

# Determinants of Thai Individuals Behavioral Intention towards Online Fitness Program on YouTube during COVID-19 Pandemic

Pailin Samritpricha\* and Rawin Vongurai

Innovative Technology Management, Graduate School of Business and Advanced Technology Management,

Assumption University, Hua Mak Campus, Bangkapi, Bangkok 10240, Thailand

\*Corresponding author. E-mail address: pailin.sam@gmail.com

Received: 6 June 2021; Revised: 8 August 2021; Accepted: 19 August 2021

#### Abstract

The purpose of this research is to investigate the determinants of Thai individuals behavioral intention towards online fitness program on YouTube during COVID-19 pandemic situation. The conceptual framework is presented on how effort expectancy, performance expectancy, social influence, attitude, desire, personal innovativeness influence behavioral intention of Thai individuals. The samples of 500 respondents were collected from online and offline questionnaires by using multi-stage sampling technique. Stratified random sampling was used to group users in three age generation and purposive sampling and convenience sampling to reach target respondents. The study applied the Structural Equation Model (SEM) and Confirmatory Factor Analysis (CFA) to analyze the data and confirm goodness-of-fit of the model and hypotheses. The results of goodness-of-fit indicated the model is consistent with empirical data and hypothesis testing results indicated that effort expectancy, performance expectancy, social influence, attitude, desire, and personal innovativeness have a significant influence on behavioral intention. The researcher also found that social influence, effort expectancy and performance expectancy showed significant impact on attitude as mediator of desire which also greatly influences behavioral intention. Behavioral intention of online fitness program on YouTube users is determined by effort expectancy, performance expectancy, social influence, attitude, desire, and personal innovativeness. Hence, fitness YouTube channel owners are recommended to apply these instruments to enhance behavioral innovation when using online fitness program on YouTube.

Keywords: Behavioral Intention, Online Fitness, YouTube, COVID-19, Thai Individuals

### Introduction

Thai people are now more health-conscious than ever before (TTG Asia, 2021). The AIA Healthy Living Index in Thailand has been increasing since 2011 from 57 to 67 in 2018 (AIA Group Limited, 2018). This increment signifies that Thai people have greater satisfaction in their health and executed more in healthy activities such as regular exercising, healthy dietary, etc. The increasing trend of healthy lifestyle can also be seen from increasing number of other sport-related businesses in Thailand from the report of Department of Business Development, Ministry of Commerce (2019). Data comparison from January to October in 2019 and 2018 shows that the value of imported running shoes rose by 53.95%, sport facilities like fitness center, aerobics and yoga were increased by 2.21% and capital value of sports apparels and equipment business rose by 47.10%. Asia City Media Group study stated that more than 77% of surveyed people in Bangkok visited a gym 2-6 times a week and some pays average of THB 2,000 to 4,000 per month for fitness membership fees (van der Wellingthon, 2020).

In this era, health and fitness communities are sponsored by the enhancement of digital devices and technologies and communication tools like social media and mobile applications (Dessart & Duclou, 2019). New media are now perpetuating the fitness trend with the rising number of customers utilizing social applications to learn more on health and fitness and monitoring purposes (Lowe, Fraser, & Souza-Monteiro, 2015).

COVID-19 is known to be highly infectious. It spread to other parts of the world rapidly including Thailand. The chaos caused by COVID-19 has severely affected the sport industry as a result of its economic and social



impact (Ratten, 2020). Fitness sector business and gym addicts faced a great challenge as fitness centers were obliged to close to decelerate the spread of the COVID-19 (Destination Thailand News, 2021). Furthermore, people will need to reduce luxury expenses in their personal budgets as a result of the negative financial impacts of the pandemic (Leelamanit, 2020).

The COVID-19 outbreak has initiated new behavior of "Anxious about Health". People tend to stay at home and encouraged social distancing. Therefore, exercising at home has become the safest option, resulting in the popularity of home wellness such as following the exercising clips on YouTube (Chaorusmeekul, 2020). People consider YouTube channels as a substitute to the gym because these channels enabling them to train in a more cost-effective way and they are great help in saving time or can offer more flexible schedules (Vrontis, Viassone, Serravalle, & Christofi, 2020). YouTube is one the sites that top Thailand's web traffic reports and considered as the most popular site for video sharing. YouTube is ranked at the second place, following facebook, for monthly traffic at 370 million. Thais spent an average time of 30 minutes per YouTube visit (David, 2019). There is an 80% increase in year-on-year growth in watch time on YouTube for fitness-related videos, as people at home shifted to technology to keep up with an active lifestyle (Wang, 2020).

The objective of this study is to investigate the determinants of Thai individuals behavioral intention towards online fitness program on YouTube during COVID-19 pandemic situation. Since COVID-19 has resulted to the changing of exercising behavior from traditional fitness class to online fitness class, this research has focuses on individuals behavioral intention towards online fitness program. So that the findings of this research can help the developers of online fitness program to understand the stimulus for individuals behavioral intention, and design or promote the fitness programs in such a manner that suitable for current situation. The determinants studied in research conceptual framework are based on the integration of Unified Theory of Acceptance and Use of Technology (UTAUT), Model of Goal-Directed Behavior (MGDB), Diffusion of Innovations (DOI), and previous studies to understand the individuals behavioral intention towards information technology, which in this context of study is online fitness program on YouTube. Hence, the proposed variables are consisting of effort expectancy, performance expectancy, social influence, attitude, desire, personal innovativeness, and behavioral intention.

