Health-related Behavior and Adoption of Mobile Payments in Life Insurance During the Pandemic: Evidence from Sri Lanka

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ABSTRACT

The purpose of this paper is to investigate the relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic concerning the Sri Lankan context. The data were collected through a survey using a structured self-administered questionnaire from 203 life insurance policyholders in Sri Lanka. The study found a significant positive relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic. The intention to use mobile payments in life insurance was significantly predicted by perceived susceptibility, social influence, and perceived ease of use. Furthermore, the study revealed that gender moderates the relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic. This is the first study investigating the impact of health-related behavior on the adoption of mobile payments in life insurance during the COVID-19 pandemic in Sri Lanka.

Keywords: COVID-19 Pandemic, Health-Related Behavior, Life Insurance, Mobile Payment Adoption, Sri Lanka

INTRODUCTION

COVID-19 outbreak originated in China at the end of 2019, and it has caused an enormous challenge to both the world population and the global economy (Wickramaarachchi et al., 2020). Most of the countries have taken several precautions such as social distancing, strict quarantine measures, avoiding crowds, nation-wide lockdown, and imposing curfew to control the spread and effect of the COVID-19 pandemic as health is becoming the top priority of the countries (Zhao & Bacao, 2021; Jayasena & Chinthaka, 2020). Most epidemiologists and health professionals agree that social distancing is vital for slowing the spread of this virus (Chang et al., 2020). The ongoing debate about whether COVID-19 is transmittable on the surface of cash, cheques, or other banknotes has led to behavioral changes related to health in their day-to-day lives. Mobile payments have played a critical role in implementing safety and preventive measures to minimize coronavirus spread (Daragmeh et al., 2021). Earlier, mobile payments were used as a medium of convenience. In contrast, the adoption of mobile payments facilitates social distancing, enabling policyholders to make transactions during quarantine, lockdown, and curfew periods of the country. According to Sreelakshmi and Sangeetha (2020), the adoption of mobile payments plays a vital role in implementing safety and preventive measures to minimize the spread of coronavirus and save people's lives.

There was a low customer adoption of mobile payments in Sri Lanka before mid-2020 (CBSL, 2020). However, the first quarter of 2020, during the coronavirus spread rapidly, has a significant increase in mobile payments in Sri Lanka (CBSL, 2020). Accordingly, it has enhanced customer preference towards mobile payment methods instead of traditional payment methods such as physical cash handling. Further, it hinted that people have tended to adopt health-related behaviors to their daily transactions. Enhancing customer experience through digital transformation initiatives has worked well during the COVID-19 pandemic in Sri Lanka (KPMG, 2021). However, as in many countries, the prevailing pandemic has affected all the business sectors in Sri Lanka, including the life insurance sector (KPMG, 2021). Pandemic has affected the life insurance industry in several means. Firstly, people started to seek pandemic covers from life insurers and increased the behavioral intention to purchase life insurance products. The total number of life insurance policies in force and new issues in 2020 was increased by 6.21% and 0.67 % compared to life insurance policies in force at the end of 2019, respectively. Secondly, the

life insurance sector quickly responded to the pandemic and transferred the operations to virtual environments. As a result, insurers have introduced digital capabilities to collect premiums, renew the policies, reconcile transactions, etc. (KPMG, 2021). Accordingly, they have offered an array of mobile payment channels to enhance the easiness of their policyholders. With the expansion and the rapid demand during the last few years, life insurance companies have come forward to improve their customer experience through digital transformation services (KPMG, 2021).

The pandemic has converted the policyholders' preference towards mobile payment methods. It helps prevent the spread of coronavirus instead of traditional payment methods (Daragmeh et al., 2021). Following the precautions and health measures imposed by the health professionals and the country's government, the life insurance policyholders have moved to use mobile payment services instead of physical cash handling when renewing the insurance policies, making the premium payments in life insurance, etc. Notably, there is a trend of adopting mobile payments even when continuing and completing the premiums in life insurance during the pandemic than the past few years (KPMG, 2021). Hence, the protective health-related behavior suggests the need for a deeper understanding of policyholders' health-related behavior for adopting mobile payments in life insurance. Because without having proper knowledge regarding the health-related behavior and adoption of mobile payments in life insurance, the life insurers are unable to manage a sufficient amount of funds by themselves.

To the best of our knowledge, research focusing on health-related behavior and adoption of mobile payments during the COVID-19 pandemic primarily related to the life insurance sector remains unexplored as coronavirus infection is expected to continue for a couple of years. Further, studying the relationship between health-related behavior and the adoption of mobile payments in life insurance during the pandemic would be appropriate. It will help improve productivity in the life insurance sector while embracing digitization. Hence, the study's objective is to investigate whether there is a significant relationship between health-related behavior and the adoption of mobile payments in life insurance during the pandemic regarding the Sri Lankan context.

