**Research Article**

# Exploring the Impact of 'Buy Now, Pay Later' on E-Shopper Motivation: The Role of Consumer Demographics in Egypt and Saudi Arabia – A Comparative Study

Hatem H. Garamoun

*Affiliation; Marketing Department, College of Business Administration, University of Business and Technology, Jeddah 21448, Saudi Arabia; hatem@ubt.edu.sa*

| ARTICLE INFO | ABSTRACT |
|---|---|
| | This study investigates the moderating role of demographic variables including age, income, marital status, and gender on the effect of Buy Now, Pay Later (BNPL) services on motivation of e-shoppers in Egypt and Saudi Arabia. With a sample of 524 respondents from both countries, data was collected through Google Forms in order to measure the influence of these factors on the use of BNPL services. The analysis of the data was carried out using a structural equation modeling which indicated that although BNPL strengthens e-shopper motivation in both regions, the model fit and effect were more visible in Saudi Arabia. Also, among age, income, and marital status that were significant predictors of e-shopper motivation, gender did not significantly affect the adoption and consequences of BNPL services. These results do not only add value to the knowledge of financial behavior in the digital marketplace, but also assist marketers and policy makers in creating tailored BNPL offerings for different consumer segments.<br><br>**Keywords:** Buy Now Pay Later; Income Effect; Gender Effect; Marital Status Effect; Age Effect; e-Shopper Motivation; Saudi Arabia; Egypt |

## Introduction

The world of e-commerce is being changed by the emergence of 'Buy Now, Pay Later' (BNPL) option, and the market estimate of this method has exceeded $500 billion, with future predictions of growth hitting $3 trillion in 2030 [1]. Ubiquitous, especially among the youth, with 60% of global BNPL repeat users and nearly half of Gen Z users projected to use these services by 2025 [1]. Consumers in regions such as Northwest Europe and others, which include Australia and New Zealand, BNPL is the major payment method for e-commerce shopping, signifying a great shift of the payment preference. This worldwide trend has got its validation in the Middle East, namely in Saudi Arabia and Egypt, where BNPL has a pronounced growth. The Saudi Arabian BNPL sector is projected to progress with a CAGR of 11%. 2% of its entire production value is $2. This figure will grow even more and Research and Markets predicts that it will reach 192 billion until 2029 [2]. Another breathtaking point is that the market of Egypt has the growth rate reaching as high as 38% [3]. The sector is expected to grow by 6% year on year, and the forecast puts it at $7 by the end of this period. The global electroceutical market is projected to grow to more than US$50 billion by 2029 [2]. As e-commerce is getting closely connected to fintech developments from BNPL, it is essential for both retailers and decision-makers to comprehend the interrelationships.

The BNPL model fundamentally changes the global e-commerce landscape in favor of e-shopping in the dynamic market of Egypt and Saudi Arabia. This research analyses how Buy Now, Pay Later (BNPL) affect consumers' shopping behavior, paying particular attention to the mediating influence of consumers' personal characteristics, such as age, gender, income, and marital status. These elements influence financial behavior and risk assessment, affecting BNPL adoption. For instance, younger consumers will likely choose BNPL for luxury products as they have more digital adaptability, while older people will likely prefer the traditional form of credit [4]. Recognition of such behavior is essential for retailers to craft better sales strategies and for policymakers to create regulations regulating emergent fintech technologies. Our research offers a comparative study of consumer sentiments and trends in both regions by showing differences between the regions and regional similarities. This extensive research incorporates a

dedicated chapter on the research introduction, literature review, creation of the theoretical framework, statement of hypotheses, methodology, data analysis, and discussion, finally verifying broader implications of the ever-changing situation of the retail and the finance landscape in the Middle East. The study's research questions are:

1. How does the availability of Buy Now, Pay Later (BNPL) options impact e-shopper motivation in Egypt and Saudi Arabia?
2. Is the moderating effect of age on the relationship between BNPL availability and e-shopper motivation more pronounced in Egypt than in Saudi Arabia?
3. Does income level more significantly moderate the relationship between BNPL availability and e-shopper motivation in Egypt compared to Saudi Arabia?
4. How does gender influence the moderating effect on the relationship between BNPL availability and e-shopper motivation in Egypt and Saudi Arabia?
5. Is the moderating impact of marital status on the relationship between BNPL availability and e-shopper motivation more substantial in Egypt than in Saudi Arabia?

## Literature Review

### 2.1 Buy Now Pay Later

The "Buy Now, Pay Later" (BNPL) phenomenon is a brand-new concept in consumer finances, unlike traditional credit cards, which offer a convenient payment option that has been expanding fast to developed and developing markets. In their research, [5, 6] attribute the increased purchasing power of consumers and the higher sales volumes to buy now and pay later. Mostly, it is thought of as a tool to improve the conversion rate of online shopping carts, which is very high in many online retailers. The researchers argue that BNPL contributes to substantial spending and makes it easy for buyers to commit to purchases immediately without any immediate monetary expense. However, the portrayal could be more uniformly positive. [7] agreed that this new e-commerce payment method might be against financial sustainability. The youth with the more prominent consumer pool and access to credit through BNPL will be at the highest risk of getting caught up in a cycle of debt that may be difficult for them to escape. Moreover, [8, 9] address the regulatory framework that BNPL operates under, disclosing that although implementations of tight credit checks and consumer protection standards are missing, they can present material risks to customers and the economy. The scholarly perspectives make this nuanced subject more straightforward, as BNPL combines financial innovation and concern. A crucial analysis seems required due to the complexity of BNPL.

### 2.2 E-Shopper Motivation

Several mental and behavioral factors, such as convenience, product variety, and cost-saving, modulate the e-shopper motivation. Digital platforms, as a side effect, intensify these types of gratification, and the use of technology and personal marketing makes them more effective [10]. Consequently, the different demographic groups' motivations for e-shopping may diverge: young consumers, for instance, use social proof and immediate access, while older customers look for reliability and detailed product information [11]. The motivation, pleasure, and emotional arousal when shopping online contribute immensely to e-shopping [12]. The experience is even more appealing because of the impressive interactive and virtual environments, which further arouse hedonic motives and make online shopping more fun [10]. Although concerns about privacy, fraud, and lack of product verification put a question mark on the effect of e-shopping on consumers' motivation [13], alternatives could still boost people's motivation to engage with this shopping experience. Henceforth, competent management is required to make customer interactions safe and pleasant [14]. In the long run, the factors that impact e-shoppers should be analyzed to examine buyers from different viewpoints. Among these viewpoints, the main ones are the buyer's influence and the critical attributes characterizing their practices.

### 2.3 Demographic Factors in Buying Behavior

Demographic features are critical considerations in determining how different consumers behave. How they perceive and act on products and show up in-store or online changes accordingly. Many studies have stated that age, gender, income, and marital status are critical to consumer behavior. Precisely, one case is that of age, which influences technology adoption and decides a person's preferences regarding online shopping and new payment trends, with young consumers normally more inclined to experience new e-commerce varieties and methodologies,

like online shopping and buy now pay later (BNPL) [15]. Amongst the gender-related factors, research indicates that men's buying process differs from women's, as women are more likely to compare shopping and value-based purchases [16]. Income from diverse pools plays a significant role in customers' behavior as the high-income earners are more likely to put quality and brand reputation above price. In contrast, below-income customers may actively seek promotions and discounts [17, 18]. Besides marriage status and family size, the number of people living in a household leads to certain purchasing decisions. The law of diminishing returns puts into effect the type of product and the quantity of goods the family needs [19]. Since different demographic factors play a vital role in making choices, marketers must recognize these factors, and that is how they customize their strategy so that the products and services they offer will reach the right people and ensure the targeted marketing effort. The expertise gained in this expanded view of the influence of demographics on business improves business strategies. It increases happiness with products or offerings that respond to their needs and preferences.