#### Literature Review

## **Behavioral Intention (BI)**

Behavioral intention is the willingness of an individual to carrying out a behavior (Oliveira, Thomas, Baptista, & Campos, 2016). Generally, as the strength of the intention to adopt proliferates, the will to carry out a behavior also increases. In the context of technology acceptance, behavioral intention measures the actual usage of the technology (Venkatesh, Thong, & Xu, 2016). According to the previous research, behavioral intention is significantly influenced by several factors, including personal innovativeness and desire. In the context of adopting new technologies across various industries like social network sites and online purchase intentions, personal innovativeness significantly influences behavioral intentions (Dhiman, Arora, Dogra, & Gupta, 2020).

#### Effort Expectancy (EE)

Effort expectancy is defined as the level of effort for the usage of a system (Venkatesh et al., 2016). According to Chaouali, Yahia, & Souiden (2016), when the users perceived that the system or technological services is effortless, the higher chances for users to adopt the new technology. Research shows that technology which is easy to use in the early stage has positive impact on consumer's intentions towards utilizing it (Dhiman et al., 2020).



Effort Expectancy was proved to have impact on users' acceptance of wearable technology in healthcare (Gao, Li, & Luo, 2015). Effort expectancy appeared to have a positive impact on behavioral intention, indicating that ease of use is substantial to using golf innovation products (Seol, Ko, & Yeo, 2017). The perceived ease of use is one the essential factor that influences user's technology acceptance (Kim & Shin, 2015). Thus, the following hypothesis is proposed.

H<sub>1</sub>: Effort expectancy significantly influences attitude towards online fitness program on YouTube.

#### Performance Expectancy (PE)

The level to which a person believes that the system usage will be able to remit better job outcome is stated as performance expectancy (Aksoy, Alan, Kabadayi, & Aksoy, 2020). Performance expectancy is described as the strongest determinant of attitude and behavioral intention (Chopdar, Korfiatis, Sivakumar, & Lytras, 2018; Lee, Lee, & Rha, 2019). Performance expectancy has been examined across many industry. Kalantari & Rauschnabel (2018) has shown that augmented reality smart glasses had benefits that could reach the perceived usefulness of the users, hence influences on their attitude. In UTAUT, performance expectancy refers to the extent that a certain technology is beneficial to an individual when performing an activity (Venkatesh et al., 2016). Barua & Barua (2021) confirmed that users intent to use mobile health services if they find that the service or technology can enhance performance in their daily work. Gao et al. (2015) has confirmed that Performance Expectancy has an effect on user's intention to adopt healthcare wearable devices. Therefore, the following hypothesis is proposed.

H<sub>2</sub>: Performance expectancy significantly influences attitude towards online fitness program on YouTube.

## Social Influence (SI)

Social influence is the level that an individual believes on other important people's opinion to use a particular technology (Venkatesh et al., 2016). Research signifies that the information given by intimate ones plays a part in raising awareness and intentions towards the technology (Dhiman et al., 2020). According to Weng (2016), an example of social influence affecting behavioral intention in health care devices can be recommendation from doctors. In perspective of mobile payment usage, social influence can be from one's social surroundings, family, friends, and colleagues that impact the usage of application (Lee et al., 2019). Slade, Williams, Dwivedi, & Piercy (2015) has studied Near Field Communication mobile payments and reported that the effects of social influence greatly impacted behavioral intention on the usage. Corresponding to the study by Lin & Theingi (2019) that social influence has strong relationship on behavioral intention towards adopting and accepting mobile commerce. Among Generation Y, social influence has resulted to be one of the determinants on users' adoption of mobile banking (Tan & Lau, 2016). Hence, the following hypotheses are developed.

H<sub>3</sub>: Social influence significantly influences attitude towards online fitness program on YouTube.

H<sub>4</sub>: Social influence significantly influences behavioral intention towards online fitness program on YouTube.

Attitude (AT)

Attitude is the level that a person having favorable or unfavorable judgment to carry out a particular behavior (Aksoy et al., 2020). In other words, when the result of a particular behavior is positive, the more positive attitude can be gained. Han & Ryu (2012) has applied goal-directed behavior model to study restaurant services and proved that attitude was a powerful determinant influencing a revisit intention. The extended goal-directed behavior indicated that attitude is also linked with desire (Esposito, van Bavel, Baranowski, & Duch-Brown, 2016). Some examples are the desire for online purchase of sporting goods is positively affected by the attitude and desire on overseas travel is greatly impacted by the attitude (Chiu, Kim, & Won, 2018; Kim, Lee, Lee, &



Song, 2012). In the aspect of environmental, the attitude of bicycle travelers has a significant impact on desire to commute by bike (Meng & Han, 2016). Hence, the following hypothesis is formulated.

H<sub>5</sub>: Attitude significantly influences desire towards online fitness program on YouTube.

