social trends that prioritize convenience and affordability over sustainability [26].
Additionally, while they have greater access to environmental information, their engagement with green products might be limited by a perception of these products as less accessible or relevant to their immediate needs [29].

Education and Green Purchasing Behavior
One-Way ANOVA analysis revealed a statistically significant difference in green purchasing behavior by education level (F=8.775, p=0.000). Post-hoc analysis showed that primary school graduates showed lower green purchasing behavior compared to the other educational categories. Higher levels of education are positively correlated with green purchasing behavior, probably due to increased environmental knowledge and greater awareness of the consequences of consumption.

Income and Green Purchasing Behavior
There was a statistically significant correlation between income and green purchasing behavior. Consumers with an income of €1.501-2.000 showed the highest green purchasing behavior (Mean = 3.95). This finding may reflect the greater affordability of sustainable products, which are often more expensive than conventional products.

Conclusion
Green purchasing behavior is significantly influenced by demographic factors such as age. Education and income. In contrast. there was no statistically significant difference between men and women. although women showed a higher tendency towards green consumption. Younger consumers had lower green purchasing behavior, while people with higher education and middle to high income showed a higher preference for green products.
These results underline the importance of education and affordability in shaping an environmentally responsible purchasing culture.

Health Related Quality of Life (HRQoL) and Green Markets
The quality of life of the participants was assessed using the SF-12, a reliable measurement tool that allows distinguishing between physical and mental health.
The results showed that there is a positive but weak association between green purchasing behavior and health-related quality of life (HRQoL).
The mean score for physical health was 78.03%, while for mental health it was 67.95%. suggesting a slightly higher score for physical health compared to mental health.

Table 4: Statistical Findings of HRQoL

HRQoL indicator	Average (%)	Standard Deviation (%)
Physical Health	78.03	19.21
Mental Health	67.95	20.21

The results suggest that green purchasing behavior may have a positive impact on quality of life, although the link is stronger with mental health.

Correlation of Green Purchase Behavior with Perceived Quality of Life (HRQoL)
Investigating the relationship between Green Purchase Behavior and quality of life was done using the Pearson correlation coefficient.

Table 5: Correlation of GPB with Perceived HRQoL

Relationship	Contributor Pearson (r)	Importance (p-value)
Green Purchase Behavior & Physical Health	0.095	0.019
Green Purchase Behavior & Mental Health	0.182	0.000
Green Purchase Behavior & Overall HRQoL	0.169	0.000

The results show that
There is a weak positive correlation between green purchasing behavior and HRQoL Indicators. The association is stronger with mental health (r= 0.182. p<0.001) than with physical health (r = 0.095. p = 0.019).
Consumers who prefer green products seem to have better mental wellbeing, probably due to the sense of moral satisfaction and positive impact they attribute to their choices.
These findings support previous research showing that ecological awareness and sustainable choices can contribute to overall psychological well-being.

Correlation between Purchase Intention of sustainable Products and perceived Quality of Life
The relationship between intention to purchase wood and furniture products with a sustainable life cycle and quality of life (HRQoL) was also examined.

Table 6: Correlation between Purchase Intention of sustainable Products and HRQoL

Relationship	Contributor Pearson (r)	Importance (p-value)
Purchase Intention for Sustainable Products & Physical Health	0.149	0.000
Purchase Intention for Sustainable Products & Mental Health	0.227	0.000
Purchase Intention for Sustainable Products & Overall HRQoL Score	0.223	0.000

The results show that

Intention to purchase sustainable products is more strongly associated with mental health (r = 0.227, p<0.001) than with physical health (r = 0.149, p<0.001). This positive correlation can be interpreted as a sense of personal responsibility and satisfaction that consumers experience when choosing sustainable products. The correlation with physical health is weaker, suggesting that ecological choices have more influence on perceived well-being and less on physical fitness.

Conclusion

The findings show that green purchasing behavior is positively correlated with health-related quality of life. The correlation is stronger for mental health. probably due to the sense of satisfaction, moral awareness and responsibility associated with sustainable choices. The intention to buy sustainable products is also associated with a higher quality of life. confirming the psychological dimension of green consumption. Although the correlations are weak. they show a general trend where environmental awareness is associated with a better perception of well-being.

These results offer new perspectives on the role of green consumption in costumer well-being and underline the importance of environmental awareness for improving quality of life.

Discussion

The results of the present study confirm the importance of environmental awareness in shaping green purchasing behavior, especially among consumers who show an increased commitment to sustainable practices. The findings indicate that consumers with a strong environmental awareness tend to choose environmentally friendly products, especially in the wood and furniture products sector. This aligns with previous studies that emphasize the role of environmental awareness in promoting sustainable consumption practices, particularly in sectors with high environmental impact, such as wood and furniture [2, 6].