## Theoretical Framework

### 3.1    Perceived Affordability

The concept of perceived affordability is purposed to see how the person defines the financial possibility and the reasonableness of the purchase in terms of his budget and along the lifeline [20]. This model argues that a customer will likely purchase an item if they think the cost is realistic compared to her financial capacity, which creates the perception of a reasonable connection between the cost and that product value. 'Buy Now, Pay Later' (BNPL) offers affordability, which may encourage consumers to buy items beyond their budget. Consumers may to choose a BNPL option because it can spread the cost over a time frame without immediate financial worries. This raises the chances of customers making purchases who could be hesitant because of price concerns. It also helps them be motivated more because of the economic convenience they feel while purchasing.

### 3.2    Social Influence Theory

The Social Influence Theory explains the way individuals undertake their decisions and the course in which the process is affected by the social context, like peer and broader social norms [21]. The theory explains that individuals do not necessarily base their purchases on a product's qualities but instead look up to members of their social circle and incorporate their choices into their decision-making. The impact of this theory on online retailers, especially BNPL, is likely to be deep and genuine. As BNPL is patronized and accepted by society, people will probably shift to this payment method because they are convinced that it is recommended and endorsed by their communities. Consumers in digital environments tend to pay more attention to social proof and online reviews that, in most cases, can substantially affect consumers' behavior. Thus, the decision to take the BNPL is becoming socially influenced.

### 3.3    Self-Determination Theory

The Self-Determination Theory (SDT) suggests that people remain motivated in endeavors that corresponds to their basic psychological needs for autonomy, competence and relatedness [22]. In online shopping, where consumers have the option of BNPL, SDT explains how the flexibility of payment methods positively affects consumer autonomy, allowing them to manage their money the way they see it as independent and empowering. On top of that, it induces confidence and mastery in social interactions can also be supported by using easy and intuitive BNPL systems. Lastly, an equally important factor is relatedness or interpersonal relationships. This can be observed when clients participate in mainstream and widely-adored financial services such as Buy Now Pay Later (BNPL), which link individuals to an online community.

### 3.4    Conceptual Framework

Figure 1 represents a conceptual model which intends to outline the relationships expected between Buy Now, Pay Later (BNPL) services and e-shopper motivation with demographic factors, such as age, income, gender, and marital status, as moderators. BNPL is deemed as an independent variable influence in e-shopper motivation to buy as the dependent variable. The model implies that while the impact of BNPL on the motivation of e-shoppers may be direct, the extent and character of this impact is likely to be moderated by the four demographic variables. Age and income operate as a set of interdependent variables that may completely or partly determine the impact of BNPL on consumer behavior. Same with gender and marital status that are also interrelated establishing that these factors could co-influence or interact with the primary relationship. This model suggests a complicated interaction

where each demographic variable may separately as well as in combination with others, influence the basic effect of BNPL on the consumer's motivation to take part in online shopping.
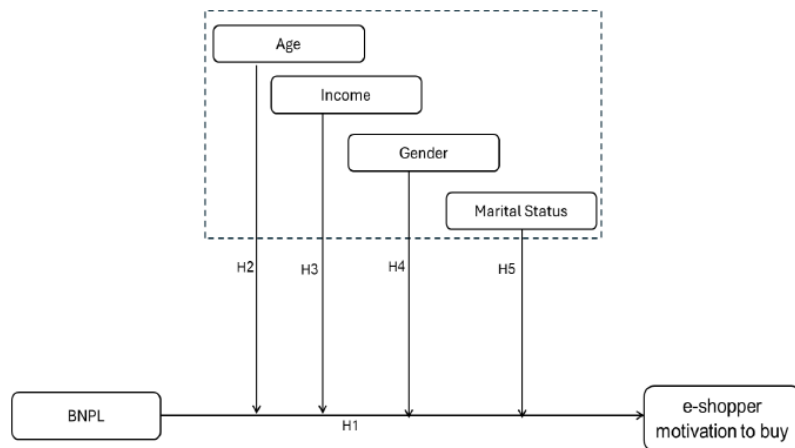


*Figure 1: Conceptual Framework*

## Hypotheses Development

### 4.1     BNPL on E-Shopper Motivation

Recent investigations confirm the influence of the Buy Now, Pay Later (BNPL) options on consumers' buying attitudes, corroborated by the positive correlation between the availability of such services and the increase in e-shoppers' motivation. For example, the work of [23, 24] show that the presence of BNPL businesses directly influenced the increase in online purchasing activities. This is due to the drop in the financial barrier for consumers when BNPL is provided. Research by [25, 6] has also shown these findings. It has been identified that BNPL is used to attract first-time buyers and encourage time customers due to the perceived convenience and flexibility in financial management. According to the research, BNPL services can considerably facilitate purchase since the costly item seems more affordable after being divided into smaller instalments. Considering the intercontinental market while carefully examining the peculiarities of the Egyptian and Saudi economies and cultural backgrounds, this question arises whether these conclusions are also valid for these countries. For this reason, we propose the following hypotheses:

H1-a: BNPL positively influences ESMOT in Egypt.

H1-b: BNPL positively influences ESMOT in Saudi Arabia.

### 4.2     Age Effect on the Relationship between BNPL and E-Shopper Motivation

By virtue of recent research, demographic features like age are commonly believed to impact consumers' modes of interaction with different marketing schemes, which includes BNPL offers. The outcomes of the assessments previously done showed different reactions to BNPL compared with the different age groups being studied, which is an indication that we might also need to consider the role played by age as a moderator variable in the relationship between BNPL facilities being in existence and e-shopper motivation. For instance, a study by [4] demonstrated that millennials are much more prone to BNPL service than Gen-X or Baby Boomers.  Presumably, millennials are more tech-savvy and thus tend to be attracted to digital solutions and installment plans more than others, which is going to strengthen the influence of BNPL on their shopping motivation. Alternatively, [26] research insisted that the consumers above the age of 40 were inclined towards the traditional shopping method; however, when these consumers were offered BNPL options, there was a significant increase in their e-commerce activity perceived financial security associated with BNPL plans.  For this reason, we suggest the following hypotheses:

H2-a: Age moderates BNPL impact on ESMOT more in Egypt.

H2-b: Age moderates BNPL impact on ESMOT more in Saudi Arabia.

**4.3    Income Effect on the Relationship between BNPL and E-Shopper Motivation**

Based on recent studies, the topic of impact of buy now–pay later (BNPL) implementation on consumers purchasing attitudes has been explored. This is in line with the fact that the sales of those customers who already have the access to BNPL services are increasing and this is due to the more motivated online shoppers. The research by [18] points out that this was largely due to the emergence of buy now, pay later (BNPL) platforms which were mainly only accessible online and looked to capitalize on such a trend. This is because BNPL provision decreases the monetary obstacle on consumers way as they now can borrow money and pay back in a few installments after purchase. The notions exemplified in this text are reinforced by the study conducted by [5]. BNPL has also been commended for being instrumental in encouraging repeat customers as well as the first-time purchasers to buy by the fact that the point of making it financially sensible and easy through the BNPL system. As per the research, BNPL services fall into the category of leveling the playing field by allowing customers to do away with expensive items and splitting the price on affordable monthly installments.  For this reason, we propose the following hypotheses:

H3-a: Income moderating BNPL impact on ESMOT more in Egypt.