### Desire (DE)

Desire is a motivation of individuals to carry out a behavior (Chiu et al., 2018). As stated by Perugini & Bagozzi (2004), desires are personal drive that considered to be essential in the first stage of human active behaviors, which is the factor causing the formation of intention. In mobile device sector, it was found that the greater the desire to use mobile devices, the higher the chance of future usage intention (Kim & Preis, 2016). Intention to use information system is driven by the perceived desirability of an individual and the outcome from performing such behavior (Moghavvemi, Mohd Salleh, & Standing, 2016). Hunter (2006) studied the behaviors of shopping center visitors and found that shoppers tend to go to the shopping center if they had greater desire to visit. From these supported studies, the following hypothesis has been formulated.

H<sub>6</sub>: Desire significantly influences behavioral intention towards online fitness program on YouTube.

## Personal Innovativeness (PI)

Parasuraman & Colby (2015) has defined innovativeness for an individual tendency for adopting new technology as a likelihood of an individual to be a pioneer or leader in technology. Personal innovativeness can impact the behavioral intention of the users to adopt social network sites (Wijesundara & Xixiang, 2017). Similarly to research of Oliveira et al. (2016), that higher innovativeness of user, the more likely that user would be attracted to new technologies. Juaneda-Ayensa, Mosquera, & Murillo (2016) has proved that personal innovativeness has an impact on omnichannel customers' behavior through their endorsement and intention to adopt innovations while shopping. In the research by Escobar-Rodríguez & Carvajal-Trujillo (2014), personal innovativeness appeared to have powerful impact on the online purchase intention of low-cost carrier air tickets. Hence, the following hypothesis is derived.

 $H_7$ : Personal innovativeness significantly influences behavioral intention towards online fitness program on YouTube.

## **Research Methods and Materials**

## **Research Framework**

The conceptual framework shown in Figure 1 is adapted from three theoretical models. First, the study of Aksoy et al. (2020) verified that EE, PE, and SI significantly influences AT. Second, Dhiman et al. (2020) examined the impact of PI on BI to adopt new social network platforms and online buying intentions. He proved that SI has direct influence on the customers' BI to use mobile fitness application. Third, Chiu et al.'s (2018) research investigated the customers' behavioral intention to buy sporting goods online by applying goal-oriented behavior model. It was proved that AT has influences on DE and subsequently influence BI. This study aims to examine the determinants of BI among Thai individuals towards online fitness programs on YouTube during COVID-19 pandemic situation. The variables studied are EE, PE, SI, AT, DE and PI. In addition, the causal relationship between each variable is investigated to reveal its impact on BI.



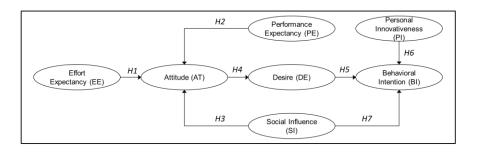


Figure 1 Conceptual Framework.

## Methodology

The researcher applied probability and nonprobability sampling for quantitative method study. The developed questionnaire consists of three parts, screening question, a 5-point Likert scale to measure variables, and demographic questions. The 5-point Likert scale is ranging from strong disagreement (1) to strong agreement (5). Pilot testing has been conducted by the index of Item-Objective Congruence (IOC) and Cronbach's Alpha method to verify the reliability from the respondents. Three experts were acquired to validate the scale items under IOC assessment and results for each item were higher than acceptable value of 0.5 (Turner & Carlson, 2003). In addition, pilot testing of 40 sample size has been assessed for reliability by measuring Cronbach's Alpha and the results, showed in Table 2, were all above 0.6, thus acceptable for larger group distribution (Sekaran, 1992). The questionnaires were then distributed online and offline to the target group of Thai individuals who have experienced using online fitness program via YouTube, which resulted in 500 valid responses. SPSS AMOS 26.0 is used to analyze collect data through Confirmatory Factor Analysis (CFA) and Structural Equation Model (SEM). CFA was conducted to test the convergence accuracy and discriminant validity and SEM was conducted to test the conceptual model fit and proposed hypotheses.

## **Population and Sample Size**

The population used in this research consists of three generations of YouTube users, Generation X who were born during 1965–1980, Generation Y who were born during 1981–2000 and Generation Z who were born between 2001 and above. Referring to Hair, Black, Babin, Anderson, & Tatham (2005), the sample size of 30 to 500 is enough for most of the research. For this study, the questionnaire was distributed to 530 respondents during January to April 2021 and 500 responses were considered eligible after screening.

# Sampling Technique

The researcher used multi-stage sampling technique. The first stage is a probability sampling, using stratified random sampling to divide sampling into three generation groups of YouTube users as stated in Table 1. As there is no complete source of target population, population size is estimated from the number of internet users in Thailand (Electronic Transactions Development Agency, 2020) with the ratio of Thai population age pyramid (Thailand Board of Investment, 2021), and ratio of YouTube visit for each age group (PP, 2018). The second stage adapted nonprobability sampling method of purposive sampling and convenience sampling to ensure that respondents met the target group of Thai individuals that have experienced using online fitness program via YouTube. The data was collected during January to April 2021. Questionnaires were distributed online via social networks including Email, Facebook, Line, and Whats App Chat Application and offline via fitness centers directly to customers and indirectly through personal trainers for further distribution to their customers. The respondents were encouraged to share questionnaire link to their peers who met the criteria.