## LITERATURE REVIEW

Health Belief Model (HBM)

The HBM (Figure 1) is one of the most widely employed theoretical models that can be used to predict the health-related behavior of individuals (Janz & Becker, 1984). In other words, the model is described as a predictor of preventive health behavior, and it was developed during the early 1950s by a group of social psychologists in the United States (Rosenstock, 1974). The model is based on the theory that the willingness to change the health-related behavior of individuals is based on health perceptions (Janz & Becker, 1984). The HBM initially described five key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived threat, and cues to action, which predict health-related behavior (Janz & Becker, 1984). Among the constructs of HBM, perceived susceptibility and perceived severity were recognized as the most important predictors of preventive health-related behavior across all empirical scholars and behaviors (Jones et al., 2015).

Moreover, self-efficacy is another element that was not included in the initial model until 1988 (Sreelakshmi & Sangeetha, 2020). Later, it was also found as a vital component of the HBM, and it refers to an individual's belief in their capability to perform a behavior (Bandura, 1978). Notably, self-efficacy is not a much-included factor in HBM scholars in actuality. Many researchers have used this model to investigate health-related behavior in various contexts, and it has been a widely applied model in technology adoption literature (Sreelakshmi & Sangeetha, 2020; Zhao & Bacao, 2021). Therefore, the current study has also used the constructs of HBM to investigate how health-related behavior is associated with the adoption of mobile payments in life insurance during the COVID-19 pandemic in Sri Lanka.

Technological Acceptance Model (TAM)

TAM (Figure 2) is one of the widely accepted models that can be used to predict and explain the individuals' intention and behavior related to technology acceptance (Davis et al., 1989). It was initially introduced by Davis in 1986 using the Theory of Reasoned Action (TRA) as the theoretical backdrop (Davis et al., 1989). TAM explains two significant constructs that can predict the user adoption of technology. They are perceived usefulness and perceived ease of use. Perceived usefulness is defined as the degree to which an individual

believes that using a particular system would enhance their work performance.
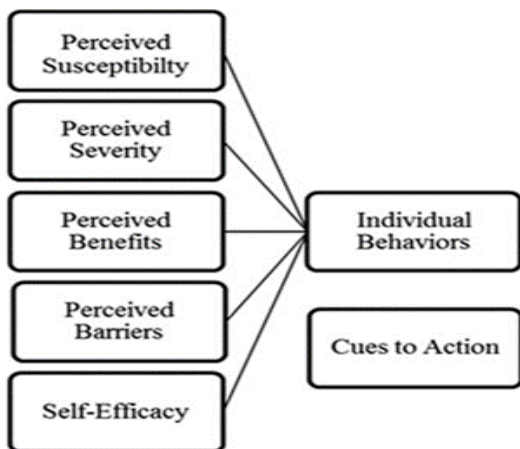
**Figure 1:** The health belief model (Source: Rosenstock, 1974)
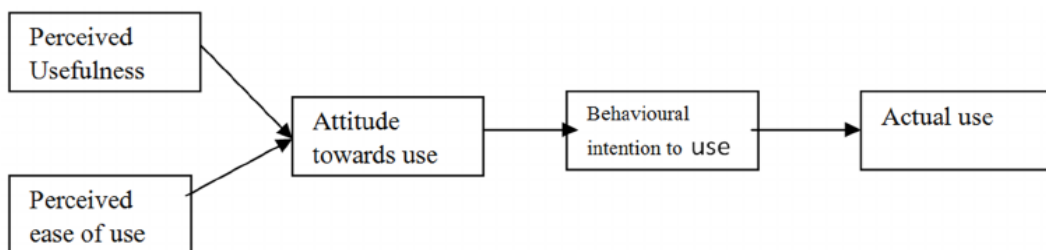
Figure 2: The original TAM model (Source: Davis, 1989)

In contrast, perceived ease of use is defined as the degree to which an individual expects the target system to be free of effort (Davis, 1989). According to TAM, perceived usefulness and perceived ease of use directly impact the behavioral intention of the individuals. In line with similar empirical studies, TAM can examine the adoption of mobile payments in different sectors (Mouakket, 2020). Many recent studies have applied this model when studying the acceptance of online technology in various sectors such as mobile health insurance service, e-commerce, mobile payments, mobile commerce, etc. (Flavian et al., 2020; Ndifon et al., 2020; Sreelakshmi & Sangeetha, 2020).

The Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT (Figure 3) is another popular technology adoption theory that can be used to explain adoption behavior (Sreelakshmi & Sangeetha, 2020).

