# "An analysis of experienced life events on continuance intention to use online banking in Thailand"

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### AN ANALYSIS OF EXPERIENCED LIFE EVENTS ON CONTINUANCE INTENTION TO USE ONLINE BANKING IN THAILAND

#### Abstract

At present, marketers focus on the phenomenon of changing consumer behavior that influences consumer decision-making. This study aims to analyze the influence of experienced life events (affected by COVID-19), perceived risk, and anxiety on the continuance intention to use online banking in Thailand. The data were attained from 500 customers who had visited commercial banks in Thailand. The data were analyzed through Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). The findings of the study suggested that both perceived risk and anxiety influenced the continued use of online banking services while experiencing the COVID-19 pandemic. More specifically, anxiety had a direct negative influence on the continuance intention to use online banking services; and the perceived risk had an indirect influence on the Continuance Intention to use online banking services caused by anxiety. From the research results, it is recommended that focus should be on policies and activities that help reduce consumers' perceived risk and anxiety to motivate more consumers to turn to online banking and eventually into a cashless society with a willingness and sense of safety.

**Keywords** anxiety, perceived risk, online banking, customer life

course, experienced life events

JEL Classification M30, M31

#### INTRODUCTION

Researchers in marketing are currently aware of the importance of life experiences that affect consumer behavior, as life events play an important role in defining patterns of consumption behavior (Moschis, 2007). People have different experiences due to their age ranges and their historical, social, cultural, economic, and environmental contexts and these are constantly changing (Elder, 1998). Further, a person's life events are constantly and alternatively negative or positive throughout their life course (Drake et al., 2011; Peterson et al., 2012). These life events can have a significant impact on changes in consumer behavior, such as the 2014 Ebola crisis (Marzi et al., 2015) and the SARS outbreak in 2003 (Maunder, et al., 2003). Such events resulted in changes in consumer behavior and attitudes making people more interdependent (Prakitsuwan & Moschis, 2020).

Particularly, the current event is the 2019 Coronavirus (COVID-19) outbreak that is happening in more than 223 countries around the world. There are more than 224,001,493 infected people and approximately 4,620,028 deaths contributed to the disease. The COVID-19 pandemic has both directly and indirectly affected behavior in the use of products and services (Carufel, 2020), especially changes in the use of new banking services (Prakitsuwan & Moschis, 2020; Flint & Kotwal, 2020). However, Thailand is just beginning to develop into a

cashless-society, the change is rapid and shows a positive direction (Bank of Thailand, 2020). Online banking is represented as an outcome of technological and financial innovations that have transformed the lifestyles of consumers by providing more fast and more convenient access to banking service. Currently, there has been an important phenomenon related to online banking in Thailand; the number of online banking users is increasing by leaps and bounds. When compared with the information of the past five years, it was found that in June 2017, 45,167,588 accounts were using online banking, but as of June 2021, there were 110,839,744 accounts, an increase of 65,672,156 accounts making a 145.5 percent jump (Bank of Thailand, 2020). However, a great obstacle that confronted the fast-growing phenomenon of the increase of online consumers in Thailand was that some consumers had concerns regarding the perceived risk and security of online systems (Thipparat, 2022; Homboon et al., 2021; Plainbangyang, 2018; Boonsiritomachai & Pittayadejanant, 2017). This is in conflict with the increasing numbers.

The data clearly show a significant increase in online banking usage. This phenomenon occurred during the period of life-experience event caused by the COVID-19 outbreak. COVID-19 may be a major cause of consumers' continuance intention to use online banking services. Also, may have caused consumers to overlook perceived risks and anxiety arising from the use of online banking. There are nonetheless, still very few studies in this context; and it is also found that relatively few studies have used experienced life events as a moderated variable to study how the influence life-experience events affects the behavior of consumers. Although relatively little evidence was found on the impact of the COVID-19 outbreak on changing consumer behavior, it has enabled analysts to fill in the gaps of research in the past. This has led to an interesting analysis of the root causes of behavior changes in consumers who overlook the problem of anxiety and perceived risks. Anxiety and perceived risk are still an important concern for consumers in Thailand.