Table 1 Population and Sample Size by Generation Group of YouTube Users

Commention Comme	Internet Users	YouTube Visit	YouTube Visitors	Allocation of
Generation Group	(Million)	Percentage	(Million)	Sample Size
Generation Z	5.60	85%	4.76	155
Generation Y	6.55	79%	5.17	170
Generation X	7.95	67%	5.33	175
Total	20.10		15.17	500

Source: Electronic Transactions Development Agency (2020); PP (2018); Thailand Board of Investment (2021)

### Results and Discussion

## **Demographic Factors**

The 500 target respondents consist of 286 (57.1%) male and 214 (42.9%) female. There were 16 respondents in generation Z (3.2%), 357 respondents in generation Y (71.4%), and 127 in generation X (25.4%), 11 respondents are students (2.2%), 297 respondents are employees of private and public organizations (59.4%), 184 respondents are business owners (36.8%), and 8 respondents are employed in other occupation (1.6%). Further, 173 respondents use online fitness program via YouTube 1 to 2 times a week (34.6%), 258 respondents use 3 to 4 times a week (51.6%), and 69 respondents use more than 5 times a week (13.8%).

## Confirmatory Factor Analysis (CFA)

CFA was used prior analyzing the measurement model with SEM. The results derived from CFA indicated that all variables items are significant with discriminant validity. As shown in Table 2, factor loading is acceptable for goodness of fit at value higher than 0.50 and p-value of lower than 0.05 (Hair et al., 2005). Composite Reliability (CR) is acceptable at value higher than 0.7 and Average Variance Extracted (AVE) at higher than 0.5. For AVE higher 0.4, it is acceptable if CR is higher than 0.6 (Fornell & Larcker, 1981).

Testing for discriminant validity was evaluated by computing the square root of each AVE (Fornell & Larcker, 1981) shown in Table 3. The values of discriminant validity are all greater than inter-construct correlations, therefore, the discriminant validity is considered to be supportive. The model's goodness of fit is also measured by using the indicators of GFI, AGFI, NFI, IFI, CFI, RMR and RMSEA shown in Table 4. The values calculated from adjusted model are acceptable. Therefore, the convergent validity and discriminant validity is assured.

Table 2 Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
EE	Aksoy et al. (2020)	3	0.749	0.647 - 0.784*	0.757	0.512
PE	Aksoy et al. (2020)	5	0.835	0.654 - 0.755*	0.835	0.504
SI	Aksoy et al. (2020)	3	0.753	0.609 - 0.839*	0.734	0.486
AT	Chiu et al. (2018)	4	0.751	0.630 - 0.697*	0.755	0.436
DE	Chiu et al. (2018)	3	0.670	0.555 - 0.729*	0.677	0.414
PI	Dhiman et al. (2020)	3	0.794	0.625 - 0.834*	0.804	0.581
BI	Chiu et al. (2018)	5	0.918	0.791 - 0.872*	0.923	0.706
DI	Dhiman et al. (2020)	J	0.316	0.191 . 0.612	0.320	0.700

**Note:** \*p < 0.05



Table 3 Discriminant Validity

Variables -				Correlations			
variables	EE	PE	SI	AT	DE	PI	BI
EE	0.716						
PE	0.496	0.710					
SI	0.513	0.425	0.697				
AT	0.566	0.582	0.522	0.660			
DE	0.548	0.500	0.536	0.629	0.643		
PI	0.557	0.497	0.571	0.600	0.600	0.762	
BI	0.551	0.535	0.608	0.620	0.617	0.728	0.840

Note: The diagonally listed value is the AVE square roots of the variables.

Table 4 Goodness of Fit

Index	Acceptable Values	CFA Values	SEM Values
CMIN/DF	< 3.00 (Hair et al., 2005)	1.910	1.934
GFI	≥ 0.90 (Hair et al., 2005)	0.922	0.920
AGFI	≥0.90 (Hair et al., 2005)	0.901	0.900
NFI	≥ 0.90 (Arbuckle, 1995)	0.926	0.923
CFI	≥ 0.90 (Hair et al., 2005)	0.963	0.961
TLI	≥ 0.90 (Hair et al., 2005)	0.956	0.955
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.043	0.043
RMR	< 0.05 (Hair et al., 2005)	0.027	0.029

Note: CMIN/DF = The Ratio of the Chi-square Value to Degree of Freedom; GFI = Goodness-of-Fit Index;

AGFI = Adjusted Goodness-of-Fit Index; NFI = Normalized Fit Index; TLI = Tucker-Lewis Index;

CFI = Comparative Fit Index, RMSEA = Root Mean Square Error of Approximation; RMR = Root Mean Square Residual

## Structural Equation Model (SEM)

SEM verified the relationship between constructs in a model and measures falsity in the structure coefficient (Hair, Black, Babin, & Anderson, 2010). The measurement for model fit should not be over 3 for Chi-square/degrees-of-freedom (CMIN/DF) ratio and GFI and CFI should be higher than 0.9 (Hair et al., 2005). The goodness of fit index is calculated and adjusted model by using SPSS AMOS version 26. The statistical values shows in Table 4 represents a model fit.