It discusses the behavioral intention to adopt new technologies among individuals. It was initially developed in 2003 with four core determinants of intention to use and four moderating variables, namely gender, age, experience, and voluntariness (Venkatesh et al., 2003). The UTAUT model suggests that four significant constructs, performance expectancy, effort expectancy, social influence, and facilitating conditions, affect behavioral intention and, eventually, technology usage behavior (Ndifon et al., 2020). These factors are considered significant predictors of user acceptance of information technology (Venkatesh et al., 2003). Venkatesh et al. (2003) have considered 'performance expectancy' similar to 'perceived usefulness and relative advantage,' 'effort expectancy' identical to 'perceived ease of use and complexity, 'social influence' similar to 'subjective norms' and 'facilitating conditions' similar to 'perceived behavioral control' when developing this model. UTAUT model has been empirically tested and proven superior to the other technology acceptance models such as TAM, TRA, etc. (Venkatesh et al., 2003). Further, it has been applied in various contexts of technology acceptance, such as mobile payments, mobile health insurance, etc. (Ndifon et al., 2020; Sreelakshmi & Sangeetha, 2020; Zhao & Bacao, 2021). Therefore, in line with similar empirical studies, the UTAUT model is used here to explain the adoption of mobile payment solutions in life insurance during the COVID-19 pandemic regarding the Sri Lankan context.
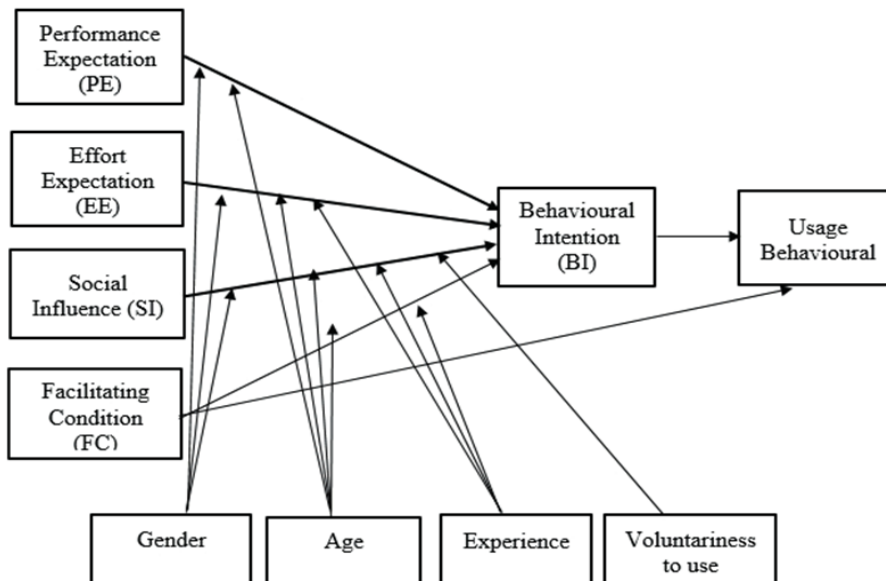
Figure 3: The UTAUT model (Source: Venkatesh et al., 2003)

Health-related Behavior and Mobile Payment Adoption in Life Insurance

The COVID-19 pandemic has affected nearly every aspect of human lives (Gadarian et al., 2021) The pandemic and lockdown restrictions have impacted the various aspects of health-related behaviors of the individuals (Avery et al., 2021). In general, health behaviors are actions taken by individuals that affect the health or morality of the individuals (Short & Mollborn, 2015). Health-related behaviors are dynamic and shape the well-being of the individuals (Short & Mollborn, 2015). The COVID-19 pandemic has increased society's acceptance of mobile payment solutions and influenced mobile payment adoption by raising awareness of the risk of traditional payment methods such as physical cash handling (Daragmeh et al., 2021).

Mobile payments refer to the contactless transactions that happen digitally via a mobile device to pay for goods and services (Dahlberg et al., 2006). It can happen through mobile apps, mobile cash, and online payments by credit cards and debits cards, etc. (Flavian et al., 2020). They allow individuals to transact and interact with financial institutions without being present physically in any of the branches. In response to the pandemic, people have engaged with new daily activities methods (Sreelakshmi & Sangeetha, 2020). Accordingly, life insurance companies have paid greater attention to customer behavior trends and focused on novel mobile payment achievements to meet consumer needs during the pandemic (KPMG, 2021). With the digitization of life insurance companies over the past years, implementing safety and preventive measures to minimize the spread of the coronavirus has become easier than ever (Nguyen, 2021). As HBM explained, if individuals perceive an enormous health threat and more benefits while engaging in preventive health actions, they tend to adopt preventative health measures to their day-to-day works (Becker et al., 1977). Notably, mobile payment services are viewed as such protective health-related behavior because they keep users from getting affected by a coronavirus in this prevailing pandemic situation (Sreelakshmi & Sangeetha, 2020; Daragmeh et al., 2021). Therefore, the study considers adopting mobile payment services in life insurance as preventive health behavior during the pandemic.

Research Framework and Hypotheses

The suggested conceptual framework interlinks the dependent (Intention to use mobile payments) and independent (perceived susceptibility, perceived severity, self-efficacy, social influence, perceived usefulness, and perceived ease) variables adopted from the TAM, HBM, and UTAUT (figure 4). Further, we use two demographic characteristics (age and gender) as moderating variables to investigate the moderating impact of demographic factors on the relationship between health-related behavior and the adoption of mobile payments in life insurance during the pandemic.