## 1. LITERATURE REVIEW AND HYPOTHESES

This section reviews the literature in four main areas :experienced life events, perceived risk, anxiety, and continuance intention to use. Life experience means any factors or events affecting a life path of every human, surrounded by various things (Baltes et al., 1980; Salthouse, 1991; Elder, 1998; Moschis, 2007). The experienced life events are both negative and positive depending on each individual and the society in which that individual is living in. All the experienced life events influence human beings (Drake et al., 2011; Peterson et al., 2012; Cohen et al., 1987). From past studies, it is apparent that experienced life events can be positive and negative. This triggers the interest in the study of changes in con- sumer behavior in this research, these behaviors can be explained from the theory of life path (Clausen, 1986; Moschis, 2007). Life course theory has been widely applied to the studies on human behaviors, specifically the studies of behavioral changes though out human lifespan. It has also been found that sociologists and psychologists have checked and confirmed that times of change in life are important steps related to changes in human

behavior (Perlmutter, 1988; Elder, 1998; Moschis, 2007; Yingwattanakul & Moschis, 2019). As for the contexts of consumer behaviors, these discovered past studies are studies on changes in food consumption behavior (Moschis et al., 2020), changes in consumption behavior of the elderly (Prakitsuwan & Moschis, 2020), and changes in financial service use behavior of consumers (Mathur & Kasper, 2019), all of which have shown that the knowledge of consumer life course can be used to explain behavioral changes. Therefore, the knowledge of consumer life course was gained from the studies on several subjects to explain the life course of each individual, with the steps of development that each individual has practiced from the birth to the last day of life, which is related to personal behaviors influenced by surrounding environs (Pulkkinen & Caspi, 2002). Human life course can be applied to the marketing explanation, which is useful for explaining consumer behavior that is ever-changing, especially in the contexts concerning modern technology like this research work, whereby life course is used to explain consumer life course toward the utilization of online banking services and to study the influences that experienced live events have on consumer life course.

From the past studies, it is apparent that experienced life events can be positive and negative. This triggers the interest in the study on changes in consumer behavior in this research, the researcher uses experienced life event as a moderate variable. The event used is the significant event that is currently happening. The negative event used in this study is the COVID-19 pandemic, which has happened worldwide. Concerning the past studies, Campbell et al. (2020) explained that extrinsic events or threats may affect consumer life courses. At the same time, Prakitsuwan and Moschis (2020) mentioned that events could cause changes in consumption behavior due to the occurrence of new forms of services due to necessity or radical changes in the environs. This idea concurs with the oaks by Carufel (2020) and Malhotra et al. (2020) who have stated that a negative experienced life event can greatly change consumer behaviors, especially the COVID-19 pandemic, which could directly and indirectly affect market behavior concerning utilization of products and services and leading to the consumption of services in new ways. Hence, it is important to study the significant roles that experienced life events play in consumer life course, especially in the context of the continuous utilization of online banking service through the variables of anxiety and perceived risk on the intention of consumer to use online banking services continuously.

Davis-Berman and Berman (2002) argued that anxiety is a key factor of explaining perceived risk, and increased risk perception affects mood disorders and anxiety. Furthermore, Im et al. (2008) explained that these two variables of perceived risk and anxiety have different characteristics. Perception of risk has an effect on long-term consumption of technology, while anxiety is the feeling that arises while consumers are using technology. This is consistent with Taylor (1974) who stated that consumer perceptions of risk arise first and then when negative information is perceived, thereby causing concerns or anxiety. There are additional studies of risk perception and anxiety in other contexts. Campbell et al. (2020) found that security anxiety is a threat to online use. Meng and D'Arcy (2012) found that a study on the associations of shared perceived risk and anxiety in the context of financial technology found a negative association of anxiety and perceived risk toward