H3-b: Income moderating BNPL impact on ESMOT more in Saudi Arabia.

**4.4    Gender Effect on the Relationship between BNPL and E-Shopper Motivation**

The divergence in male and female attitude towards the adoption of and response to BNPL (Buy Now Pay Later) services is an interesting research field, especially in market where the role of gender in financial decisions is significant. Previous studies by [16]found that women are, on average, more conservative and thorough in their money spending. Nevertheless, this group also appreciates the freedom that BNPL provides, and so, females use these services to orientate the family budget in a smart way. Similarly, nevertheless, it was determined that males used BNPL services on impulse purchases more frequently by work of [26]. Such differences in behavior suggest the likelihood of a significantly different impact of BNPL on the e-shopper motivation in males and females. For this reason, we propose the following hypotheses:

H4-a: Gender moderating BNPL impact on ESMOT more in Egypt.

H4-b: Gender moderating BNPL impact on ESMOT more in Saudi Arabia.

**4.5    Marital Status Effect on the Relationship between BNPL and E-Shopper Motivation**

Marital status is one of the demographic variables that have a significant effect on consumers' buying decisions and financial decisions in general, so it determines how the individuals utilize the buy now, pay later (BNPL) services. Research conducted by [27] claims that the way married individuals as well as single ones perceive the distribution and access of wealth varies. This issue is relevant for the intention to use BNPL services. This research showed that married consumers use BNPL mainly as a budgeting tool and not as a source of fun. Secondly, a study by [28] highlighted the fact that single people use buy now pay later services for fun and pleasure and spend their money on different lifestyle purchases, and the motivating factors are different for those who are married. For this reason, we propose the following hypotheses:

H5-a: Marital status moderating BNPL impact on ESMOT more in Egypt.

H5-b: Marital status moderating BNPL impact on ESMOT more in Saudi Arabia.

## Methodology

**5.1    Items Measurement and Questionnaire Design**

In order to assess the impact of Buy Now, Pay Later (BNPL) options on motivation levels of e-shoppers in Egypt and Saudi Arabia, an elaborate structured questionnaire was designed, containing seven sections, which would contain proper details on specific variables and respondent demographics. The questionnaire had 29 items in total where 26 items were on the major research variables and three were for the demographic details of the participants. The demographic category provided data on sex, age, and nationality of the respondent and hence, provided important context for the analysis of modulating variables. The six non-demographic sections of the questionnaire were specifically aligned with each of the primary study variables: Availability of BNPL, which is a primary predictor,

e-shopper motivation, age, income, gender, and marital status. All these sections comprised of questions that were developed to measure how participants perceive and deal with BNPL services, using a 1-5 Likert scale where 1 stands for a strong disagreement and 5 represents a strong agreement with the stated assertions. The scale we constructed allowed us to measure the intensity of the attitudes and experiences of the respondents, facilitating a deeper study of how BNPL impacts the specific demographic segments in our markets of interest. The structured paradigm assured complete evidence to every variable, and, therefore, it enabled an exhaustive verification of our research hypotheses.

## 5.2     Measurement Model

The measurement model (Figure 2) is a path diagram constructing the causal relationships between BNPL, age, gender, marital status, income level, and e-shoppers' motivation.
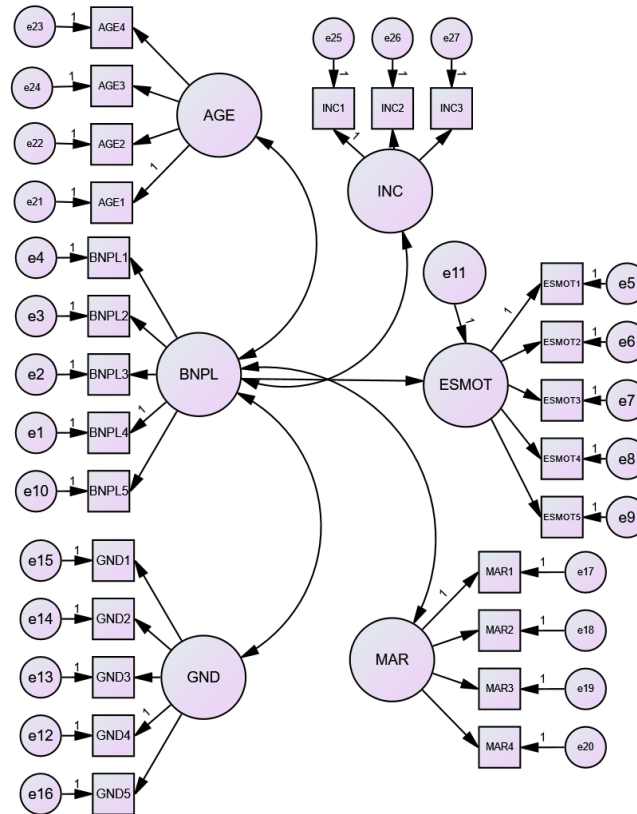


*Figure 2: Depiction of the Measurement Model*

## 5.3     Sampling and Data Collection

The population of Egypt is 114,220,691, with around 72% of internet users who shop for goods and services online in 2022/2021. However, 50.1%. of them actually make online purchases. Hence, the number of Egyptians that participate in online shopping is around 57,228,497 people [29]. The number of inhabitants in Saudi Arabia is 37,473,929. Given the fact that only 53.3% of Internet users buy products or services online, the approximate number of online shoppers is 19,974,041 people [30]. Both nations have high internet penetration rates that are an indicator of a sizable online shopping market. For the two countries, we set a minimum sample size of 500 respondents. Data collection was done through questionnaires on a Google Forms interface due to the geographical separation of the target population.

## 5.4     Data Analysis

Applying Structural Equation Modeling (SEM), we conducted data analysis for our study on the influence of Buy Now, Pay Later (BNPL) services on e-shopper motivation, which took place in Egypt and Saudi Arabia, focusing on the connections between demographic characteristics and the use of BNPL. The SEM analysis was performed with

the software of SPSS and AMOS which allowed us to compute the path coefficients as well as verify the overall model fit indices thus providing a robust statistical framework to our study. In addition, Excel also served as the means of primary data processing and descriptive statistics. We ran stepwise regression analysis to refine our model and identify the most significant predictors. This methodology provided an opportunity to outline the main factors that should be included in the final SEM model. We also performed comprehensive checks of the validity and reliability of our measurement scales, ensuring that they captured the constructs under study properly and that they were justifiably reflective of the data. This when pooled method of data analysis ensured that our findings were statistically valid and very revealing as to the behavior of BNPL services among the chosen populations.

## Results

### 6.1    Demographic Analysis of Respondents

The demographic analysis of the study sample of 524 participants has different characteristics in terms of age, gender and country distribution. The majority of the respondents are found in the age group of 18-30 years of age which is 53.1% of the whole sample, showing a young audience in the BNPL services. In that order is the 31-40 years age group that has a share of 30.3%, and for those who are 41 and over 16.6% and this suggests that the BNPL is the most attractive to younger consumers. In terms of gender distribution, males represent the larger proportion of the sample at 60.7% and females at 39.3%. The men predominance indicates the small male domination in the utilization of BNPL services within the sample. The sample is almost equally split between Saudi Arabia and Egypt, with 54.2% of the Saudis, and 45.8% came from Egypt, as shown in Table 1. This is substantial proof of the attraction and utilization of BNPL solutions in both countries. This kind of demographic segmentation forms the foundation to analyze the factors associated with characteristics of BNPL use in different age groups, gender, and regional settings.