Intention to use mobile payments

Intention to use is often referred to as an individual's intention to continuously reuse something (Daragmeh et al., 2021). Accordingly, this study defines the intention to use mobile payments as an individual's intention to continuously reuse mobile payments. In response to the COVID-19 pandemic, people have tended to adopt health-related behaviors to their day-to-day lives because the virus spreads from human to human through droplets or contaminated surfaces (Fang et al., 2020). Further, there is a high possibility of transmitting the virus through surfaces, including physical money (World Health Organization, 2021). In the meantime, life insurance companies have also paid greater attention to the behavior of their policyholders and focused on novel mobile payment achievements to meet consumer needs during the pandemic (KPMG, 2021). Many Scholars who studied intention to use mobile payments have adopted the factors like perceived susceptibility, perceived severity, self-efficacy, social influence, perceived usefulness, and perceived ease of use as the predictors (Ahadzadeh et al., 2015; Sreelakshmi & Sangeetha, 2020; Zhao & Bacao, 2021). Based on that, the researcher has proposed the above hypothesis.

H1: There is a significant relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic.
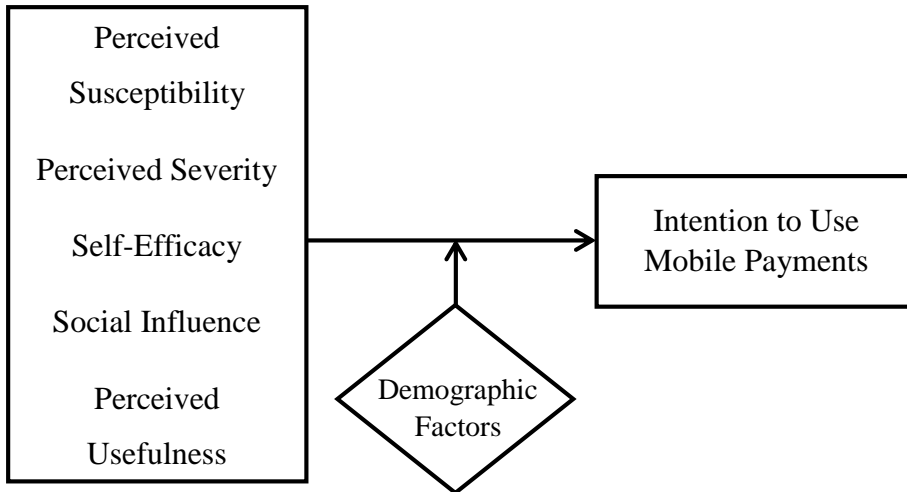
Figure 4: Conceptual Framework

Perceived susceptibility

The state of being very likely to be influenced or affected by a disease or something is called 'susceptibility.' In line with the above definition, perceived susceptibility can be referred to an individual's perception towards the risk of contracting a health condition (Rosenstock, 1974). It is a major construct under the HBM (Janz & Becker, 1984). It has been applied as a major construct when explaining the health-related behavior of individuals (Jones et al., 2015; Rosenstock, 1974). For the people who subjectively assess their health as susceptible to diseases and are concerned about a healthy life, positive affective feelings about the technology systems come into play in using technology systems for health-related purposes (Ahadzadeh et al., 2015). According to Sreelakshmi and Sangeetha (2020), perceived susceptibility significantly impacts the adoption of mobile-based payment services during the pandemic. The high level of susceptibility to COVID-19 enhances the continuous intention to use mobile payments instead of physical cash handling when performing a transaction in the banking sector. According to Daragmeh et al. (2021), perceived susceptibility to COVID-19 has a significant positive impact on the continuous intention to use e-wallets. Based on that, the researcher has proposed the below hypothesis.

H2: There is a significant relationship between perceived susceptibility and intention to use mobile payments in life insurance during the COVID-19 pandemic.

Perceived severity

The number of people infected by the coronavirus continues to change day by day (Wolka et al., 2020). As a response to the pandemic, people are more concerned about their health than ever and considerably protect themselves from contracting the virus. With the daily updates of this massive pandemic, people are highly aware of the seriousness of the novel coronavirus disease. They believe that using a digital wallet instead of physical cash is a protective health behavior during the COVID-19 pandemic (Daragmeh et al., 2021). Further, they revealed that daily updates regarding the massive spread of coronavirus are the main reason for the high level of perceived severity among the people.

The concept of perceived severity refers to the potential of the individual's opinion of how severe the condition and its consequences are (Becker et al., 1977). Among the HBM constructs, perceived severity has the highest magnitude effect on the intention to use mobile-based payments during the pandemic. Nguyen (2021) discovered that perceived severity positively influences the intention to use contactless payment technologies during the COVID-19 pandemic. Further, perceived severity significantly affects the adoption of mobile-based payment services (Sreelakshmi & Sangeetha, 2020), digital wallets (Daragmeh et al., 2021) in the COVID-19 context.

H3: There is a significant relationship between perceived severity and intention to use mobile payments in life insurance during the COVID-19 pandemic.

Self-efficacy

Self-efficacy is defined as a concept that believes in his or her ability to successfully perform a behavior (Sreelakshmi & Sangeetha, 2020). According to Bandura (1978), self-efficacy combines four principal sources of information such as performance accomplishment, vicarious experience, verbal persuasion, and physiological states. The current study focused on life insurance policyholders' self-assessed ability to use mobile payment services. Accordingly, self-efficacy refers to the individual's belief in adopting mobile payment services in life insurance during the pandemic. Furthermore, Ndifon et al. (2020) found that self-efficacy influences the intention to use mobile-supported health insurance systems.

