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## Determinants of Youths' Intention to Shop Online: Study of Uganda and Rwanda

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### Abstract

*Existing literature on online shopping has focused on reasons for people to shop online while there is limited research on youths' intention to shop online. Hence, this paper was motivated to examine the determinants of youth's intention to shop online by comparing two countries namely Uganda and Rwanda. This paper's specific objectives are; to analyse the relationship between hedonic and satisfaction among youths to shop online and to analyse the relationship between subjective norms and satisfaction among youths to shop online. This is a quantitative study that used structured questionnaires which were circulated by email survey to 122 youths of higher education institutions in Uganda (Makerere University Business School) and Rwanda (University of Rwanda). The data was analysed using descriptive statistics and Partial Least Square Structural Equation Modelling (PLS-SEM). The findings indicated a significant relationship between hedonic and satisfaction among youths' intention to shop online ( $p=0.000$  for Uganda;  $p=0.05$  for Rwanda); and a significant relationship between subjective norms and satisfaction among youths' intention to shop online ( $p=0.02$  for Uganda;  $p=0.000$  for Rwanda). The practical implication is for stakeholders of online shopping and policy makers to consider hedonic and subjective norms as key factors that determine youths' intention to shop online.*

**Keywords:** Youth, online shopping, hedonic, subjective norms, satisfaction, higher education institutions, Uganda, Rwanda

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### Introduction

Shopping online has gained popularity over the years. At the global level, scholars have been concerned with factors limiting consumers to shop online. For example, Daroch, Nagrath and Gupta (2020) noted that among the factors constraining consumers to shop online included fear of bank transactions, insecurities, services, experiences and trust. Similarly, in Africa, various studies (Moeti, Mokwena & Malebana, 2021; Mofokeng, 2021; Oloveze et al., 2022) have mentioned attributes that restrain consumers from shopping online. In Nigeria, Oloveze *et al.* (2022) found that online shopping by consumers was directly affected by attitude, perceived



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usefulness and social influences. Within Africa, the literature from Uganda and Rwanda on shopping online is scant. For instance, in Rwanda, the study by Ntahobari and Twizeyimana (2020) opined that, Rwandans prefer online shopping however, the focus of that study was on e-commerce for businesses rather than youths in higher education institutions. This indicates that more research is needed to expand the literature on shopping online from business owners to youths. Furthermore, including the youths as a unit of analysis of study to understand shopping online is vital since Africa is projected to have more youths in the years ahead by contributing over 40% of the world's young people by 2050 (UNECA, 2017). Similarly, in Uganda, past scholars like Jannat, Habib and Nura (2021) commented that Ugandans have not fully embraced e-commerce, just like most sub-Saharan countries and this postures challenges for online consumption by potential consumers. The studies by Jannat et al., (2021) and Ntahobari and Twizeyimana (2020) suggested that there is still a problem in terms of challenges on online shopping for these two countries of Uganda and Rwanda, hence making this study not only relevant and timely but also suitable in terms of the scope.

Despite the challenges of online shopping at the global level to the local level, even during the Coronavirus Disease 2019 (COVID-19) global pandemic, the online shopping relevance was accelerated due to lockdowns and social distancing that left many people immobile and reliant on online purchases of goods and services. For instance, Taiwan, during the COVID-19 pandemic had an increase of 4.9% in customers that did shop online (Chang & Meyerhoefer, 2021). Existing literature such as Fu et al., (2020), Giao, Vuong and Quan (2020), Usman and Kumar (2021), and Gulfraz *et al.* (2022) indicated that shopping online among customers can depend on various factors. These factors include; hedonic motivations, enjoyment, positive feelings of pleasure, excitement, convenience, level of satisfaction, payment convenience and competing prices which are related to shopping online (Alhaimer, 2022; Kim & Eastin, 2011; Erjavec & Manfreda, 2022; Ma et al., 2022; Martinez-Lopez et al., 2016; Mehra, Rajput & Paul, 2022).

On the other hand, Alaimo, Fiore and Galati (2022), and Njoroge et al., (2012) found that, satisfaction is a key factor in measuring consumers' purchase intent while Ma *et al.* (2022) concentrated on online shopping frequency and revealed that, shopping online in New Zealand is mainly affected by convenience in payment and competitive prices. Furthermore, there are studies on shopping online including Gulfraz et al., (2022) and Ma et al., (2022) that have contributed knowledge toward an understanding of shopping online. Despite the available literature, the study by Alsoud and Othman (2018) in Jordan found that subjective norms do impact consumers' attitudes positively hence emphasizing the need for more research on online shopping in other locations. Additionally, Ma et al., (2022) discovered that shopping online can also be influenced by urban location and the size of the family.