online service business. In addition, there have been several studies on perceived risk and anxiety in other contexts. For instance, a person will have anxiety that is significantly increased from the perceived risk of death when infected with COVID-19 disease (Malhotra et al., 2020). There are findings showing that coronavirus fear could mediate the relationship between coronavirus risk and parental coronavirus anxiety (Yıldırım et al., 2021). Therefore, the previous studies have found that perceived risk is negatively associated with anxiety. Additionally, the literature review, Lu et al. (2005), and some other studies found that perceived risk is a key factor affecting consumer decision-making. Hossein et al. (2012) and Munoz-Leiva et al. (2017) found that there was a positive correlation between perceived risk and consumer decision-making. Moreover, other researchers found a negative influence of perceived risk on the intentional use of products. For example, Kesharwani and Bisht (2012) and Al-Saedi et al. (2020) found that the perceived risk negatively influenced the intention to act in relation to the use of internet banking technology. In terms of perceived risks and the continual use of the products, research results showed that perceived risk was negatively correlated with consumer continual use of products (Rahmayanti & Ketut, 2020; Abdul-Hamid et al., 2019; Dayour et al., 2019; Chang et al., 2017) Therefore, from the literature review, it was found that most of the perceived risk was negatively correlated with consumer intentions to continue to use the products. That is, if the consumers have a low level of risk perception, they tend to have an increased intent to use the product continually. Conversely, if the consumers have an increased risk perception, their intention to use the product continually decreased.

Therefore, the findings from past studies show that there have not been a great number of studies on an anxiety and consumers' intention of utilization in the context of technology, the number of which is far inferior to the variable of perceived risk. The found past studies are relatively old. For instance, Alrajawy et al. (2018) found that anxiety has a negative impact on the perception of benefits, the perception of convenience and the intention to use smartphones; Celik (2016) has found that anxiety has a negative effect on customers' online shopping. Meanwhile, Suryani et al. (2020) have found

the anxiety about the between affects and intention to use e-money. Additionally, the direct correlation between anxiety and intention to continuously use has been found. Hong et al. (2015) have found that the anxiety towards society in general and the anxiety towards online society have a negative influence on the intention of continuous utilization; and that anxiety from technology affects emotional trust and intention to continuously use mHealth service (Meng et al., 2020). Thus, from the review of past literature, it can be assumed that anxiety has a negative correlation to the consumers' intention of continuous utilization. From the literature review, concerning the relationship lines between anxiety and perceived risk and intention of continuous utilization, it has been discovered that there have been very few studies on anxiety and perceived risk in the past (Malhotra et al., 2020), most of which are related to other contexts and are studies on technologies that are rather old (Alalwan et al., 2018; Plainbangyang, 2018). Such past studies are different from this study, which is on consumer behavior a modern context. Therefore, this is the gap for this research

Additionally, this study uses experienced life event as a moderate variable. The event used is the significant event that is currently happening. The negative event used in this study is the COVID-19 pandemic, which has happened worldwide. Concerning the past studies, Campbell et al. (2020) explained that extrinsic events or threats may affect consumer life courses. At the same time, Prakitsuwan and Moschis (2020) mentioned that events could cause changes in consumption

behavior due to the occurrence of new forms of services due to necessity or radical changes in the environment. This idea concurs with Carufel (2020) and Malhotra et al. (2020) who have stated that a negative experienced life event can greatly change consumer behaviors, especially the COVID-19 pandemic, which could directly and indirectly affect market behavior concerning utilization of products and services and lead to the consumption of services in new ways. Hence, it is important to study the significant roles that experienced life events play in consumer life course, especially in the context of the continuous utilization of online banking service through the variables of anxiety and perceived risk on the intention of consumer to use online banking services continuously. Therefore, the aims of this research project are: 1) to analyze the influence of perceived risk and anxiety on a customer's intention to continuously use on-line banking services; and 2) to test the effect of life experience, as a moderator variable of correlations between perceived risk and anxiety and the intention of a customer to continuously use on-line banking services. This study is to be used as a guideline for developing strategies and policies for improving customers' risk perception and anxiety. Reaching the highest level of consumer safety is an important step towards becoming a fully cashless society in Thailand. Therefore, hypotheses 1 to 6 were put forward and a continuance intention framework was drawn up (see Figure 1).

H1: Perceived risk negatively influences consumer anxiety in using online banking continually.