Furthermore, consumer self-efficacy plays a critical role in ensuring the ability to adopt digital wallets in both the short and long term (Daragmeh et al., 2021). Daragmeh et al. (2021) showed that self-efficacy significantly influences the primary drivers of continuous intention. Accordingly, we developed the following hypothesis.

H4: There is a significant relationship between self-efficacy and intention to use mobile payments in life insurance during the COVID-19 pandemic.

Social influence

Social influence has been considered one of the most influential factors of intention to use mobile payment systems (Zhao & Bacao, 2021). It refers to the degree to which an individual perceives that people who are essential to them believe they should use the new system (Venkatesh et al., 2003). According to UTAUT, it is one of the direct determinants of behavioral intention to adopt mobile technology (Venkatesh et al., 2003). According to Tjakur (2013), the degree to which an individual is ready to submit to the beliefs of others would have a substantial effect on the individual's intention to use mobile payment services.

In technology acceptance decisions, the role of social influence is complex and subject to a wide range of contingent effects (Venkatesh et al., 2003). Accordingly, they argued that when an individual's essential referents show a favorable attitude towards mobile payments, they will also form a fair attitude to adopt it. Penney et al. (2021) have revealed that social influence affects users' behavioral intention to use mobile money services. Further, they have discovered social impact as an individual's belief in whether significant others such as family members, close friends, and colleagues think they should have a mobile money account. Zhao and Bacao (2021) revealed that social influence positively impacts the behavioral intention to use mobile payments during the COVID-19 pandemic. Most people consider mobile payments a health-protective tool as it avoids face-to-face contact among individuals. Accordingly, we developed the following hypothesis.

H5: There is a significant relationship between social influence and intention to use mobile payments in life insurance during the COVID-19 pandemic.

Perceived usefulness

Perceived usefulness is a basic feature of the TAM model, which is considered one-factor affecting intention to use mobile payments (Daragmeh et al., 2021). It is defined as the degree to which a person believes that using a particular system would enhance their work performance (Thakur & Srivastava, 2014). In the light of that definition, the researcher defines perceived usefulness as the belief that using mobile payments in life insurance would enhance work performance. Individuals intend to adopt mobile payments when they recognize that mobile payments are useful instead of other traditional payment methods (Flavian et al., 2020). For example, adopting mobile payments in a pandemic is a useful alternative for physical cash handling, even in the full or partial lockdown periods (Daragmeh et al., 2021).

Transactions like online payments, online requests for cheques, sending monthly e-statements are useful and beneficial in different ways (Kesharwani & Bisht, 2012). While improving the performances, saving time, and increasing the services' effectiveness, internet banking acts as a useful tool for the users. Perceived usefulness has a positive and significant impact on individual behavioral intention to use internet banking services (Kesharwani & Bisht, 2012), mobile payments (Tella & Olasina, 2014), use mobile health (Deng., 2013). Flavian et al. (2020) argued that individuals intend to adopt mobile payment systems when they recognize their usefulness instead of other traditional payment methods and found that perceived usefulness significantly impacts intention to use mobile payments. Mobile payments are useful during the pandemic by saving them time, reducing the cost and effort, and acting as a health-protective financial tool that reduces the risk of contracting the virus. Therefore, the researcher has formulated a hypothesis as stated below.

H6: There is a significant relationship between perceived usefulness and intention to use mobile payments in life insurance during the COVID-19 pandemic.

Perceived ease of use

Perceived ease of use can be defined as the degree to which a person believes that using a particular system would be free of physical and mental efforts (Davis, 1989). It refers to the belief that using mobile payments in life insurance would be free of physical and mental efforts. Deng (2013) revealed

that perceived ease of use is one factor that affects the intention to use mobile health. As reflected in the results of Tella and Olasina (2014), perceived ease of use is a significant factor that can be used to predict e-payment continuance intention. According to Flavian et al. (2020), the intention to use mobile payment depends on an individual's perceived ease of use. Further, Daragmeh et al. (2021) found that perceived ease of use of mobile payments indirectly influences behavioral intention. Thus, the below hypothesis was formulated.

H7: There is a significant relationship between perceived ease of use and intention to use mobile payments in life insurance during the COVID-19 pandemic.

Demographic factors

Different scholars have revealed that most studied demographic factors on intention to use mobile payments are age and gender (Thakur & Srivastava, 2014; Albashrawi & Motiwalla, 2019; Flavian et al., 2020; Souiden et al., 2021). Accordingly, age and gender have been widely considered as the moderating variables which moderate the relationship between the dependent and independent variables in the different sectors such as telemedicine service, mobile health, mobile payments, mobile banking, etc. (Rho et al., 2015). Further, Chaouali and Souiden (2019) found that age moderates the relationship between functional barriers, psychological barriers, and mobile banking. Zhao et al. (2018) found that different age groups have specific moderating effects on mobile health services adoption. According to Venkatesh et al. (2003), the relationship between performance expectancy and behavioral intention to adopt new technologies will be moderated by age and gender. Thus, the below hypotheses were developed.

