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The role of ownership inclination on the intention to subscribe to music streaming among older adults

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ABSTRACT

This study investigates the factors influencing older adults' willingness to subscribe to music streaming services, focusing on ownership inclination as a mediator. While the adoption of music streaming services among older adults has grown, research on their subscription behaviors remains limited, particularly regarding psychological factors like ownership desire. Addressing this gap, the study integrates the Value-Based Adoption Model (VAM) and psychological ownership theory to explore the relationship between perceived value, ownership inclination, and subscription intention. Data from 376 older adults were analyzed using PROCESS Macro to test mediation effects. Findings reveal that ownership inclination significantly mediates the relationship between perceived value and subscription intention, even when perceived value is low. These results provide theoretical and practical insights into how music streaming platforms can attract older consumers by fostering a sense of ownership. The study emphasizes the importance of psychological and economic factors in driving technology adoption among aging populations, offering strategies for service providers and policymakers to support inclusivity.

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Introduction

The global population is experiencing an enormous shift in age structure. The proportion of older people in the overall population is continuously rising as people live longer lives. Globally, there were 1.18 billion people aged 60 and up in 2024, accounting for 14% of the world's population and it is expected to hit 21% in 2050, and by 2100, it will eventually increase to 28% (United Nations [UN], 2024). It is argued that the COVID-19 pandemic would significantly accelerate the adoption of digital technologies among baby boomers (Reneland-Forsman, 2018). In comparison to other age groups, older adults use the internet mostly for entertainment, such as watching movies and listening to music (Loipha, 2014), assessing information, and communicating (Zhou et al., 2014). It has been discovered that using music-related technologies, such as digital instruments and streaming services, improves elder audiences' psychological health and overall quality of life (Abrahan et al., 2020). Although the majority of music streaming platform users are male who is under the age of 44 (Lüders et al., 2021), it is found that older consumers are more inclined and prepared to pay subscription fees for streaming music (Dawson, 2015).

In the past, consumers legally purchased recorded music from retailers in a variety of formats such as vinyl, cassette, and CD. Today, in this digital era, digital formats have grown in popularity not only for download-to-own, pay-per-download, and shared files but also for online streaming services. Streaming

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is the real-time consumption of music without necessarily downloading the file. Music streaming services always provide users with access to enormous collections and a plethora of options from any location (Maasø, 2018). The services (e.g. Spotify, Pandora, Deezer etc.) adopted a freemium model in which users' subscriptions and/or advertising are the primary sources of revenue for the company (Anderson, 2009). The service provider offers two types of services: one is free of charge for the users, but the cost is supported by advertising; whereas another is a premium service in which consumers are charged a monthly fixed rate.

The premium service provides additional benefits such as the subscribers can access the music catalog without restriction, better song quality, no advertisements, and offline listening (Thomas, 2013). The achievement of this freemium model depends on the willingness of consumers to pay. As such, the major challenge for this business model is convincing the users to spend money on these streaming services (Dinsmore et al., 2017), especially retaining the paying users and converting non-paying users to paying ones (Mäntymäki & Islam, 2015). However, it is unclear why some ad-subscribers become premium subscribers and others remain free users. Without a clear understanding of the consumer's motivation, music streaming service providers often struggle with attempts to convert free listeners to fee-based subscribers, especially older individuals have been conspicuously underrepresented in research endeavors and in the design of digital technologies (Mannheim et al., 2019). This underrepresentation is partly attributed to unfavorable perceptions associated with aging, which portray seniors as a marginalized group, encompassing those who have been neglected and those experiencing cognitive decline, frailty, and special needs (2019, p. 2). Given this, the underlying research question is: What motivates older people to convert from freemium to premium music streaming services?

Unfortunately, research on factors influencing the intentions of seniors to engage in music streaming remains limited (Mannheim et al., 2019). While TAM, a technology acceptance model, has been widely adopted to explain the intention to use online streaming technologies (Camilleri & Falzon, 2021; Yang & Lee, 2018); however, this study adopted VAM, value-based adoption model, the extended version of TAM in which integrated value-intention into the framework. The model overcomes TAM's limitation by including both functional and hedonic qualities, which are crucial in shaping usage behaviors. According to VAM, consumers make decisions based on the value of the chosen item, taking into account all relevant benefits and sacrifice considers (Kim et al., 2007). To comprehend the challenges confronted by the older people in utilizing digital services, exemplified in this instance by music streaming, it is imperative for system designers to possess a thorough understanding of the specific requirements and interrelated elements influencing them. Such elements include economic, physical, and psychology that exert influence on the willingness and acceptance of digital music streaming services among aging populations. This will positively contribute to acceptance, hence boosting older individuals' wellbeing and supporting aging in place.