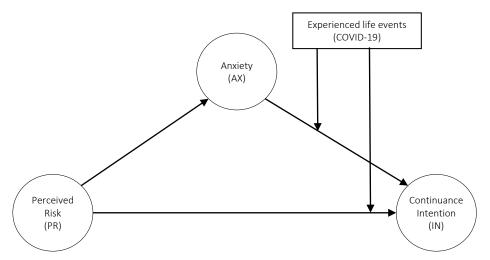


Figure 1. Continuance intention framework

- Perception of risk has a negative influ-H2: ence on intention to continue using online banking.
- Anxiety could negatively influence the intention to continue using online banking.
- Perceived risk indirectly influences intention to continue using online banking through anxiety.
- Experienced life events (COVID-19) affect a relationship between perceived risk and intention to continue using online banking of consumers.
- Experienced life events (COVID-19) affect the relationship between anxiety and intention to continue using online banking of consumers.

2.2. Variables' measurements

Related items from previous studies were adopted to develop a full survey in this study. For instance, items of perceived risk were adopted from Alalwan et al. (2018). Items of anxiety were adopted from Venkatesh et al. (2003), and items of continuance intention were adopted from Bhattacherjee (2001). Unlike above variables, experienced life events which, was regarded as a moderator, was developed.

At the same time, a 5-point Likert scale was used to allow participants rate their opinions. Kim et al. (2021) and Kim and Jindabot (2022) informed that using this rating method was suitable for a self-administered questionnaire as this rating method caused less frustration because it provided a clear cut between negative and positive scales to participants.

#### 3. RESULTS 2. RESEARCH METHODOLOGY

#### 2.1. Data collection and instrument

The populations are online banking service users in Thailand, and the samples are consumers who are the customers of commercial banks in Thailand. The sample size of this study is based on the minimum sample size criterion for Analysis of the Structural Equation Model, which is based on the observed variable to the sample ratio; according to Hair (2014), guidelines propose that the sample size should not be fewer than eight times the observable variables in the model. The research conceptual framework consists of three latent variables and 15 observable variables. It is consistent with the ratio basis of observable variables to the sample size accounted for 33 times the observable variables. The calculation uses the minimum sample size, and the data would be collected from 500 samples (Hair, 2014). For sampling method, since the exact population is unknown, samples were randomized by the non-probability sampling. Firstly, sampling method using the quota sampling, whereby the number of customers per commercial bank is equal to 100 samples; secondly, random or convenient sampling with the customers who did transactions at the banks' branch.

### 3.1. Structural equation model measurement

Valid data were analyzed using a structural equation model (SEM). However, confirmatory factor analysis (CFA) and convergent validity were checked to ensure the overall model fitness and model validity construct in this study.

Regardless of the overall model fitness, the evaluation of the overall harmony of the model of CFA was conducted. The consideration of the harmony is based on the  $\chi^2/df$  value, which should not be less than 5 (Wheaton, Muthen, Alwin, 1977, cited in Rinthaisong, 2020), the CFI value need to be at least 0.90, the TLI value should be greater than 0.90, the SRMR value should not be greater than 0.08, and the RMSEA value should be under 0.07 (Hair et al., 2019). From Table 1, the results of the data analysis are as follows:  $\chi^2 = 372.481$ , df = 85, P-Value = 0.0000 with  $\chi^2/df = 4.382$ , which meets the acceptable criteria and has CFI = 0.950, TLI = 0.939 and SRMR = 0.049, which also meets the acceptable criteria, and RMSEA = 0.080 (90%CI = 0.074-0.091) remaining within the acceptable range (Hair et al., 2019). Both criteria are within the acceptable range, and the results show that the