H8: Gender significantly moderates the relationship between health-related behavior and adoption of mobile payments in life insurance during the COVID-19 pandemic.

H9: Age significantly moderates the relationship between health-related behavior and adoption of mobile payments in life insurance during the COVID-19 pandemic.

METHODOLOGY

This study is based on Sri Lanka, a developing country situated in the South Asian region. COVID-19 has harmed every aspect of human life due to the virus's rapid spread (Nguyen, 2021). A quantitative study has been carried out based on quantitatively weighted research questions (Dewasiri et al., 2018; Dewasiri et al., 2017). The questionnaire consists of three sections. Section A covered the basic demographic characteristics of the respondents. Section B contained 26 statements to evaluate the study's independent variables (perceived susceptibility, perceived severity, self-efficacy, social influence, perceived usefulness, and perceived ease of use). Finally, section C contained three statements to evaluate the current study's dependent variable (intention to use mobile payments). Each item of the questionnaire was coded in a 5-points Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree).

Primary data were collected from the respondents using a self-administered questionnaire sent to the target respondents through online platforms like e-mail, LinkedIn, Facebook, WhatsApp, and Instagram to gather relevant data. The study's target population is all the life insurance policyholders in Sri Lanka. Therefore, to participate in this survey, the respondents must have a life insurance policy. Accordingly, 250 self-administered questionnaires were distributed among respondents from July 2021 to September 2021, during the period in which the coronavirus spread rapidly, and the country opted to lockdown. However, out of 250 questionnaires distributed, we received 203 complete responses with a response rate of 81.2%.

DATA ANALYSIS AND RESULTS

Multiple linear regression analysis was carried out to find out the predictors of intention to use of mobile payments, and hierarchical multiple linear regression was conducted to examine the moderating effect of the demographic factors of this study.

Reliability

Lee et al. (2005) highlighted that when the composite reliability and the average variance extracted were higher than 0.7 and 0.5, respectively, there is good construct reliability. The composite reliability for all constructs varied from 0.792 to 0.917, and the average variance extracted ranged from 0.564 to 0.762, indicating the construct reliability (Table 1). The Cronbach's alpha

values ranged between 0.6 and 0.7 are considered acceptable reliability levels (Hulin et al., 2003). The Cronbach's alpha values for all constructs varied from 0.692 to 0.886, indicating that the items in the multi-scale are reliable. All the items have played a significant role in conceptualizing the respective constructs (Table 1).

Table 1: Reliability

Construct	No. of Items	Composite Reliability	Average Variance Extracted	Cronbach's Alpha
Perceived Susceptibility	3	0.792	0.564	0.692
Perceived Severity	3	0.837	0.632	0.708
Self-Efficacy	4	0.855	0.596	0.773
Social Influence	4	0.887	0.663	0.829
Perceived Usefulness	4	0.894	0.678	0.840
Perceived Ease of Use	5	0.917	0.688	0.886
Intention to Use	3	0.906	0.762	0.842

Validity

The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity (BTS) were used to ensure the sampling adequacy and the strength of the relationship among variables. If the KMO coefficients are greater than 0.5 for both dependent and independent variables and the significant values are less than 0.05, statistically, it indicates that the study sample is adequate and acceptable for further analyses (Hadi et al., 2016). The KMO coefficients for all the variables are greater than 0.5, and significant values for all the variables are less than 0.05, indicating that the sampling adequacy is significant.

Table 2: Validity

Construct	KMO	BTS (Sig. Value)
Perceived Susceptibility	0.577	0.000
Perceived Severity	0.665	0.000
Self-Efficacy	0.674	0.000
Social Influence	0.798	0.000
Perceived Usefulness	0.791	0.000
Perceived Ease of Use	0.853	0.000
Intention to Use	0.723	0.000

On an excellent measurement indicator, item factor loading values must be at least 0.5 (Hair et al., 2010). The results of factor loadings for all 26 items, and the item loadings in the present research ranged from 0.595 to 0.885. Therefore, statistically, the construct validity was ensured as the factor loadings of each indicator were higher than 0.5.

Testing for Multivariate Assumptions

Statistical independence was checked using the Durbin-Watson value. Durbin-Watson value which is approximately equal to 2 indicates that there is no statistically significant autocorrelation in the residuals. Normality of the data was ensured using the Kolmogorov-Smirnov test and Shapiro-Wilk test. According to the results of the Kolmogorov-Smirnov test and Shapiro-Wilk test, p-values obtained for all the constructs are greater than 0.05, indicating the data are normally distributed. Further, the skewness and kurtosis tests were also used here to assess the normality. The normality of the data was also confirmed by the skewness and kurtosis values within the range of -1 and +1 (Hair et al., 2021). Multicollinearity can be detected by examining the tolerance and variance inflation factors (VIF) for each independent variable. The tolerance value greater than 0.1, and the VIF value less than 10 confirmed that there is no multicollinearity issue in the data set as indicated in Table 3.