*Table 1: Results of Demographic Analysis*

| Demographic | Category | Frequency | Percent |
|---|---|---|---|
| Age | 18-30 Yrs | 278 | 53.10% |
| | 31-40 Yrs | 159 | 30.30% |
| | >40 Yrs | 87 | 16.60% |
| Gender | Male | 318 | 60.70% |
| | Female | 206 | 39.30% |
| Country | Saudi Arabia | 284 | 54.20% |
| | Egypt | 240 | 45.80% |

### 6.2    Assessment of the Measurement Model

#### 6.2.2   Composite Reliability

The inter-item consistency composite reliability for Egypt and Saudi Arabia is good and most values are 0.7 to calculate composite reliability in social science research [31]. For Egypt, the composite reliability scores for BNPL, INCOME, AGE, MARITAL, GENDER and E-SHOPPER MOTIVATION is 0.938, 0.750, 0.727, 0.933, 0.712, and 0.824, respectively. They are all above or very close to 0.7 threshold, and within the constructs internal consistency was high. Saudi Arabia has good scores for reliability for the same constructs: For BNPL, INCOME, AGE, MARITAL were 0.931, 0.715, and 0.903, and 0.959, respectively (Table 3). These scores give additional evidence to the adequacy of the model whereby MARITAL and AGE show a very high reliability. This means that the indicators used in the SEM are valid and that they produce consistent results which maintain the stability of the results obtained from the model analysis.

*Table 2: Results of Composite Reliability Analysis*

| Variable | Saudi | Egypt |
|----------|-------|-------|
| BNPL | 0.927216 | 0.937851 |
| AGE | 0.905032 | 0.926548 |
| GENDER | 0.62993 | 0.712384 |
| INCOME | 0.675697 | 0.750036 |
| MARITAL | 0.950236 | 0.933058 |
| E-SHOPPER MOTIVATION | 0.864007 | 0.824059 |
| **Average** | **0.825353** | **0.847323** |

### Internal Consistency

This research scrutinizes the internal consistency of constructs measured in Egypt and Saudi Arabia via Cronbach's Alpha. According to [31], a value of at least 0.7 is considered acceptable. The construct of the Buy Now, Pay Later (BNPL) exhibit high inter- consistency reflecting excellent reliability. The AGE construct also demonstrates high internal reliability. Hence, it is a strong measure of age-related items. The construct GENDER also has good internal consistency, which supports the influence of gender differences on the studied phenomena. But the INCOME construct has the lowest Cronbach's Alpha scores, indicating that items within it are not as cohesively and reliably capturing the influence of income. The construct of marital status shows good reliability in Saudi Arabia but at the pass margin in Egypt, indicating perhaps a more multifaceted or divergent impact. E-shopper motivation has a good internal consistency across both countries. The average Cronbach's Alpha coefficient is 0.830 across all constructs for Egypt and 0.874 for Saudi Arabia, as shown in Table 3. and showed a rather high degree of internal consistency in the survey instrument used in the study.

*Table 3: Results of Internal Consistency Analysis*

| Construct | Number of Items | Cronbach's Alpha (Egypt) | Cronbach's Alpha (Saudi) |
|-----------|-----------------|--------------------------|--------------------------|
| BNPL | 5 | 0.956 | 0.951 |
| AGE | 4 | 0.916 | 0.934 |
| GENDER | 5 | 0.925 | 0.948 |
| INCOME | 3 | 0.584 | 0.664 |
| MARITAL | 4 | 0.740 | 0.855 |
| E-SHOPPER MOTIVATION | 5 | 0.857 | 0.892 |
| Mean/Total | 26 | 0.830 | 0.874 |

### 6.2.3   Convergent Validity

The convergent validity of the Saudi data is assessed on the basis of the AVE values of the constructs. AGE, INCOME, MARITAL, INCOME, and E-Shopper Motivation constructs show acceptable convergent validity (greater than 0.5 [32]). The AVE scores show that most of the constructs successfully capture the variance of the indicators of they could be improved upon. As evident in Table 4, GENDER does not satisfy it since it achieved 0.34 and 0.27 in the Egyptian and Saudi frameworks, respectively. Consequently, results suggest that majority of constructs in the model perform well at explaining the variances of their indicators.

*Table 4: Results of Convergent Validity Analysis*

### SAUDI

**BNPL**

| L | L^2 | Sum of L^2 | Indicators | AVE |
|---|---|---|---|---|
| 0.88 | 0.77 | | | |
| 0.86 | 0.74 | | | |
| 0.86 | 0.73 | 3.62 | 5 | 0.72 |
| 0.84 | 0.71 | | | |
| 0.82 | 0.67 | | | |

**AGE**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.93 | 0.87 | | | |
| 0.84 | 0.71 | | | |
| 0.84 | 0.71 | 3.00 | 4 | 0.75 |
| 0.84 | 0.71 | | | |

**GENDER**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.48 | 0.23 | | | |
| 0.57 | 0.33 | | | |
| 0.42 | 0.18 | 1.35 | 5 | 0.27 |
| 0.55 | 0.30 | | | |
| 0.56 | 0.31 | | | |

**INCOME**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.88 | 0.78 | | | |
| 0.71 | 0.50 | | | |
| 0.72 | 0.51 | 1.79 | 3 | 0.60 |

**MARITAL**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.96 | 0.92 | | | |
| 0.88 | 0.77 | | | |
| 0.92 | 0.84 | 3.35 | 4 | 0.84 |
| 0.91 | 0.82 | | | |

**ESMOT**

| L | L^2 | Sum of L^2 | Indicators | AVE |
|---|---|---|---|---|
| 0.61 | 0.37 | | | |
| 0.75 | 0.56 | | | |
| 0.72 | 0.52 | 2.51 | 5 | 0.50 |
| 0.76 | 0.58 | | | |
| 0.70 | 0.48 | | | |
| | | | | **0.613** |

### EGYPT

**BNPL**

| L | L^2 | Sum of L^2 | Indicators | AVE |
|---|---|---|---|---|
| 0.86 | 0.74 | | | |
| 0.87 | 0.75 | | | |
| 0.88 | 0.78 | 3.76 | 5 | 0.75 |
| 0.73 | 0.53 | | | |
| 0.98 | 0.96 | | | |

**AGE**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.89 | 0.78 | | | |
| 0.80 | 0.64 | | | |
| 0.76 | 0.58 | 3.05 | 3 | 1.02 |
| 1.02 | 1.04 | | | |

**GENDER**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.59 | 0.35 | | | |
| 0.45 | 0.20 | | | |
| 0.51 | 0.26 | 1.68 | 5 | 0.34 |
| 0.66 | 0.44 | | | |
| 0.66 | 0.43 | | | |

**INCOME**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.42 | 0.17 | | | |
| 0.86 | 0.73 | | | |
| 0.58 | 0.33 | 1.78 | 3 | 0.59 |
| 0.73 | 0.53 | | | |