Therefore, due to the persistent problem of challenges related to shopping online, this study's main objective was to examine the determinants of youths' intention to shop online in the context of Uganda and Rwanda. To address the main objective, this paper developed two specific objectives which are; to analyse the relationship between hedonic and satisfaction among youths to shop online, and to analyse the relationship between subjective norms and satisfaction among youths to shop online. This study defines intent to shop online as the purchase of products or services online which is associated with satisfaction. Furthermore, this paper refers to youths in Uganda and Rwanda who are male and female not exceeding 24 years in higher education

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institutions and are actively shopping online through various online shops. According to UNECA (2017), the young Africans as the youth should not exceed 24 years old. Hence, this paper adopts the categorisation of youths age from UNECA (2017).

Based on the specific objectives which were to analyse the relationship between hedonic and satisfaction among youths to shop online, and to analyse the relationship between subjective norms and satisfaction among youths to shop online, this study argues that hedonic and subjective norms have significant relationship with satisfaction by developing two hypotheses that:

*H1: There is a significant relationship between hedonic and satisfaction among youths to shop online.*

*H2: There is a significant relationship between subjective norms and satisfaction among youths to shop online.*

This outcome of this paper has study implications to the policy makers, academia, and higher education practitioners.

## Literature Review

### *Technology Acceptance Model (TAM)*

The Technology Acceptance Model (TAM) was developed by Davis in 1989 (Attié & Meyer-Waarden, 2022; Davis, 1989). In addition, the technology acceptance model assumes that an individual's behaviour intention to use a system is determined by beliefs in terms of usefulness and ease of use (Tao et al., 2022; Venkatesh, Davis & Walton, 2000). Therefore, the major components of the technology acceptance model are usefulness and ease of use which are valuable constructs and relevant to understand shopping online for the context of this study in terms of youths' intention to shop online by comparing Uganda and Rwanda. Similarly, Alsoud and Othman (2018) used the technology acceptance model to provide an empirical understanding of Jordanian consumers towards online shopping and found that websites in terms of quality, credibility and security protection, were significantly related to customers' online shopping intention. Other scholars have also used the technology acceptance model such as Moon, Shim and Lee (2022) and Aineah (2016) and Monsuwe, Dellaert and de Ruyter (2004).

The study by Akidm, Casaló and Flavián (2022), as well as that of Monsuwe, Dellaert, and de Ruyter (2004) applied the technology of acceptance model and argued that, the hedonic orientation of online shopping reflects enjoyment aspect since hedonists seek enjoyable experiences, fun and fantasy. The study further states that, within the technology acceptance model, hedonic orientation appears to influence consumers' attitude toward online shopping. In addition, Aineah (2016) focused on the factors affecting the online purchase intent of the college students using the technology acceptance model with the extended constructs of trust, enjoyment and e-quality. The study by DeLone and McLean (2003) mentioned that user satisfaction is closely interrelated with the intention to purchase online. Similarly, Aldhmour and Sarayrah (2016) used the technology acceptance model to investigate factors influencing consumer's intention to use online shopping and found that subjective norms had positive direct impact on

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consumer's attitudes while other perceived ease of use, perceived usefulness and perceived risk did not have a direct impact on customers' intention.

### ***Theory of Reasoned Action (TRA)***

The theory of reasoned action was conceptualised by Fishbein and Ajzen in 1975 and further developed by Ajzen and Fishbein in 1977 (Ajzen & Fishbein, 1977; Fishbein & Ajzen, 1975). The theory of reasoned action is hinged on the constructs of people's behaviour in different settings in terms of their intention whether attitude or subjective norms (Ajzen & Fishbein, 1977; Fishbein & Ajzen, 1975; Hagger, 2019). Furthermore, on the subjective norms, the study by Beyari and Garamoun (2022), as well as that of Aldhmour and Sarayrah (2016) used the Theory of Reasoned Action (TRA) which encompasses belief, attitude, intention and behaviour. These major components of the theory of reasoned action are important and suitable for understanding the youths' intention to shop online. These studies (Aldhmour & Sarayrah, 2016; Beyari & Garamoun, 2022) show that the technology acceptance model along with the theory of reasoned action have been used to examine online shopping.