Table 3: Multicollinearity

Construct	Tolerance	VIF
Perceived Susceptibility	0.460	2.172
Perceived Severity	0.615	1.625
Self-Efficacy	0.549	1.822
Social Influence	0.311	3.215
Perceived Usefulness	0.282	3.546
Perceived Ease of Use	0.284	3.516

Health-related Behavior and the Adoption of Mobile Payments

A simple linear regression analysis was conducted to examine the relationship between health-related behavior and the adoption of mobile payments in life insurance during the pandemic. As the composite value of the constructs representing the health-related behavior of the life insurance policyholders, 'health-related behavior' was considered the independent variable, and 'intention to use mobile payments in life insurance' was considered the dependent variable in this case. 41.5% (R square = 0.415) of the variation of intention to use mobile payments could be explained by health-related behavior. The fitted regression model is a highly significant predictor ($p<0.05$) of mobile payment adoption in life insurance during the pandemic. Furthermore, a significant positive relationship (p-value =0.000, β= 0.830) exists between health-related behavior and intention to use mobile payments in life insurance.

Table 4: Regression results - health-related behavior and the adoption of mobile payments

Variable	Beta	p-value
Constant	0.882	0.002
Health-related Behavior	0.830	0.000
Adjusted R^2	0.412	
p-value (ANOVA Table)	0.000	

To identify the most significant impact, we employed a multiple linear regression model incorporating the dimensions to the model. As a result, the independent variables could explain 71.1% (R2 = 0.711) of the variance of intention to use mobile payments in life insurance. The fitted regression model was a significant predictor of intention to use mobile payments. Perceived susceptibility (p-value=0.030, β= 0.158), Social influence (p-value=0.015, β= 0.178), and perceived ease of use (p-value=0.030, β= 0.484) have a positive statistically significant relationship with intention to use mobile payments in life insurance as per the regression results indicated in the Table 5.

Table 5: Dimension level regression results

Variable	Beta	p-value
(Constant)	0.259	0.233
PSUS	0.158	0.030
PSEV	0.046	0.386
SE	0.019	0.732
SI	0.178	0.015
PU	0.076	0.305
PEU	0.484	0.000
Adjusted R^2	0.701	
p-value (ANOVA Table)	0.000	

Moderator Analysis

The moderation effects of the two demographic factors, gender and age were tested using the hierarchical multiple linear regression analysis (Baron and Kenny, 1986). Accordingly, a three-stage hierarchical multiple linear regression analysis was conducted with three causal paths namely; the impact of the health-related behavior as a predictor (Path 1), the impact of gender as a moderator (Path 2), and the interaction of these two variables (Path 3). The moderator hypothesis is supported if the interaction is significant (Baron and Kenny, 1986). Accordingly, the interaction term of health-related behavior and gender is statistically significant (p-value<0.01) at the confidence level of 90%.

Table 6: Results of moderating effect of gender

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	0.882	0.287	0.002
	HRB	0.830	0.074	0.000
2	(Constant)	0.737	0.321	0.023
	HRB	0.835	0.074	0.000
	GENDER	0.082	0.081	0.316
3	(Constant)	-0.974	0.949	0.306
	HRB	1.276	0.242	0.000
	GENDER	1.174	0.576	0.043
	HRB.GENDER	-0.283	0.148	0.057

A three-stage hierarchical multiple linear regression analysis was conducted to check the moderating effect of age; the impact of the health-related behavior as a predictor (Path 1), the impact of age as a moderator (Path 2), and the interaction of these two variables (Path 3). The results revealed that the interaction term of health-related behavior and age is not statistically significant (p-value>0.01) at a 90% confidence level.

Table 6: Results of moderating effect of age

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	0.882	0.287	0.002
	HRB	0.830	0.074	0.000
2	(Constant)	0.983	0.289	0.001
	HRB	0.837	0.073	0.000
	AGE	-0.063	0.033	0.057
3	(Constant)	1.409	0.555	0.012
	HRB	0.726	0.143	0.000
	AGE	-0.271	0.234	0.247
	HRB.AGE	0.054	0.060	0.369

DISCUSSION, RECOMMENDATIONS, AND FUTURE RESEARCH DIRECTIONS

The findings revealed a significant positive relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic. The possible reason for this kind of significant relationship is viewed as the massive spread of the COVID-19 pandemic and people's tendency to adopt health related-behaviors to their daily lives to protect from the coronavirus. Accordingly, mobile payments have been popularized among the life insurance policyholders in Sri Lanka as a health-protective payment tool rather than the traditional payment tools. This result is in line with the findings of Sreelakshmi and Sangeetha (2020).

