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MIDDLE EAST UNIVERSITY
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Transformation towards Green Construction: The Impact of Green Marketing on Consumers' Attitudes- The Moderating Role of Green Product Awareness

التحوّل نحو الإنشاءات الخضراء: تأثير التسويق الأخضر على اتجاهات المستهلكين–الدور المعدّل للوعي بالمنتجات الخضراء

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Authorization

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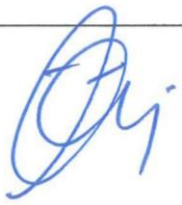
Prof. Dr. Ahmad Ali Salih	Internal Member and Head of Committee	Middle East University	
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Dedication

إلى التي تقول لي دائمًا "لا يُسنُّ السّيف إلّا بالطّرْق، ولا يُشكّل الذهب إلّا بالحرارة، فَدَع حرارة الصّعوبة و طَرْق الأيّام يجعل منك سيّفًا ذهبيًّا حادًّا"، إلى صاحبة الكلمات التي شَحذت مني همّة لأكمِل مسيرتي. فإذا تواجد الصبر مع الهمّة العالية، وتواجدت قوة الإرادة مع العقل الجوّال، تشكَّل اسمها، إلى الكاتبة والروائيّة، المعلّمة فيفيان صهيون، أمّي كل الفخر.

إلى الذي هَذَّبَ نفسي وطِباعي، واتقنَ مُعامَلتهما. إلى الذي اختار لي تخصصي هذا وشجّعني على المضي فيه، إلى الذي أتمنى وجوده معي في كلّ لحظة، إلى روح الأب الرّاهب النّاسك آثوس ريغي -رحمه الله-.

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Transformation towards Green Construction: The Impact of Green Marketing on Consumers' Attitudes- The Moderating Role of Green Product Awareness

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Abstract

This study aimed at determining the impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on Jordanian consumers' attitudes toward buying green buildings in Jordan. Moreover, to determine the moderating role of green product awareness on the relation between green marketing and consumers' attitudes toward buying green buildings in Jordan. Therefore, the researcher depended on the descriptive and analytical approach in order to achieve the goals of this study.

The study population includes all consumers in Amman who might be interested in buying green buildings. A convenience sample has been used in order to collect data from the respondents. Questionnaire was the instrument that the researcher used for this study. Moreover, (400) questionnaires were distributed, (368) answers have been returned back to the researcher, while the valid for statistical analysis were (357) questionnaire. For the purpose of data analysis, different statistical methods have been used including: standard deviation, simple regression, multiple regression, hierarchical multiple regression, exploratory factor analysis, confirmatory factor analysis. Moreover (SPSS-V20) and (AMOS-V23) were used in this study.

The most important results of the study are: there is an impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan at ($\alpha \leq 0.05$). Moreover, there is impact of green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan at ($\alpha \leq 0.05$).

The study recommended increasing the level of enculturation for the consumers about the green issues and green products, which will enhance their awareness and as a

result, this will be reflected positively on their attitudes toward buying such products. Moreover, the construction contracting companies have to take into consideration the green concepts to enhance their social responsibility especially towards environmental issues and this can be reflected positively on influencing consumers' attitudes toward buying green buildings.

Keywords: Green Marketing, Consumers' Attitudes, Green Product Awareness, Green Construction.

التحول نحو الإنشاءات الخضراء: تأثير التسويق الأخضر على اتجاهات المستهلكين–الدور المعدّل للوعي بالمنتجات الخضراء

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الملخّص

هدفت هذه الدراسة إلى تحديد تأثير التسويق الأخضر (القيمة المدركة الخضراء والمنتجات الخضراء (المباني الخضراء) والتخوفات البيئية) على اتجاهات المستهلكين نحو شراء مبانٍ خضراء في الأردن. بالإضافة إلى تحديد الدور المعدّل للوعي بالمنتجات الخضراء على العلاقة ما بين التسويق الأخضر واتجاهات المستهلكين نحو شراء مبانٍ خضراء في الأردن. اعتمد الباحث على المنهج الوصفي والتحليلي من أجل تحقيق أهداف هذه الدراسة.

مجتمع الدراسة يتكون من جميع المستهلكين في عمّان الذين من الممكن أن يكونوا مهتمين بشراء مبانٍ خضراء. وقد تم اختيار عينة سهلة الوصول من أجل جمع بيانات من المستهلكين. الإستبانة كانت الأداة الأساسية لجمع البيانات من المستهلكين. تم توزيع (400) إستبانة لكن تمت إجابة (368) إستبانة، بينما كانت (357) إستبانة صالحة للتحليل فقط. تم تحليل البيانات باستخدام مجموعة من الأساليب الإحصائية وتتضمن: الإنحراف المعياري والإنحدار الخطي البسيط، والإنحدار المركب، والإنحدار الهرمي المركب، تحليل العوامل الاستكشافية، وتحليل العوامل المؤكدة. بالإضافة إلى استخدام كل من (SPSS–V20) و(AMOS–V23).

أبرز نتائج هذه الدراسة: وجود أثر للتسويق الأخضر (القيمة المدركة الخضراء والمنتجات الخضراء (المباني الخضراء) والتخوفات البيئية) على اتجاهات المستهلكين نحو شراء مبانٍ خضراء في الأردن عند مستوى دلالة إحصائية ($\alpha \leq 0.05$). بالإضافة إلى وجود أثر للوعي بالمنتجات الخضراء كمتغير معدّل على العلاقة ما بين التسويق الأخضر واتجاهات المستهلكين نحو شراء مبانٍ خضراء في الأردن عند مستوى دلالة إحصائية ($\alpha \leq 0.05$).

أوصت الدراسة برفع مستوى تثقيف المستهلكين حول القضايا الخضراء والمنتجات الخضراء، مما يعزز وعيهم، بالتالي سينعكس ذلك بشكل إيجابي على اتجاهاتهم نحو شراء هذه المنتجات. بالإضافة إلى أنه يجب على شركات المقاولات الإنشائية مراعاة المفاهيم الخضراء لتعزيز مسؤوليتها الإجتماعية خاصة تجاه القضايا البيئية وبالتالي سينعكس ذلك بشكل إيجابي على اتجاهات المستهلكين نحو شراء المباني الخضراء.

الكلمات المفتاحية: التسويق الأخضر، اتجاهات المستهلكين، الوعي بالمنتجات الخضراء، إنشاءات خضراء.

Chapter ONE
Background

1.1 Introduction

As a result of the continuous changing in the environment around organizations and the continuous conditions and situations that face them, there should be a changing in the way that the organization faces its problems and circumstances, and changing in its plans and strategies, otherwise it will be exposed to the threat of losing, or even dying and getting out of the market. These changes that happens all the time, if they have not been taken into the account of the future of the organization, in terms of survival, performance, competitive advantage and/or reputation, there will be a disastrous effect on the organization itself. These changes and challenges may be in transformation toward globalization, technology and/or sustainability, changing in consumers' needs and wants, and their own preferences. One of the critical departments in which it should consider these issues in its work is the marketing department, because marketing has crucial role in attracting and retaining consumers and without it, the sales will decline (Jowkar and Mehrad, 2016).

Improving the organization performance in the market especially in changing environmental conditions around it, does not only include improving the products it provides or the way it competes in the market, but it also includes how it creates the value for the consumers and construct a good, profitable relation with them, and capture this value in return which is; "marketing" (Kotler and Keller, 2016). As a result of the increasing the orientation of the world towards the concept of sustainability, which it can be defined as Crane and Matten (2007) pointed out, as it does not only include the environmental issues, but it also includes the economic and the social issues, in order to

meet what the current generation needs, without sacrificing with the ability of the next generations to meet their needs also. According to Leskinen et al. (2020) sustainability can be considered as a crucial success attribute for the investors in the real estate market. Moreover, sustainability concept is accelerating to become a normal concept in the modern business and receiving attention from organizations to include it in all the sectors and departments (Ahmad et al., 2021). Therefore, the concept of green marketing is best fit here, because it focuses on minimizing the environmental effects occurred when creating and exchanging value and can be considered as an indication of the organization that it is acting responsibly (Taghian et al., 2016). Another definition for the green marketing is the marketing that its insider activities are considered as environmentally friendly activities, and all of them done with respect to organizations economic and social performance (Carrigan and Piha, 2019). The goal of the green marketing is reaching to consumer satisfaction, and satisfaction of the organization by achieving its goals, also one of the important and main goals is to minimize the ecological impact and considering the social responsibility into organizations account (Qurniawati, 2017). Products that are considered as ecologically products provide security for both the consumer and the environment as well, in the long run, in which these products cannot be considered as a source for the waste increasing in the environment or one of the factors in which increase the damage to the environment (Purwanti, 2019). Moreover, green product is one of the major decisions that pave the road for the organizations to become greener and prove its orientation toward this transformation (Taghian et al., 2016). Also based on Garg and Sharma (2017), green products compared to the normal products are less pollution, less consumption for the resources like the scarce resources.

In terms of the field of construction; the concept of green buildings is accelerating rapidly in the world, and this concept means incorporation of environmental consideration into the building itself with aiming to protecting consumers health and using the natural environmental resources in a way that reduces the environmental damage, also green buildings provide the quality of life in the building combined with luxurious lifestyle which will be reflected on level of satisfaction for the consumers, another advantage is reducing the annual costs paid by the consumer for water and electricity (Fafore et al., 2018). The green buildings are environmentally friendly buildings starting from the raw materials, classified as green materials in which they are recycled or even reused. In the green building lifecycle, minimization of usage of resources like water and energy exists, combined with clean environment inside the building. Moreover, these buildings provide high performance in all aspects like engineering, environmental and the economical, and this includes built in systems for the conservation of energy, higher quality of inside air which will be reflected positively on the consumer health and this will increase his/her productivity (Samer, 2013).

The main purpose of this study is to examine the impact of green marketing on consumers' attitudes toward buying green buildings in Jordan by taking into account the moderating role of green product awareness, while the green product awareness was considered as a moderating variable, due to its presence in previous studies as a moderator with strong relation with green marketing (the independent variable) and these studies have shown that the green product awareness as a moderating variable can diminish, strengthen, or negate the relation between the independent variable and the dependent variable. The main objective of this study is to examine the impact of green marketing including (green perceived value, green products (green buildings), and

environmental concerns), on consumers' attitudes toward buying green buildings in Jordan.

1.2 Problem Statement

In reference to the reports provided from the International Energy Agency (IEA) in 2018, approximately 40 percent of the usage of energy and emissions of carbon are from buildings. Moreover, Hegerl et al. (2019) have shown that climate change is directly affected by the CO_2 emissions, and the reason behind these emissions is the human activities linked with the land usage, extraction of the trees, and construction processes for different types of structures. Moreover, according to the International Panel on Climate Change (IPCC) reports in 2019, between the years 2030 and 2052 it is expected that the global warming will be increased up to 1.5^0 C, if the human activities especially in the field of industry and building continues as it is with the same rate. In addition, Shukla (2021) has pointed that referred to the Boston Consulting Group (BCG) reports, that the consumers are preparative to pay extra amount of money, in order to get environmentally friendly products which provide green characteristics for them. Moreover, consumers have positive good attitudes toward environmentally conscious living, which leads to green product purchases and usage. Furthermore, according to the reports from the directorate of planning and institutional development in the department of land and survey (DLS) in Jordan for the year 2021, the trading volume in Jordan's real estate market increased by 11 percent during the first 10 months of 2021 compared to the same period in 2019; reaching 3,957 million Jordanian Dinars approximately. In light of the presence of an increase in the volume of trading in Jordan's real estate market, and the increase in world's orientation towards a sustainable green environment (transformation towards green), and the lack of green buildings in

Jordan, this study aims at examining the attitudes of people (consumers) toward buying green buildings in Jordan. In order to have a clear picture about consumers' attitudes toward buying green buildings in Jordan, three contracting companies represented by their "Owners/ General Managers" in Jordan were asked to answer the following questions (Appendix, 1):

Q1: Do you notice any increase in the volume of trading in the real estate market, especially in the purchase of buildings in Jordan?

Q2: Do you think that green buildings can be a source of a competitive advantage in the Jordanian real estate market?

Q3: Do you think green buildings can be attractive choice for consumes?

The answers from the "Owners/ General Managers" of the contracting companies showed a positive orientation toward the idea of green buildings, with willingness to know the attitudes of the consumers toward buying this type of buildings in Jordan especially with existence of increase in the annual paid money from the consumers for water and energy, in addition, the trend nowadays is saving the environment.

Therefore, based on reviewing the literature there is a knowledge gap in reinforcing the consumers' attitudes toward buying green buildings, thus this study fills the gap in order to reinforce consumers' attitudes toward buying green buildings in Jordan.

1.3 Study Purpose and Objectives

The main purpose of this study is to determine the impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan. Moreover, to determine the moderating role of green product awareness on the relation between green marketing and consumers' attitudes toward buying green buildings in Jordan.

The main objectives of this study are:

- Provide a conceptual framework for the variables included in the study (green marketing, consumers' attitudes toward buying green buildings, and green product awareness).
- Provide a conceptual framework for the sub-variables included in green marketing variable; (green perceived value, green products (green buildings), and environmental concerns).
- Examine the impact of green marketing on consumers' attitudes toward buying green buildings in Jordan.
- Examining the moderating role of green product awareness on the relation between green marketing and the consumers' attitudes toward buying green buildings in Jordan.

1.4 Study Questions and Hypotheses

This study aims to answer the following questions that are derived from the problem statement:

The First Main Question:

Q_1. Is there an impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green building in Jordan?

Based on the variables included in green marketing in this study, the following sub-questions are developed:

$Q_{1.1}$ Is there an impact of green perceived value on consumers' attitudes toward buying green buildings in Jordan?

$Q_{1.2}$ Is there an impact of green products (green buildings) on consumers' attitudes toward buying green buildings in Jordan?

$Q_{1.3}$ Is there an impact of environmental concerns on consumers' attitudes toward buying green buildings in Jordan?

The Second Main Question:

Q_2. Is the impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan can be moderated by green product awareness?

Study Hypotheses

The following hypotheses can be developed to examine the relations between the variables included in this study:

First Main Hypothesis:

H_{01}: There is no impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Based on the main hypothesis above, the following sub-hypotheses can be derived:

$H_{01.1}$: There is no impact of green perceived value on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

$H_{01.2}$: There is no impact of green products (green buildings) on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

$H_{01.3}$: There is no impact of environmental concerns on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Second Main Hypothesis:

H_{02}: There is no impact of green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

1.5 Study Model

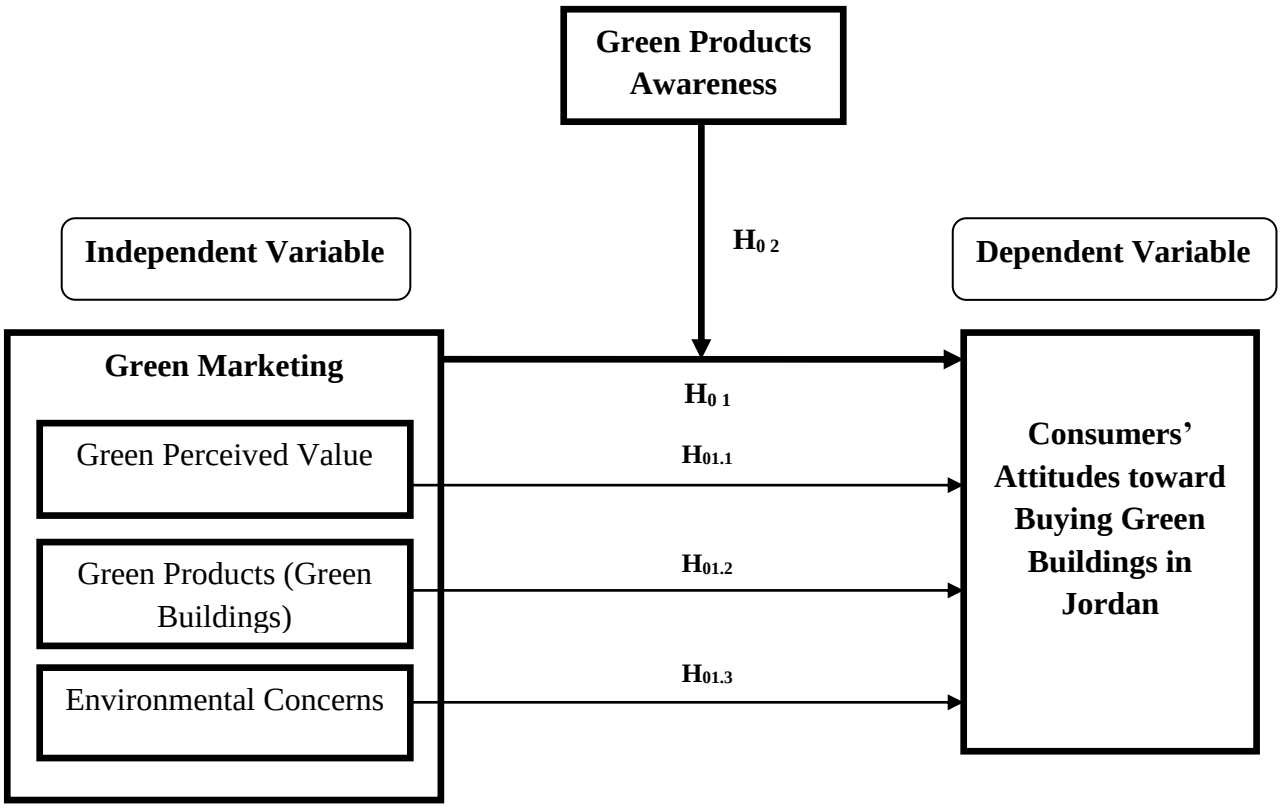

Figure 1.1: Study Model

Sources: Adapted from: Independent Variable: (Liao et al., 2020; Hojnik et al., 2019; Divyapriyadharshini et al., 2019). Dependent Variable: (Liao et al., 2020). Moderator: (Siyal et al., 2021)

1.6 Study Importance

The importance of this study is an additional value from two aspects; the scientific and the practical:

The Scientific Importance:

- Contribute to the enrichment of Arab library in general and the Jordanian libraries in particular by improving the number of studies about the impact of green marketing on consumers' attitudes toward buying green buildings, as these topics are currently lacking in Arab libraries, as far as the researcher knows. Thus this study may become a base for a contribution for the future studies.