While the mentioned studies such as Aineah (2016), Aldhmour and Sarayrah (2016) and Monsuwe, Dellaert, and deVruyter (2004) have not applied both the technology acceptance model and theory of reasoned action in a single study to investigate shopping online from the perspective of satisfaction and how hedonic and subjective norm determines the satisfaction of youths' intention to shop online from the settings of two higher education institutions. Adding to this theoretical gap, this study adopts both the technology acceptance model and the theory of reasoned action to determine factors that influence youths' intention to shop online. This current study has narrowed the empirical literature gap in prior authors by utilising the technology acceptance model and theory of reasoned action in the analysis of hedonic and subjective norms as factors that determine youths' intention to shop online in the context of Uganda and Rwanda.

### ***Youths' Intention to Shop Online***

Shopping online is an innovative form of trade that takes place on the internet where customers purchase products and services directly from the seller (Rizwan *et al.*, 2014). Individuals intend to shop online because it saves time (Heidenstrøm & Hebrok, 2022; Rizwan *et al.*, 2014). Kim and Eastin (2011) have defined hedonic shopping motivation as the enjoyment of shopping for its own sake, the pursuit of fun, novelty and excitement while shopping. In this paper, hedonic is the shopping experience exhibiting aspects of excitement, escape from boredom and enjoyment. The concept of subjective norms constitutes societal norms and social influence (Fishbein & Ajzen, 1975; Francis & Bishagazi, 2022). This paper adopts the definition of subjective norms from Fishbein and Ajzen (1975).

Other factors influencing online shopping intention were revealed by Alsoud and Othman (2018). The study by Alsoud and Othman (2018) was carried out in Jordan and used Partial Least Square (PLS) analysis to test the factors that enhance Jordanian academic-staff intention to purchase online. The findings of males (62%) with the majority aged 30 to 39 years (88%) indicated that factors such as website quality, website credibility and security protection significantly relate to online shopping intention. Whilst the study by Alsoud and Othman (2018)

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focused on online shopping for academic staff, this study examined online shopping from a youth perspective.

Njoroge *et al.* (2012) applied factor analysis and found that differences manifest in how satisfied students are with technology which is mainly from four factors which are proficiency, assessment, performance and preference towards web courses. Although satisfaction was used in the study, the focus was on course material as opposed to shopping online. In addition, the study by García-Salirrosas *et al.*, (2022) and that of Saleem *et al.*, (2015) indicated that satisfaction is one of the important factors, which impact purchase intention. The studies by Njoroge *et al.*, (2012), Garcia-Slairoso *et al.*, (2022) and Saleem *et al.*, (2015) have examined online shopping but from different perspectives of course materials and with findings that satisfaction is among the factors affecting purchase. In this study satisfaction is treated as a measure of youths' intention to shop online by arguing that hedonic and subjective norms are significantly related to satisfaction among the youth to shop online.

Martinez-Lopez *et al.*, (2016) conducted a qualitative and quantitative study in Spain with participants from university schools as respondents to invest in hedonic motives for online consumption experience by applying exploratory factor analysis and confirmatory factor analysis. The study concluded that, measurement for hedonic motives for online consumption was visual appeal, enduring involvement with a product or service, sensation seeking, escape, intrinsic enjoyment, hanging out, social shopping, self-expression and role shopping. Ma *et al.*, (2022) used a regression analysis to investigate online behaviours of buyers during the COVID-19 global pandemic in New Zealand. Findings showed that shopping online is heavily influenced by convenience of payment by the consumers followed by pricing, living in the city, and the number of children in the household (Ma *et al.*, 2022). These studies (Ma *et al.*, 2022; Martinez-Lopez *et al.*, 2016) have applied factor analysis and regression analysis to measure hedonic motives for online consumption. However, this study applied PLS-SEM not only to measure hedonic but also subjective norms and satisfaction. Thereby contributing to a different methodological analysis to achieve results in the context of the two countries of Uganda and Rwanda for youths' intention to shop online.

Subjective norms in relation to online shopping have also been explored by Thaworn, Wei and Wiriyawit (2021) when studying Thailand online shoppers. Thaworn, Wei and Wiriyawit (2021) used a quantitative approach with a survey of 535 online consumers which revealed that subjective norms are one of the factors that positively impact consumers online buying behaviour. However, for a deeper understanding of the online shopping phenomenon, this study not only used subjective norm but included hedonic and satisfaction. In Malaysia, Hasbullah *et al.*, (2016) utilised a quantitative method with regression analysis to include subjective norms to study youths' intention to shop online with findings indicating that youths' intention to buy online was significantly related to attitude, subjective norms and website usability. This study uses a similar approach but with a different analysis of PLS-SEM and covering two countries rather than one country. Interestingly, Mofokeng (2021) examined online shopping during the COVID-19 pandemic and covered the relationship between satisfaction and loyalty moderated by e-commerce in South Africa. Mofokeng (2021) noted that satisfaction related to product delivery was moderated by e-commerce. This study is different from Mofokeng (2021) because it aimed to contribute in understanding online shopping from the relationship between (hedonic and subjective norms) and satisfaction among the youth.