## **Research Hypothesis Testing Result**

The significance of each variable is assessed from its regression weights and R2 variances. The result from Table 5 postulated that all hypotheses were supported with a significance at p = 0.05. PI has the most influences towards BI, with coefficient of 0.540, followed by SI ( $\beta$  = 0.252), and DE ( $\beta$  = 0.155). EE has the most significant influence on AT with coefficient of 0.635, followed by SI ( $\beta$  = 0.204), and PE ( $\beta$  = 0.190). AT has strong impact on DE with coefficient of 0.993.

Effort Expectancy (EE) in  $H_1$  has the highest influence towards attitude among Thai individuals. This finding promotes the concept of Chaouali et al. (2016) and studies of Gao et al. (2015); Nguyen & Khoa (2019); and Seol et al. (2017) that the ease of use and ability to enhance performance from using the technology can favorably form behavioral intention. Secondly in  $H_3$  for Social Influence (SI) which forms positive attitude towards online fitness program on YouTube which concurring with Dhiman et al. (2020) that opinions from intimate peers can



raise awareness and positive judgement towards the technology. The least influential factor on attitude, however significant, is in  $\rm H_2$  for Performance Expectancy (PE). The finding of direct significance between performance expectancy and attitudes is similar to the findings derived from Gao et al. (2015); Lee (2017); Venkatesh et al. (2016); and Barua & Barua (2021) that when an individual perceived using a technology is beneficial and enable to enhance their job outcome, the users are intended to develop positive attitude or judgement towards the technology. Attitude in path  $\rm H_4$  has further influenced the desire towards online fitness program on YouTube, which supports the finding of Esposito et al. (2016) that attitude relates to desire and Han & Ryu's (2012) study that favorable attitudes can create a desire for repetitive and continuance of behavior.

Among three factors that significantly influence behavioral intention, personal innovativeness or PI in  $H_6$  has the highest influence on behavioral intention for Thai users of online fitness program on YouTube. This finding strengthen the previous research of Wijesundara & Xixiang (2017); Juaneda-Ayensa et al. (2016); and Escobar-Rodríguez & Carvajal-Trujillo (2014) that through the innovativeness and endorsement of the technology, it can influence the adoption of new behavior or technology. Second influential factor towards behavioral intention is social influence (SI) in  $H_7$  that supported with the study of  $H_8$  (2018); Tan & Lau (2016); and Lee et al. (2019) that social influence from surroundings of family and friends is one of the determinants of mobile application adoption among Generation Y customers. Thirdly, desire in  $H_5$  has a significant influence on behavioral intention, which agrees with Moghavvemi et al. (2016); and Kim & Preis's (2016) study that the greater the desire or motivations, the higher the chance of future usage or behavioral intention.

Table 5 Hypothesis Result of the Structural Model

Hypothesis S	tandardized Path Coefficient $(oldsymbol{eta})$	t-value	Test Result
$\mathbf{H_{i}}$ : AT $\leftarrow$ EE	0.635	7.706*	Supported
<b>H</b> <sub>2</sub> : AT ← PE	0.190	3.601*	Supported
H₃: AT ← SI	0.204	3.285*	Supported
$\mathbf{H_4}: \mathrm{DE} \longleftarrow \mathrm{AT}$	0.993	14.534*	Supported
H₅: BI ← DE	0.155	2.540*	Supported
H <sub>6</sub> : BI ← PI	0.540	7.550*	Supported
H <sub>7</sub> : BI ← SI	0.252	3.669*	Supported

**Note:** \*p < 0.05

## **Conclusions and Recommendation**

### Conclusion

In this study, the researcher focuses on investigating the determinants of behavioral intention of Thai individuals towards online fitness program on YouTube. The conceptual framework was developed from UTAUT, MGDB, DOI, and empirical research to formed constructs for the study, namely, effort expectancy, performance expectancy, social influence, attitude, desire, personal innovativeness, and behavioral intention. The data was collected from the target group of 500 respondents via online and offline channels and analyzed for factors that influence users' behavioral intention. Confirmatory Factor Analysis (CFA) were used to determine validity and reliability of the research model and SEM were used to analyze the model fit and hypothesis testing in order to derived with the influential factors on behavioral intention.



The research has explained the following findings. Firstly, behavioral intention towards online fitness program on YouTube is highly influenced by personal innovativeness, which proves the diffusion of innovation theory that innovation is a crucial element for to predict the users' behavior on adopting a technology. It implies that although each individual has different personal characteristics (Aroean & Michaelidou, 2014), majority of the respondents are willing to try or give chances on new technology for classes or online fitness program. Hence, the fitness program owners or developers should focus on making the content user friendly, interactive, and utilize the innovative features of YouTube to catch interest or attraction from users for engagement. Secondly, social influence both drives positive attitude of the users and their behavioral intention towards online fitness program. Therefore, sustaining a positive vibe of effective and productive fitness program is crucial for the fitness program owners or developers as it can formulate favorable opinion or word-of-mouth to their peers and social surroundings. Thirdly, desire significantly influences behavioral intention, which desire were directly driven by attitude and indirectly driven by effort expectancy, social influence, and performance expectancy. This finding can explain the UTAUT and MGDB theories that the factors are significantly, although direct or indirectly, influences behavioral intention. Therefore, the fitness program owners or developers must ensure that the program is designed for users in such a way that is achievable both in terms of content and outcome. The overall findings indicate that the research objective of determining persuasive factors affecting Thai individuals behavioral intention towards online fitness program on YouTube during COVID-19 pandemic situation has been met, explainable, and supportive with previous research papers.