The Practical Importance:

- The result of this study may be applicable for other studies or other industries in which they are within a relevant field.
- The importance of this study in seeking to determine if there is an impact of green marketing on consumers' attitudes toward buying green buildings in Jordan.
- The importance of this study in seeking to determine to determine if there is a contribution for the green product awareness as a moderator on the relation between green marketing and consumers' attitudes toward buying green buildings in Jordan.

1.7 Study Terms and Operational Definitions

Independent variable and its sub-variables:

Green Marketing: is a term in marketing as a strategy used and relevant to the consumers and organizations, and linked with the environmental issues, concerns, and improvements (Townsend, 2017). Furthermore, the concept is not new, but is still one of the concepts that take place in the strategies used in the organizations, and related to the concept of sustainability (Govender & Govender, 2016). Moreover, according to Townsend (2017), the green marketing strategy is based on inserting the green practices

into the traditional marketing strategy. For this study the green marketing can be defined as the umbrella that contains green environmental concepts as sub variables. It can be measured by three variables which are green perceived value, green products (green Buildings), and environmental concerns.

Green Perceived Value: is a term representing the totality of gained benefits from a specific product referring to consumers' environmental inclinations, desires and expectations, and their green needs. Moreover, it can be measured and considered as an emerging factor between green consumers (Koller et al., 2011). According to Lin et al. (2016), the green perceived value (GPV), can be considered as a subjective matter of evaluation, in which it is based on the expectations, needs and the desires of the green consumers. For this study the green perceived value can be defined as the total environmental value that the consumer will receive from using green buildings. This variable can be measured through value provided to the consumers and more environmental benefits than other products (Lin et al., 2016; Chen, 2010).

Green Products (Green Buildings): Green product is a term that is linked with the sustainable and environmentally friendly practices, technologies, and standards in supply chain and manufacturing process (Palevich, 2012). Referring to Dangelico & Vocalelli, (2017), to ensure the best use of the green products and take the desired advantages from them, they have to be widely spread and enabled in the market.

Green Building: The concept of green building (GB), is rapidly going into the global scale, providing positive plans and activities via the construction field, which will help to develop and provide innovative solutions to face the current and the future challenges (Zhu et al., 2019). Moreover, according to Khoshbakht et al. (2018), the benefits of green buildings go beyond reducing energy and reducing the consumption of the natural resources; they also enhance consumers' experience, expectations, and satisfaction. For

this study green products (green buildings) can be defined as environmentally friendly buildings in which they help the environment by reducing the waste produced, consuming less resources, using the recycled materials or can be recycled in the future, and provide clean, healthy and comfort lifestyle for the consumers. This variable can be measured through meeting consumers green needs and wants, higher perceived health, and presence the of green features (Wen et al., 2020; Zampese et al., 2016).

Environmental Concerns: is a term that is linked with consciousness of the person (consumer), regarding to the environmental issues and problems (Suki, 2015). In addition, Kostadinova (2016), pointed that the environmental concern can be clarified as it is the persons' own knowledge and awareness that influence his/her behavior toward responding to the environment changes. Furthermore, Nanggong (2019) showed that there is a significant positive impact of the environmental concerns and from the perceived benefits and values, on the consumer behavior specially the sustainable behavior. For this study environmental concerns can be defined as consumers' believes and thoughts in which will direct them toward buying green products and what are the real reasons behind buying green buildings. This variable can be measured through solving environmental problems and taking into consideration the environment in the consumers' activities (Nanggong, 2019; Suki, 2013; Kirmani and Naved, 2016).

The Dependent Variable: Consumers' Attitudes toward Buying Green Buildings in Jordan:

According to Almodarresi et al. (2019), the term attitude can be defined as it is any decision made by the consumers with inclusion of specific phenomena is an "attitude", in addition to that, attitude can be considered as the long-term "formation of motivational, emotional, and cognitive processes" based on the environment that the person exists in. Generating more and more knowledge and concerns about the environmental issues and green products, this will enhance the attitudes of consumers to be changed toward the usage of green products (Maheshwari, 2014). For this study consumers' attitudes can be defined as one of the critical factors and has a significant influence on the decision of the consumers about buying green buildings. This variable can be measured through consumers' thoughts about the green products, and their own experience if they have tried like these products before (Woo and Kim, 2018; Tandon et al., 2020; Kirmani and Naved, 2016).

The Moderating Variable: Green Product Awareness:

Green awareness or green product awareness can be defined based on Alamsyah et al. (2018) as the consumers' environmental awareness in relation to any goods or services they choose. Green product awareness has the ability to influence the attitudes and intentions and as a result the behavior of the consumers in many ways; through reducing their harmful and wasteful consumptions, enhancing their preferences about the green products (Suki, 2013). Moreover, the awareness of green products can be increased by increasing the promotion on the green product at first (Divyapriyadharshini et al., 2019). For this study green product awareness can be defined as the knowledge that consumers

have in their minds about the importance of green buildings and what are the benefits behind buying and living in this type of buildings. This variable can be measured through consumers' knowledge about green products and its benefits, consumers' realization about environmental issues, and consumers' responsible activities towards the environment (Saha and Kuruppuge, 2016; Mensah, 2021; Mohiuddin et al., 2018).

1.8 Study Limits

1. Place Limits: This study will be applied on consumers in Amman.
2. Time Limits: This study was completed before the mid of year 2022
3. Topic Limits: The variables included in this study (green marketing as independent variable and consumers' attitudes as dependent variable), while overlooking other variables which might have an impact.

1.9 Study Limitations

1. In Arab Libraries, there is lacking of similar or related studies in which they consider the impact of green marketing on consumers' attitudes toward buying green buildings in Jordan.
2. The study was applied on Jordanian consumers to determine and identify their attitudes toward buying green buildings, thus this raises the question of whether it is possible to extend the results of this study on other countries and/or industries.

Chapter TWO
Theoretical Framework and Previous Studies

This chapter will include the following aspects:

- Overview of the definitions of the variables and sub-variables in the study including Green marketing (Green Perceived Value, Green Products (Green buildings), and Environmental Concerns), Consumers' Attitudes toward Buying Green Products, and Green Product Awareness).
- Previous studies that are related to this study.
- The difference between this study and the previous studies.

2.1 Theoretical Framework

2.1.1 Green Marketing

Green Marketing Concept

The evolution of the concept of green marketing back to first definition according to Hennion and Kinnear (1976) in which includes that "ecological marketing" is mainly linked with all the activities that marketing involves, especially those activities that have an effect or can cause problems to the environment. Through the years, more and more definitions appeared and the concept became more organized and structured. The aim of "sustainable marketing" is to satisfy three main yardsticks: 1) meeting consumers' needs, 2) accomplishing organizational goals, 3) harmony the processes with the environmental system (Fuller, 1999). The concept of green marketing is accelerating and becoming highly critical topic to the academics and implementers (Massey and Singh, 2019). There can be three phases for the green marketing: a) ecological green marketing: this means that the activities that are included in the marketing are having specific orientation toward the environmental problems like pollution, and having

concerns about the natural resources. b) Environmental green marketing: this means that the focus is on using technology that is characterized as green one, in the process of designing and producing new innovative products, in addition to taking into consideration the pollution, waste and environmental issues. c) Sustainable green marketing: in which means that the environmental consumption costs and environmental production costs are fully taken into account of marketing activities and in the mind of marketers as well this concept includes the environmental issues while preparing the marketing mix (Purwanti, 2019). According to Papadas et al. (2017) in order to measure the orientation of organizations toward green marketing, there are many factors that can help to measure this orientation: investing in research and development programs that aim to find green products, partners to cooperate with have to be chosen carefully with a specific stated policy between both parties, using the renewable energy instead of regular one, and using reusable or recycled materials in its products. Therefore, the idea of green marketing especially in our current environmental situations is imperative more than a choice for the organizations to implement (Vaitone et al., 2022).

Green Marketing Dimensions

The dimensions of the green marketing orientation are three: a) strategic green marketing: this dimension is concerned with the long term actions and plans, and is linked with the top management decisions, like alliances, joint ventures and mergers with other organizations that follow the similar environmental policies. This dimension requires the organization to expand its strategic marketing objective, including both; protection of the stakeholders and the environment, in which this is turned to the triple bottom line; economic, social, and performance. b) Tactical green marketing: this dimension is concerned with the short term actions, in which it transforms the

marketing mix from traditional mix into green mix. Moreover, this dimension includes reduction the environmental damage and footprint, by using greener produced products and greener promotional tools. c) Internal green marketing: this dimension is concerned by deeply embedding the environmental values and issues within the organization in order to reach to a green organizational culture (Papadas et al., 2017).

Green Marketing Strategy

According to Kotler and Armstrong (2014), there are four main steps in the green marketing strategy including 1) segmentation: in which the traditional segmentation of marketing may not be applicable in green marketing for example; segmentation based on demographic in green marketing may be useless and not effective as segmenting based on the "green" behavioral segments of consumers, 2) targeting: there are some activities that can be done in green targeting like: in tactical level; mention the green attributes of the products and how it can provide green value to the consumers. In quasi strategic level; develop new green brand with existence of the existing brand. In strategic level; begin new strategic business unit characterized as green (SBU), 3) positioning: positioning of green products can be based on green functional attributes of the product and/or the emotional positioning, and both have a positive influence on the attitudes of consumers, 4) differentiation; positioning of the green brand not the green product itself can be considered as a great chance for differentiation. According to Fraj et al. (2013), there are two types of green marketing, that the "green marketing strategy scale" measures: one is process oriented and the other one is market oriented, and these two types can provide a crucial theoretical enrichment.

Green Marketing Importance

The importance for green marketing can be for both; organizations and consumers; in which for organizations; green marketing can be a competitive advantage source (Moravcikova et al., 2019). Moreover, enhancing the organizational image in the market, which will attract new consumers, increase the sales of the organization, and encourage investors to invest in it (Nadanyiova et al., 2020). If the organization uses the green marketing strategies on the other hand, its products are not considered as green products, and it claims that they are green, this is called "green washing", and this practice has to be controlled, as a result, organizations prefer not to fall into this predicament, their products have to be also green products, consequently, the consumer will take the advantage from both the green marketing and the green products, and received higher value because of differentiated products that have been produced from the organization (Sharma and Trivedi, 2018).

Green Marketing Variables

Mainly there are eight variables included in the green marketing, in which these variables are: "eco-labels, eco-brands, environmental advertising, environmental awareness, green product, green price, green promotions and demographics", in which eco-labels are major part of the package of the product and can be either as a paper or diagram on the products package, thus its role is to help the consumers to know if the products are green or not. Eco-brand role is to make sure that the consumer distinguishes the green from the non-green products by noticing the brand. Environmental advertising objective is to encourage the consumers to buy less environmentally harmful products. Environmental awareness is critical because consumers who have the awareness, measure the effect and the cost on both the environment and the society. Green products are considered as sustainable products in

which in their full life cycle, the damage produced to the environment from such products is minimized. Green price: green products price is higher than the traditional one, because the cost of product itself is higher. Green promotion has two major aims; to enhance organization image in the market and improve the idea that the organization is environmentally friendly organization, in addition, creates awareness in the mind of the consumers about green products. Demographics can be used as a tool to segment the consumers into green consumers or not (Sharma and Trivedi, 2018).

Green Perceived Value

The concept of green perceived value (GPV) is greatly focusing on consumers' environmentally expectances, and their own green needs and wants (Lin et al., 2016). Thus, green perceived value can be considered as the overall assessment of the consumers' point of view to the green products (Rizwan et al., 2014). Also as Rahardjo (2015) mentioned that green perceived value can be defined as the overall valuation regarding the products' advantages and how these products benefit the environment referring to consumers' eye view. Additionally, the consumers have their own assessment about the green products and how these products can satisfy their green needs and wants (Alamsyah & Febriani, 2020). Furthermore, by satisfying those green needs and expectations, the green perceived value will be increased, and as a result, the consumers will be satisfied, in addition, providing a connection and relation between the moral satisfaction of the consumers and green brand image, the loyalty of the consumers for the brand will be increased (Lin et al., 2016). In addition, referring to Chen et al. (2015), green perceived value should be measured by organizations, due to its critical impact on consumers' confidence in the organization itself and in its products. Moreover, according to Liao et al. (2020), green perceived value is one of two factors constructing the green customer value, and the other factor is the environmental

image, in which the green customer value including both factors (green perceived value and environmental image) has a significant positive impact on the attitudes of consumers toward buying green products. Furthermore, green perceived value can positively influence consumers' green purchase intentions toward buying green products (Alamsyah et al., 2020). Moreover, Chen (2010) pointed that the green perceived value has a significant positive impact on consumers' satisfaction then trusts level, and after that the loyalty, and if the organizations want to enhance their consumers' green loyalty, they should improve the GPV firstly, in addition it is essential to apart the green perceived value from the ordinary perceived value. Moreover, refereeing to Amin and Dhewi, (2021), they have shown that green perceived value has a critical importance in influencing the consumers' satisfaction, consequentially the consumers' satisfaction influence the loyalty of them positively, thus the green perceived value influence the loyalty of the consumers positively through the satisfaction.

Thus, Dehghanan and Bakhshandeh (2014) showed that, green perceived value have a positive influence on the purchase intention of the consumers toward the products. Traditionally, there were four dimensions constructing the green perceived value framework including: functional, social, emotional, and conditional dimension; these four dimensions were the basic and standard dimensions for GPV framework, nevertheless there is a lack regarding the economic and financial sides, thus two more dimensions including the economic dimension and the financial dimension, were added to the basic framework dimensions, as long as these two dimensions have a significant contribution to consumers' decisions (Jabeen et al., 2021). As a result, the green perceived value cannot be deemed as "unidimensional construct" (Danish et al., 2019). Hence organizations should direct their focus toward increasing the GPV to the fullest

extent possible (Rahardjo, 2015). In this way, organizations should embrace special strategies -green marketing strategies- in order to enhance the GPV (Lam et al., 2016).

There are five items in which the green perceived value measurement includes: a) the functions of a specific product-the environmental function- gives a "very good" value to the consumer, b) the performance of the product –the environmental performance- meets consumer expectations, c) the reason behind buying this product is that it has more environmental concerns than other product, d) the reason behind buying this product is that it can be considered as environmentally friendly product, e) the reason behind buying this product is that it has more environmental benefits than the other product (Chen, 2010) .

Green Product (Green Building):

Consumers tend to choose the green product due to many reasons, like: their own consciousness and concerns about the environment, the economical benefits that they will gain and the products' green reliability and appearance (Maniatis, 2014). Moreover, the economical benefits according to Koller et al. (2011) will be increased; green products will help the consumer to save money in the terms of long run of usage and this can be referred to energy saving characteristics in this type of products. Furthermore, Tezer and Bodur, (2019) stated that when the consumers simply just use a green product, they will be highly valued by the society.

In terms of green building, rapid developments in the environment can be considered as the main engine that drives and enhance the idea of sustainable and quality environment (Yasinta et al., 2020). Thus the concept of green buildings includes that all activates in any building life cycle are considered as green activities, and this starts from planning to have green building, designing green building in which contains

recycled materials or can be recycled, with build-in green systems for indoor air quality, solar panels systems (energy appliances), water conversion systems including: water reuse and redirecting systems and rainwater harvesting systems, green thermal systems, high quality insulations in order to have neutral indoor rooms temperature and for noise reduction process. After that, the construction and operation process of the building (Darko and Chan, 2016). Referring to Yasinta et al. (2020), the green building can be a way out to lessen the environmental damage that caused by the industries in general and the construction industry in particular. Green buildings can be residential buildings, commercial buildings, hospitals, schools, universities, and many other categories of buildings (Zhang et al., 2019). Furthermore, according to Banerjee et al. (2021), GB can increase the consumers' satisfaction due to enhancing their comfort, health, productivity and reducing the costs they pay annually for water and energy. Moreover, all the benefits from the green building can be considered as crucial factors in order to go further step into the "global sustainable development", in addition technology has an outstanding extraordinary role in improving the design and the construction processes in any green building (Zhang et al., 2017). Therefore, in order to face the challenges expressed by the natural environment and sustainability issues and concerns, one of the critical approaches is to focus on constructing green buildings. As a result, companies are required to provide marketing and management strategies that are compatible with the concept of green buildings in order to achieve the transformation towards the green buildings (Wang et al., 2020). In addition, the new marketing and management strategies have to conquer any consumers' skepticism regarding the green buildings (Abuamer and Boolaky, 2015). Moreover, the promotion is a great weapon that can increase the consumers' knowledge about green buildings, and then enhance their attitudes toward buying such type of buildings (Durdyev et al., 2021). Despite of all the

advantages that can be generated from the green buildings, still there is a major predicament that faces the implementation of the concept which is the elevated initial cost of the construction itself (Yasinta et al., 2020).

On the other hand, when considering the idea of the costs in traditional buildings, first major costs come to mind are the land cost and the construction processes costs (Sesana and Salvalai, 2013). Meanwhile people may forget about the costs that will be paid annually like electricity, water, air purification, heating and cooling costs, in addition to other types of costs that they will be paid indirectly, like less psychological comfort, less productivity, and higher health issues in comparison with the green buildings. Therefore, apparently, it seems that the green buildings have higher costs than the traditional buildings, although if the total costs are calculated and involved in the decision making and taking while comparing both types of buildings, there might be a change in decision regarding the green buildings.