**MARITAL**

| L | L^2 | Sum of L^2 | Indicators | |
|---|---|---|---|---|
| 0.90 | 0.81 | | | |
| 0.82 | 0.68 | | | |
| 0.81 | 0.65 | 3.11 | 4 | 0.78 |
| 0.99 | 0.97 | | | |

**ESMOT**

| L | L^2 | Sum of L^2 | Indicators | AVE |
|---|---|---|---|---|
| 0.72 | 0.52 | | | |
| 0.85 | 0.73 | | | |
| 0.88 | 0.77 | 2.50 | 5 | 0.50 |
| 0.56 | 0.31 | | | |
| 0.41 | 0.17 | | | |
| | | | | **0.662** |

### 6.2.1   Discriminant Validity

In Saudi Arabia and Egypt, our constructs discriminant validity is supported by the square root of the AVE of each construct being greater than their correlations between constructs. This means that our constructs are different as they measure different phenomena as a prove of discriminant validity of our model in both countries. One of them is Saudi Arabia with ESMOT variable validity score equals to 0.850, larger than the ones with other constructs like BNPL and MARITAL. The score for GENDER 0.873 in Egypt, far more than its correlation with other constructs. This high discriminant validity thus represents the reliability and validity of the SEM method, through which, the relationships in the data can be confidently analyzed.

*Table 5: Results of Discriminant Validity Analysis*

**SAUDI ARABIA**

| | BNPL | AGE | GENDER | INCOME | MARITAL | ESMOT |
|---|---|---|---|---|---|---|
| BNPL | 0.749 | | | | | |
| AGE | 0.621 | 0.695 | | | | |
| GENDER | 0.319 | 0.426 | 0.664 | | | |
| INCOME | 0.514 | 0.616 | 0.432 | 0.685 | | |
| MARITAL | 0.603 | 0.605 | 0.382 | 0.364 | 0.877 | |
| ESMOT | 0.374 | 0.432 | 0.309 | 0.417 | 0.309 | 0.850 |

**EGYPT**

| | BNPL | AGE | GENDER | INCOME | MARITAL | ESMOT |
|---|---|---|---|---|---|---|
| BNPL | 0.753 | | | | | |
| AGE | 0.580 | 0.646 | | | | |
| GENDER | 0.377 | 0.588 | 0.873 | | | |
| INCOME | 0.557 | 0.566 | 0.342 | 0.725 | | |
| MARITAL | 0.362 | 0.608 | 0.466 | 0.390 | 0.709 | |
| ESMOT | 0.551 | 0.468 | 0.429 | 0.412 | 0.344 | 0.774 |

## 6.3   Structural Equation Modeling (SEM)

The SEM analysis gives intriguing insights on how demographic variables are linked to the acceptance of Buy Now, Pay Later (BNPL) services. The covariances between INC and BNPL with the coefficient of -0.33. This suggests that individuals with higher income levels are less interested in the BNPL services. It is that people who earn more do not want to finance directly or use any deferment of payment as long as they manage to spend today by themselves because of their financial condition. In the same vein, the covariance of marital status (MAR) and BNPL is negative with an estimate of -0.14, which implies that individuals who are married are less likely to use BNPL than single people. This could be as a result of different financial needs of married couples and the more stable financial status that will make the need for BNPL services to be lesser. Another variable AGE also shows the negative covariance with

the BNPL having coefficient equal to -0.45. This observation is consistent with the fact that older individuals are less likely to embrace the BNPL concept. The age-old money behaviors or a smaller pull of modern financial technologies to the older age groups may account for the hesitation. However, gender (GND) is almost insignificant in the acceptance of BNPL and it is backed by an insignificant positive coefficient of 0.05. This means that gender does not really have a significant influence on the chances of using the BNPL service hence the choice is equalized across genders.
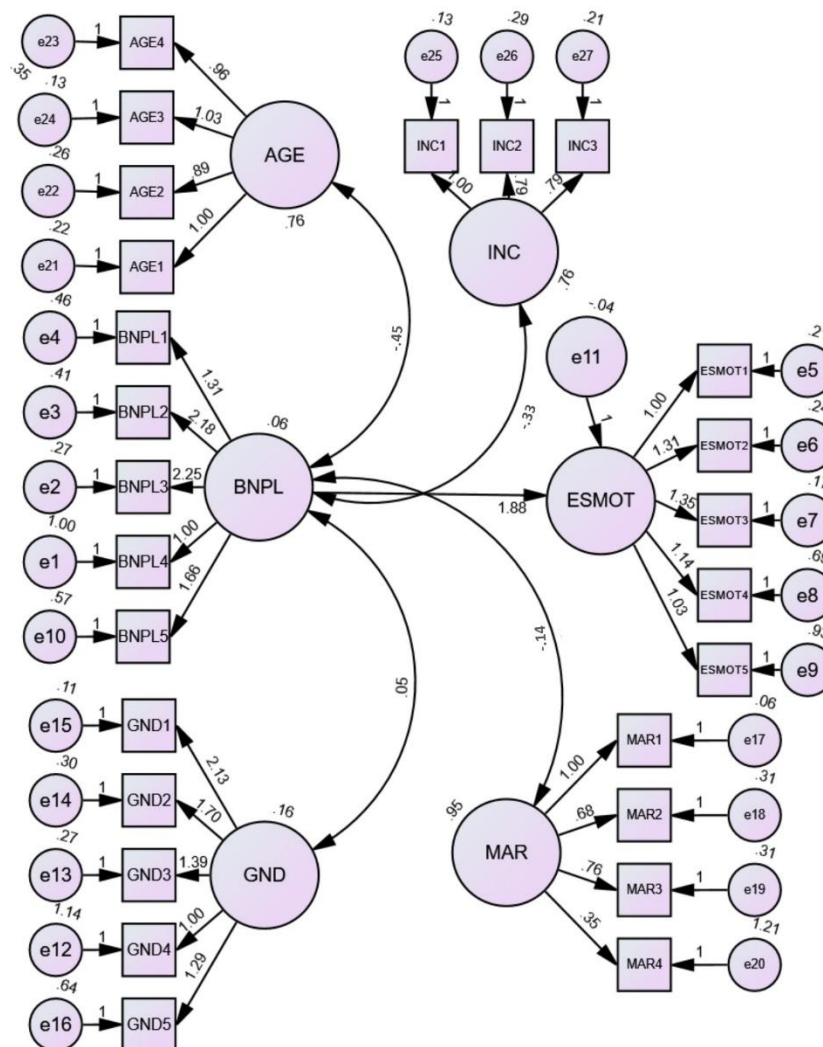


## 6.4    BNPL on E-Shopper Motivation

The results of the regression analyses of Saudi Arabia and Egypt indicate that Buy Now, Pay Later (BNPL) services significantly influence the E-shopper motivation (ESMOT) in both regions. Nevertheless, the impact is a bit more profound in Saudi Arabia. This is revealed by the R Square in Saudi Arabia (0.559) however, it is less in Egypt (0.505) i.e.  the BNPL explains more of the variance in e-shopper motivation among the consumers in Saudi Arabia. This is also supported by the standardized beta coefficients whereby Saudi Arabia has a higher beta (0.744 compared to 0.711 in Egypt (Table 6). This suggests that in the context of Saudi Arabia, BNPL is a more powerful determinant of e-shopper motivation. This is likely to happen as a result of varying stages of market maturity, consumer perception and economic condition in both countries. In addition, the precision of the estimates, which is illustrated by the lower standard errors in Saudi Arabia, suggests that the usage patterns and response of the Saudi consumers are more consistent. In general, the role of BNPL in the motivation of e-shoppers is massive in both countries, but it is more pronounced in Saudi Arabia.