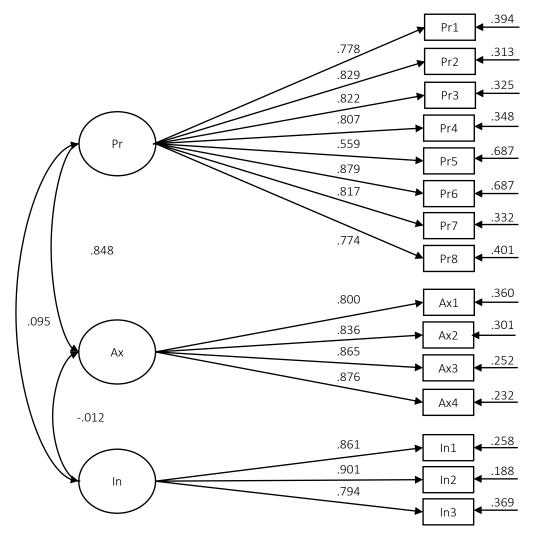


Figure 2. CFA model

Table 1. Statistic value for assessing the harmony of the CFA model

	Statistical values									
Model	v <sup>2</sup>	J.E	D Value	امار 2. اعامار 2.	DNACEA	90%CI of RMSEA		CEL	<b>T</b> 11	CDMD
	Х	df	P-Value	χ²/df	RMSEA -	Lower	Upper	CFI	TLI	SRMR
CFA	372.481	85	0.0000	4.382	0.080	0.074	0.091	0.950	0.939	0.049

model is in harmony with the empirical data. The confirmatory factor analysis model (CFA) with standard scores is shown in Figure 2.

Meanwhile, researchers also checked the loading factors of the involved items. The analysis of the model is in harmony with empirical data that show the weight from the analysis of raw scores of observed variables, it was found that the weight of each indicator is statistically significant. It means all the observed variables are ingenious variables in themselves, as shown in Figure 2.

Regardless of convergent validity, Composite Reliability (CR) and Average Variance Extracted (AVE) were determined using two data sections: Error variance in the measurement of observable variables and factor loading, which show CR and AVE values as shown in Table 2. It can be seen that all latent variables have CR values, which need to be higher than 0.7, and AVE values should be greater than 0.5, indicating that all latent variables are reliable to analyze the Structural Equation as shown in Table 2. Therefore, it was assumed that the model was fit to perform SEM analysis.

Table 2. Measurement model

Variables	Cuanhach's almba	Statistical values		
variables	Cronbach's alpha	CR	AVE	
Perceived Risk	0.91	0.925	0.610	
Anxiety	0.90	0.881	0.651	
Continuance Intention to Use	0.88	0.877	0.704	

#### 3.2. SEM results

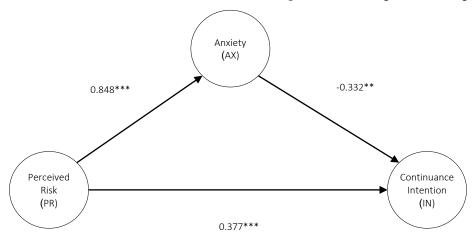
Finally, SEM analysis was conducted. All critical ratios were briefly reported in Figure 3, Tables 3, 4 and 5.

The research findings from Table 3 show that perceived risk has a statistically significant positive direct influence on anxiety ( $\beta = 0.848$ , p < 0.001), which corresponds to hypothesis 1, explaining that when consumers' perceived risk of using online banking services has increased, their anxiety also increases, and vice versa, when consumers have reduced perceived risks of using online banking consumers will have less anxiety.

Perceived risk could positively affect the intention of a consumer to use online banking on an ongoing basis at a statistically significant level ( $\beta$  = 0.377, p < 0.001). This finding does not meet hypothesis 2 and is in conflict with theories and previous literature reviews that describe that when consumers' perceived risk increases, their intention to use online banking continually is reduced, and when their perceived risks are reduced, their intention to use online banking continually will rise.

The result also shows that anxiety has a negative impact on the intention to continue to use online banking at a statistically significant level ( $\beta$  = -0.332, p < 0.01), which corresponds with hypothesis 3, explaining that when consumers have increased anxiety, their intention to continually use online banking decreases; and when consumers have less anxiety, their willingness to continually use online banking rises. In addition, R Square of anxiety and intention to continuously use banking online show that anxiety is 0.40, continuance intention to use online is 0.71, as shown in Figure 3.