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A study conducted in Kenya on online shopping found that some of the factors affecting the online purchase intent of college students are perceived usefulness, perceived ease of use and transactional security (Aineah, 2016). However, the study was confined to college students whereas this study focused on youths in higher education institutions and in particular, universities to investigate the phenomenon of online shopping. Moreover, there are still limited studies on the concept of shopping in Africa. Few studies have done research on shopping and focused on convenience shopping for industrial products related to traditional methods of shopping (Mkwizu et al., 2018; Moon, Choe & Song, 2021). Additionally, these studies (Mkwizu *et al.*, 2018; Moon, Choe & Song, 2021; Kagoya & Mkwizu, 2019) have advocated the need for more research in the area of shopping. To support prior research studies by Mkwizu et al., (2018) and Moon, Choe and Song (2021) on adding research to shopping in Africa, this study confined its research on online shopping among the youths and in two countries of Uganda and Rwanda. Furthermore, prior researchers (Alsoud & Othman, 2018; Ma et al., 2022; Shi, Leung, & Munelli, 2022) also noted that there are limited studies on online shopping. On the other, Jannat *et al.* (2021) in Uganda and Ntahobari and Twizeyimana (2020) in Rwanda noted challenges related to online shopping which include challenges on e-commerce for Rwanda and consumers not fully embracing online shopping for Uganda. However, in these studies, the factors such as hedonic and subjective norms, were not covered and the unit of analysis was confined to business owners and individual customers as opposed to the youths who are projected to be over 40 % by 2050 as indicated UNECA (2017). Therefore, this paper fills the knowledge gap in understanding the challenges of online shopping in Africa by examining the determinants of youths' intention to shop online with arguments that there is a significant relationship between (hedonic and subjective norms) and satisfaction among the youth to shop online.

## Methodology

The research design involved in this study was cross-sectional design because the data was collected only once from the respondents which was inexpensive compared to longitudinal design which consumes time and it is considered expensive. The quantitative research method was applied in this study to examine the determinants of youths' intention to shop online. The countries of Uganda and Rwanda were selected for this study due to the introduction of online shopping by various online service providers in these two countries as indicated by the previous studies (Jannat et al., 2021; Ntahobari & Twizeyimana, 2020). While similar services of online shopping exist other African countries like Nigeria or Kenya, this study was confined to Uganda and Rwanda and this can be treated as a limitation of this study. The youths of the age not exceed 24 years of age were the unit of analysis for this study.

The youth were from higher education institutions of Makerere University Business School (MUBS) in Kampala, Uganda and the University of Rwanda (College of Business and Economics). In addition, the higher education institutions in these two countries were preferred simply because of easy access of the respondents to facilitate data collection. This study deployed an online survey. The administration of the online survey for this study considered only the youth that did not exceed 24 years that were distributed with the structured questionnaires using email. Therefore, the inclusion criteria for selecting the youth considered the age group

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limit not beyond 24 years old so as to comply with UNECA (2017) regarding the category for the youth in the African continent. Those beyond 24 years were excluded from the online survey. Similar studies have adopted online surveys like Ma et al., (2022).

The collection of data was done from March to May 2019. This study had a total sample size of 122 youths from Uganda and Rwanda obtained through purposive sampling of the first few youths. Purposive sampling was selected to ensure that only those youths who have engaged in online shopping were included and most importantly only those not exceeding 24 years. In order to identify more youth using the inclusion criteria of online shopping and not exceeding 24 years to take part in the survey, the first five youths from each university who were initially selected purposively were instructed to refer the questionnaire to fellow youths and thereby supplementing the purposive sampling with snowballing sampling. A similar study by Oloveze *et al.* (2022) also adopted snowballing technique as sampling technique when examining the online shopping phenomenon in Nigeria. The survey questionnaire comprised pre-determined questions with a 5-point Likert scale from 1 strongly disagreed to 5 strongly agreed for purposes of making it easy to collect data within the planned period for data collection designed on cross-sectional basis. This study managed to obtain 71 responses from youths from MUBS in Uganda and 51 from Rwanda which was deemed sufficient for analysis and considered this to serve as a limitation for this study.