*Table 6: Regressing e-Shopper Motivation on BNPL*

| Statistic | Saudi Arabia | Egypt |
|---|---|---|
| R | 0.748 | 0.711 |
| R Square | 0.559 | 0.505 |
| Adjusted R Square | 0.558 | 0.503 |
| Standard Error of Estimate | 0.533 | 0.600 |
| Constant (B) | 1.388 | 1.425 |
| Constant Std. Error | 0.131 | 0.157 |
| BNPL Coefficient (B) | 0.660 | 0.648 |
| BNPL Std. Error | 0.035 | 0.042 |
| BNPL Beta | 0.748 | 0.711 |
| t for BNPL | 18.916 | 15.580 |
| Significance (BNPL) | 0.000 | 0.000 |
| ANOVA F | 357.797 | 242.721 |
| ANOVA Sig. | 0.000 | 0.000 |

## 6.5    Mediation Effect Comparison

The stepwise regression analysis in the study illustrates various models in which demographic factor affect e-shopper motivation between Egypt and Saudi Arabia that indicate slight, yet critical, cultural and economic differences of two regions. In all of the countries, the entering of the variable of average age (AGE) into the model of online shopping behavior makes the model more predictively valuable, pointing to the crucial part that age plays in this behavior. However, the effect in Egypt is even stronger, which is indicative of the greater potential of age-related e-commerce behavior differences between Egypt and Saudi Arabia (Table 7). In both models, the GND dummy only shows a small difference that gender also insignificantly indicates it in motivation of e-shopper determination in these two countries. Marriage status and income variables show increase contribution to the models and in Egypt, marriage status has a more important effect and in Saudi Arabia the income is the most influencing. This is though, more likely to be related to different economic dynamics of these two regions with the financial capabilities in Saudi Arabia and the marital and social structures in Egypt playing different roles here as these factors may have different impacts on peoples' will to engage into online shopping. Overall, these findings highlight the differentiation of consumer behavior among these markets, and underline the necessity of regional marketing tactics considering local demographic impacts on portrayal of e-commerce.

*Table 7: Results of Mediation Analysis*

| Model | Variable Added | $\Delta R^2$ Egypt | P-value Egypt | $\Delta R^2$ Saudi | P-value Saudi |
|---|---|---|---|---|---|
| 1 | BNPL | - | - | - | - |
| 2 | AGE | 0.132 | 0.000 | 0.060 | 0.000 |
| 3 | GND | 0.002 | 0.263 | 0.002 | 0.317 |
| 4 | MAR | 0.028 | 0.000 | 0.013 | 0.002 |
| 5 | INC | 0.070 | 0.000 | 0.082 | 0.000 |

## 6.6    Model Fit Indices

The fit indexes of structural equation modeling (SEM) models in Saudi Arabia and Egypt are qualitatively different. The rule is that CMIN/DF are less than or equal to 3.0 [31]. Table 8 shows that the default model has a CMIN/DF ratio of 2.702, denoting a good fit, whereas the saturated model has a CMIN of 0.000, indicating perfect fit. Saudi Arabia fits well for the default model and less poor for the independence model than Egypt indicating that the theoretical constructs and their interrelationships are more congruous with the observed data in the Saudi Arabian context. The specified relationships in the SEM are significantly better representations of the data than the independence model in both models, hence, validating the importance and appropriateness of the hypothesized relationships in capturing e-shopper motivations in both countries.

*Table 8: Model Fit Indices Results*

|  | | | **SAUDI** | | |
| --- | --- | --- | --- | --- | --- |
| **Model** | **NPAR** | **CMIN** | **DF** | **P** | **CMIN/DF** |
| **Default model** | 59 | 861.883 | 319 | 0.000 | 2.702 |
| **Saturated model** | 378 | 0.000 | 0 | | |
| **Independence model** | 27 | 2035.529 | 351 | 0.000 | 5.799 |
|  | | | **EGYPT** | | |
| **Model** | **NPAR** | **CMIN** | **DF** | **P** | **CMIN/DF** |
| **Default model** | 56 | 796.533 | 275 | 0.000 | 2.896 |
| **Saturated model** | 378 | 0.000 | 0 | | |
| **Independence model** | 27 | 2068.443 | 307 | 0.000 | 6.738 |

## 6.7        Decision on Hypotheses

Hypotheses examined the direct influence of BNPL on e-shopper motivation, and the moderating impacts of age, income, gender, and marital status on such relationship. The findings of this study indicate that BNPL significantly improves the sense of motivation of the e-shopper from both countries, thereby proving that BNPL is an effectual marketing tool. Moreover, additional analyses showed that age and income stand out as significant moderator variables enhancing the impact that BNPL has on the motivation of e-shoppers, in Egypt and Saudi Arabia, so this implies that marketers need to consider these variables in their strategies. However, the gender effect did not have any significant value in both countries indicating that BNPL attractiveness and usefulness might not be related to the gender difference in this context. Marital status was also a strong moderator, in the inclination to use BNPL options and could be attributed to the differing financial obligations and priorities between married and unmarried people.

*Table 9: Summary Results on Hypotheses*

| **Hypothesis** | **Significance** | **Accepted/Rejected** |
| --- | --- | --- |
| H1-a: BNPL on ESMOT in Egypt | 0.000 | Accepted |
| H1-b: BNPL on ESMOT in Saudi Arabia | 0.000 | Accepted |
| H2-a: Age on BNPL x ESMOT in Egypt | 0.000 | Accepted |
| H2-b: Age on BNPL x ESMOT in Saudi Arabia | 0.000 | Accepted |
| H3-a: Income on BNPL x ESMOT in Egypt | 0.000 | Accepted |
| H3-b: Income on BNPL x ESMOT in Saudi Arabia | 0.000 | Accepted |
| H4-a: Gender on BNPL x ESMOT in Egypt | >0.05 | Rejected |
| H4-b: Gender on BNPL x ESMOT in Saudi Arabia | >0.05 | Rejected |
| H5-a: Marital on BNPL x ESMOT in Egypt | 0.000 | Accepted |
| H5-b: Marital on BNPL x ESMOT in Saudi Arabia | 0.000 | Accepted |

## Discussions of Findings and Conclusion

## 7.1        Discussion and Implications

A significant body of research on the relationship between Buy Now, Pay Later (BNPL) option and e-shopper motivation, with recent studies specifying the great effect of BNPL services on consumer purchase attitudes and behavior. In the context of Egypt and Saudi Arabia, our study aimed to explore this association. The literature, consisting of studies by [23] and [24], provides evidence for the argument that BNPL eliminates financial obstacles, inducing e-shoppers to buy freely. Based on [25] and [6], BNPL services are more attractive to new and repeat buyers. These studies emphasize the function of BNPL in converting costly products into cheaper ones by spreading the payment over different parts and such an approach highly affects purchase decisions. The pattern of the Egyptian and Saudi markets characteristics analysis demonstrated that BNPL had a powerful and positive impact on the e-shopper motivation in the two countries, as is consistent with the general findings of the literature, thus, suggested that BNPL is an effective tool that enhances online shopping to culturally diverse regions.