There are two measures in order to achieve the green building concept correctly: one is called passive measure, in which means boosting the design of the building and take the most advantages from the natural resources in order to meet living requirements. On the other hand, the active measure, which means using of green mechanical and electrical technology which can be more efficient in energy usage but more expensive in the short run (Zhang et al., 2011). The benefits of the green building can be summarized into five categories: the green buildings have lower operating costs than the traditional buildings, more comfort is linked with green building than the traditional one and enhance the health of the consumers, occupants' productivity enhancement, and for the organizations this can be turned for them with enhancement of the reputation and higher value in the market (Zhang et al., 2017). Furthermore, having

the knowledge about this type of buildings and how to acquire the maximum benefits can significantly enhance the performance of the occupants (Kotkar and salunkhe, 2017). Accordingly, Zhang et al. (2019) pointed that there are two critical issues that can affect the development of any green building: the first one is external; which involves policies and regulations, economic status, and the certification systems. The other issue is internal; which involves technical issues in production and construction processes, construction management, and consumers' own experience with such type of buildings.

Environmental Concerns

According to Molinillo et al. (2020) the concept of environmental concerns (EC) is linked with the idea of prevention of the environmental damage that continuously occurs, and minimization of its impact on the whole life. Moreover, (Konuk, 2018) defined the environmental concerns as the reflection of consumers' positive impressions and feelings regarding the green environmental issues. The idea behind the environmental concerns is as Nuttavuthisit and Thogersen (2017) pointed out that consumers' environmental concerns are one of the bases that drive and influence their attitude to changing toward environmental attitude. In addition, the environmental concerns can be considered as major predictor for the consumers' attitudes toward buying green products, and as a result, increasing in the level of environmental concerns will lead to increase in transforming the attitudes of the consumers to become green attitudes (Yadav and Pathak, 2016).

Therefore, one of the motivators for enhancing the intention of the consumers toward buying green products is the environmental concerns (Pagiaslis and Krontalis, 2014). Also consumers' behavior will change due to changing in their attitudes, because

the environmental attitudes can be considered as a factor that contributes and affects the behavior of the consumers (Kostadinova, 2016). Then changing consumers' behavior to sustainable environmental behavior will enhance the purchasing of the green products. Moreover, if the consumers have the environmental concerns, they will provide support in order to find solutions for the environmental problems and issues, which can be an indication for their intentions to act environmentally (Suki, 2015). Referring to Molinillo et al. (2020) the environmental concerns can be related positively to the conscious of consumers and their health based on their decisions and actions taken toward buying specific products. Furthermore, the consumer behavior varies from the "Non-salient" to "salient" in which; "Non-salient" consumers do not consider the environment in their behavior and their environmental concerns are at low level. On the other hand, the "salient" consumers include and consider the environment in their behavior and decisions, and their environmental concerns are at high level (Amatulli et al., 2017). Referring to Tandon et al. (2020), the environmental concerns can be considered as extrinsic but also affecting the attitude of the consumers. According to Amatulli et al. (2017), the organizations should determine how to attract consumers – especially "non-salient" consumers - in order to engage them into the environmental attitudes, thus their intentions will be changed toward the green product, and as a result the behavior will be changed toward greener behavior.

There are seven dimensions stated by Zimmer et al. (1994) and reused also by Royne et al. (2016); in which these dimensions are: 1) concerns about waste, 2) concerns about wildlife, 3) concerns about biosphere, 4) concerns about popular issues, 5) concerns about health, 6) concerns about energy, 7) concerns about environmental technology. As a result, Royne et al. (2016) have found that increasing the level of environmental concerns and specially the concerns about the waste can be a direct

contributor to the changing in the attitudes and behavior of the consumer to become acting environmentally. According to Cruz and Manata (2020) there are five major aspects for the environmental concerns in which: 1) growth limits; the earth is becoming close to number of people it can support with the limited natural resources, 2) "Anti-anthropocentrism"; people can adjust the environment natural resources in order to meet their own needs, 3) "Fragility" of the nature balance, in which can result from people excessive manipulation with the natural resources which can result a disastrous effects, 4) "Rejection of exemptionalism"; in which the human cleverness can guarantee not to make the planet unlivable, 5) eco-crisis possibility of occurrence; in which people are abusing the environment extremely which will be reflected negatively on the eco-system. When embedding these aspects in people minds correctly, and make the danger on the environment and the earth as whole clear for all people, this can change their attitudes, intentions and their behavior into greener one, which can result in better, clean, and sustainable environment.

2.1.2 Consumers' Attitudes toward Buying Green Products

The concept of consumers' attitudes can be considered as critical issue to be studied because the attitudes of the consumers has a great effect on the intentions of them to buy a specific product, thus if the attitudes of the consumers become focusing on the green products (green buildings), then higher intention will be transforming toward the green product (green buildings), thus the behavior of the consumers is linked with the attitude of them (Ritter et al., 2015). According to Maheshwari (2014) increasing the knowledge about the environmental issues and problems in consumers' minds will encourage the attitude of them to become greener attitude, and this will be reflected on their intentions and behavior to become greener. Additionally, Mcintyre and Milfont (2016) showed that the attitudes usually used for identifying the consumers behavior toward buying

products, thus if the consumers' attitudes are positive toward the green issues, then their behavior most likely will be greener. Moreover, Anvar and Venter (2014) have shown in their study that the attitudes of consumers toward green products can be positively influenced by the society, environmental awareness (awareness about green products) and the price of the product itself. Furthermore, according to Lestari et al. (2020), the attitude of people is major factor to formulate the intentions of them about specific product. In addition, the attitudes can be considered as the most critical and accurate predictor for the intentions (Sreen et al., 2017). In addition, the attitudes can be considered as a great indicator for the consumers' intentions and thus for their behavior (Han et al., 2020). Moreover, Cavusoglu et al. (2020) pointed that enhancing the attitudes of the consumers will be reflected on stronger intentions for their behavior.

Based on Koller et al. (2011), the attitudes toward saving the environment has crucial effects on the attitudes of consumers, to be changed to green attitudes or attitudes toward buying green products adding to that, the green value that the consumers will receive, has a great positive impact on the attitudes of them toward buying the green products. Referring to Elhaffar et al. (2020) consumers' attitudes, intentions, behavior and their own norms are all considered individual factors that can be changed through changing in the surrounding environment, and/or changing in the knowledge that they have in their minds. One of the factors that also affect the attitudes, is the "self-transcendence" because it is linked with the environmental concerns and related to persons' interests, and as a result, the self-transcendence has a positive impact on the attitudes of consumers toward buying green products, also enhance their behavior and actions taken to be environmentally friendly actions (Kim and Seock, 2019). Furthermore, according to Elhaffar et al. (2020) the trust level plays a major and critical role in formulating the attitude that will affect the behavior as a result, because the

sequence of attitudes, intentions, and behavior is crucial to reach to the desired decision from the consumers (Gifford and Chen, 2017). In addition, Goh and Balaji (2016), pointed that the "Attitude-Behavior Context –ABC theory" showed a theoretical framework about the relationship between the attitudes and the behavior, and provided that the attitude can be considered as a predecessor and can influence the behavior. Moreover, Claudy et al. (2013) pointed that the "behavioral theory" discussed that the attitudes and the intentions are directly affecting the behavior of the consumers and at the same time both- the attitudes and the intentions- are affected by the promotion for the product, and as a result, if the product is classified as green product, then the promotion should enhance the green concept of the product and this will be reflected on consumers attitudes, intentions and the then their behavior. In the same manner, according to Kao (2019), the attitudes and intentions of consumers toward buying green products can be significantly enhanced through the environmental advertising. Though, there might be a difference between what consumers want to have, and what they actually have, thus there might be a gap between the attitudes and the behavior of the consumers (Echegaray and Hansstein, 2017).

According to Coskun (2018), there are three main attitudinal dimensions: a) affective dimension: which indicates the emotional and feelings side linked with specific product, object and/people, b) cognitive dimension: which indicates a special component which is the perceptual one and will be reflected on the process of evaluation of the attitudes, c) conation dimension: which is related to the intentions and formulate the behavior of the consumers. Referring to Chen and Chai, (2010), there are three dimensions for the environmental attitudes, and these dimensions are: a) environmental protection b) the role of government c) consumers' personal norms. In which consumers' personal norms and the role of government toward the environment,

have a significant contribution on consumers' attitudes toward green products. On the other hand, the environmental protection has less contribution in changing the attitudes, while the personal norms have the highest contribution from all the three dimensions. Therefore, increasing the perceived value, will be reflected on enhancing the attitudes toward buying the product, and in case of green products; increasing the green perceived value, will lead to positively enhance the attitudes of the consumers toward buying green products. Moreover, if the consumers themselves have an experience with this type of products, and if this experience was positive, then this will significantly influence consumers' attitudes toward buying green products (Liao et al., 2020). Furthermore, Hanninen and Karjaluoto (2017) pointed that; one of the main dimensions that can affect the consumers' attitudes toward buying green products is the green perceived value. While the attitudes toward green products can be handled into two main ways; these attitudes can be "general environmental attitudes" which means positively or negatively evaluate people while doing specific behavior, and the other way is the "specific environmental attitudes" which means the evaluation of specific green product or green behavior like buying green products (Verma et al., 2019).

Changing the attitudes of consumers can be considered as complex and hard process, and depend on the type of attitudes that is exposed to change. Thus the characteristics of the attitudes are crucial especially when talking about changing in attitude toward another attitude. Therefore, the characteristics of the attitudes can be classified as: 1) explicit attitudes versus implicit attitudes: in which the explicit attitudes can be measurable easily but it can be exposed to bias. On the other hand, the implicit attitudes are less biased and more causal than the explicit, 2) symbolic attitudes versus non-symbolic attitudes: in which the symbolic attitudes are peoples' attitudes that are based on "affect" form different situations. On the other hand, the non-symbolic

attitudes are resulted from cognitive reasoning for a specific action and this type of attitudes can be modified easily, 3) strong attitudes versus weak attitudes: strong attitudes are less sensitive to change, and more stable, in contrast to weak attitudes, 4) Positive attitudes versus negative attitudes: in which positive attitudes are related to attitudes that can be influenced and enhanced to change, and is linked with people who accept new experiences and are willing to be changed and improved (Coskun, 2018).

2.1.3 Green Product Awareness

Green product awareness is critical factor that influences the attitude and intention of consumers about the green products, and then encourage their environmental behavior (Mensah, 2021). Moreover, it is worthy to study the green product awareness because this helps to determine the pattern at which the consumers follow in their behavior and decisions in buying products (Alamsyah et al., 2021). Furthermore, the awareness can be considered as the reflection of the consumers' past experience, and affects the future attitudes, intentions and behavior (Dewindaru et al., 2022). Moreover, the level of green product awareness of the consumers' can be significantly critical in predicting the behavior of the consumers toward buying green products (Divyapriyadharshini et al., 2019). In the same manner, Rahmi et al. (2017) showed that the green product awareness can significantly control the consumers' behavior toward buying green products. Thus, consumers' purchasing decision will be affected also because of the existence of the relation between the green product awareness and consumer behavior (Siddique and Hossain, 2018). The increasing environmental awareness and the continuous changing in the attitudes of consumers are clear evidences in the markets in emerging countries, as the green product awareness has a positive influence on the attitudes toward buying green products. Moreover, the environmental awareness and knowledge influence the attitudes of consumers toward green products,

then affecting their intentions and actual purchase decisions (Mohiuddin et al., 2018). Furthermore, Divyapriyadharshini et al. (2019) pointed that there is a critical role for educating people about green products, features for this type of products, uses and advantages they can gain through using green products, because increasing the level of knowledge and awareness is crucial in order to change consumers' attitudes, intentions and behavior to become more greener.

In the same manner, Srinivas (2015) pointed that the demand for green products will increase when the awareness for this type of products start to increase. Thus, lacking in green products demand can be referred to the lacking in the awareness about this type of products (Pradhan and Priyan, 2020). In addition, one of the most important factors that influence the intentions of the consumers is the awareness (Akbar et al., 2014). Thus, the awareness of green products has changed the consumers' behavior by reducing the consumption of the conventional traditional products, and moving to choose and consume the green products more and more (Suki, 2013). Thus, consumers' green product awareness is considered as critical factor that affects the productivity levels; because consumers' green product awareness affect their behavior, and then the behavior will affect their consumption of this type of products, and in the same manner, productivity depends on both product consumption and the consumers green awareness, meanwhile the productivity will change to meet the consumers needs and wants (Siyal et al., 2021). According to Alamsyah and Hariyanto, (2017) and Tjarnemo and Sodahl (2015); the green product awareness level has been increased due to the increase in the knowledge in consumers' minds about these products' benefits. Then the increased level of green product awareness has lead to rise in the green product concepts and implementation (Siddique and Hossain 2018). Despite of this increase in the knowledge and awareness about green products, it still low level and specially in the levels of green

conscious in the markets (Shittu, 2020). Furthermore, Mohiuddin (2018), pointed that the education and specially the environmental one, has a major role in enrichment of the knowledge and increase the awareness of the people and the next generation about the green products and its benefits, in order to be more greener consumers and to become responsible for their behaviors.

From global perspective, the consumers are becoming highly concerned about buying green products; this can be referred to the increase of their green product awareness (Siyal et al., 2021). Accordingly, many organizations around the world started to adapt their strategies and culture to become more environmentally friendly organizations, by using green marketing strategies and producing green products and services (Wu et al., 2021). Additionally, Amegbe and Owino, (2017), have pointed that in order to enhance the "green lifestyle", there is a crucial need to construct the concept of awareness and specially the awareness toward green products, thus this will help to transform from the consumption of conventional/traditional products toward the green products. Furthermore, Suki (2013), showed that in order to enrich consumers' awareness there should be focus mainly on two issues: green marketing and environmental activities, like; conservation of energy which will be reflected positively on the environment and a good example for that is the "Earth Hour", in which it is an annual event, focusing on reduction the negative impact on the environment, and helping saving energy, thus this hour is stated by global community, where all the lights are switched off for an hour. Moreover, by enhancing such activities the level of consumers' awareness related to environmental issues will be increased, and as a result, their attitudes, intentions, and behavior will be changed toward green products.

In addition, Divyapriyadharshini et al. (2019) pointed that one of the main contributions in influencing the awareness of the consumers about the green products is the promotional activities regarding the environmental issues and the green products and its advantages. In the same manner, Siddique and Hossain (2018), explained that the most influencing factor, in which positively affect the consumers green product awareness is the promotional activities. Moreover, Rahmi et al. (2017), showed that the green advertising can be considered critical in order enhance the consumers green product awareness. Furthermore, the creation process for the green product awareness does not only rely on the promotional activities and advertising, there are many other factors to determine this process like: consumers' point of view toward this type of products, their own previous experience with the green products, the slogan and symbol of the products, and the labels (Alamsyah et al., 2021).

2.2 Previous Studies

1) Boolaky and abuamer, (2015) entitled: "**Consumer Behavior towards Green Building: A Study in Abu Dhabi**": The aim of this study is discussing the concept of green building from consumers point of view and especially consumers in Abu Dhabi, also to evaluate different elements from consumers point of view about the green buildings and discussing the competition level in the field of green buildings in the region. The study sample used in the research was sixty consumers, in which they were interviewed and asked questions related to the study topic, and meeting the aims of the research like questions about the features of green buildings that attract consumers, green marketing tools used for the green buildings, the concept of "green washing" and its effect on the consumers' behavior, and consumers' impressions about green buildings. This study revealed that marketing tools for

green buildings are sometimes different than the tools used for marketing in traditional buildings. Moreover, consumers are considering the green building as an attractive choice form them due to its benefits. Furthermore, they have found that consumers' behavior is directly affected by the surrounding environment and changes occur. In the light of the results, the study recommended educating the people to enhance their knowledge and awareness about the green buildings and the material used in this type of building, thus their behavior will be changed toward buying green building, as a result, more investments will be injected into this field, which will help in promoting green buildings.

This study took the real estate market in Abu Dhabi as the place of the study, and it was designed in order to provide solutions for problems facing construction field in Abu Dhabi through answering questions directed towards features of green buildings that can attract consumers, distinguishing marketing tools that are best fit to reach to consumers, and how to meet consumers needs and wants. Therefore, according to the recommendation provided from the previous study, our current study uses the awareness as a moderating variable to continue, build up the research and examine its impact between green marketing and consumers' attitudes.

2) Kumar, (2015) entitled**: "Green Marketing Mix: A Review of Literature and Direction for Future Research"**: The aim of this study is to propose a systematic literature review related to the green marketing field and provide a proof on the integration between two main concepts which are marketing and sustainability, also deals with green marketing practices as a response for the increasing consumers' consciousness of environment in the market. The number of papers used in this research is 105 papers out of 196 papers collected. The results of the study revealed

that the green marketing has appeared as a managerial idea to enhance the reputation of the organizations, by applying the ethical and social responsibility principles and standards, with production of the eco-products. Moreover, the green marketing has three main elements which are: commitment, differentiation, and enrichment, and all of them aims to provide higher and greater perceived green value for the consumers by developing unique and creative products. In the light of the results, the study recommended that the organizations should increase their contribution and focus on improving consumer value and this will lead to gain a sustainable competitive advantage.

The methodology used in this study was a systematic way of gathering information from 105 related papers, about green marketing, sustainability, integration between these two major concepts.

3) Royne et al. (2016) entitled**: "From Thinking Green to Buying Green: Consumer Motivation Makes the Difference":** the aim of this study is to examine the gap between consumers' environmental concerns and their weak involvement in the green behavior. Moreover identifying environmental concerns dimensions. The sample used for the study was 919 respondents, and the range of ages included was "from 17 to 74 years". This study revealed that three of environmental concerns dimensions; (waste, environmental technology, popular issue) out of seven environmental concerns dimensions are directly related to engaging the consumers in green behavior. Moreover, consumers' participation level in green behaviors differs according to their own point of view about the importance of specific dimension of the environmental concerns. In the light of the results, filling the gap between consumers' environmental concerns and their behavior can be done clearly

by enhancing the communication strategies in green marketing, which will support consumers' behavior with their environmental concerns. Furthermore, organizations have to consider that each dimension of environmental concerns dimensions provide different motivation to the consumers toward specific green behavior. In addition, enhancing the awareness and knowledge of the consumers about the environmental issues, will help to encourage their attitudes, intentions, and behavior to become greener.