#### Recommendation

The findings of this study revealed that all factors of effort expectance, performance expectancy, social influence, attitude, desire and personal innovativeness has direct or indirect significant influence on Thais' behavioral intention towards online fitness program on YouTube. Therefore, the researcher recommended to consider these influential factors when developing the features in the online fitness program via YouTube. The YouTube fitness channel owners such as fitness Key Opinion Leaders (KOLs), personal trainers, fitness coaches and fitness club operators should create quality and workout contents with a variety of programs while optimizing YouTube as the innovative tool to offer fitness programs to the target audience to obtain success in their career or achieve organizational success. It is imperative for the owners of YouTube fitness channels to focus on ease of use, user-friendliness with attractive workouts to enhance user experience and satisfaction such as offering the video clips that are gripping, and require least efforts to understand and follow the steps. Moreover, it is essential for the YouTube fitness channels to formulate positive attitude and word of mouth among users by providing pleasant experience, measurable health improvement and achievable outcome. This can also create desire for repetitive usage or engagement with the YouTube fitness channels.

## Limitation and Further Study

This study has limitations that should be investigated for future researches. This research focuses on Thais that have experienced using online fitness programs/classes via YouTube, thus different schemes may present different outcome e.g. different platform of fitness channel, samples in other nationalities, level of user experience etc. Variables studied for determinants of behavioral intention can also be extended or include mediators such as facilitating conditions, perceived critical mass, information quality or visualization of the video clips. The extension of study can support owners, personal trainers, fitness coaches and marketers in fitness club operators to develop an effective online fitness channels and enable to reach the target audience.



#### References

AIA Group Limited. (2018). *The AIA Healthy Living Index 2018*. Retrieved from https://www.aia.com/content/dam/group/en/docs/healthy-living-pdf/Whitepaper.pdf

Aksoy, N. C., Alan, A. K., Kabadayi, E. T., & Aksoy, A. (2020). Individuals' Intention to Use Sports Wearables: the Moderating Role of Technophobia. *International Journal of Sports Marketing and Sponsorship*, 21(2), 225–245. https://doi.org/10.1108/ijsms-08-2019-0083

Arbuckle, J. (1995). AMOS: Analysis of Moment Structures User's Guide. Chicago: Small Waters.

Aroean, L., & Michaelidou, N. (2014). A Taxonomy of Mobile Phone Consumers: Insights for Marketing Managers. *Journal of Strategic Marketing*, 22(1), 73-89. https://doi.org/10.1080/0965254X.2013.876063

Barua, Z., & Barua, A. (2021). Acceptance and Usage of mHealth Technologies amid COVID-19 Pandemic in a Developing Country: The UTAUT Combined with Situational Constraint and Health Consciousness. *Journal of Enabling Technologies*, 15(1), 1-22. https://doi.org/10.1108/JET-08-2020-0030

Browne, M. W., & Cudeck, R. (1993). Alternative Ways of Assessing Model Fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing Structural Equation Models* (pp. 136–162). Newbury Park, CA: Sage.

Chaorusmeekul, P. (2020). Explore 5 Changes Exercise Routines During-Coronavirus. Retrieved from https://thestandard.co/explore-5-changes-exercise-routines-during-coronavirus/

Chaouali, W., Yahia, I. B., & Souiden, N. (2016). The Interplay of Counter-conformity Motivation, Social Influence, and Trust in Customers' Intention to Adopt Internet Banking Services: The Case of an Emerging Country. *Journal of Retailing and Consumer Services*, 28, 209-218. https://doi.org/10.1016/j.jretconser. 2015.10.007

Chiu, W., Kim, T., & Won, D. (2018). Predicting Consumers' Intention to Purchase Sporting Goods Online: An Application of the Model of Goal-directed Behavior. *Asia Pacific Journal of Marketing and Logistics*, 30(2), 333-351. https://doi.org/10.1108/APJML-02-2017-0028

Chopdar, P. K., Korfiatis, N., Sivakumar, V. J., & Lytras, M. D. (2018). Mobile Shopping Apps Adoption and Perceived Risks: A Cross-country Perspective Utilizing the Unified Theory of Acceptance and Use of Technology. *Computers in Human Behavior*, 86, 109–128. https://doi.org/10.1016/j.chb.2018.04.017

David. (2019). Social Media Trends 2019: Part 4-Thailand Leads the World in Time Spent Online. Retrieved from https://lexiconthai.com/blog/thailand-leads-the-world-in-time-spent-online/

Department of Business Development, Ministry of Commerce. (2019). *Business Analysis Report: November 2019*. Retrieved from https://www.dbd.go.th/download/document\_file/Statisic/2562/T26/T26\_201911.pdf



Dessart, L., & Duclou, M. (2019). Health and Fitness Online Communities and Product Behaviour. *Journal of Product & Brand Management*, 28(2), 188–199. https://doi.org/10.1108/JPBM-12-2017-1710