Intent to shop online as the dependent variable was measured using satisfaction. The items for measuring satisfaction were adopted from Njoroge et al., (2012) and customized. The statements for satisfaction were; Overall, I am happy with my online shopping experience (Sat1); Overall, I am satisfied with the benefits I obtain from online shopping (Sat2); If I need to buy certain products, I am more likely to purchase them online (Sat3); and I am likely to increase my online purchase in the future (Sat4).

Hedonic and subjective norms are the independent variables and intent to shop online is the dependent variable. Items measuring hedonic were adopted from Martinez-Lopez et al., (2016) and customized by this study. The statements that measured hedonic were; Online shopping is more exciting than conventional shopping (Hedo1); Online shopping is boring compared to traditional shopping (Hedo2); and Online shopping is more enjoyable than offline (Hedo3). The items to measure subjective norms were adopted from Lin (2007), and Zarrad and Debabi (2012) and customized by this study. The statements for subjective norms were; People who are important to me would think that I should shop online (Nosov1); People who influence me would think that I should shop online (Norsov2); People whose opinions are valued to me would prefer that I shop online (Norsov3); Online shopping offers an opportunity to exchange information with other online shoppers (Norsov4); Online shopping provides a platform to share experiences with other online shoppers (Norsov5); and Online shopping extends my personal relationships (Norsov6).

The collected data were analysed using descriptive statistics using SPSS version 20 and Partial Least Square Structural Equation Modelling (PLS-SEM) assisted with SmartPLS 3. The descriptive statistics provided the frequencies and percentages to describe the characteristics of the respondents. For the PLS-SEM analysis, the quantitative data was subjected to reliability test using composite reliability values in the SmartPLS 3. The composite reliability values for the Uganda sample were reliable and indicated hedonic was 0.73, subjective norms were 0.86 and satisfaction was 0.90. The composite reliability values for the Rwanda sample were reliable and

indicated hedonic was 0.719, subjective norms were 0.878 and satisfaction was 0.902. The composite reliability values are within the acceptable range of 0.70 and above as indicated in the study by Manley et al., (2020). According to Manley et al., (2020), before bootstrapping to test for significant findings of the measurement model, the study constructs should be tested for outer loadings, discriminant validity and collinearity. Therefore, this study's constructs of hedonic, subjective norms and satisfaction were tested for reliability of outer loadings. After the outer loadings are confirmed to be ok with value equal or above 0.70 then a discriminant validity test using the Fornell-Larcker Criterion was done to ensure there is no multicollinearity. Further collinearity test was deployed using Variance Inflation Factor (VIF) to ensure there is no collinearity issues related to the tested constructs of hedonic, subjective norms and satisfaction.

## Findings

The characteristics of the sampled respondents for Uganda are revealed in Table 1. Findings indicate that, most of the respondents were females (52.1%), not exceeding 24 years old aged (100%), the products shopped online were electronics (64.8%) and the number of years of using online shopping was 1 to 2 years (38.0%). The characteristics of the sampled respondents for Rwanda in Table 1 show that, most of the respondents were females (51%), not exceeding 24 years old aged (100%) and shopped online for electronics (47.1%), and the number of years of using online shopping was 3 to 5 years (39.2%).

These results imply that, majority of the respondents were young females who shopped for electronics products online in both Uganda and Rwanda by the time this study was conducted. The findings also suggest that, more females (39.2%) in Rwanda have 3 to 5 years of using online shopping while the Ugandan females (38%) were mostly using online shopping between 1 to 2 years. The differences in results are supported by Jannat *et al.* (2021) who suggested that, Ugandans have not fully embraced e-commerce.