The independent variables used in this study were age, gender, education, and ethnicity in one category, and other category named as environmental concerns dimensions including seven dimensions (concern for waste, wildlife, biosphere, popular issues, health, energy and environmental technology). The dependent variable used was consumers' sustainable behavior including five types (energy, food, water reduction, waste reduction, and other eco friendly behavior).

4) Divyapriyadharshini et al. (2019) entitled: **"Consumer Awareness towards Green Products and Its Impact":** This study aims to understand the consumers' awareness regarding green products, and the way that they would help the environment if they turn to green products, in which the awareness of the green products can be considered as a crucial factor in predicting the decision of buying products. The researcher used both types of data, primary and secondary, in which the primary data collection was through survey method, and data was collected from 30 respondents. The published journals, different books, and many academic resources were used as resources for the secondary data. The study revealed that the awareness of the green products is critical because of its effects on the purchasing decision of the products, and the green product awareness is influenced

by the promotion of green products. Moreover, the awareness of the green products can be included as a factor to influence the consumer buying behavior. Also, consumers bought green products mainly for health concerns. In the light of the results, the study recommended that increase the education of people is crucial especially about the green products (the uses and the features), because this will increase the awareness of the green products and as a result will influence the consumer buying behavior of green products.

The independent variables used in this study were environmental concerns, knowledge, eco-friendly products, social media, and promotional activities. While the green product awareness was considered as dependent variable.

5) Hojnik et al. (2019) entitled: **"Transition towards Sustainability: Adoption of Eco-Products among Consumers":** The aim of this study is to discover how the environmental concerns of the consumers affect their purchasing intention. In which the environmental concern was taken as an independent variable, and the purchase intention as a dependent variable. In addition, the study aimed to figure out if consumers are only concerned about the environment, or they are making a difference in their actions. Furthermore, to examine the mediating role of consumers' familiarity and consciousness of the eco-products, and consumers' perceived sense of environmental responsibility. The sample used in this research is 705 consumers from Slovenia. The study found that the maximum effect for turning the environmental concerns to purchasing intention comes from the conscious of eco-products. Moreover, female showed more environmental concerns, consciousness about eco-products, more perceived sense of environmental responsibility than male. In the light of the results, the study recommended the

companies and the governments to increase their effort to build up and improve the awareness of eco-products and enhance the concept of sustainability and sustainable behavior in the consumers, because increasing the awareness of eco-products will increase the environmental consciousness, and this will enhance turning the environmental concerns to purchasing intention.

The independent variable used in this study was the environmental concerns. The dependent variable was consumers' purchase intention of eco-products. While consumers' familiarity with this type of products, consciousness about these products, and their perceived sense of responsibility are considered as mediating variables between the environmental concerns and consumers' purchase intention.

6) Purwanti, (2019) entitled: **"Green Marketing: Strategy for Gaining Sustainable Competitive Advantage in Industry 4.0":** The aim of this study is to define the concept of green marketing and how it can be a source for the sustainable competitive advantage in the industrial revolution 4. Moreover, it provides ideas on how to deal with threats in business by using the concept of green marketing. The researchers gathered and analyzed data from relevant references, which became source for the problem analysis in this study. The study showed that green marketing definition changed through time, due to improvements and importance of the environmental sustainability and the main green marketing goal is to build strong, long, and profitable relationships with consumers and with stakeholders, to enhance the concept of environmentally responsible company. Moreover, green marketing can be window to gain a sustainable competitive advantage especially when there are opportunities and/or existence of pressure from both government and competitors. In the light of the results, the study recommended that due to

changing in the marketing in the available businesses and products, the organizations have to adapt new approaches in marketing in order to continue and have sustainable competitive advantage. Moreover, when the products have nearly the same price, quality and performance, then mostly the products with ecological characteristics will be purchased therefore the organizations have to think and consider the eco-products into its account.

The methodology used in this study was a systematic way of gathering information from different and related resources, thus these references became a source for the problem analysis.

7) Vaitone and Skackauskiene, (2019) entitled:**"Green marketing orientation: evolution, conceptualization and potential benefits":** The aim of this study is to analyze evolution, conceptualization and potential benefits of orientation toward green marketing, also providing the managers and the other researchers with an inclusive review of green marketing including the causes, dimensions and outcomes. The results of the study revealed that the marketing activities in the strategic, tactical, and operation levels can be considered as critical because they have direct impact on green marketing in all contexts like environmental, social and organizational context. Moreover, the overall business and the eco-system may be enhanced and improved due to improving in the strategic, tactical, and operations activities in green marketing field. Therefore, applying green marketing in the companies can lead to find new opportunities in the market. In the light of the results, the study recommended that the concept of green marketing should be engaged in all organizations' activities, such as strategic, tactical and operations, and any other activity that will create or deliver product or value to the consumers

in order to have minimum environmental damages and increasing the benefits whether it is social or commercial. The methodology used in this study was an inclusive way of reviewing and gathering information from relevant and different resources in order to have full and clear picture about the concept of green marketing, its dimensions, and outcomes. Moreover to discover green marketing impact on the overall business and eco-system, and to attract more opportunities in the market.

8) Cavusoglu et al. (2020) entitled: "**The Effect of Attitudes toward Green Behaviors on Green Image, Green Customer Satisfaction and Green Customer Loyalty**": the aim of this study is to examine the impact of consumers' attitudes towards the green behavior on "green image green customer satisfaction and green customer loyalty" and to find evaluation for the concepts of green marketing with relation to environmental issues and trends. The sample used for the study was 392 respondents out of 400 questionnaire spread to the consumers whom have been to green hotels in Turkey. This study revealed that attitudes towards the green behavior have a positive impact on the green image, and the green image has a positive impact on consumers' green satisfaction and then loyalty. Moreover, they have found that green consumer satisfaction significantly affect consumers green loyalty. In the light of the results, the green concept is critical to be implemented in organizations because it attracts more consumers and at the same time the organization itself can take advantage from the reduction in the annual costs paid for energy and water. Moreover, any organization should focus on improvement for its green products, thus they can provide and increase the green perceived value for the consumers. Furthermore, consumers' attitudes toward buying green products

are increasing therefore the sales will increase, thus the organizations should include the quantities and the quality of this type of products into its account, in order to make the consumers satisfied, because they can recommend organizations' products to other consumers.

The independent variable used in this study was attitudes toward green behaviors. The green consumer satisfaction and the green consumer loyalty were considered dependent variables. Moreover, "green image" is considered as a mediating variable between the attitudes toward green behaviors, and (green consumer satisfaction and the green consumer loyalty).

9) Liao et al. (2020) entitled:**"Examining the Moderating Effects of Green Marketing and Green Psychological Benefits on Customers' Green Attitude, Value and Purchase Intention":** The aim of this study is to examine the relationships between green customer value, the attitude of customers to green products, and the green intention in purchasing these products, after that, to investigate the moderating role for green marketing on green customer value, the attitude of customers to green products, and the green intention in purchasing these products, and the last thing the study examined is the effect of green psychological benefits as a moderator has on green customer value, the attitude of customers to green products, and the green intention in purchasing these products. The researchers used the survey method in order to collect the data from customers, where 319 responses were used for the analysis, and the respondents were customers who have one year experience at least in purchasing green products in Cambodia. This study revealed that green customer value has a positive effect on customers' attitude toward buying green products. Moreover, both customers

attitude toward buying green products and green customer value have a positive influence on intention of buying "green purchase intention". Furthermore, Green psychological benefits and green marketing both have a moderating role in the relation between green customer value, the attitude of customers to green products, and the green intention in purchasing these products. In the light of the results, the study recommended that organizations have to take into consideration these concepts to enhance their social responsibility especially towards environmental issues and this can be reflected positively on influencing the attitude and green customer value (perceived value) on the behavioral intention of the customers. In addition, the organizations may increase its focus on the communication with customers about the environment and its related trending issues, thus this will help in eliciting customer environmental concerns and as a result the attitude toward purchasing green products will be increased and then increase their intention, due to the increase in customers' worry about the environment.

In this study the independent variables used were green customer value and customers' attitudes toward green products. The dependent variable used was the customers' "green purchase intention". While both green marketing and green psychological benefits were considered moderating variables.

10) Alamsyah et al. (2021) entitled: **"Green Awareness through Environmental Knowledge and Perceived Quality":** the aim of this study is to examine the role of consumers' green product awareness through "eco-labels, knowledge, and perceived quality". Moreover, to examine the function of the information about the consumers' awareness, in any decision made by marketing managers. The sample used for this study was 200 consumers who have been using green products and

their answers were collected by questionnaire. The study showed that there is a positive relationship between green products eco-labels and increasing the knowledge and awareness about this type of products. Furthermore, there is a positive relation between the green perceived quality and green product awareness. As a result, the eco-labels, knowledge and perceived quality, enhance consumers' green product awareness and encourage their behavior to become greener. In the light of the results, the researchers recommend that companies should implement green marketing strategies in order to enhance and improve green knowledge, because this will lead to enhance the green behavior of the consumers. Moreover, companies should direct their focus towards green products with their quality and value provided to the consumers, in order to make them satisfied and then loyal.

This study considered the eco-labels independent variable, and consumers' green awareness as a dependent variable. While the "environmental knowledge and perceived quality" mediating variables in the relation between the dependent and independent variable.

11) Amin and Dhewi, (2021) entitled: "**How Green Perceived Value and Green Perceived Risk Influence Customer Loyalty through Customer Satisfaction**": The aim of this study is examining the impact of "green perceived value and green perceived risk on customer loyalty through customer satisfaction". The sample used in this study was equal to 104 respondents by the questionnaire. This study revealed that firstly the green perceived value has a critical role in enhancing customers satisfaction, and after that, the customers satisfaction positively influence the customer loyalty, thus green perceived value positively influence the customer loyalty. Moreover, green perceived value significantly influence the customers'

loyalty through the satisfaction. In the light of the results, the study recommended that the companies should focus on enhancing their green products, thus the green value provided to the customers will be increased, and as a result, they will be satisfied because their own expectation has been met, or the performance even exceed their expectations, then this will be reflected on their loyalty positively.

This study considered the "green perceived value and green perceived risk" independent variables and the consumers' loyalty as a dependent variable. While the customer satisfaction as a mediating variable in the relation between the dependent and independent variables.

12) Mensah, (2021) entitled: **"Green Product awareness effect on green purchase intentions of university students': an emerging market's perspective":** the aim of this study is to examine if the awareness availability, quality, and value can affect the intentions of the students toward buying green products. Moreover, to determine how these variables can predict the intentions of the students toward buying green product. Sample used for this study was from university students and they are equal to 478 students, and the data was collected by questionnaire. The study showed that the highest impact was for green perceived quality, while the lowest impact was for green perceived availability. Moreover, awareness can be considered as critical element in enhancing green purchase intentions. In the light of the results, the study recommended that governments, managers and marketers should enhance the green products quality and improve consumes' knowledge about green products and its benefits by focusing on promotion.

This study considered green perceived quality, green product awareness, green perceived availability, green perceived quality, and green perceived value independent variables. While the green purchase intention as a dependent variable.

13) Shukla, (2021) entitled:**"Exploration of Green Marketing: A Shift from Traditional Marketing to Green Marketing for Sustainable Environment":** The aim of this study is to explore the relationship between green marketing and sustainable environment, also to determine the factors that enhance the sustainability, and to examine the level of awareness of customers about green practices and products. The sample used in this study was 100 consumers, in which the information was collected by questionnaire. The results showed that there is a positive relationship between the green marketing and the environmental sustainability also both green products and environmental sustainability are related to each other with respect to green marketing. In the light of the results, the study recommended that companies should increase their concentration to improve its sustainability orientation, because customers will increase their demand on eco-products. Nowadays, awareness of green products' purchasing is increased and as a result, the awareness will be reflected on as a purchasing intention of the eco-products. Therefore, companies have to satisfy these needs to fulfill this gap that may occur.

    This study considered the green marketing as an independent variable with four sub-variables including: "green product, green packaging, green promotion, and green distribution". While the environmental sustainability considered as a dependent variable.

14) Siyal et al. (2021) entitled: **"Factors Influencing Green Purchasing Intention: Moderating Role of Green Brand Knowledge"**: The aim of this study is to examine the moderating role of the green brand knowledge at the relation between positioning of the green brand, consumers' attitude toward green brand,

environmental concerns, and the green purchase intentions. The sample used in this study was 396 respondents by questionnaire, out of total 500 questionnaires distributed to the respondents.The results showed that there is a direct positive relation between positioning of the green brand, consumers' attitudes toward green brand and environmental concerns, with the green purchase intentions. Furthermore, there is a significant role for the green brand knowledge in moderating the relation between consumers' attitudes toward green brand, environmental concerns and the green purchase intentions. In the light of the results, the study recommended that enhancing consumers' knowledge is crucial thing and increasing their environmental concerns in order to improve their intentions toward buying green products.

According to keller (1993), the brand knowledge includes both brand awareness and brand image, and the reason behind choosing the awareness–not the knowledge-as a moderator is that; in Jordan, yet there is no brand exists in order to make interactions with it and receive the perception from the consumers –according to the researcher knowledge-.

15) Riptiono, (2022) entitled: "**The Effects of Consumption Value, Environmental Concerns, and Consumer Attitudes towards Consumer Purchase Intentions of Electric Cars":** the aim of this study is to examine the effect of "consumption value, environmental concerns, and consumer attitudes towards consumer purchase intentions of electric cars" while considering the cars as products in the research. The sample used in this study was 220 respondents, and the data was collected from them though questionnaire. The study showed that environmental concerns can be considered as predictor for consumers' attitudes toward buying green products.

Furthermore, consumers' attitudes toward buying green products are the engine for enhancing consumers' intentions. In the light of the results, the managers and marketers have to improve organizations' strategies in order to improve the consumers' knowledge regarding the green products and the perceived value from such products. Moreover, increasing consumers' environmental concerns is critical issue, because these concerns will have great positive effect on consumers' attitudes toward buying green products.

This study considered the cars as the product to be included in the research, and took the "consumption value, environmental concerns, and consumer attitudes" independent variables. While the green purchase intentions as a dependent variable.

2.3 What Distinguishes this Study from Previous Studies?

Referring to the theoretical framework and the previous studies that are related to this study with the variables that are included in, and based on that, the following points can be considered as the contribution of this study, and shows what distinguishes this study from previous studies:

1) This study can be considered as the first study that combines the three variables together (green marketing, consumers' attitudes towards buying green buildings and green product awareness), and examine the relation exists between them, referring that most of the previous studies have included only two of the variables– according to the researcher knowledge-.
2) The field that has been included in this study was the construction field, within the civil engineering area in Jordan, and the companies linked with the study are the contracting/construction companies.

3) The construction field and especially the green building field in the real estate market in Jordan, represent an unfilled area to implement the study, since the study combines both the green marketing field and the green construction field.
4) The variables included as sub-variables in the green marketing variable (green perceived value, green products (green buildings), and environmental concerns) are considered as new combination of sub-variables, in which they do not exist as one category under the green marketing variable in the previous studies –according to the researcher knowledge-.
5) This study can be considered as the first study that includes: the green marketing including (green perceived value, green products (green buildings), and environmental concerns) as an independent variable; consumers' attitudes towards buying green buildings as a dependent variable; and green product awareness as a moderating variable -according to the researcher knowledge-.

Chapter THREE
Methodology and Procedures

This chapter represents the methodology and the procedures used to achieve the objectives of this study, study methodology, the selected sample and its characteristics, steps to prepare and develop study tool, its consistency extent, the carried procedures for the study and the statistical methods and process that the researcher used.

3.1 Study Methodology

The methodology definition is: "an effective method of organizing a set of diverse and purposeful ideas to reveal the reality of this phenomenon" (Anderson and Pool, 2001). In which there are two methods:

The inductive method: According to Sekaran and Bougie (2010) the inductive method can be defined as the process, at which we observe a certain phenomena, then reaching to the general and wide conclusions.

The deductive approach: In this approach, the results are analyzed, interpreted, and drawn based on sample from the society, in order to reach to decisions that are relevant to the society. This approach is relied on interpreting the problems or situations by the circumstances, dimensions and then describing the relationship between them, in order to have integrated, accurate, and clear picture for the phenomena. Moreover, in this approach analyzing, measuring, and interpreting data also exists, aims at reaching exact description for the problem or situation, after that, the solution will be provided in order to be implemented. The deductive approach is the approach that we can reach to a reasonable conclusion for a specified case, by applying a general theory (Sekaran and Bougie, 2010).

The study considered as causal study and it aims at examining the impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan. Moreover, to examine the moderating role of green product awareness on the relation between green marketing and the consumers' attitudes toward buying green buildings in Jordan. The starting point was by reviewing the literature, developing questionnaire- in which was used for gathering data- , after that the data was coded and analyzed by using SPSS- V20 and AMOS- V23. Then face validity, construct validity, and reliability are tested and checked. Moreover, hierarchical multiple regression was used for testing the hypotheses.

3.2 Study Population and Sample

- Study Population:

The study population includes all consumers in Amman who might be interested in buying green buildings. Amman was chosen because its population can be considered as intense and diverse population.

- Study Sample:

Referring to Sekaran (2010) and to the random table by Krejcie and Morgan (1970) a representative sample to its society was chosen for this study. A convenience sample has been used in order to collect data from the respondents. Considering that this technique for gathering data can be considered low-cost and comfortably technique (Diffley et al., 2011). Moreover, according to Hair et al. (2010), in order to achieve the stability in the statistical analysis the sample size that the researcher planned to have is equal to 400 consumers. The researcher distributed questionnaire online but

unfortunately (368) out of (400) questionnaires have been returned back to the researcher, while the valid for statistical analysis were (357) questionnaire.