Destination Thailand News. (2021). *Thailand COVID-19 Recovery Fitness Trends by Jetts*. Retrieved from https://destinationthailandnews.com/lifestyle-news/health-and-wellness/thailand-covid-19-recovery-fitness-trends-by-jetts.html

Dhiman, N., Arora, N., Dogra, N., & Gupta, A. (2020). Consumer Adoption of Smartphone Fitness Apps: An Extended UTAUT2 Perspective. *Journal of Indian Business Research*, 12(3), 363–388. https://doi.org/10.1108/JIBR-05-2018-0158

Electronic Transactions Development Agency. (2020, March 30). ETDA Revealed Thailand Internet User Behavior 2019. Retrieved from https://www.etda.or.th/th/NEWS/ETDA-Revealed-Thailand-Internet-User-Behavior-2019.aspx

Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online Purchasing Tickets for Low Cost Carriers: An Application of the Unified Theory of Acceptance and Use of Technology (UTAUT) Model. *Tourism Management*, 43, 70-88. https://doi.org/10.1016/j.tourman.2014.01.017

Esposito, G., van Bavel, R., Baranowski, T., & Duch-Brown, N. (2016). Applying the Model of Goal-directed Behavior, Including Descriptive Norms, to Physical Activity Intentions: A Contribution to Improving the Theory of Planned Behavior. *Psychological Reports*, 119(1), 5-26. https://doi.org/10.1177/0033294116649576

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.2307/3151312

Gao, Y., Li, H., & Luo, Y. (2015). An Empirical Study of Wearable Technology Acceptance in Healthcare. Industrial Management & Data Systems, 115(9), 1704-1723. https://doi.org/10.1108/IMDS-03-2015-0087

Ha, Y. (2018). Online Brand Community and Its Outcomes. *The Journal of Asian Finance, Economics and Business*, 5(4), 107-116. https://doi.org/10.13106/jafeb.2018.vol5.no4.107

Hair, J., Black, B., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis: A Global Perspective* (7<sup>th</sup> ed.). Upper Saddle River, N.J.: Pearson Prentice Hall.

Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2005). *Multivariate Data Analysis* (6<sup>th</sup> ed.). Harlow, England: Pearson Education.

Han, H., & Ryu, K. (2012). The Theory of Repurchase Decision-making (TRD): Identifying the Critical Factors in the Post-purchase Decision-making Process. *International Journal of Hospitality Management*, 31(3), 786-797. https://doi.org/10.1016/j.ijhm.2011.09.015



Hunter, G. L. (2006). The Role of Anticipated Emotion, Desire, and Intention in the Relationship between Image and Shopping Center Visits. *International Journal of Retail & Distribution Management*, 34(10), 709-721. https://doi.org/10.1108/09590550610691310

Juaneda-Ayensa, E., Mosquera, A., & Murillo, Y. S. (2016). Omnichannel Customer Behavior: Key Drivers of Technology Acceptance and Use and their Effects on Purchase Intention. *Frontiers in Psychology*, 7, 1117. https://doi.org/10.3389/fpsyg.2016.01117

Kalantari, M., & Rauschnabel, P. (2018). Exploring the Early Adopters of Augmented Reality Smart Glasses: The Case of Microsoft HoloLens. In T. Jung, & M. C. tom Dieck (Eds.), *Augmented Reality and Virtual Reality:* Empowering Human, Place and Business (pp. 229–245). Cham, Switzerland: Springer.

Kim, K. J., & Shin, D.-H. (2015). An Acceptance Model for Smart Watches: Implications for the Adoption of Future Wearable Technology. *Internet Research*, 25(4), 527-541. https://doi.org/10.1108/IntR-05-2014-0126

Kim, M.-J., Lee, M. J., Lee, C.-K., & Song, H.-J. (2012). Does Gender Affect Korean Tourists' Overseas Travel? Applying the Model of Goal-directed Behavior. *Asia Pacific Journal of Tourism Research*, 17(5), 509-533. https://doi.org/10.1080/10941665.2011.627355

Kim, M. J., & Preis, M. W. (2016). Why Seniors Use Mobile Devices: Applying an Extended Model of Goal-directed Behavior. *Journal of Travel & Tourism Marketing*, 33(3), 404-423. https://doi.org/10.1080/10548408.2015.1064058

Lee, J.-M., Lee, B., & Rha, J.-Y. (2019). Determinants of Mobile Payment Usage and the Moderating Effect of Gender: Extending the UTAUT Model with Privacy Risk. *International Journal of Electronic Commerce Studies*, 10(1), 43-64. https://doi.org/10.7903/ijecs.1644

Lee, J. W. (2017). Critical Factors Affecting Consumer Acceptance of Online Health Communication: An Application of Service Quality Models. *The Journal of Asian Finance, Economics and Business*, 4(3), 85–94. https://doi.org/10.13106/jafeb.2017.vol4.no3.85

Leelamanit, P. (2020). Survival of the Fitness: Some Gyms will Adapt, Some won't Survive. Retrieved from https://thisrupt.co/business/survival-of-the-fitness-gyms-wont-survive/

Lin, Z., & Theingi, H. (2019). Extended UTAUT2 Model on Factors Influencing of Mobile Commerce Acceptance in Yangon, Myanmar. *AU-GSB e-Journal*, 12(2), 3-18. Retrieved from http://www.assumptionjournal. au.edu/index.php/AU-GSB/article/view/4495