**Table 1: Respondents Characteristics for Rwanda and Uganda**

Characteristics	Information on range	Rwanda (F, %)	Uganda (F, %)
Age Groups	Not exceeding 24 years	51 (100)	71(100)
Gender	Male	25 (49)	34 (47.9)
	Female	26 (51)	37 (52.1)
Product Shopped	Clothing	7 (13.7)	10 (14.1)
	Electronics	24 (47.1)	46 (64.8)
	Food and Drinks	20 (39.2)	(21.1)
No. of Years of online shopping	Less than a year	7 (13.7)	14 (19.7)
	1 to 2 years	18 (35.3)	27 (38.0)
	3 to 5 years	20 (39.2)	23 (32.4)
	More than 5 years	6 (11.8)	7 (9.9)

This study considered the discriminant validity using Fornell-Larcker Criterion which is concerned with values that are acceptable for all values below 1 (See Table 2). Prior scholars opined that, the Fornell-Larcker Criterion can be used to assess the discriminant validity in research that involves latent variables to prevent multicollinearity issues (Rasoolimanesh, 2022;

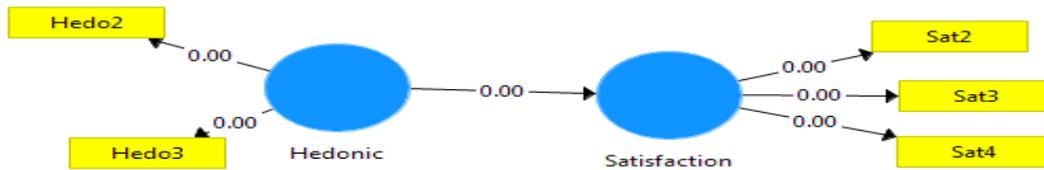
Kagoya and Mbamba, 2021; Ab Hamid *et al.*, 2017). All the constructs (hedonic, subjective norm and satisfaction) have values that are acceptable because the discriminant values are not above 1 and this means that the constructs can be subjected for next test which is the collinearity test.

**Table 2:** Discriminant Validity: Hedonic, Subjective norms and Satisfaction for Uganda and Rwanda

Variables	Country	Discriminant Validity values
	<b>Uganda</b>	
Hedonic		0.766
Subjective norm		0.542
Satisfaction		0.408
	<b>Rwanda</b>	
Hedonic		0.777
Subjective norm		0.714
Satisfaction		0.835

Before bootstrapping, other items were dropped due to low loadings. The collinearity values for the retained items for the Uganda sample were hedonic2 (1.037), hedonic3 (1.037), subjective norms as Norsov 1(1.942), Norsov2 (2.546), Norsov3 (3.665), Norsov4 (3.1), Norosov6 (1.766), Satisfaction as Sat1 (1.391), Sat2 (4.606) and Sat3 (4.782). The collinearity values for the retained items for the Rwanda sample were hedonic1 (1.116), hedonic3 (1.116), subjective norms as Norsov1 (2.450), Norsov2 (3.970), Norsov3 (2.612), Norsov4 (2.111), Norsov5 (2.794), Norosov6 (3.017), Satisfaction as Sat1 (1.391), Sat3 (3.101) and Sat4 (2.858). The collinearity results indicated  $VIF < 4$  or  $(VIF) < 5$  and this is acceptable according to Hair Jr and Sarstedt (2019). All these VIF values as collinearity values mean that there are no collinearity issues for the variables of hedonic (hedonic2 and hedonic3), subjective norms (Norsov1, Norsov2, Norsov3, Norsov4, Norosov6) and Satisfaction (Sat1, Sat2, Sat3) for Uganda while for Rwanda it is hedonic (hedonic1, hedonic3), subjective norms (Norsov1, Norsov2, Norsov3, Norsov4, Norsov5, Norosov6) and Satisfaction (Sat1, Sat3, Sat4). With no collinearity issues, this paper proceeded with bootstrapping analysis to determine the relationship between (hedonic and subjective norms) and satisfaction for youth to shop online.

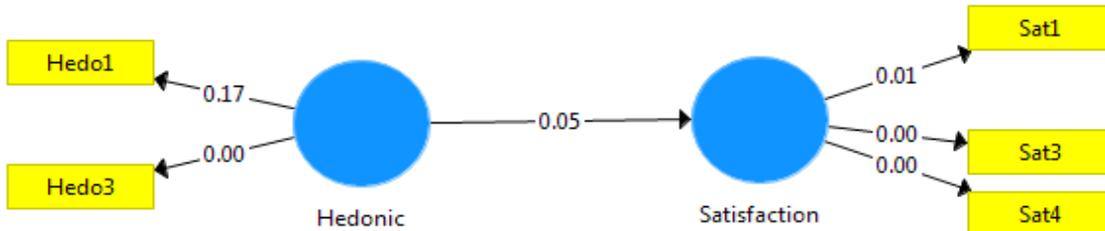
Using the bootstrapping technique, the PLS-SEM analysis revealed findings in Figure 1 that, there is a significant relationship between hedonic and satisfaction for youths' intention to shop online ( $p=0.00$ ) for Uganda. This further shows that, the relationship between hedonic and satisfaction is significant at significance level of 0.05. The results in Figure 2 indicate that, there is a significant relationship between subjective norms and satisfaction for youths' online shopping ( $p=0.02$ ) for Uganda. Figure 3 show that, there is a significant relationship between hedonic (hedo3) and satisfaction for youths' intention to shop online ( $p=0.05$ ) in Rwanda. The results in Figure 4 indicate that, there is a significant relationship between subjective norms and satisfaction for youths' intention to shop online ( $p=0.00$ ) in Rwanda.