3.3 Data Collection Methods

In order to fulfill the purpose of the study, two sources of data were used; secondary sources and primary sources:

- Secondary Data: This data was collected from scientific journals, books, published researches, literature, articles, and the Internet.
- Primary Data: This data was collected especially for the purpose of this study, through a questionnaire developed for this study, in which it is appropriate for the study and its title and was built to achieve this purpose.

3.4 Study Instrument

The main instrument developed and used by the researcher in this study was the questionnaire, and the developing process for this questionnaire is to make it compatible with study variables by reviewing previous studies, that are related in the subject with this study subject. The questionnaire consisted of four parts:

1) Part one: sample characteristics questions and are represented by (gender, age, marital status, level of education, experience, family income, and number of family members).
2) Part two: questions related to the independent variable (green marketing) represented by (green perceived value, green products (green buildings), and environmental concerns).
3) Part three: questions related to the dependent variable (consumers' attitudes toward buying green buildings in Jordan).
4) Part four: questions related to the moderating variable (green product awareness).

3.5 Statistical Analysis

After collecting the data, the researcher coded them in order to be transferred to "Statistical Package for Social Sciences" (SPSS-V20) and to "Analysis of Moment Structures" (AMOS-V23). Furthermore, (0.05) was the significance level taken in testing the hypotheses of the study. The following tools have been used in order to describe and diagnose the variables of the study, and to meet the objectives of the study:

Frequency: to review the study sample answers.

Percentage: to show the proportion of answers for a particular variant of the total answers.

Mean: to display the average answer to a particular variable.

Standard Deviation: to show the degree of dispersion of the answer from its mean.

Simple Regression: in order to examine the impact of study independent sub-variables on the dependent variable.

Multiple Regressions: in order to allocate the best reassign model for the effect of independent variables on the dependent variable.

Hierarchical Regression: to show if the variables of interest explain a statistically significant amount of variance in the Dependent Variable (DV) after accounting for all other variables.

F Test: in order to verify the significance of the relationship between the variables of the study.

T Test: in order to find significance difference between the means of the variables of the study.

Variance Inflation Factor (VIF): is the quotient of the variance in a model with multiple terms by the variance of a model with one term alone. Moreover, VIF used to detect if there is a multi-co linearity problem.

AMOS software and structural equation modeling (EFA, CFA and model fit).

Exploratory Factor Analysis (EFA) used to test the nature of relation between the independent variable (IV) and the dependent variable (DV).

Confirmatory Factor Analysis (CFA) uses the path analysis for testing the study hypotheses referring to related relevant measurements from previous studies for both the independent variable and the dependent variable.

The following table demonstrates the sample characteristics of the respondents who have answered the questionnaire:

Table 3.1: Describing Sample Characteristics

Sample Characteristics	Category	Frequency	Percent %
Gender	Male	216	60.5
	Female	141	39.5
	Total	**357**	**100.0**
Age (Years)	Less than 30	189	52.9
	30 to less than 40	63	17.6
	40 to 50	64	17.9
	Above 50	41	11.5
	Total	**357**	**100.0**
Marital Status	Single	200	56.0
	Married	155	43.4
	Divorced	2	0.6
	Widow	0	0
	Total	**357**	**100.0**

Sample Characteristics	Category	Frequency	Percent %
Education	Diploma	67	18.8
	Bachelor	218	61.1
	High Diploma	22	6.2
	Master's Degree	40	11.2
	Doctorate	10	2.8
	Total	**357**	**100.0**
Experience (Years)	Less than 5	179	50.1
	5 to less than 10	54	15.1
	10 to 15	44	12.3
	Above 15	80	22.4
	Total	**357**	**100.0**
Family Income (Jordanian Dinar)	less than 1000	100	28.0
	1000 to less than 1500	127	35.6
	1500 to 2000	52	14.6
	More than 2000	78	21.8
	Total	**357**	**100.0**
Number of Family Members	2	25	7.0
	3	47	13.2
	4	132	37.0
	Other	153	42.9
	Total	**357**	**100.0**

Table 3.1; represents the characteristics of the sample included in this study in which these characteristics include: gender, age (years), marital status, level of education, experience (years), family income (Jordanian Dinar), and number of family members.

According to that, the number of males in the sample is equal to (216) with a percentage equals to (60.5%). On the other hand, the number of females in the sample is equal to (141), with a percentage equals to (39.5%).

The table shows that the number of consumers in which their age is less than 30 years old is equal to (189) with a percentage equals to (52.9%), while (63) of the consumers are from 30 to less than 40 years old, which represents (17.6%).

Furthermore, (64) of the consumers are from 40 to 50 years old with a percentage equals to (17.9%). On the other hand, the number of consumers whom are above 50 years old is equal to (41) with a percentage equals to (11.5%). Thus, the majority of the sample is within less than 30 years old category, while both categories: 30 to less than 40 years old and 40 to 50 years old have high similarity in percentages. On the other hand, the minority is between the percentages goes for the above 50 category.

The table above represents that (200) out of (357) consumers, with a percentage equals to (56.0%) are single, while (155) consumers are married with a percentage equals to (43.4%). On the other hand, only (2) consumers are divorced with a percentage equals to (0.6%). Therefore, the two major categories are single and married, in which these two categories include the majority of the sample.

It can be noticed that consumers who hold diploma degree are equal to (67) consumers, with a percentage equals to (18.8%), while (218) consumers hold bachelor degree with a percentage equals to (61.1%), also (22) consumers with a percentage equals to (6.2%) hold the high diploma degree. Furthermore, (40) consumers with a percentage equals to (11.2%) hold masters degree, while only (10) consumers with a percentage equals to (2.8%) hold Doctorate degree. Thus, more than half of the consumers in the sample are from bachelor degree holders.

It is obvious from the above table that (179) consumers have experience less than 5 years, and their percentage is equal to (50.1%), while (54) consumers with a percentage equals to (15.1%) have experience ranged from 5 years to less than 10 years. Besides that, (44) consumers with a percentage equals to (12.3%), their experience ranged from 10 years to 15 years. On the other hand, (80) of the consumers in the sample have above 15 years experience, representing (22.4%).

It is clear that the family income is less than (1000) JD for (100) consumers, and representing a percentage equals to (28.0%), while the family income ranging from (1000) JD to less than (1500) JD for (127) consumers, and representing a percentage equals to (35.6%), also (52) of the consumers representing (14.6%), their family income is between (1500) JD to (2000) JD. On the other hand, (78) of the consumers, representing (21.8%), their family income is above (2000) JD.

From the above table, the number of family members equals to (2) members for (25) consumers with (7.0%), also the number of family members equals to (3) members for (47) consumers representing a percentage equals to (13.2%), while the number of family members equals to (4) members for (132) consumers representing a percentage equals to (37.0%). On the other hand, (153) consumers choose "other" choice, and their percentage is equals to (42.9%).

3.6 Validity and Reliability

Face validity: Measuring tool appears to measure what is actually supposed to be measured. The shape of the tool and the appearance of the questions are proportional to their purpose of their design. The researcher reviewed the questionnaire according to academic professionals from different universities and from the field (the construction field), then took their recommendations and opinions in order to enhance, enrich, and level up the study tool.

Construct Validity: According to Linn and Gronlund (2000), validity is the degree to which a test measures what it claims to measures, and shows the degree of correlation of each item with the total degree of its axis. For the purpose of evaluating construct validity, the researcher followed the path by reviewing the past relevant literature, and previous studies in order to build strong foundations for the study as whole. Moreover,

both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were applied.

3.6.1 Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) was performed in order to evaluate the validity of the independent variable (green marketing), dependent variable (consumers' attitudes toward buying green buildings in Jordan), and the moderating variable (green product awareness). According to Laher (2010), factor loading represents "the amount of variation an item contributes to the factors' total variation", in which should not be below (40%). The most preferable case; is that the items of questionnaire load on one factor, while there are cases that the item load on more than one factor, and this case requires the researcher to chose the factor that has higher loading instead of any other factor. According to Laher (2010), if an Eigen value for a specific factor equals to less than (1), that factor should be deleted and ending the process of extracting more factors. The factor explained variance is an average amount of total factors variance per item. When the value is high, then explained variance can be positively recognized. Kaiser, Meyer and Olkin, (KMO) is a test used in order to identify adequacy of the data used for the purpose of analysis, KMO values ranges between (0) to (1), according to Hair et al. (2010), if the value of KMO equals to (0.5) or above, this can represent that the data used is adequate and sufficient. Barlett's test used in order to examine that the variables "Correlation Matrix" is a zero matrix (identify matrix). Furthermore, this test is provided with value representing type one error ($\alpha \leq 0.05$). Therefore, if Sig value is less than or equals to (0.05), then this means a positive meaning in which the data used was convenient for the analysis purpose, as representing different sampling for the study population.

Table 3.2: Factor Loadings for Study Variables Items

Code	Items	Factor Loading for Independent Variable (Green Marketing)			Dependent variable (Consumers' attitudes toward buying green building)	Moderating Variable (Green Product Awareness)
		Green Perceived Value	Green Products (Green Buildings)	Environmental Concerns		
1	Green buildings have higher in-door quality of living than the conventional buildings	0.853				
2	Green buildings have higher construction standards than the conventional buildings	0.896				
3	Buying green building will be an economical choice with the long-term benefits	0.863				
4	Green buildings provide higher value than the conventional buildings	0.861				
5	Green building provide more environmental benefits than conventional buildings	0.781				
6	Green buildings help to meet consumers green needs more than conventional buildings		0.804			
7	Green buildings enhance occupants to perform their activities better		0.854			
8	Green buildings enhance occupants physical health		0.92			
9	Green buildings enhance occupants psychological health		0.919			

Code	Items	Factor Loading for Independent Variable (Green Marketing)			Dependent variable (Consumers' attitudes toward buying green building)	Moderating Variable (Green Product Awareness)
		Green Perceived Value	Green Products (Green Buildings)	Environmental Concerns		
10	Green buildings ensure the presence of green features within the structure		0.862			
11	If people continue to perform their activities as the current pace, the environment will be severely damaged			0.679		
12	If I have the option to buy a building, I will buy green building			0.851		
13	I will buy a green building instead of conventional building just because its benefits to the environment			0.877		
14	My activities are considered environmentally friendly activities			0.810		
15	I think how to improve our environment			0.822		
16	People have the right to adjust nature in order to meet their own needs			0.515		
17	I believe that the environment has an intrinsic ability to counteract the impact of human activities			0.503		
18	I think that there will be a real dependence on green buildings in the near future				0.820	
19	I have planned to buy green building				0.668	
20	I think that buying				0.868	

Code	Items	Factor Loading for Independent Variable (Green Marketing)			Dependent variable (Consumers' attitudes toward buying green building)	Moderating Variable (Green Product Awareness)
		Green Perceived Value	Green Products (Green Buildings)	Environmental Concerns		
	green building will be a great idea					
21	I will put extra effort in order to buy green building				0.885	
22	I have an experience with a green buildings				0.617	
23	If I have a positive idea about green buildings, I will encourage my acquaintances to buy such buildings				0.785	
24	I have heard about green buildings					0.855
25	I have the knowledge about the green buildings					0.813
26	I know the differences between green buildings and conventional buildings					0.867
27	I know the importance of green buildings for the occupants					0.932
28	I know the importance of green buildings for the environment					0.883
29	I prefer to live in green building instead of conventional building					0.807

From table 3.2, the lowest loading value is equal to (0.503) for No. 17 (code 17) and this value is for the environmental concerns, while the highest value is equal to (0.932) for No.27 (code 27), and this value is for the green product awareness. As the

factor loadings can be considered as a reflection for the convergent validity; discussing that any items' factor loading is equal to (0.4) or above is considered as convergent. As a result for that, the convergent validity is achieved; because the lowest loading value (0.503) is more than (0.4) thus the condition has been met.

From the table above, the lowest loading value for the dependent variable (consumers' attitudes toward buying green buildings in Jordan) is equal to (0.617) for No. 22 (code 22), while the highest value is equal to (0.885) for No.21 (code 21). As the factor loadings can be considered as a reflection for the convergent validity; discussing that any items' factor loading is equal to 0.4 or above is considered as convergent. As a result for that, the convergent validity is achieved; because the lowest loading value (0.617) is more than (0.4) thus the condition has been met.

We can notice from the table above that the lowest loading value for the moderating variable (green product awareness) is equal to (0.807) for No. 29 (code 29), while the highest value is equal to (0.932) for No.27 (code 27). As the factor loadings can be considered as a reflection for the convergent validity; discussing that any items' factor loading is equal to 0.4 or above is considered as convergent. As a result for that, the convergent validity is achieved; because the lowest loading value (0.807) is more than (0.4) thus the condition has been met.

Table 3.3: EFA Analysis for Independent Variable (Green Marketing)

Item	KMO	Bartlett's Test of Sphericity – Chi-Square	DF	Explained Variance	Sig.
1	0.838	1171.856	10	72.531	0.00
2					
3					
4					
5					
6	0.852	1412.123	10	76.188	0.00
7					
8					
9					
10					
11	0.783	1378.05	21	73.921	0.00
12					
13					
14					
15					
16					
17					
Total	0.908	5229.79	136	71.99	0.00

From the table above, it is clear that KMO for the independent variable (green marketing) is equal to (0.908), thus it is between (0) and (1), and above (0.5), which represent an acceptable, adequate and sufficient data for the purpose of analysis. Moreover, the Bartlett's Test of Sphericity – Chi-Square equals to (5229.79) with sig. equals to (0.00).

From the table above, we can notice that KMO for the green perceived value is equal to (0.838), in which this value is between (0) and (1), and above (0.5), which represent an acceptable, adequate and sufficient data for the purpose of analysis. Moreover, the Bartlett's Test of Sphericity – Chi-Square equals to (1171.856) with sig. equals to (0.00).

From the table above, we can notice that KMO for the green products (green buildings) is equal to (0.852), in which this value is between (0) and (1), and above (0.5), which represent an acceptable, adequate and sufficient data for the purpose of analysis. Moreover, the Bartlett's Test of Sphericity – Chi-Square equals to (1412.123) with sig. equals to (0.00).

From the table above, we can notice that KMO for the environmental concerns is equal to (0.783), in which this value is between (0) and (1), and above (0.5), which represent an acceptable, adequate and sufficient data for the purpose of analysis. Moreover, the Bartlett's Test of Sphericity – Chi-Square equals to (1378.05) with sig. equals to (0.00).

Table 3.3 shows that there is existence of significant probabilities between the factors used in correlation matrix, and this can be referred to that the probabilities are significant at ($p < 0.05$) which proof that there is a significant relation between the factors that are included in the analysis.

Table 3.4 EFA Analysis for the Dependent Variable (Consumers' Attitudes toward Buying Green Buildings in Jordan)

Item	KMO	Bartlett's Test of Sphericity – Chi-Square	Df	Explained Variance	Sig.
18	0.813	1232.39	15	79.238	0.00
19					
20					
21					
22					
23					

From the table above, it is obvious that KMO for the dependent variable (consumers' attitudes toward buying green buildings in Jordan) is equal to (0.813). As a

result, it is between (0) and (1), and above (0.5), which means that data is considered as adequate and sufficient. Moreover, the Bartlett's Test of Sphericity – Chi-Square equals to (1232.39) with sig. equals to (0.00).

Table 3.4 shows that there is existence of significant probabilities between the factors used in correlation matrix, and this can be referred to that the probabilities are significant at ($p < 0.05$) which proof that there is a significant relation between the factors that are included in the analysis.

Table 3.5 EFA Analysis for the Moderating Variable (Green Product Awareness)

Item	KMO	Bartlett's Test of Sphericity – Chi-Square	Df	Explained Variance	Sig.
24	0.892	1751.817	15	74.033	0.00
25					
26					
27					
28					
29					

From the table above, it is obvious that KMO for the moderating variable (green product awareness) is equal to (0.892). As a result, it is between (0) and (1) and above (0.5), which means that data is considered as adequate and sufficient. Moreover, the Bartlett's Test of Sphericity – Chi-Square equals to (1751.817) with sig. equals to (0.00).

Table 3.5 shows that there is existence of significant probabilities between the factors used in correlation matrix, and this can be referred to that the probabilities are significant at ($p < 0.05$) which proof that there is a significant relation between the factors that are included in the analysis.

3.6.2 Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis was performed by using software that provides for each item of the questionnaire both: "standardized and un-standardized" loading. There are mainly six indicators used to make a decision about the goodness of model fit, and these indicators are: chi square test (χ^2), the Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), the Normed Fit Index (NFI), the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximate (RMSEA).

Accordingly, chi square test (χ^2) uses the probability in order to tell if the goodness of fit is accepted or rejected, and the desired situation is when the probability (p) of χ^2 is greater than 0.05, in which it means that there is no statistical difference between the actual (real) and the theoretical measured model. However, χ^2 is affected by the sample size therefore; researchers infrequently reach to the desired value for chi square test. While when it comes to RMSEA indicator, less value of result, gives positive indication and more desirable situation. Thus, when the value is less than (0.08), it can be considered as "fair", though there are other suggestions to be less than (0.05) instead of (0.08) in order to give better indication. For the comparative fit index (CFI) and the goodness of fit index (GFI), the range of the value is between (0) and (1), while a "good" fitting takes place when the value is "around (0.9) and higher".

The result pertain all variables included in the study; independent variable (green marketing), dependent variable (consumers' attitudes toward buying green buildings in Jordan), and the moderating variable (green product awareness).