Table 4 shows the role the anxiety could mediate the relationship between perceived risk and consumers' willingness to continually use online banking. It was found that perceived risk indirectly influences consumers' intention to continually use online banking services through anxiety. This is by hypothesis 4. Overall, the results of the study on the influence of anxiety as a mediating variable reveal that it is a partial mediation effect, since customers' willingness to continue to use on-line banking services is directly influenced by consumers' perceptions of risks and indirectly influenced by consumers' perceptions of risk through anxiety. These results are illustrated in the structural equation modeling (SEM) in Figure 3.



Note: Index  $\chi^2$ /df = 4.382, CFI = 0.50, TLI = 0.939, SRMR = 0.049, RMSEA = 0.080 (90% CI = 0.077-0.096); \*\*p < 0.01; \*\*\* p < 0.001.

Figure 3. Structural equation model

Table 3. Direct effect

Correlation lines		Z	P-value
1. Perceived risk → Anxiety	0.848***	35.771	0.000
2. Perceived risk → Continuance Intention to Use online banking services		3.528	0.000
3. Anxiety → Continuance Intention to Use online banking services		-2.998	0.003

*Note:* n = 500 \*\* p < 0.01; \*\*\* p < 0.001.

Table 4. Indirect effect

Correlation lines		-	95%CIs	
		2	Lower	Upper
Perceived risk → Anxiety → Continuance Intention to Use online banking services	-0.282*	-2.952	-0.463	-0.110

*Note:* n = 500; \* p < 0.05.

**Table 5.** Moderating variable

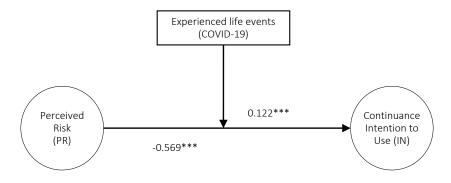
Correlation lines	β	SE	Z	P-value
Coronavirus 2019 Outbreak $\downarrow$ (Perceived risk $\rightarrow$ Continuance Intention to Use)	0.122***	0.038	3.210	0.001
Coronavirus 2019 Outbreak ↓ (Anxiety → Continuance Intention to Use)	0.171***	0.038	4.472	0.000

*Note:* n = 500; \*\*\* p < 0.001.

This result of the analysis shows the influences of the moderating variables. From Table 5, influences of the experienced life events variable (COVID-19 pandemic) on the association between perceived risk and consumer willingness to use online banking continually showed that the COVID-19 pandemic had a significant influence on the relationship between perceived risk and the intention of a consumer to use online banking services at a statistical level ( $\beta$  = 0.122, p < 0.001), which is Hypothesis 5. This can be illustrated as follows: When the spread of the COVID-19 pandemic increases by 1 unit, the influence of the awareness of the risk on the

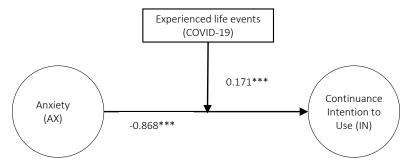
continuance intention to use online banking services has also increased by 0.122 units (see Figure 4).

The results of the analysis show the influence of the moderating variable of experienced life event (COVID-19 pandemic) on the association between anxiety and willingness to use online banking continually; they show that the COVID-19 pandemic has a significant influence on the relationship between anxiety and the intent to use online banking ( $\beta$  = 0.171, p < 0.001), which is Hypothesis 6. This means that when the COVID-19 pandemic's severity increases by



*Note:* n = 500; \*\*\* p < 0.001.

Figure 4. Influence of the moderating variable of experienced life event of the COVID-19 pandemic



*Note:* n = 500; \*\*p < 0.01; \*\*\* p < 0.001.

Figure 5. Influence of the moderating variable of life-experience of the COVID-19 pandemic

1 unit, there is an increase of anxiety that influences the continuance intention to use online banking services by 0.171 units (see Figure 5).