Lowe, B., Fraser, I., & Souza-Monteiro, D. M. (2015). A Change for the Better? Digital Health Technologies and Changing Food Consumption Behaviors. *Psychology & Marketing*, 32(5), 585-600. https://doi.org/10.1002/mar.20802



Meng, B., & Han, H. (2016). Effect of Environmental Perceptions on Bicycle Travelers' Decision-making Process: Developing an Extended Model of Goal-directed Behavior. *Asia Pacific Journal of Tourism Research*, 21(11), 1184-1197. https://doi.org/10.1080/10941665.2015.1129979

Moghavvemi, S., Mohd Salleh, N. A., & Standing, C. (2016). Entrepreneurs Adoption of Information System Innovation: The Impact of Individual Perception and Exogenous Factors on Entrepreneurs Behavior. *Internet Research*, 26(5), 1181–1208. https://doi.org/10.1108/IntR-01-2014-0024

Nguyen, H. M., & Khoa, B. T. (2019). The Relationship between the Perceived Mental Benefits, Online Trust, and Personal Information Disclosure in Online Shopping. *The Journal of Asian Finance, Economics and Business*, 6(4), 261-270. https://doi.org/10.13106/jafeb.2019.vol6.no4.261

Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile Payment: Understanding the Determinants of Customer Adoption and Intention to Recommend the Technology. *Computers in Human Behavior*, *61*, 404-414. https://doi.org/10.1016/j.chb.2016.03.030

Parasuraman, A., & Colby, C. L. (2015). An Updated and Streamlined Technology Readiness Index: TRI 2.0. *Journal of Service Research*, 18(1), 59-74. https://doi.org/10.1177/1094670514539730

Perugini, M., & Bagozzi, R. P. (2004). The Distinction between Desires and Intentions. *European Journal of Social Psychology*, 34(1), 69-84. https://doi.org/10.1002/ejsp.186

PP. (2018, March 21). YouTube vs Mass Media Reaches Nationwide and it's not just an Entertainment Platform. Retrieved from https://www.brandbuffet.in.th/2018/03/youtube-day-2018-ecosystem-in-thailand/

Ratten, V. (2020). Coronavirus Disease (COVID-19) and Sport Entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 26(6), 1379–1388. https://doi.org/10.1108/IJEBR-06-2020-0387

Sekaran, U. (1992). Research Methods for Business: A Skill-building Approach. New York: Wiley.

Seol, S., Ko, D., & Yeo, I. (2017). UX Analysis Based on TR and UTAUT of Sports Smart Wearable Devices. KSII Transactions on Internet and Information Systems, 11(8), 4162-4179. https://doi.org/10.3837/tiis.2017.08.024

Slade, E., Williams, M., Dwivedi, Y., & Piercy, N. (2015). Exploring Consumer Adoption of Proximity Mobile Payments. *Journal of Strategic Marketing*, 23(3), 209–223. https://doi.org/10.1080/0965254X.2014.914075

Tan, E., & Lau, J. L. (2016). Behavioural Intention to Adopt Mobile Banking among the Millennial Generation. *Young Consumers*, 17(1), 18–31. https://doi.org/10.1108/YC-07-2015-00537

Thailand Board of Investment. (2021). *Thailand in Brief: Demographic*. Retrieved from https://www.boi.go.th/index.php?page=demographic



TTG Asia. (2021). Thailand Maintains Focus on Health and Wellness Tourism. Retrieved from https://www.ttgasia.com/2021/01/04/thailand-maintains-focus-on-health-and-wellness-tourism/

Turner, R. C., & Carlson, L. (2003). Indexes of Item-Objective Congruence for Multidimensional Items. *International Journal of Testing*, 3(2), 163–171. https://doi.org/10.1207/S15327574IJT0302\_5

van der Wellingthon, N. K. (2020). Fitness Trend in Thailand – Earn Money Now! Retrieved from https://www.sanet.eu/en/fitness-trend-in-thailand-earn-money-now/

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2016). Unified Theory of Acceptance and Use of Technology: A Synthesis and the Road Ahead. *Journal of the Association for Information Systems*, 17(5), 328-376. https://doi.org/10.17705/1jais.00428

Vrontis, D., Viassone, M., Serravalle, F., & Christofi, M. (2020). Managing Technological Innovation in the Sports Industry: A Challenge for Retail Management. *Competitiveness Review*, 30(1), 78–100. https://doi.org/10.1108/CR-11-2019-0127

Wang, J. (2020). *Think with Google: Year in Search 2020 Thailand*. Retrieved from https://services.google.com/fh/files/misc/yearinsearch\_th\_en2020.pdf

Weng, M. (2016). The Acceptance of Wearable Devices for Personal Healthcare in China (Master's thesis). University of Oulu, Finland. Retrieved from http://jultika.oulu.fi/files/nbnfioulu-201605111684.pdf

Wijesundara, T. R., & Xixiang, S. (2017). Intention to Use Social Networking Sites: Impact of Personal Innovativeness. *Journal on Innovation and Sustainability*, 8(1), 79–90. https://doi.org/10.24212/2179-3565.2017V8I1P79-90