Table 3.6 Matrix of Correlation Between Study Variables

Dimensions		GPV	GP	EC	Independent	Dependent	Moderating
GPV	**Pearson Correlation**	1	.781**	.713**	.903**	.682**	.689**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	357	357	357	357	357	357
GP	**Pearson Correlation**	.781**	1	.746**	.917**	.711**	.670**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	357	357	357	357	357	357
EC	**Pearson Correlation**	.713**	.746**	1	.914**	.789**	.675**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	357	357	357	357	357	357
Independent	**Pearson Correlation**	.903**	.917**	.914**	1	.803**	.744**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	357	357	357	357	357	357
Dependent	**Pearson Correlation**	.682**	.711**	.789**	.803**	1	.787**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	357	357	357	357	357	357
Moderating	**Pearson Correlation**	.689**	.670**	.675**	.744**	.787**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	357	357	357	357	357	357

**. Correlation is significant at the 0.01 level (2-tailed).

AMOS V.23 has been used in order to calculate the appropriate indicators related to the independent variable

Table 3.7 Model Fit Indicators of Study Variables

Indicator	Value
RMSEA	0.077
RMR	0.049
$\chi 2$	360.034
DF	116
SIG.	0.00
GFI	0.900
AGFI	0.860
TLI	0.924
CFI	0.935
NFI	0.908

From the above table, the value of $\chi 2$ equals to (360.034), at Sig equals to (0.00) and Degrees of Freedom (DF) equals to (116). According to Arbuckle (2014), the value (5) is the maximum value that the minimum variance should reach, while the value of minimum variance can be found by dividing χ^2 over the degree of freedom (DF)

$$\textbf{Value of Minimum Variance} = \frac{\chi 2}{DF} = \frac{360.034}{116} = 3.1037$$

Therefore, the value (3.1037) is less than (5), thus this is a reflection for the "good" level of fitting.

Also, the table shows that the value of GFI is equal to (0.900) which is in the range of acceptable values (between 0 and 1), and specifically in the range of "around 0.9 and higher". Moreover, AGFI value is acceptable because it is equal to (0.860) thus it is also between (0) and (1). Furthermore, NFI value equals to (0.908), CFI value equals to (0.935), and TLI value equals to (0.924), thus their values are close to the value of (1). Moreover, RMSEA value equals to (0.077) in which it is close to (0). All these indicators provide conformity and validity of the items about the independent variable and its sub-variables. Furthermore, figure (3.1) shows the results of regression weights for independent variable, and figure (3.2) shows the results of regression weights and coefficients of determinations for the study model

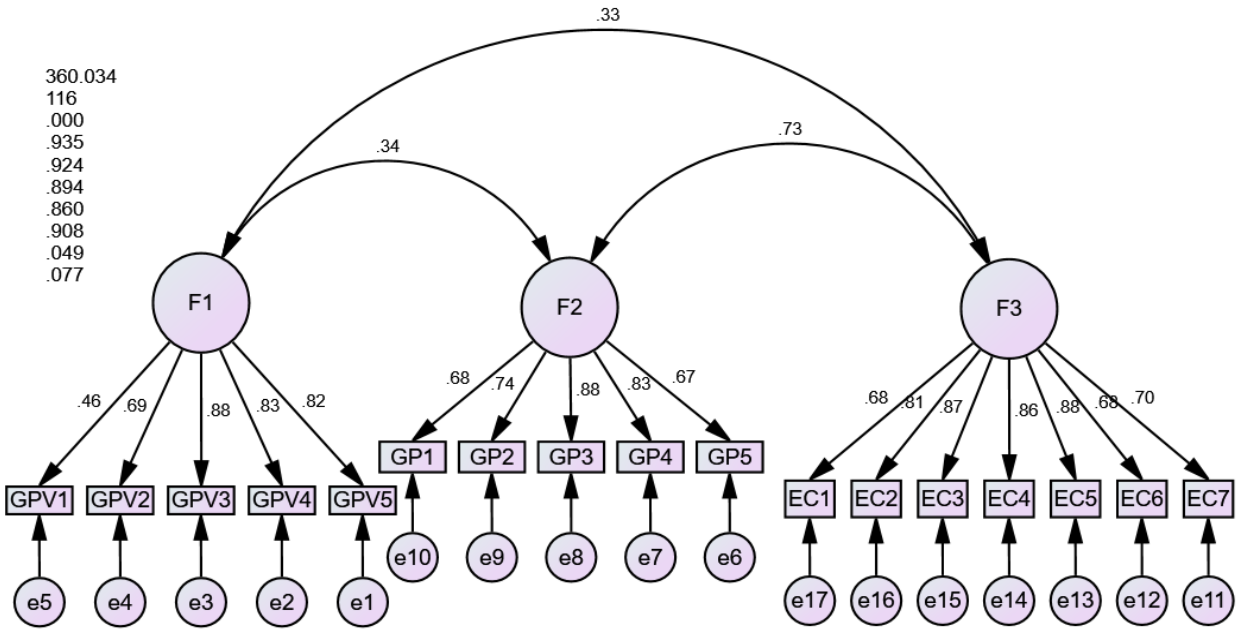

Figure 3.1: Results of Regression Weights for Independent Variable

AMOS V.23 has been used in order to calculate the appropriate indicators related to the study model, table (3.8) shows the results of the analysis:

Table (3.8): Model Fit Indicators

Indicator	Value
RMSEA	0.071
RMR	0.062
$\chi 2$	1380.189
DF	370
SIG	0.00
GFI	0.924
AGFI	0.907
TLI	0.914
CFI	0.902
NFI	0.921

From the above table, the value of $\chi 2$ equals to (1380.189), at Sig equals to (0.00) and Degrees of Freedom (DF) equals to (370). According to Arbuckle (2014), the value (5) is the maximum value that the minimum variance should reach, while the value of minimum variance can be found by dividing χ^2 over the degree of freedom (DF)

$$\textbf{Value of Minimum Variance} = \frac{\chi 2}{DF} = \frac{1380.189}{370} = 3.7302$$

Therefore, the value (3.7302) is less than (5), thus this is a reflection for the "good" level of fitting.

Also, the table shows that the value of GFI is equal to (0.924) which is in the range of acceptable values (between 0 and 1), and specifically in the range of "around 0.9 and higher". Moreover, AGFI value is acceptable because it is equal to (0.907) thus it is also between 0 and 1. Furthermore, NFI value equals to (0.921), CFI value equals to (0.902), and TLI value equals to (0.914), thus their values are close to the value of (1). Moreover, RMSEA value equals to (0.071) in which it is close to (0). All these indicators provide conformity and validity of the items for study model as whole.

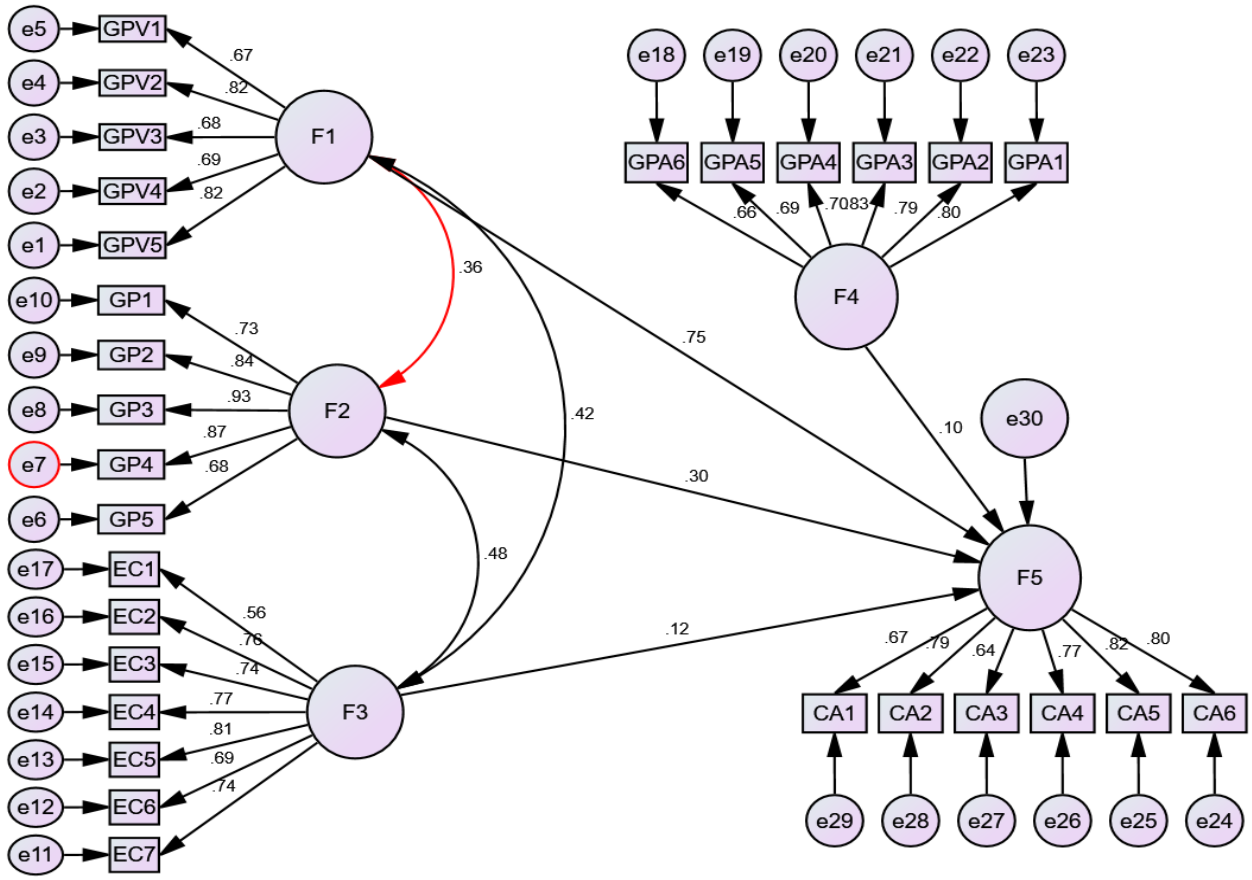

Figure 3.2: The Results of Regression Weights and Coefficients of Determinations for the Study Model

3.6.3 Reliability

By calculating the value of Cronbach Alpha coefficient, if its value is more than (0.70), then this can be considered as verification for the internal consistency, and this value (cut-off-point) is suitable and appropriate for the administrative science (Hair et al., 2010). When the value of the coefficient reaches 1, (100%), this means that the items in the tool used for the study has the highest internal consistency degree (Sekaran and Bougie, 2010).

Table 3.9: Reliability Test (Cronbach's Alpha) for all Variables

Variables	No. of Items	Cronbach's Alpha
Green Perceived Value	5	0.850
Green Products (Green Buildings)	5	0.902
Environmental Concerns	7	0.880
Independent (Green Marketing)	**3 Sub-variables**	**0.897**
Dependent (Consumers' Attitudes toward Buying Green Buildings in Jordan)	6	0.885
Moderating (Green Products Awareness)	6	0.884

From the table above, the results of reliability test (Cronbach's Alpha), the minimum value is equal to (0.850) for the green perceived value, while the maximum value is equal to (0.902) for the green products (green buildings). Therefore, there is a relatively high reliability, because the minimum value obtained from the test is equal to (0.850) which is more than (0.7) taking into considerations that the highest value for the coefficient is (1).

Chapter FOUR

Study Results and Hypotheses Test

This study aims at examining the impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan. Moreover, to examine the moderating role of green product awareness on the relation between green marketing and the consumers' attitudes toward buying green buildings in Jordan. Thus, questions and study hypotheses were developed in order to achieve the goal of the study.

This chapter is divided into two parts; the first part is about the descriptive statistics for the study questions, while the second one is about testing the hypotheses that were developed for the study.

4.1 Analyzing the Green Marketing

In order to determine the class interval in this study, Fruned equation was used (Fruned, 1982).

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

$$\textbf{Class Interval} = \frac{\textbf{Maximum Class} - \textbf{Minimum Class}}{\textbf{Number of levels}} = \frac{5-1}{3} = 1.33$$

Thus the lowest level equals to (1), therefore, the lowest range starts from (1) to (2.33), the moderate range starts from (2.34) to (3.67), while the highest range starts from (3.68) to (5).

Table 4.1 Means for sub-Variables of the Independent Variable

No.	Sub-Variables	Mean	Level	Rank
1	Green Perceived Value	3.68	High	2
2	Green Products (Green Buildings)	3.71	High	1
3	Environmental Concerns	3.45	Moderate	3
Green Marketing		**3.61**	**Moderate**	

Means description (1 – 2.33 low), (2.34 – 3.67 moderate), (3.68 – 5 high)

From table 4.1, the mean for each sub-variable in the independent variable (green marketing) is represented, in which the highest value is referred to green products (green buildings) and equals to (3.71), while the lowest value is referred to environmental concerns and equals to (3.45).

4.1.1 Analysis of Green Perceived Value Items

Table 4.2: Mean, Standard Deviation, t-Value, sig for Green Perceived Value

No.	Item	Mean	S.D.	t-Value	Sig	Level	Rank
1	Green buildings have higher in-door quality of living than the conventional buildings	3.50	1.08	8.744	0.00	Moderate	5
2	Green buildings have higher construction standards than the conventional buildings	3.57	1.12	9.625	0.00	Moderate	4
3	Buying green building will be an economical choice with the long-term benefits	3.75	1.06	13.494	0.00	High	2
4	Green buildings provide higher value than the conventional buildings	3.61	1.05	11.011	0.00	Moderate	3
5	Green building provide more environmental benefits than conventional buildings	3.99	1.09	17.052	0.00	High	1
Green Perceived Value		**3.68**	**0.92**	**14.080**	**0.00**	**High**	

Means description (1 – 2.33 low), (2.34 – 3.67 moderate), (3.68 – 5 high), tabulated t value = 1.96

From the table above, the mean, standard deviation, t-Value and sig values are expressed, in which these values are related to the green perceived value variable. The highest mean is for item number 5 (code 5) and equals to (3.99), while the lowest value

was for the first item (code 1) and equals to (3.50). Therefore, the average mean for green perceived value equals to (3.68) which can be considered as high value (high level for green perceived value).

The table indicates the value of calculated t, this test has been performed to check that the means for the items are away from neutrality, (away from neutral answer, response rate which equals to 3). Therefore, the calculated t is more than tabulated t (1.96), thus this shows that the rated means for the items are away from neutrality (away from neutral answer). Moreover, the calculated t for each item is more than (1.96) thus we can conclude that samples answers are considered away from neutral answer.

4.1.2 Analysis of Green Products (Green Buildings) Items

Table 4.3: Mean, Standard Deviation, t-Value, sig for Green Products (Green Buildings)

No.	Item	Mean	S.D.	t-Value	Sig	Level	Rank
6	Green buildings help to meet consumers green needs more than conventional buildings	3.75	1.01	14.012	0.00	High	2
7	Green buildings enhance occupants to perform their activities better	3.54	1.00	10.126	0.00	Moderate	5
8	Green buildings enhance occupants physical health	3.68	1.13	11.445	0.00	High	4
9	Green buildings enhance occupants psychological health	3.74	1.09	12.827	0.00	High	3
10	Green buildings ensure the presence of green features within the structure	3.83	1.01	15.414	0.00	High	1
Green Products (Green Buildings)		**3.71**	**0.91**	**14.588**	**0.00**	**High**	

Means description (1 – 2.33 low), (2.34 – 3.67 moderate), (3.68 – 5 high), tabulated t value = 1.96

From the table above, the mean, standard deviation, t-Value and sig values are expressed, in which these values are related to the green products (green buildings) variable. The highest mean is for item number 10 (code 10) and equals to (3.83), while the lowest value was for the item number (code 7) and equals to (3.54). Therefore, the

average mean for green products (green buildings) equals to (3.71) which can be considered as high value, high level for green products (green buildings).

The table indicates the value of calculated t, this test has been performed to check that the means for the items are away from neutrality, (away from neutral answer, response rate which equals to 3). Therefore, the calculated t is more than tabulated t (1.96), thus this shows that the rated means for the items are away from neutrality (away from neutral answer). Moreover, the calculated t for each item is more than (1.96) thus we can conclude that samples answers are considered away from neutral answer.

4.1.3 Analysis of Environmental Concerns Items

Table 4.4 Mean, Standard Deviation, t-Value, sig for Environmental Concerns

No.	Item	Mean	S.D.	t-Value	Sig	Level	Rank
11	If people continue to perform their activities as the current pace, the environment will be severely damaged	4.06	1.15	17.312	0.00	High	1
12	If I have the option to buy a building, I will buy green building	3.66	1.05	11.848	0.00	Moderate	2
13	I will buy a green building instead of conventional building just because its benefits to the environment	3.52	1.11	8.905	0.00	Moderate	3
14	My activities are considered environmentally friendly activities	3.29	1.04	5.364	0.00	Moderate	5
15	I think how to improve our environment	3.51	1.05	9.092	0.00	Moderate	4
16	People have the right to adjust nature in order to meet their own needs	3.03	1.32	5.400	0.00	Moderate	7
17	I believe that the environment has an intrinsic ability to counteract the impact of human activities	3.09	1.16	6.415	0.00	Moderate	6
EC.		**3.45**	**0.81**	**10.494**	**0.00**	**Moderate**	

Means description (1 – 2.33 low), (2.34 – 3.67 moderate), (3.68 – 5 high), tabulated t value = 1.96

From the table above, the mean, standard deviation, t-Value and sig values are expressed, in which these values are related to the environmental concerns variable. The

highest mean is for item number 11 (code 11) and equals to (4.06), while the lowest value was for the item number 16 (code 16) and equals to (3.03). Therefore, the average mean for environmental concerns equals to (3.45) which can be considered as moderate value, moderate level for environmental concerns.

The table indicates the value of calculated t, this test has been performed to check that the means for the items are away from neutrality, (away from neutral answer, response rate which equals to 3). Therefore, the calculated t is more than tabulated t (1.96), thus this shows that the rated means for the items are away from neutrality (away from neutral answer). Moreover, the calculated t for each item is more than (1.96) thus we can conclude that samples answers are considered away from neutral answer.