Perceived susceptibility is the strongest driver of the life insurance policyholders' intention to use mobile payments during the pandemic. This result agrees with the other mobile technology studies, such as mobile payments (Sreelakshmi & Sangeetha, 2020; Daragmeh et al., 2021; Ahadzadeh et al., 2015) as well. Thus, findings suggest that life insurance users are more likely to adopt mobile payments during the pandemic if they have a high level of susceptibility to coronavirus. HBM describes perceived severity as a key construct of preventive health-related behavior (Becker et al., 1977). However, we investigated an insignificant relationship between perceived severity and intention to use mobile payments. Therefore, our results are inconsistent with (Nguyen 2021; Sreelakshmi & Sangeetha, 2020; Daragmeh et al., 2021). According to the HBM, self-efficacy is a significant construct that tends to predict the health-related behavior of individuals (Bandura, 1978). However, the results of this study show that there is no significant relationship between perceived severity and intention to use mobile payments in life insurance during the pandemic in Sri Lanka. Accordingly, it is not in line with the results found by Daragmeh et al. (2021) and Sreelakshmi and Sangeetha (2020) also not consistent with the original postulation by Bandura (1978) in HBM as well. According to UTAUT, social influence directly influences behavioral intention to adopt technology (Venkatesh et al., 2003).

In line with the previous theoretical and empirical findings (Thakur & Srivastava, 2014; Zhao & Bacao, 2021; Penney et al., 2021), our study also suggested that there is a significant positive relationship between social influence and intention to use mobile payments in life insurance during the pandemic in Sri Lanka. During the pandemic, most people have tended to use mobile payments as a health-protective action. Accordingly, it is viewed that social influence is a powerful tool when determining the intention to adopt mobile payment during the pandemic because the opinions of life insurance policyholders' close associates can significantly influence the decision to adopt mobile payments.

According to the TAM, perceived usefulness is a critical predictor of users' technology acceptance (Davis, 1989). However, our results found that perceived usefulness has an insignificant effect on the intention to use mobile payments in life insurance during the pandemic in Sri Lanka. Accordingly, our results do not adhere to the predictions of the original authors and Tella and Olasina (2014), Flavian et al. (2020), and Daragmeh et al. (2021). Instead, perceived ease of use is a variable whose effect significantly impacts life

insurance policyholders' intentions to use mobile payments during the COVID-19 pandemic in Sri Lanka. This result aligns with the original TAM (Davis, 1989).

Further, the result of this study is consistent with the findings by Tella and Olasina (2014), Flavian et al. (2020), and Daragmeh et al. (2021), as they also have found a significant relationship between perceived ease of use and mobile payment adoption. Therefore, it is viewed that life insurance policyholders tend to adopt mobile payments when they perceive that using mobile payments is free of effort during the pandemic. However, the result of this study contradicts the result of Gowanit et al. (2016).

Our findings correspond with the applicability of UTAUT in a new technology context, which highlighted that behavioral intention to adopt new technologies is moderated by gender as a new contribution. However, this research contradicts Dou et al. (2017) on intention to adopt the smartphone health technology in China. Furthermore, age does not significantly moderate the relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic in Sri Lanka. This finding contradicts the empirical studies conducted by Venkatesh et al. (2003) and Zhao et al. (2018) in different contexts. However, it is in line with the finding corresponding with the result found by Dou et al. (2017).

Managerial Implications

The results suggest that the policymakers of the life insurance industry could design effective policies focusing on mobile payment systems because it is considered a health-protective tool, and the adoption of mobile payments will help minimize the spread of coronavirus among society. Further, as the prevailing pandemic is expected to continue for a couple of years, they might organize awareness programs to boost mobile payment adoption as it helps prevent the spread of the virus while maintaining social distancing.

Findings suggest that life insurance companies need to emphasize the ease of using mobile payment systems and improve their convenience for better customer satisfaction. Accordingly, the mobile payment developers of life insurance companies should focus on providing well-organized, user-friendly services which respond quickly to the users' needs and therefore enhance the expectations of the ease of use of mobile payments in life insurance. In addition,

the life insurance companies could organize and conduct promotional campaigns about mobile payment services, emphasizing their ease of use.

Further, as the study suggests a significant relationship between social influence and intention to use mobile payments, life insurance companies should pay more attention to social influencers because the customers are influenced by their friends, relatives, and other people. Accordingly, it is essential to understand the influencers of customers and how to promote these people to forward positive options about mobile payments. The marketing managers of the life insurance companies might be able to use the results of this study to improve their marketing campaigns so that they should focus on what matters to users. Accordingly, they can develop effective and efficient marketing strategies to increase the policyholders' satisfaction when using mobile payments.

On the other hand, the findings of this study will be essential for the life insurance companies which have not yet engaged with mobile payment services. In addition, the results of this study will be beneficial to the regulatory bodies and other interested parties of the life insurance industry, such as the IRCSL, CBSL, and government, to develop and implement workable policies.

Limitations and Recommendations for Future Research

In this study, we investigate the relationship between health-related behavior and the adoption of mobile payments in life insurance during the COVID-19 pandemic in Sri Lanka. However, like any other research, the current study also has certain limitations that provide future research opportunities. First, due to the prevailing pandemic situation, the present study only collects the data from questionnaires on an online platform. Hence, the respondents are restricted from filling out an online questionnaire. The scope of the current research has been limited to the field of life insurance. Therefore, future researchers are encouraged to conduct similar research considering another sector such as banking. Further, as the current study captured only two demographic factors as the moderating variables, future research is needed to investigate the moderating role of other demographic factors.

CONFLICTS OF INTERESTS

The authors declare no conflicts of interest

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