#### 4. DISCUSSION

The results of this study reflect significant changes in the life path of consumers, summarized in the objectives of the research as follows:

As a result of objective number 1. To analyze the influence that perceived risk and anxiety have on the intention of a customer to continuously use online banking services. The research results show that the perceived risk has a direct positive influence on consumers' intention to continuously use online banking services. This is consistent with Jung and Cho (2020), but not with Rahmayanti and Ketut (2020), Abdul-Hamid et al. (2019), and Chang et al. (2017) who have discovered that perceived risk has a negative relationship to the intention of continuous utilization. This might be because there were other factors affecting consumer behaviors until it became inevitable to use online banking services, such as the COVID-19 pandemic that has changed consumer behaviors due to the fear of being infected with the disease while using cash, thus, shops are seeing more online activities (Prakitsuwan & Moschis, 2020; Carufel, 2020). Therefore, consumers may overlook the risk and use more online banking service despite perceived risk, which concerns the safety of account, financial theft and data theft by hackers. In addition, it was found that perceived risk could directly and positively influence the anxiety from the use of online banking services by consumers. This point concurs with the works by Taylor (1974) and Davis-Berman and Berman (2002) who have

stated that when consumers have perceived risk, they will perceive the loss in a negative way, which causes anxiety. This also concurs with Campbell et al. (2020) and Meng and D'Arcy (2012), who have found that a study on the associations of shared perceived risk and anxiety in the context of financial technology found a negative association between anxiety and perceived risk toward online service business. This concurs with the study by Malhotra et al. (2020), who have found that a person will be highly anxious about death when that person has perceived risk from COVID-19, and also agreeable with the study by Yıldırım et al. (2021) whose findings showed that coronavirus fear has a mediating impact on the relationship between coronavirus risk and parental coronavirus anxiety, reflecting consumer behaviors. When there is perceived risk, consumers will feel unconfident and anxious, especially in the context of the utilization of on-line banking service.

As a result of objective number 2. To test the influence of life experience as a moderator variable of the correlations between perceived risk and anxiety and the intention of a customer to continuously use on-line banking services. The study on the influences of experienced life events found that the COVID-19 pandemic affected the association between perceived risk and intention to use online banking continually. This is in line with Campbell et al. (2020) who state that external incidents or threats affect the life course of consumers. This reflects that the COVID-19 pandemic has a significant effect on the willingness to continue to apply online banking even though consumers are still aware of the risks of online banking. The COVID-19 pandemic has caused people to overlook risks such as financial risk and account and personal data security, etc. (Alrajawy et al., 2018;

Munoz-Leiva et al., 2017). The present study found that the COVID-19 pandemic has influenced the relationship between anxiety and intention to use online banking consistently. The finding of this study is line with the studies of Malhotra et al. (2020) and Drake et al. (2011) stating that anxiety and negative life experience events lead to conformity with what is leading. Further, Campbell et al. (2020) stated that negative events or potential threats can lead to a wide range of consumers' emotional and instinctive responses. This reflects that the COVID-19 pandemic could significantly affect consumers to overcome the fear of risk and anxiety in using online banking. This, however, contradicts the past study that has found that people are still concerned about using online banking (Pleangbangyang, 2018).

Therefore, this study is useful in terms of theory because it develops a new model that explains changes in consumer behaviors using the theories of life course, planned behaviors, utilization of information technology, and perpetual technology. This research is the first to examine all of the aforementioned theories within a single study. The findings from the research will help answer the question, and enhance and fulfill the body of knowledge of consumer intention of continuous utilization, especially in the context of online banking services. The conclusion of the research can be applied to other experienced life events that happen to consumer life course or can be used for comparing with the behavior of the use

of other financial technologies in the future, or for comparing behaviors of consumers from different cultures such as the financial transaction through Bitcoin system or new financial innovation.

This study is also useful for banks and agencies related to banking businesses that can apply the findings from the research to extensive development in order to enhance the capacity to meet customer needs, reduce problems of anxiety, deal with perceived risk so that customers continuously use online banking services, even when an experienced life event ends or there is a new life course. This can help these businesses gain competitiveness and boost business opportunities by setting marketing strategies to enhance confidence and trust in the use of online financial technologies continuously and sustainably, and provide guidelines to public sector and banks to become aware of and deal with anxiety stemming from the risks that could occur while consumers are using online banking services. This is for setting measures or directions to prevent risk and anxiety during and after the use of online banking services to ensure maximum safety. Otherwise, there might have been an agency directly dealing with this matter to mitigate risk to consumers' bank accounts such as by designing the application to be easy to use, less complicated, and highly secured to prevent hackers from hacking or accessing the personal data of customers. In addition, the cost should be reduced to ensure that the bank's existing customers use the services continuously.