4.2 Analyzing the Dependent Variable Items (Consumers' Attitudes toward Buying Green Buildings in Jordan)

Table 4.5: Mean, Standard Deviation, t-Value, sig for Consumers' Attitudes toward Buying Green Buildings in Jordan

No.	Item	Mean	S.D.	t-Value	Sig	Level	Rank
18	I think that there will be a real dependence on green buildings in the near future	3.59	1.08	10.403	0.00	Moderate	3
19	I have planned to buy green building	2.74	1.07	4.547	0.00	Moderate	5
20	I think that buying green building will be a great idea	3.65	1.06	11.541	0.00	Moderate	1
21	I will put extra effort in order to buy green building	3.31	1.00	5.755	0.00	Moderate	4
22	I have an experience with a green buildings	2.60	1.15	6.558	0.00	Moderate	6
23	If I have a positive idea about green buildings, I will encourage my acquaintances to buy such buildings	3.62	1.01	11.709	0.00	Moderate	2
Consumers' Attitudes toward Buying Green Buildings in Jordan		**3.25**	**0.82**	**5.820**	**0.00**	**Moderate**	

Means description (1 – 2.33 low), (2.34 – 3.67 moderate), (3.68 – 5 high), tabulated t value = 1.96

From the table above, the mean, standard deviation, t-Value and sig values are expressed, in which these values are related to the dependent variable; consumers'

attitudes toward buying green buildings in Jordan . The highest mean is for item number 20 (code 20) and equals to (3.65), while the lowest value was for the item number 22 (code 22) and equals to (2.60). Therefore, the average mean for environmental concerns equals to (3.25) which can be considered as moderate value, moderate level for dependent variable; consumers' attitudes toward buying green buildings in Jordan.

The table indicates the value of calculated t, this test has been performed to check that the means for the items are away from neutrality, (away from neutral answer, response rate which equals to 3). Therefore, the calculated t is more than tabulated t (1.96), thus this shows that the rated means for the items are away from neutrality (away from neutral answer). Moreover, the calculated t for each item is more than (1.96) thus; we can conclude that samples answers are considered away from neutral answer.

4.3 Analyzing the Moderating Variable Items (Green Product Awareness)

Table 4.6: Mean, Standard Deviation, t-Value, sig for Green Product Awareness

No.	Item	Mean	S.D.	t-Value	Sig	Level	Rank
24	I have heard about green buildings	3.43	1.17	6.892	0.00	Moderate	4
25	I have the knowledge about the green buildings	3.07	1.15	3.197	0.00	Moderate	6
26	I know the differences between green buildings and conventional buildings	3.41	1.10	6.950	0.00	Moderate	5
27	I know the importance of green buildings for the occupants	3.44	1.12	7.437	0.00	Moderate	3
28	I know the importance of green buildings for the environment	3.62	1.12	10.474	0.00	Moderate	1
29	I prefer to live in green building instead of conventional building	3.60	1.14	9.972	0.00	Moderate	2
Green Product Awareness		**3.43**	**0.98**	**8.307**	**0.00**	**Moderate**	

Means description (1 – 2.33 low), (2.34 – 3.67 moderate), (3.68 – 5 high), tabulated t value = 1.96

From the table above, the mean, standard deviation, t-Value and sig values are expressed, in which these values are related to the moderating variable; green product awareness. The highest mean is for item number 28 (code 28) and equals to (3.62), while the lowest value was for the item number 25 (code 25) and equals to (3.07). Therefore, the average mean for environmental concerns equals to (3.43) which can be considered as moderate value, moderate level for the moderating variable; green product awareness.

The table indicates the value of calculated t, this test has been performed to check that the means for the items are away from neutrality, (away from neutral answer, response rate which equals to 3). Therefore, the calculated t is more than tabulated t (1.96), thus this shows that the rated means for the items are away from neutrality (away from neutral answer). Moreover, the calculated t for each item is more than (1.96) thus we can conclude that samples answers are considered away from neutral answer.

4.4 Testing Study Hypotheses

In this study, there are two main hypotheses, and the first hypothesis includes three sub-hypotheses.

Table 4.7 The Suitability of Study Data to Test Hypotheses Analysis Using VIF

Variables			VIF	Tolerance	Skewness
Dependent Variable (Consumers' Attitudes toward Buying Green Buildings in Jordan)	**Green Marketing**	**Green Perceived Value**	5.400	0.185	-0.856
		Green Products (Green Buildings)	6.250	0.160	-0.931
		Environmental Concerns	6.077	0.165	-0.616
	Green marketing		6.50	0.154	-1.005
	Moderating Variable (Green Product Awareness)		2.238	0.447	-0.673

According to Hair et al. (2010) if VIF less than (10) and Tolerance is greater than (10%), this indicates that there is no multi-co linearity problem, as a result, from table 4.7, it is clear that all values of VIF is less than (10). Moreover, all the Tolerance values are more than (10%), which represent good results, with no multi co linearity problem.

Table 4.8: Normal Distribution of Study Variables

Variables	Kolmogorov-Smirnova			Skewness	Kurtosis
	Statistic	DF	Sig		
GPV	0.217	357	0.260	-0.856	-0.78
GP	0.358	357	0.061	-0.931	-0.91
EC	0.312	357	0.122	-0.616	-0.98
GM	0.214	357	0.300	-1.005	-0.80
CA	0.288	357	0.223	-0.04	-0.82
GPA	0.225	357	0.310	-0.673	-0.76

From table 4.8, all Skewness values are resulted within the range from (-1.005) for the green marketing variable to (-0.04) for the consumers' attitudes toward buying green buildings in Jordan, in which all the results are almost within the range of (-1) to (1), which indicates that the data used in this study is close to the normal distribution.

4.4.1 The First Hypothesis Test

H_{01}: There is no impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Table (4.9): Results of Multiple Linear Regressions Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815[a]	.664	.661	.47729

a. Predictors: (Constant), EC, GPV, GP

ANOVA [a]

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	158.896	3	52.965	232.505	.000[b]
	Residual	80.414	353	.228		
	Total	239.310	356			

a. Dependent Variable: CA

b. Predictors: (Constant), EC, GPV, GP

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.242	.117		2.063	.040
	GPV	.130	.046	.146	2.804	.005
	GP	.173	.049	.193	3.515	.000
	EC	.548	.049	.542	11.101	.000

a. Dependent Variable: CA

From the above tables, the value of R equals to (0.815), which indicates that (green marketing) and (consumers' attitudes toward buying green buildings in Jordan) are positively and highly correlated with a percentage equals to (81.5%). R square, the coefficient of determination equals to (0.664), in which this value indicates that the variation in (green marketing) explained (66.4%) of the variance in (consumers' attitudes toward buying green buildings in Jordan), while the "analysis of variance" showed that F value is equal to (232.505) at Sig. less than (0.05).

Based on the analysis, it can be noticed that there is an impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan, thus the null hypothesis is rejected. Therefore, the hypothesis becomes:

There is an impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan at a level of significance (α≤0.05).

First Sub-Hypothesis:

$H_{01.1}$: There is no impact of green perceived value on consumers' attitudes toward buying green buildings in Jordan at a level of significance (α ≤ 0.05).

Table (4.10) Results of Simple Linear Regressions Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682[a]	.466	.464	.60019

a. Predictors: (Constant), GPV

ANOVA [a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	111.428	1	111.428	309.323	.000[b]
	Residual	127.882	355	.360		
	Total	239.310	356			

a. Dependent Variable: CA
b. Predictors: (Constant), GPV

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.006	.132		7.640	.000
	GPV	.610	.035	.682	17.588	.000

a. Dependent Variable: CA

From the above tables, the value of R equals to (0.682), which indicates that (green perceived value) and (consumers' attitudes toward buying green buildings in Jordan) are positively and highly correlated with a percentage equals to (68.2%). R square, the coefficient of determination equals to (0.466), in which this value indicates that the variation in (green perceived value) explained (46.6%) of the variance in (consumers' attitudes toward buying green buildings in Jordan) while the "analysis of variance" showed that F value is equal to (309.323) at Sig. less than (0.05).

According to the above table, β equals to (0.682), which means that increase in one unit of green perceived value, will lead to increase in consumers' attitudes toward buying green buildings in Jordan with a percentage equals to (68.2%), and the T is equal to (17.588), at a confidence level (Sig) equals to (0.00).

Based on the analysis, it can be noticed that there is an impact of green perceived value on consumers' attitudes toward buying green buildings in Jordan, thus the null hypothesis is rejected. Therefore, the hypothesis becomes:

There is an impact of green perceived value on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Second Sub-Hypothesis

$H_{01.2}$: There is no impact of green products (green buildings) on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Table (4.11) Results of Simple Linear Regressions Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711[a]	.505	.504	.57760

a. Predictors: (Constant), GP

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	120.875	1	120.875	362.312	.000[b]
	Residual	118.435	355	.334		
	Total	239.310	356			

a. Dependent Variable: CA

b. Predictors: (Constant), GP

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.892	.128		6.985	.000
	GP	.637	.033	.711	19.035	.000

a. Dependent Variable: CA

From the above tables, the value of R equals to (0.711), which indicates that green products (green buildings) and (consumers' attitudes toward buying green buildings in Jordan) are positively and highly correlated with a percentage equals to (71.1%). R square, the coefficient of determination equals to (0.505), in which this value indicates that the variation in green products (green buildings) explained (50.5%) of the variance in (consumers' attitudes toward buying green buildings in Jordan) while the "analysis of variance" showed that F value is equal to (362.312) at Sig. less than (0.05).

According to the above table, β equals to (0.711), which means that increase in one unit of green products (green buildings), will lead to increase in consumers' attitudes

toward buying green buildings in Jordan with a percentage equals to (71.1%), and the T is equal to (19.035), at a confidence level (Sig) equals to (0.00).

Based on the analysis, it can be noticed that there is an impact of green products (green buildings) on consumers' attitudes toward buying green buildings in Jordan, thus the null hypothesis is rejected. Therefore, the hypothesis becomes:

There is impact of green products (green buildings) on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Third Sub-Hypothesis

$H_{01.3}$: There is no impact of environmental concerns on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Table (4.12): Results of Simple Linear Regressions Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.789[a]	.623	.622	.50407

a. Predictors: (Constant), EC

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	149.108	1	149.108	586.835	.000[b]
	Residual	90.202	355	.254		
	Total	239.310	356			

a. Dependent Variable: CA
b. Predictors: (Constant), EC

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.498	.117		4.261	.000
	EC	.798	.033	.789	24.225	.000

a. Dependent Variable: CA

From the above tables, the value of R equals to (0.789), which indicates that environmental concerns and (consumers' attitudes toward buying green buildings in Jordan) are positively and highly correlated with a percentage equals to (78.9%). R square, the coefficient of determination equals to (0.623), in which this value indicates that the variation in environmental concerns explained (62.3%) of the variance in (consumers' attitudes toward buying green buildings in Jordan) while the "analysis of variance" showed that F value is equal to (586.835) at Sig. less than (0.05).

According to the above table, β equals to (0.789), which means that increase in one unit of environmental concerns, will lead to increase in consumers' attitudes toward buying green buildings in Jordan with a percentage equals to (78.9%), and the T is equal to (24.225), at confidence level (Sig) equals to (0.00).

Based on the analysis, it can be noticed that there is an impact of (environmental concerns) on consumers' attitudes toward buying green buildings in Jordan, thus the null hypothesis is rejected. Therefore, the hypothesis becomes:

There is impact of environmental concerns on consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

4.4.2 The Second Hypothesis Test

H_{02}: There is no impact of green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

In order to test the above hypothesis, hierarchical multiple regression analysis was performed.

Table (4.13) Results of Hierarchical Multiple Regression Analysis to Show the Impact of Green Marketing on Consumers' Attitudes towards Buying Green Buildings in Jordan, in existence of Green Product Awareness

Dependent Variable	Independent Variables	First Model			Second Model			Third Model		
		B	T	Sig	B	T	Sig	B	T	Sig
Consumers' attitudes toward Buying Green Buildings in Jordan	Green marketing Variables	0.803	25.412	0.0						
	Green Product Awareness				0.425	10.210	0.0			
	Green marketing Variables with presence of green product awareness							0.487	11.707	0.0
	R	0.803			0.852			0.881		
	R^2	0.645			0.726			0.776		
	Delta R^2	0.645			0.081			0.05		
	Delta F	645.745			104.236			578.872		
	Delta sig	0.000			0.000			0.000		

Based on the above table, there are three models in the hierarchical multiple regression analysis performed, in which the first model shows that the correlation coefficient R equals to (0.803) which means that there is high positive correlation between green marketing and consumers' attitudes toward buying green buildings in Jordan. Moreover, the results revealed that there is a critical impact of green marketing, on consumers' attitudes toward buying green buildings in Jordan, in which Delta F, which is equal to (645.745), with Sig equals to (0.00). Furthermore, the value of R square the coefficient of determination is equal to (0.645) which indicates that the variation in green marketing variable, explained (64.5%) of the variance in (consumers' attitudes toward buying green buildings in Jordan). In addition, the value of B is equal to (0.803) which means that an increase in green marketing variable, will lead to increase with (80.3%) in consumers' attitudes toward buying green buildings in Jordan.

The second model, green product awareness variable was included in the model, in which the value R became (0.852) and R square the coefficient of determination equals to (0.726) while Delta F equals to (104.236) at ($\alpha \leq 0.05$). Furthermore, B value is equal to (0.425), T value equals to (10.210), and Sig (0.0), these results confirmed that there is a role for the moderating variable on the relation between green marketing and consumers' attitudes toward buying green buildings in Jordan with an increase equals to (0.081), (changed from (0.645) to (0.726)).

The third model, the green marketing variable (independent variable) and the sub-variables were included, in addition to the green product awareness variable (moderating variable), in which the value of R equals (0.881), while R square the coefficient of determination equals to (0.776) and Delta F equals to (578.872) at ($\alpha \leq 0.05$). Furthermore, B value is equal to (0.487), T value equals to (11.707) at Sig (0.0), these results confirm the role of green marketing (green perceived value, green products (green buildings), and environmental concerns) with existence of green product awareness (moderating variable), between green marketing and consumers' attitudes toward buying green buildings in Jordan. As the variance percentage of explanation has increased to reach (0.776).

Based on these results, the null hypothesis is rejected. Therefore, the hypothesis becomes:

There is impact of green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan at a level of significance ($\alpha \leq 0.05$).

Chapter FIVE
Results' Discussion, Conclusion, and Recommendations

This chapter will discuss study results with respect to the statistical analysis for respondents' answers collected from the questionnaire that has been developed specially for this study. Moreover, in line with examining the impact of green marketing (green perceived value, green products (green buildings) and environmental concerns), on consumers' attitudes toward buying green buildings in Jordan: The moderating role of green product awareness.

5.1 Discussion of Relative Importance of Study Variables

5.1.1 Green Marketing

According to the results came out from the statistical analysis, the relative importance for the green marketing sub-variables were high in general, in which the highest mean goes for the green products (green buildings) and equals to (3.71), and referring to Fruned equation, this mean is considered within the high range values. Green products (green buildings) sub-variable is followed by (green perceived value), with a mean equals to (3.68), which is also considered within the high range values, after that the (environmental concerns) with a mean equals to (3.45) which is considered within the moderate range values.

The highest mean is referred to the green products (green buildings) this can be explained by the following: in terms of green products (green buildings in specific), the consumers firstly may prefer to interact directly with this type of products, then take a decision and judge on the product, if it is suitable, if they were satisfied, and if the value they have received has met their own needs and wants. Thus the priority goes for the product itself, and after that goes for the value that will be received from consuming

such products (green perceived value), in which this comes in the second rank after the green products (green buildings). On the other hand, the lowest mean was for the environmental concerns, and this can be explained as following: there might be a lack in the knowledge among the consumers regarding the green issues and green products in Jordan, and this can be referred to the scarcity of educational and awareness campaigns regarding these issues, especially in the field of construction. In the same manner, the concept of green buildings in Jordan is still immature and yet there is a lack of real applied green buildings, thus this support that the consumers' environmental concerns are still in low level about these issues, and consumers may prefer their own benefits on benefiting the environment.

This result is agreed with Sharma and Trivedi, (2018) in which the consumer will take the advantage from both green marketing and green products, and then receive higher value because of differentiated products that have been produced from the organization. Furthermore, the result is in agreement with Royne et al. (2016); in which have shown that filling the gap between consumers' environmental concerns and their behavior can be done clearly by enhancing the communication strategies in green marketing, in which this reflects the importance of green marketing and shows its impact on consumers' decisions.

5.1.2 Consumers' Attitudes toward Buying Green Buildings in Jordan

The results of the analysis have shown that the values of means ranged from (2.6) to (3.65), which are in the moderate range of values, this result can be referred to that the consumers yet do not have a clear full picture about the concept of green buildings especially that this concept is still immature in Jordan. Thus the idea of buying such buildings is covered with many questions from the consumers, therefore their attitudes

toward buying these buildings is moderate and needs more time and knowledge about the green buildings and its benefits for both: the consumers themselves and the environment.

The result is in line with Boolaky and abuamer, (2015) in which have shown that the consumers have to be more educated toward green buildings, in order to enhance their knowledge and awareness, and this will be reflected on their behavior toward buying this type of buildings. This indicates that consumers' attitudes toward buying green buildings are still moderate. Moreover, the result is in agreement with Liao et al. (2020) as mentioned; that if the consumers themselves have experience with this type of products and if this experience was positive, then this will significantly influence consumers' attitudes toward buying green products. Therefore, because the existence of green buildings in Jordan is still not spread widely, then consumers experience will not be available in a way that encourage them and influence their attitudes toward buying green buildings.

5.1.3 Green Product Awareness

The results of the analysis have shown that the values of means ranged from (3.07) to (3.62), which are in the moderate range of values, this result can be referred to that the consumers awareness about green products (green buildings) is still moderate, and this is because the knowledge of consumers regarding this type of buildings is not fully clear, and this is may be due to lack of green buildings in Jordan, low experience in dealing with such buildings, not recognizing the importance of green buildings, and not knowing the differences between green buildings and conventional buildings. Therefore, the role of green product awareness as a moderator is yet moderate.