In conclusion, older adults make up a sizable proportion of the worldwide population, which distinct digital consumption patterns and psychological variables, such as psychological ownership, that differ dramatically from young consumers. The current study is to analyze the factors that influence older people's intentions to stream music and subscribe. Furthermore, previous researchers have called for an inquiry into the motivations for changing a basic account to a premium subscription (Chen et al., 2018). As a result, understanding the factors that influence aging client's willingness to subscribe to fee-based service is crucial for both academic and management practices. Due to understanding their intents might help service providers develop specialized marketing tactics and promote inclusive technology design for older consumers.

Literature review

The technology acceptance model (TAM) is a common theoretical groundwork for studies of information technology adoption. TAM developed in 1989 as a result of two social psychology concepts, the Theory of Reasoned Action (Ajzen, 1991) and Theory of Planned Behavior (Venkatesh & Davis, 2000). TAM posits that one's action, for instance, customer behavior, is the consequence of one's belief that is rational and voluntary (Ajzen, 1991; Venkatesh & Davis, 2000). TAM has been verified as a robust theoretical model that explains how attitudes and behaviors toward technological acceptance evolved. According to this

behavioral paradigm, two factors, perceived usefulness, and perceived ease of use, determine one's attitude and behavior. Technology is mostly classified into two forms: hedonic and utilitarian. Hedonic technology brings value in the form of user satisfaction, whereas utilitarian technology is defined as operational or functional value (Van der Heijden, 2004). TAM has been widely used to explain behavioral intention and technology adoption among consumers (Marangunić & Granic, 2014); however, TAM-based models with utilitarian objectives may not fully capture the hedonic part or the pleasure-driven nature of music consumers (Fernandes & Guerra, 2019). TAM is the most used model in technology adoption literature for describing consumers' adoption behavior; nevertheless, it is stated that the model should be able to contain additional aspects explaining adoption behavior beyond the evaluations of convenience and utility (Lai, 2017).

Prior studies extended TAM by an integrated value-intention framework, VAM, to investigate the purchase intention of online music services (Chu & Lu, 2007; Fernandes & Guerra, 2019; Wang et al., 2013). Kim and colleagues (2007) proposed an alternative model to explain customers' usage intentions from the perspective of value-maximization, namely, the value-based adoption model (VAM). The model overtakes the weakness of TAM by including both functional and hedonic values that play important roles in determining usage behaviors. VAM posits that consumers decide their choice behavior after calculating the worth of the chosen thing by considering all relevant benefit and sacrifice factors. Perceived value is a consumer's overall assessment determined by their perception of what is received and what is provided by a product's utility (Zeithaml, 1988). To fill the gap, perceived value is proposed as the main factor of user adoption, which is determined by cost and benefit beliefs in VAM (Kim et al., 2007).

Attempts to extend VAM have steadily emerged by introducing new components such as antecedents, mediators, and/or moderators. However, these studies' findings are frequently inconclusive and necessitate further investigation. Throughout the studies, there were contradictions; for instance, some studies have shown a positive association between perceived value and purchase intent (Kai et al., 2021; Ng et al., 2020; Zhu et al., 2020), whereas others illustrate the opposite (Danckwerts & Kenning, 2019). Until now, the current study has aimed to construct an empirical comprehensive music streaming adoption model by adopting and applying VAM to measure consumers' behavioral intention to subscribe to fee-based music streaming services. The primary characteristics that explain the presence of behavioral intention to embrace premium streaming services among older consumers include perceived value, which is mediated by ownership desire. Previous research has indicated that music-based psychological ownership is substantially linked to the propensity of older consumers to migrate from free to premium services (Danckwerts & Kenning, 2019). The researcher has called for further investigation of the conversation of psychological ownership. It is recommended that it may be informative to investigate if ownership inclination acts as an intervention that might influence this intention to purchase relationships. Moreover, demographics and consumer characteristics are suggested for examination.

As mentioned earlier, the extension of TAM has gradually arisen, and the findings are not reaching consensus and require further investigation (Lai, 2017; Marangunić & Granic, 2014). In addition, previous researchers noted that TAM may not fully explain user intention in some phenomena. In addition, the researcher developed a new TAM (i.e. value-based TAM or value adoption model) in which perceived value was found to be more important than perceived usefulness in explaining behavioral intention (Kim et al., 2007). The value-maximization perspective has been empirically tested, indicating that perceived benefits and sacrifices affect users' adoption via the medium of perceived value (Chu & Lu, 2007; Wang et al., 2013). Thus, VAM, the benefit and sacrifice framework suggested by a prior researcher, can explain and predict user's purchasing intention or the intention to subscribe to a fee-based service.

The value-intention framework was introduced in 1985 by Dodds and Monroe. It is anticipated that the individual propensity to engage in a certain behavior is determined directly by the perceived value from the behavioral effects. They proposed a relationship among the concepts of the perception of sacrifices, quality, and value (Dodds & Monroe, 1985). Subjectively, perceived value results from the trade-off between advantages and disadvantages. Consumers' overall evaluation of a product's utility is based on their judgments of what they received and what they had provided (Zeithaml, 1988). Quality is reflected as the received component, and consumer effort is reflected as the sacrifice component in the value-intention framework. In the context of music streaming, the importance of customer utility while streaming music cannot be overstated.