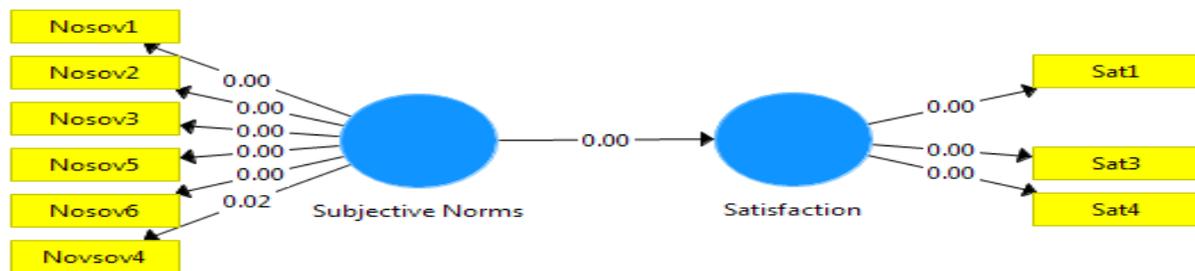
**Figure 1: P values-** hedonic and satisfaction of youths’ intention to shop online for Uganda



**Figure 2: P values-** subjective norms and satisfaction of youths’ intention to shop online for Uganda



**Figure 3: P values-** hedonic and satisfaction of youths’ intention to shop online for Rwanda



**Figure 4:** P values- subjective norms and satisfaction of youths' intention to shop online for Rwanda

## Discussion

These characteristics results from the majority of the respondents implied that young females from both countries actually shop for electronic products online. The findings also suggest that more females in Rwanda have 3 to 5 years of using online shopping compared to Ugandan females for 1 to 2 years. The differences in results support Jannat et al., (2021) that Ugandans have not fully embraced e-commerce and could explain why Rwandan females scored higher in the category of using online shopping for electronic products. Another reason that could explain the differences for Rwandan females scoring higher percentages for using online shopping on electronic products is that, Rwandans prefer online shopping (Ntahobari & Twizeyimana, 2020).

It should be recalled that, the current study results suggest that, hedonic and subjective norms are factors that determine youths' intention to shop online and the significant results support the technology acceptance model and theory of reasoned action. Therefore, the hypotheses support the chosen technology of acceptance model and theory of reasoned action to guide the analysis of youths' intention to shop online in the context of Uganda and Rwanda. This implies that, the intention to shop online is determined by hedonic and subjective norms in the context of Ugandan and Rwandan youths in higher education institutions. The results of this study are supported by those of Aldhmour and Sarayrah (2016) who found that, subjective norms significantly influenced intentions to shop online in Jordan.

Conversely, the findings of this study differ from similar research on shopping online by Ma et al., (2022) and this is may be due to the differences in the unit of analysis and the techniques applied in analysing the collected quantitative data. This study was confined to youths while Ma *et al.* (2022) targeted other groups. This study used descriptive analysis and PLS-SEM while Ma *et al.* (2022) applied regression analysis. Hence, there are methodological differences whilst contributing knowledge toward shopping online.

On the other hand, the results of this study vary from Martinez-Lopez et al., (2016) which did not have excitement as a measurement of hedonic while this study show excitement as an aspect of hedonic factor and relates intention to shop online in terms of satisfaction. In light of these findings, it means that, this study's differences in results from those of Martinze-Lopez et al., (2016) have contributed to online shopping knowledge gap to show that, excitement can be

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added as a measure of hedonic factors when analysing hedonic in relation to shopping online by youths in the context of Uganda and Rwanda.