Following on the scope of research, we studied demographic moderators such as age and income, which is believed to moderate the effect of BNPL availability and e-shopper motivation. This research confirms these past findings and highlights the role age takes in the customer acceptance of marketing strategies such as BNPL. The study by [4] revealed that millennials who are fans of digital solutions are especially responsive to BNPL services and as a

result, they are more open to shopping. Also, elderly consumers who usually adopt traditional shopping habits are more likely to engage in online consumer behavior when they are presented with BNPL options that offer a sense of financial safety [26]. These fine nuances were backed up by our findings, which indicated that the impact of age was dramatically mitigated in both Egypt and Saudi Arabia, thereby highlighting the need for age-customized BNPLs in relation to the e-shopper motivation. The approach is also in harmony with trends worldwide and with the regional peculiarities of consuming behavior that affect their digital activities.

## 7.2    Limitations

Although our research is thorough in assessing the effect of Buy Now, Pay Later (BNPL) services on the motivation of e-shoppers, some limitations should be mentioned. Self-reported data may be affected by bias in that respondents could provide false information about their purchase behavior or be influenced by the social desirability in their responses. Additionally, the cross-sectional nature of the study precludes us from making causal inferences from the data as we cannot assert that BNPL transactions result in increased e-shopper motivation without considering changes over a specific span of time. Moreover, the study only related BNPL role to some demographic variables, thereby the other variables such as socioeconomic status, urban versus rural differences, and specific personal or cultural attitudes toward debt that may affect BNPL use and impact within the scope of the study. Also, the findings of the study can be generally applicable in view of the fact how the cultural and economic inequalities between the considered locations and other sub-regions of the world exist. However, it points out the need for a more narrowed research. These limitations point to the directions for the future research that will elaborate on the results of this study and offer a more holistic view on the determinants of BNPL solutions adoption and the effects of its usage.

## 7.3    Conclusion

This research offered important insights regarding the connection between Buy Now, Pay Later (BNPL) services and e-shopper motivation in countries with different cultural and economic backgrounds, Egypt and Saudi Arabia to be exact. By using recognized theoretical models and empirical data, we showed that BNPL considerably increases e-shopper motivation in both locations and thus confirmed earlier works that identified the positive impact of these financial options on consumer purchasing behavior. The results indicate that BNPL programs are especially successful in markets with high internet penetration and growth in the use of digital shopping alternatives. In addition, the research presented the importance of demographic moderators including age and wealth, which had different impacts on the relation between the usage of BNPL and e-shopper motivation in the two countries. This highlights the role of marketers and policy makers in the consideration of demographic characteristics when developing and implementing BNPL offerings to ensure that they are attractive and viable. However, the limitations of the study include self-reporting data biases and a cross-sectional design that allows causation to be proven but despite this, the study remains a good basis for further research. A few could use longitudinal data which would allow the researchers to analyze changes in given parameters across the time while others may expand a range of demographic and socioeconomic variables being considered, this would provide a profound insight into the influence of BNPL in the diverse global markets. This study also contributes to the discussions of financial advances in e-commerce from a scholarly perspective and gives prescriptive recommendations for firms willing to maximize their strategic alignment to the changing requirements and preferences of the digital customer.

## 7.4    Future Research

The future research of Buy Now, Pay Later (BNPL) services should cover the limitations found in this study, that require the longitudinal data in determination of relationships and long-term consequences of BNPL on consumer behavior. Integration of a variety of demographic attributes including education, occupation, and more precise socioeconomic measures, could lead to better comprehension of how various sectors of the public perceive and utilize BNPL services. Moreover, cross-country comparative studies to account for cultural effects regarding BNPL adoption and influence would give international look on its utilization as a financial instrument in e-commerce. Moreover, researchers can look into psychological aspects of BNPL use, such as impulse buying tendencies and financial management skills, to tailor BNPL products and minimize the credit service abuse risks. From such a wide angle, one will be able to understand BNPL's current role in the contemporary consumer markets, as well as how these services could be strategically used to cultivate an even more sustainable consumer spending profile.

## Bibliography

[1]  J. Howarth, "Buy Now, Pay Later Statistics," 2024. [Online]. Available: https://explodingtopics.com/blog/bnpl-stats. [Accessed 4 May April].

[2]  Research and Markets, "Saudi Arabia Buy Now Pay Later Market Report 2024: BNPL Market to Record a CAGR of 11.5% During 2024-2029, Reaching A Value of US $2.92 Billion by 2029," 2024. [Online]. Available: https://www.prnewswire.com/news-releases/saudi-arabia-buy-now-pay-later-market-report-2024-bnpl-market-to-record-a-cagr-of-11-5-during-2024-2029--reaching-a-value-of-us-2-92-billion-by-2029--302066525.htm. [Accessed 4 May 2024].

[3]  Research and Markets, "Egypt's Buy Now Pay Later Industry Report 2024-2029: Operational Metrics and Consumer Behavior, Diverse Market Opportunities," 2024. [Online]. Available: https://finance.yahoo.com/news/egypts-buy-now-pay-later-090. [Accessed 5 May 2024].

[4]  R. M. Bădîrcea, A. G. Manta, N. M. Florea, J. Popescu, F. L. Manta and S. Puiu, "E-commerce and the Factors Affecting its Development in the Age of Digital Technology: Empirical Evidence at EU−27 level," *Sustainability,* vol. 14, no. 1, p. 101, 2021.

[5]  D. A. Lupșa-Tătaru, E. Nichifor, L. Dovleac, I. B. Chiţu, R. D. Todor and G. Brătucu, "Buy Now Pay Later—A Fad or a Reality? A Perspective on Electronic Commerce," *Economies,* vol. 11, no. 8, p. 218, 2023.

[6]  B. Mukhtar, S. N. B. A. Tamrin, M. K. Shad, F. W. Lai and N. A. Jalil, "A Proposed Framework for Assessing BNPL (Buy Now, Pay Later) Adoption and its Impact on Consumers' Buying Behavior," *KnE Social Sciences,* vol. 1, no. 1, pp. 804-812, 2023.

[7]  L. Ah Fook and L. McNeill, "Click to buy: The impact of retail credit on over-consumption in the online environment," *Sustainability,* vol. 12, no. 18, p. 7322, 2020.

[8]  D. Johnson, J. Rodwell and T. Hendry, "Analyzing the impacts of financial services regulation to make the case that buy-now-pay-later regulation is failing," *Sustainability,* vol. 13, no. 4, p. 1992, 2021.

[9]  V. A. Raj, S. S. Jasrotia and S. S. Rai, "Intensifying materialism through buy-now pay-later (BNPL): examining the dark sides," *International Journal of Bank Marketing,* vol. 42, no. 1, pp. 94-112, 2024.

[10] P. Rita and R. F. Ramos, "Global research trends in consumer behavior and sustainability in E-Commerce: A bibliometric analysis of the knowledge structure," *Sustainability,* vol. 14, no. 15, p. 9455, 2022.

[11] P. Ebrahimi, K. A. Hamza, E. Gorgenyi-Hegyes, H. Zarea and M. Fekete-Farkas, "Consumer knowledge sharing behavior and consumer purchase behavior: evidence from E-commerce and online retail in Hungary," *Sustainability,* vol. 13, no. 18, p. 10375, 2021.

[12] X. Chen, S. L. Y. Fang and H. Wang, "Does identification influence continuous e-commerce consumption? The mediating role of intrinsic motivations," *Sustainability,* vol. 11, no. 7, p. 1944, 2019.