#### CONCLUSION AND RECOMMENDATIONS

The objective of this study is to analyze the influence of experienced life events (affected by COVID-19), perceived risk, and anxiety on the continuance intention to use online banking in Thailand. To fulfill the current objective of this study, the data was attained from 500 customers who had visited commercial banks in Thailand. As for a sampling method, since the exact population is unknown, samples were randomized by the non-probability sampling. First, a sampling method using the quota sampling, whereby the number of customers per commercial bank is equal to 100 samples, secondly, random or convenient sampling with the customers who did transactions at the banks' branch. The data was analyzed using Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM).

To sum up, the results of this study reflect significant changes in consumers' life courses. Firstly, risk perception has a positive influence on consumers' intention to continue using online banking, and anxiety has a direct negative influence on consumers' continuance intention to use online banking services. Secondly, the perceived risk has an indirect influence on the willingness to continually use online banking through anxiety, showing that the perceived risk and anxiety are still the key factors that affect

consumers' willingness to continue to use online banking and the entry into a cashless-society. As for the third aspect of the influence of life experience events, the results show that the COVID-19 pandemic affects the relationship between perceived risk and intention to use online banking continually, and the relationship between anxiety and the willingness to continually use online banking. This reflects that life experience events influence the behavior of consumers' life course to change according to the incident, especially the behavior in using online banking.

The results of the present study also show that the current life experience event, the COVID-19 pandemic, has affected the behavior of intentions to use online banking. This can be explained by the fact that the consumers are concerned with the safety and sanitary of cash handling (touching), perceived risks of online banking are overlooked. Anxiety that is still arising reflects that although consumer behavior has changed, consumers still have a perceived risk and anxiety in using online banking. Therefore, banks or relevant agencies can use them as guidelines for setting strategies to deal with consumer behaviors. If banks desire to promote the continuous use of online banking services, they should emphasize activities or policies that help customers have less perceived risk and anxiety concerning applying of online banking services, promote consumers to use more online banking services, and help the society to become a completely cashless society.

Recommendations are given for further research to explain more consumer behavior in terms of perceived risk and concerns about the continued use of online banking to corroborate the quantitative results to gain more meaningful and reliable findings. It is also recommended that there should also be a comparison of the age difference, whether the behavior among different age ranges is significant or not. In addition, life experience events (the COVID-19 pandemic) explored in this study, and other current events or those that may occur in the future should be further studied to affirm or compare the role of life experience events on consumer behavior in different contexts and different cultures.

#### **AUTHOR CONTRIBUTIONS**

Conceptualization: Paisal Rittigul. Formal analysis: Paisal Rittigul. Methodology: Paisal Rittigul.

Project administration: Teerasak Jindabot.

Supervision: Teerasak Jindabot.

Validation: Paisal Rittigul, Teerasak Jindabot.

Visualization: Teerasak Jindabot. Writing – original draft: Paisal Rittigul.

Writing – reviewing & editing: Teerasak Jindabot.

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#### **APPENDIX A**

Table A1. Questionnaire items

Variable	Items
Perceived risk	PR1: Afraid of being fraud and cheating PR2: Afraid of being vulnerable for personal finance PR3: Afraid of negative effect on personal data PR4: Afraid of being hacked bank account PR5: Afraid of losing my image PR6: Afraid of risky online banking PR7: Having high emotional risk with online banking PR8: Afraid of spending too much money on online banking
Anxiety	AX1: Feeling anxious with online banking AX2: Feeling anxious if pressing a wrong button AX3: Hesitate using the online banking AX4: Feeling threatened with personal privacy
Experienced life events (Covid-19)	Do you think that the situation of the Coronavirus 2019 epidemic makes you use online banking?
Intention to Continue	IN1: Still want to continue using online banking in the future IN2: Still choose online banking as the first option IN3: Still continue using it although price changes