Although demographic factors such as education and income enhance green purchasing behavior, the results show that the psychological satisfaction resulting from such practices is associated more with mental health than with physical health. This finding highlights the dual benefit of green consumption, not only in reducing environmental harm but also in enhancing personal well-being [37].

This study contributes to our understanding of the relationship between environmental awareness, green consumption and health-related quality of life (HRQoL), providing valuable insights into the role that green consumption choices play in individuals' overall well-being.

Interpretation of Results

The data analysis confirmed that environmental awareness is a determinant of green purchasing behavior. confirming findings from previous research.

Consumers who choose green products help reduce environmental pollutants and improve indoor air quality. For instance, the use of low-toxicity furniture has been linked to lower exposure to harmful chemicals, directly benefiting respiratory health [34, 9]. The preference for less polluting products reflects a high level of environmental responsibility. Green purchasing behavior is positively associated with psychological satisfaction, which in turn enhances mental well-being. This aligns with findings that moral satisfaction from green consumption contributes to reduced stress and increased life satisfaction [5].

Effect of demographic factors

The results showed the significant influence of demographic characteristics on green purchasing behavior.

- **Education:** Consumers with higher levels of education showed increased environmental awareness and a greater willingness to buy green products. Higher education is often associated with greater access to information about environmental issues and a stronger sense of responsibility towards sustainable consumption [30, 40].
- **Gender:** Women showed higher levels of green purchasing behavior compared to men. which probably reflects cultural and social influences. This is consistent with studies suggesting that women are more likely to prioritize health and environmental concerns in their purchasing decisions [23].
- **Age:** Younger consumers (18-30 years old) showed lower levels of green purchasing behavior than older age groups, possibly due to financial constraints or different priorities.
- **Income:** Middle-income consumers (€1,501-2,000) showed a stronger tendency to buy green, probably due to greater purchasing power and increased access to green products. Affordable access to green products appears to bridge the gap between intention and behavior, supporting previous research on the "intention-behavior gap" in sustainability [18].

The results showed the significant influence of demographic characteristics on GPB.

Relationship between Green Consumption and HRQoL

The findings confirm the positive correlation between green purchasing behavior and health-related quality of life. Consumers who adopt ecological practices report higher levels of physical and mental well-being. For example, choosing products with eco-certifications like FSC reduces exposure to harmful substances and enhances the perceived quality of life [4]. The association is stronger with mental health, probably because green consumption enhances a sense of moral satisfaction and social responsibility. Green consumption choices may reduce exposure to toxic substances, which explains the positive correlation with physical health. This connection underscores the dual environmental and health benefits of green purchasing [35].

Practical implications

The findings of the study have important practical applications for both political bodies and businesses:

Policy formulation: Governments can use this data to make

the most of the data to formulating policies that enhance sustainable consumption. Educational campaigns and financial incentives increase environmental awareness. Targeted policies could include subsidies for green products and regulations promoting transparency in eco-labeling [9].
Business Strategies: Companies can promote green products through the use of ecolabels, building consumer confidence. Transparency and communication about environmental benefits products can boost demand. Offer Competitive prices for green products to make them accessible to a wider consumer base. Marketing campaigns highlighting the dual benefits of green products, environmental impact and health benefits could further engage consumers [5].

Conclusions Practices Implications, Limitations and Future Directions

This study confirms that environmental awareness plays a crucial role in shaping green purchasing behavior in the wood and furniture products industry.

Limitations of the Study

Self-reported data: Results are based on self-reported questionnaires, which may contain response bias.
Geographical limitation: the study focuses on a specific population. limiting the generalizability of the results. Future studies should aim for a more diverse and representative sample to increase external validity.

Future Directions

Longitudinal studies: Future research can examine long-term health effects of green consumption.

Comparative analyses between countries: Exploring cultural differences in the relationship between Green Purchasing Behavior and HRQoL can yield important new insights.

Studies on improving eco-labels: Further research is needed to optimise environmental labels and consumer confidence. For instance, studies on the effectiveness of QR codes in providing detailed product sustainability information could enhance eco-label usability [4].

Conclusion

Environmental awareness is a key driver for promoting sustainable consumption, contributing both to environmental sustainability and to improving quality of life. This dual benefit highlights the need for continued efforts in education, policy-making, and business innovation to support green consumption behaviors globally.

Abbreviations

The following abbreviations are used in this manuscript:

MDPI	Multidisciplinary Digital Publishing Institute
GPB	Green Purchasing Behavior
HRQoL	Health-Related Quality of Life
QoL	Quality of Life
GPI	Green Purchase Intention
FSC	Forest Stewardship Council
PEFC	Programme for the Endorsement of Forest Certification
SF-12	Soft Form - 12

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