[13] L. Bell, R. McCloy, L. Butler and J. Vogt, "Motivational and affective factors underlying consumer dropout and transactional success in ecommerce: an overview," *Frontiers in Psychology,* vol. 11, no. 1, p. 546302, 2020.

[14] F. Sudirjo, L. N. A. Lotte, I. N. T. Sutaguna, A. Risdwiyanto and M. Yusuf, "The Influence of Generation Z Consumer Behavior on Purchase Motivation in E-Commerce Shoppers," *Profit: Jurnal Manajemen, Bisnis dan Akuntansi,* vol. 2, no. 2, pp. 110-126, 2023.

[15] S. L. A. Natswa, "Buy-now-pay-later (bnpl): generation z's dilemma on impulsive buying and overconsumption intention," in *BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2021)*, Atlantic Press, 2021, pp. 130-137.

[16] V. Juita, V. Pujani, R. Rahim and R. Rahayu, "The Influence of User's Digital Financial Literacy and Perceived Risks on Buy Now Pay Later (BNPL) Adoption: A Gender's Perspective," in *International Conference on Entrepreneurship, Leadership and Business Innovation (ICELBI 2022)*, Atlantis Press, 2024, pp. 629-645.

[17] M. Di Maggio, E. Williams and J. Katz, Buy now, pay later credit: User characteristics and effects on spending patterns (No. w30508), National Bureau of Economic Research, 2022.

[18] R. Aalders, "Buy now, pay later: redefining indebted users as responsible consumers," *Information, Communication & Society,* vol. 26, no. 5, pp. 941-956, 2023.

[19] Y. O. S. Y. Arisandy, Y. B. Dasril, S. N. B. Salahudin, M. A. Muslim, A. Adnan and G. K. Wen, "Buy Now Pay Later Services on Generation Z: Exploratory Data Analysis Using Machine Learning," *Journal of Theoretical and Applied Information Technology,* vol. 101, no. 11, pp. 4194-4204, 2023.

[20] U. Suhud, M. Allan, S. Rahayu and D. Prihandono, "When brand image, perceived price, and perceived quality interplay in predicting purchase intention: Developing a rhombus model," *Academic Journal of Interdisciplinary Studies,* vol. 11, no. 1, pp. 232-245, 2022.

[21] K. Roethke, J. Klumpe, M. Adam and A. Benlian, "Social influence tactics in e-commerce onboarding: The role of social proof and reciprocity in affecting user registrations," *Decision Support Systems,* vol. 131, no. 1, p. 113268, 2020.

[22] A. Appolloni, V. Basile, F. Caboni and L. Pizzichini, "An innovative approach to online consumer behaviour segmentation: the self-determination theory in an uncertain scenario," *European Journal of Innovation Management,* vol. 26, no. 7, pp. 308-327, 2023.

[23] P. Gerrans, D. G. Baur and S. Lavagna-Slater, "Fintech and responsibility: Buy-now-pay-later arrangements," *Australian Journal of Management,* vol. 47, no. 3, pp. 474-502, 2022.

[24] B. Guttman-Kenney, C. Firth and J. Gathergood, "Buy now, pay later (BNPL)... on your credit card," *Journal of Behavioral and Experimental Finance,* vol. 37, no. 1, p. 100788, 2023.

[25] L. Feng, J. T. Teng and F. Zhou, "Pricing and lot-sizing decisions on buy-now-and-pay-later installments through a product life cycle," *European Journal of Operational Research,* vol. 306, no. 2, pp. 754-763, 2023.

[26] F. Gebeyehu and A. Mavridis, Buy Now, Pay Later: Assessing the Financial and Behavioral Implications for Gen-Z Consumers in the USA, Karlskrona, Sweden: Blekinge Institute of Technology, 2023.

[27] E. Lee, "Buy Now, Pay Later: No Fees. No Credit Check," *Seattle J. Tech. Env't & Innovation L,* vol. 13, no. 1, p. 1, 2023.

[28] V. H. Hoang, P. M. Nguyen, T. M. N. Luu and T. M. H. Vu, "Determinants of intention to borrow consumer credit in Vietnam: application and extension of technology acceptance model," *The Journal of Asian Finance, Economics and Business,* vol. 8, no. 4, pp. 885-895, 2021.

[29] M. Zain, "Ministry Data Reveals Surging Interest in Online Shopping Among Egyptian Consumers," 16 April 2024. [Online]. Available: https://www.businesstodayegypt.com/Article/1/4446/Ministry-Data-Reveals-Surging-Interest-in-Online-Shopping-Among-Egyptian. [Accessed 29 April 2024].

[30] GASTAT, "Population Estimates," General Authority for Statistics - Saudi Arabia, Riyadh, Saudi Arabia, 2023.

[31] J. F. Hair Jr, G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, S. Ray and S. Ray, "Evaluation of reflective measurement models," *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook,* vol. 1, no. 1, pp. 75-90, 2021.

[32] Y. Rosseel, "lavaan: An R Package for Structural Equation Modeling," *Journal of Statistical Software,* vol. 48, no. 2, p. 1–36, 2012.

## Appendix: Questionnaire

*Table 10: Main Questionnaire*

| BNPL | Source |
|---|---|
| 1. I like BNPL services as they provide installment payment. | [23] |
| 2. BNPL choices also make me to purchase the things I would not usually buy. | [23] |
| 3. I have faith in the BNPL services to provide a safe way to handle payments. | [23] |
| 4. The ease of BNPL services raises my desire to buy online. | [6] |
| 5. Stores that provide BNPL choices are my more frequent visitor. | [23] |
| **Age Effects** | **Source** |
| 1. Newer payment methods such as BNPL are more user friendly to young customers | [4] |
| 2. Comfort with online shopping platforms is influenced by age. | [26] |

| | | Source |
|---|---|---|
| 3. | I think that my age determines how often I use BNPL solutions. | [4] |
| 4. | I become more careful the older I get when using BNPL services. | [26] |
| **Gender Effects** | | **Source** |
| 1. | I think that my sex does affect my choice in using BNPL services. | [16] |
| 2. | BNPL advertising campaigns aimed at my gender motivate me | [16] |
| 3. | I am influenced by my gender in terms of how I often I go shopping online. | [26] |
| 4. | Gender determines my perception of the risks linked to the BNPL services. | |
| 5. | I believe that men and women have different motivations to use BNPL solutions. | [26] |
| **Income Effects** | | **Source** |
| 1. | The level of my earnings inclines me to use BNPL services to acquire expensive products. | [18] |
| 2. | I tend to rely more on BNPL alternatives as my earning rises. | [18] |
| 3. | More income makes me feel more confident in doing the online shopping. | [5] |
| **Marital Status Effects** | | **Source** |
| 1. | I am influenced by marriage in considering the use of BNPL services. | [27] |
| 2. | The big online purchasing decisions are somewhat determined by my marital status. | [27] |
| 3. | I consult my partner before utilizing BNPL options for online purchases. | [1] |
| 4. | The details of my domestic duties influence my desire to use BNPL facilities. | [27] |
| **E-Shopper Motivation** | | **Source** |
| 1. | I like BNPL services as they provide installment payment. | [7] |
| 2. | BNPL choices also make me to purchase the things I would not usually buy. | [9] |
| 3. | I have faith in the BNPL services to provide a safe way to handle payments. | [7] |
| 4. | The ease of BNPL services raises my desire to buy online. | [6] |
| 5. | Stores that provide BNPL choices are my more frequent visitor. | [6] |