The statistically significant results for Uganda and Rwanda are similar but also different in that Uganda indicated a significant relationship for hedonic factor which is explained by hedo2 and hedo3 in relation to satisfaction in terms of Sat2, Sat3 and Sat4 for youths online shopping. While subjective norms are explained by Norsov1, Norsov2, Norsov3, Norsov4 and Norsov6 in relation to satisfaction (Sat2, Sat3 and Sat4) for youths online shopping. The significant findings of this study for the relationship between subjective norms and satisfaction supports the findings of Thaworn, Wei and Wiriyawit (2021) in Thailand. For Rwanda, the significant relationship for hedonic factor is explained by hedo3 in relation to satisfaction in terms of Sat1, Sat3 and Sat4 for youths' intention to shop online. These findings align with similar findings from a study by Monsuwe, Dellaert, and de Ruyter (2004) while subjective norms are explained by Norsov1, Norsov2, Norsov3, Norsov4, Norsov5 and Norsov6 in relation to satisfaction (Sat1, Sat3 and Sat4) for youths online shopping. The significant findings of this study on the relationship of subjective norms and satisfaction for Rwanda is also in line with those of Hasbullah et al., (2016) in Malaysia.

## **Conclusion and Implications**

This study examined the determinants of youth's intention to shop online by comparing two countries namely Uganda and Rwanda. The findings of this study revealed that hedonic and subjective norms have a significant relationship with satisfaction among the youths' intention to shop online. Therefore, based on these significant findings, this paper can conclude that the factors determining youths at higher education institutions to shop online in the context of Uganda and Rwanda are hedonic and subjective norms.

For Uganda, the indicators of hedonic that are related to satisfaction of youths' intention to shop online are; "online shopping is boring compared to traditional shopping" and "online shopping is more enjoyable than offline". The indicators of subjective norms that are related to satisfaction for youths' intention to shop online are; "people who are important to me would think that I should shop online", "people who influence me would think that I should shop online". Other indicators of subjective norms are; "people whose opinions are valued to me would prefer that I shop online", "online shopping offers an opportunity to exchange information with other online shoppers", and "online shopping extends my personal relationships".

On the other hand, for Rwanda, the indicator of hedonic related to satisfaction for the youths' intention to shop online is "online shopping is more enjoyable than offline" while the indicators of subjective norms in relation to satisfaction for youths' intention to shop online are "people who are important to me would think that I should shop online", "people who influence me would think that I should shop online", "people whose opinions are valued to me would prefer that I shop online", "online shopping offers an opportunity to exchange information with other online shoppers", "online shopping provides a platform to share experiences with other online shoppers", and "online shopping extends my personal relationships".

The factors of hedonic and subjective norms that have indicated a significant relationship with satisfaction of youths' intention to shop online for both Uganda and Rwanda using the

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theory of technology acceptance model and theory of reasoned action is a theoretical implication of this study. This further implies that the technology acceptance model and theory of reasoned action can be used as a guide to determine factors that influence youths in higher education institutions in Uganda and Rwanda to shop online. More so, the results of this study are significant in offering a noble foundation for future studies and online stakeholders that wish to empirically compare countries in the world to entice youths to shop online.

For practical implications, this study can assist online shopping companies, website developers, internet service providers, policy makers, youths and future researchers to consider hedonic and subjective norms as key factors in youths' intention to shop online. Additionally, more online shops should be set up to increase competition, which will in turn increase online shopping hedonic aspects such as excitement and enjoyment when shopping online even in the post COVID-19. For example, online shopping platforms already in the market by companies as well as SMEs should aspire to be creative in order to continue being useful to online users, be user-friendly and easy to use. Shopping sites should not ask for excessive information from the customers because it erodes the users' privacy and creates lack of trust for online shoppers including youths in higher institutions of learning. This implies that firms or businesses that run online shopping can lose customers leading to reduced income and their ability to sustain and finance operations.

The recommendation from this study is that the policy makers should encourage the online shops to ensure privacy and build trust in their online customers so as to achieve a competitive advantage over others. For the academia and higher education practitioners, these findings will be of great foundation in improving literature in line with online shopping particularly in the post COVID-19 pandemic. Future studies may consider using other research approaches like mixed methods.

### **Limitations of the Study**

This study has some limitations since it was purely quantitative in nature. The findings may only be generalised to countries with similar settings. In addition, the study was limited to youths only at MUBS and Rwanda Universities. Future studies can look at other groups of online shoppers' intentions, for instance, in the private sector for countries with similar characteristics. This study was limited to factors of hedonic, subjective norms and satisfaction. The current study suggests that future research may consider other factors that can moderate or mediate youths' intention to shop online such as trust, age and attitude. Finally, this study proposes that future research to consider a larger sample size due to online shopping popularity during the COVID-19 global pandemic and post-COVID-19.

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