The result is in line with Sharma and Trivedi, (2018) in which mentioned that enhancing the knowledge and awareness about green products will encourage consumers to buy these products, and this enhancement is crucial for the consumers and can be done by the environmental advertising. Moreover, the result is in agreement with Shittu (2020), as showed that despite of the increase in the knowledge and awareness about green products, it still low level and needs to be enhanced. Furthermore, Mohiuddin (2018) showed that the education and specially the environmental one, has a major role in enrichment the knowledge and increase the awareness of the people and the next generation about the green products and its benefits, in order to be more greener consumers and to become responsible for their actions.

5.2 Discussion of the Result of Study Hypotheses

In order to reach to a logical realistic conclusion and recommendations, the examination of study hypotheses should take place, which will be reflected in enhancing and supporting the rational scientific thought.

5.2.1 Discussion of the First Main Hypothesis

Referring to the first main hypothesis, the results have shown that there is an impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan, where the R square, the coefficient of determination equals to (0.664) with a significance level less than (0.05), in which this value indicates that the variation in (green marketing) explained (66.4%) of the variance in (consumers' attitudes toward buying green buildings in Jordan), which means that the construction contracting companies should focus their work and follow strategies that will enhance and increase the concept of green perceived value, green products (green buildings), and

environmental concerns of consumers, which will be reflected on their attitudes toward buying green buildings in Jordan. Furthermore, this type of companies should pay more attention especially for the green strategies, and take into consideration that these strategies have an effect on the consumers' attitudes.

This result is consistent with the result of Shukla (2021) study, in which the green marketing has an effect on consumers' attitudes toward buying green products, and affects their own demand for such type of products. The current study result is in line with the result of Riptiono (2022), in which the environmental concerns and green perceived value both affect the attitudes of consumers toward the green products. Moreover, Riptiono (2022) recommended that both managers and marketers should follow strategies that enrich consumers' knowledge and enhance their environmental concerns in order to encourage their attitudes toward the green products. Furthermore, the current study result agreed with Lam et al. (2016) study, as the organizations should embrace special strategies -green marketing strategies- in order to enhance consumers' green perceived value, which will affect their attitudes toward buying green products.

The results for the sub-hypotheses from the first main hypothesis:

1) Referring to the first sub-hypothesis, the results have shown that there is an impact of green perceived value on consumers' attitudes toward buying green buildings in Jordan, where the R square, the coefficient of determination equals to (0. 466) with a significance level less than (0.05), in which this value indicates that the variation in (green perceived value) explained (46.6%) of the variance in (consumers' attitudes toward buying green buildings in Jordan). This result is in line with Liao et al. (2020) result, in which the green perceived value has an effect on consumers' attitudes toward buying green products.

2) Referring to the second sub-hypothesis, the results have shown that there is an impact of green products (green buildings) on consumers' attitudes toward buying green buildings in Jordan, where R square, the coefficient of determination equals to (0.505) with a significance level less than (0.05), in which this value indicates that the variation in green products (green buildings) explained (50.5%) of the variance in (consumers' attitudes toward buying green buildings in Jordan). This result is agreed with Maniatis (2014), in which stated that green products can attract consumers due to many reasons, like: consumers' own consciousness and concerns about the environment, the economical benefits that they will gain and the products' green reliability and appearance, thus the green products have an impact on the consumers attitudes toward buying such type of products.
3) Referring to the third sub-hypothesis, the results have shown that there is an impact of environmental concerns on consumers' attitudes toward buying green buildings in Jordan, R square, the coefficient of determination equals to (0.623) with a significance level less than (0.05), in which this value indicates that the variation in environmental concerns explained (62.3%) of the variance in (consumers' attitudes toward buying green buildings in Jordan). This result is in line with the result of Riptiono (2022), in which the environmental concerns affect the attitudes of consumers toward the green products. Moreover, Yadav and Pathak (2016), have shown that the environmental concerns can be considered as major predictor for the consumers' attitudes toward buying green products, and as a result, increasing in the level of environmental concerns will lead to increase in transforming the attitudes of the consumers to become green attitudes.

5.2.2 Discussion of the Second Main Hypothesis

Referring to the second main hypothesis, the results have shown that there is impact of green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan. In which the green products awareness (moderating variable) has changed the coefficient of determination R square from (0.645) in the first model, to (0.726) in the second model, and to (0.776) in the third model. Therefore, this reflects that there is existence of a positive impact for the green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan. This result can be explained as follows: consumers' awareness about green products indicates the knowledge that consumers have in their minds about the importance of green products, (green buildings specifically) and what are the benefits behind buying this type of products. Thus, consumers' realization about environmental issues will be increased. Therefore, consumers' attitudes towards buying such products will be enhanced, and their responsible activities towards the environment will be encouraged.

This result is agreed with Boolaky and abuamer (2015), in which have mentioned that consumers should be more educated toward the green issues, in order to enhance their knowledge and awareness about the green buildings and the material used in this type of buildings, thus this can play as a moderating role in order to change their behavior and become toward buying green buildings. In the same manner, Divyapriyadharshini et al. (2019) showed that the increase in awareness about green products will influence the consumer buying behavior of such products. Furthermore, the result is in agreement with Mohiuddin et al. (2018), in which have shown that the

green product awareness has a positive influence on consumers' attitudes toward buying green products, thus the environmental awareness and knowledge influence the attitudes of consumers toward green products, then affecting their intentions and actual purchase decisions.

5.3 Conclusion

- The human activities can be considered as major factor that are directly related to the climate change by the land usage, extraction of the trees, and construction processes for different types of structures. Moreover, the IEA reports in 2018 showed that (40%) of the usage of energy and emissions of carbon are from buildings. Therefore the concept of green buildings is best fit here, due to the characteristics that this type of building has, while the conventional building does not have.

- Green construction sector can be considered as a promising sector in the field of civil engineering, with a bright future especially with the increasing environmental problems around us, and in the same manner increasing the awareness about such issues.

- Construction contracting companies have a positive point of view about the concept of green buildings, mainly for two reasons; the first one is that Jordan is one of the countries that suffers from water shortage and high percentage of pollution, therefore the concept of green buildings can be considered as a solution for such problems by reducing the wastes, reducing water consumption, and reducing energy consumption, thus this will be reflected positively on three parties; on the environment, on the consumers themselves; by reduction in the annual paid money for water and energy, enhance their physical and psychological health, and improve their overall performance, and on the construction contracting companies; by

increasing their profit, the value in the market, thus their market share will be increased, and therefore more investment will be injected and this will lead to higher profitability. The second reason is that this concept is still not spread widely in Jordan, and this is can be considered as an opportunity that the companies should take advantage from, and become from the first movers in this area, which will benefit the companies by gaining a competitive advantage over the other companies that have not entered this field yet, enhancing their reputation in the market, and increase their profit and profitability.

- There is an impact of green marketing (green perceived value, green products (green buildings), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan. Moreover, the relative importance for the green marketing sub-variables were high in general, in which the highest mean goes for the green products (green buildings), then the green perceived value, and after that environmental concerns. Thus, this reflects the importance of the product (building) itself in making a difference in the buying decision the consumers will take.

- There is a positive role for the green product awareness as a moderator between green marketing (green perceived value, green products (green buildings), and environmental concerns) and consumers' attitudes toward buying green buildings in Jordan. This role can be considered as a moderate role, and this can be referred to that the consumers may have either shallow knowledge and information about the concept of green buildings and its benefits, or they may not know what this concept means, therefore the level of their awareness about this type of buildings will be lower, and as a result the effect that this variable affects the relation, will be lower (moderate role).

- The objectives of this study including; determining the impact of green marketing (green perceived value, green product (green building), and environmental concerns) on consumers' attitudes toward buying green buildings in Jordan, studying the moderating role of green product awareness on the relation between green marketing and the consumers' attitude toward buying green buildings in Jordan, and providing a conceptual framework about the variables and sub-variables included in the study, have been achieved.

5.4 Recommendations and Future Research

Referring to the results of this study, the researcher recommends the following:

- Increasing the level of enculturation for the consumers by contractors and people who are working in this field, about the green issues and green products, which will enhance their awareness and as a result, this will be reflected positively on their attitudes toward buying such products, as the attitudes toward buying such buildings and the level of green product awareness are still in moderate level, as shown from the results and needs to be raised to reach the high level.

- Encourage the construction contracting companies to start a real work and contracts in performing and implementing green buildings widely in the market which will spread the concept in practical way among consumers.

- Construction contracting companies may pay more attention especially for the green strategies, and take into consideration that these strategies have an effect on the consumers' attitudes.

- Construction contracting companies can take into consideration the green concepts to enhance their social responsibility especially towards environmental issues and this

can be reflected positively on influencing consumers' attitudes toward buying green buildings.

- Make special offers and loans from the banks, for the consumers who want to buy a green buildings, and this can be considered as type of loan facility which will encourage them toward buying such buildings.
- Designing a logo especially for the green buildings at which can be hung on the outsider walls, thus this will enhance the concept of brand association in consumers' minds, and accelerate spreading the concept between higher numbers of consumers.
- Carry out similar study directed to the construction contracting companies in Jordan.
- Carry out similar study in the same field, but with different sub-variables included.
- Carry out similar study in the same field, with similar independent and dependent variables, but with different moderating variable included.
- Carry out similar study in different industry for different products.

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Appendices

Appendix (1)

The researcher provides here just a brief answers from three contracting companies represented by their "Owners/ General Managers" in Jordan, because the Owners/ General Managers answered the questions through a phone call and/or a video call.

Q1: Do you notice any increase in the volume of trading in the real estate market, especially in the purchase of buildings in Jordan?

- Al-Qaisar Contracting Company represented by Eng. Hourani, A.: If we compare this year to the past year, yes there is a good jump in the volume of trading in the real estate market, and specifically for the residential buildings like separate apartments, villas, and housing buildings.
- Maayah Contracting Company represented by Mr. Maayah, I.: Yes we feel this increase, because there is more demand from the designers (designing engineers), and owners to convert their drawings on papers to real building.
- Ghassan Haddadin Contracting Company, represented by Eng. Haddadin, M.: The increase is only confined with the buildings construction filed, and every single company can feel this increase, but in the other constructions' sectors is still low and specially with the occurrence of (COVID-19) pandemic and its effects on the economy as whole, as it closed many doors in front of huge investments in the real estate market in Jordan.

Q2: Do you think that green buildings can be a source of a competitive advantage in the Jordanian real estate market?

- Al-Qaisar Contracting Company represented by Eng. Hourani, A.: The concept is great to be applied here in Jordan especially that Jordan is one of the countries that suffers from water shortage and high percentage of pollution, thus this concept will be a solution to reduction many wastes, enhance the environment and gain a competitive advantage. Therefore, increase the profit and profitability of the company.
- Maayah Contracting Company by Mr. Maayah, I.: Green buildings are shining idea in the future of the contracting companies, and the consumers themselves. Moreover, this type of building will become the solution in the future for many problems associated with the environmental issues and as a result, companies should be ready for such type of constructions, in order to be proactive, thus the competitive advantage will be gained.
- Ghassan Haddadin Contracting Company represented by Eng. Haddadin, M.: In order to construct green buildings correctly and meeting the standards of the engineering codes, extra effort has to be applied. On the other hand, this effort can be returned to company with reputation, profit, and profitability. Moreover, companies can gain a competitive advantage on the other companies that still do not construct green buildings especially because the concept in Jordan is still immature.

Q3: Do you think green buildings can be attractive choice for consumes?

- Al-Qaisar Contracting Company represented by Eng. Hourani, A.: If this type of building is attractive or not, is depending on the segment of consumers that the company will deal with. But if the segment is aware enough about the benefits they will gain from such building, for sure, the green building choice will the most suitable for them.
- Maayah Contracting Company represented by Mr. Maayah, I.: Yes, especially if the consumers' orientation is toward saving their effort, money in the long run, and the environment at the same time.
- Ghassan Haddadin Contracting Company represented by Eng. Haddadin, M.: absolutely green buildings will be attractive choice, but this will not happen until the consumers have almost full clear picture about the concept of the green buildings with detailed calculation about the amount of money they will save in the long run, because one of the major issues that takes place in consumers' minds is the amount of money that they will pay.

Appendix (2)

List of Arbitrators

Name	Academic Rank	Work Place
Ahmad Ali Salih	Professor	Middle East University
Hamad Al-Ghadeer	Professor	Applied Science University
Ghaith Mustafa Al-Abdallah	Associate Professor	University of Kurdistan
Sameer Al-Jabali	Associate Professor	Middle East University
Tamador Al-Shatnawi	Associate Professor	Petra University
Tasnim Fayez Al-rabee	Associate Professor	German Jordan University
Laith Jameel Al-Zobaidy	Civil Engineer/Site Manager	Haymoor Cousins and Partner company

Appendix (3)

Questionnaire

As we live in a dynamic environment characterized with high and continuous changing, with newly challenges facing the companies, there should be a way that these companies face and solve the problems occur. Moreover, the challenges that can face companies can be in sustainability, globalization, and/ or technology and changing in consumers' needs, wants and preferences. Therefore, the marketing department is one of the major departments that have to consider these challenging issues in its work. Thus, green marketing is suitable here, especially that the environmental issues and problems are taking place in the world. Furthermore, in the field of construction, there is an existence of the concept of green buildings, and this concept is accelerating in the world, which includes the environmental considerations in the buildings, and aims to protect the natural environmental resources, and consumers' health.

As the sustainability is the trend nowadays and it is crucial for the future, and combination between the marketing field and engineering field is critical to be studied, the researcher is conducting a study that combines both fields, entitled: **Transformation towards Green Construction: The Impact of Green Marketing on Consumers' Attitudes- The Moderating Role of Green Product Awareness.** In order to complete the master's degree in Business Administration Department, Middle East University, Amman-Jordan.

Your participation, time, and effort are all appreciated, respected, and valued. If you have any questions, comments, or notes, please do not hesitate to contact me at:

E-mail: (anton_sahyoun@yahoo.com) or at **mobile phone**: (0776477231)

Researcher: Antoun Ghazi Sahioun

Supervisor: Dr. Abdallah Qasem Bataineh

Questionnaire:

Sample Characteristics:

Please put (✓) in the appropriate box

Gender:

□ Male □ Female

Age (years):

□ Less than 30 □ 30 to less than 40 □ 40 to 50 □ Above 50

Marital Status:

□ Single □Married □Divorced □Widow

Level of Education:

□ Diploma □ Bachelor □ High Diploma □ Masters Degree □Doctorate

Experience (Years):

□ Less than 5 □ 5 to less than 10 □ 10 to 15 □ Above 15

Family Income (Jordanian Dinar):

□less than 1000 □1000 to less than 1500 □1500 to 2000 □more than 2000

Number of Family Members:

□2 □3 □4 □other

No.	Item	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (4)	Strongly Disagree (1)
Green Perceived Value: the total environmental value that the consumer will receive from using green buildings. This variable can be measured through value provided to the consumers and more environmental benefits than other products (Lin et al., 2016; Chen, 2010).						
1	Green buildings have higher in-door quality of living than the conventional buildings					
2	Green buildings have higher construction standards than the conventional buildings					
3	Buying green building will be an economical choice with the long-term benefits					
4	Green buildings provide higher value than the conventional buildings					
5	Green building provide more environmental benefits than conventional buildings					

No.	Item	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (4)	Strongly Disagree (1)
(**Green Products) Green Building**: environmentally friendly buildings in which they help the environment by reducing the waste produced, consuming less resources, using the recycled materials or can be recycled in the future, and provide clean, healthy and comfort lifestyle for the consumer. This variable can be measured through meeting consumers green needs and wants, higher perceived health, and presence the of green features (Wen et al., 2020; Zampese et al., 2016).						
6	Green buildings help to meet consumers green needs more than conventional buildings					
7	Green buildings enhance occupants to perform their activities better					
8	Green buildings enhance occupants physical health					
9	Green buildings enhance occupants psychological health					
10	Green buildings ensure the presence of green features within the structure					

No.	Item	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (4)	Strongly Disagree (1)
Environmental Concerns: consumers' believes and thoughts in which will direct them toward buying green products and what are the real reasons behind buying green buildings. This variable can be measured through solving environmental problems and taking into consideration the environment in the consumers' activities (Nanggong, 2019; Suki, 2013; Kirmani and Naved, 2016).						
11	If people continue to perform their activities as the current pace, the environment will be severely damaged					
12	If I have the option to buy a building, I will buy green building					
13	I will buy a green building instead of conventional building just because its benefits to the environment					
14	My activities are considered environmentally friendly activities					
15	I think how to improve our environment					
16	People have the right to adjust nature in order to meet their own needs					
17	I believe that the environment has an intrinsic ability to counteract the impact of human activities					

No.	Item	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (4)	Strongly Disagree (1)
Dependent Variable: (Consumers' Attitudes towards Buying Green Buildings in Jordan): one of the critical factors and has a significant influence on the decision of the consumers about buying green buildings. This variable can be measured through consumers' thoughts about the green products, and their own experience if they have tried like these products before (Woo and Kim, 2018; Tandon et al., 2020; Kirmani and Naved, 2016).						
18	I think that there will be a real dependence on green buildings in the near future					
19	I have planned to buy green building					
20	I think that buying green building will be a great idea					
21	I will put extra effort in order to buy green building					
22	I have an experience with a green buildings					
23	If I have a positive idea about green buildings, I will encourage my acquaintances to buy such buildings					

No.	Item	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (4)	Strongly Disagree (1)
Moderating Variable: (Green Product Awareness): the knowledge that consumers have in their minds about the importance of green buildings and what are the benefits behind buying and living in this type of buildings. This variable can be measured through consumers' knowledge about green products and its benefits, consumers' perception about environmental issues, and consumers' responsible activities towards the environment (Saha and Kuruppuge, 2016; Mensah, 2021; Mohiuddin et al., 2018).						
24	I have heard about green buildings					
25	I have the knowledge about the green buildings					
26	I know the differences between green buildings and conventional buildings					
27	I know the importance of green buildings for the occupants					
28	I know the importance of green buildings for the environment					
29	I prefer to live in green building instead of conventional building					