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Perceived value is one of the dominant constructs proposed in the value-intention model to foresee behavioral intention. According to exchange theory in marketing literature, consumer perceived value is required for purchase intention (Wang et al., 2013). Perceived value is defined as the overall valuation of the benefits and costs among the consumers in acquiring the product (Zeithaml, 1988). Prior researchers proposed the relationship and provided empirical evidence confirming the positive influence of perceived value on purchase intention (Chu & Lu, 2007; Fernandes & Guerra, 2019; Kim et al., 2007). Nevertheless, the success of music streaming services does not merely rely on consumers' adoption but also on their willingness to pay for premium-based services. As postulated by the VAM, value perception will be the basis for a decision process. If an offer is considerably more benefits than expenses, the consumer perceived value will increase, which induces the intention to subscribe for premium services. The study assumes that perceived value has a considerable impact on the decision to subscribe to fee-based music streaming services. Hence, the study hypothesizes that:

H1. The perceived value significantly influences the intention to subscribe to fee-based music streaming.

Psychological ownership is described as the state in which individuals believe that the object of ownership or a portion of it is theirs (Pierce et al., 2003, p. 86). Despite streaming services being viewed as an important way to sample music and aid in the creation of one's media library, consumers still prefer to own media files (Ng & Yew, 2017). This could be because consumers are concerned about using cloud storage because ownership boundaries become unclear, users have no influence over the host, and they are worried about losing music files due to unexpected circumstances. Even though they can all listen to music, people still prefer to own and possess audio files. Ng and Yew (2017) stated that the usage of music streaming services facilitates unexpected song discovery, but it also increases the desire to collect rather than stream. Rather than replacing the ownership concept of downloading, streaming supports it. Given that the need to gather is ingrained in humans and is an essential aspect of their lives. Playlists were explored to maintain a sense of ownership when all information is stored in the cloud. Uses were supported to be able to access, compile, and share their music through the playlist in the same way that they would with a physical music collection.

Previous empirical research has claimed that middle-aged consumers are more prepared to pay for ad-free platforms (Weijters et al., 2014). It is found that online platforms that only offer downloads, but no streaming was more attractive to older than to younger consumers. The study concluded that elderly consumers are more likely to prefer ownership of downloads. Dilmperi et al. (2011) also found that older people are less likely to pirate and are more likely to pay for digital music. It is highlighted that older users who value and attach to music platform attributes drive willingness to pay. Previous researchers proposed that more research be conducted to see if there is a mediation and/or moderating influence of ownership tendency toward buying intention (Danckwerts & Kenning, 2019). Therefore, the study proposes the following hypotheses:

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H2. Ownership inclination is positively associated with the intention to subscribe to fee-based services.

H3. Ownership inclination mediates the link between perceived value and the intention to subscribe.

Considering the above arguments, this study integrates and tests the antecedents from psychological theory, ownership inclination, and dominant factors from VAM to capture the variance of intention to subscribe for fee-based service among older consumers. The hypothesized correlations among all the research constructs in this study are visually summarized and illustrated in Figure 1.

Methods

This study assessed older consumers' intentions to sign up for fee-based music streaming services using quantitative research. Thailand, like most other countries and areas, is seeing a tremendous increase in its older residents, which now records 12 million, or roughly 17% of the total population. The oldest cohort population (those aged 80 and above) is rapidly growing at an alarming rate. According to TGRI's report, Foundation of Thai Gerontology Research and Development institute, Thailand will have reached

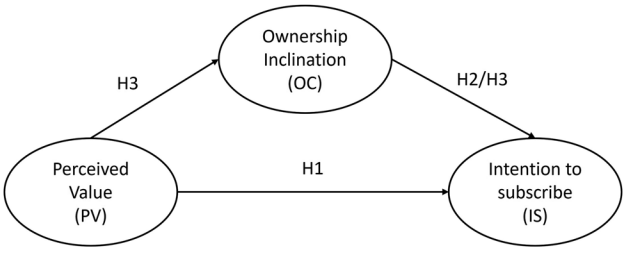


Figure 1. Intention to subscribe conceptual framework.
Source: Authors own work.

the condition of a fully aged society by 2025, with one in every five people aged 60 or older ([TGRI], 2019). Given this, it is expected that the findings from Thai elder consumers can be applied to other elderly customers. The online survey approach was used because it can quickly reach a large sample to portray consumer opinion on some issues rapidly (Bethlehem, 2010) and is cost effective (Jason, 2012). Prior to data collection, the study has obtained all necessary ethical approval from an institutional review board (IRB) from Assumption University, number 35/2022. This 10-month cross-sectional study was conducted at a single point in time. A Google form was used to disseminate and collect self-administered questions. The researcher posted the online survey link and shared it through social networking sites and apps for instant messaging on electronic devices.

Before participants took part in the study, verbal consent was obtained during initial contact, ensuring they were informed about the purpose and voluntary nature of the research. Verbal consent was particularly necessary for senior citizens with vision difficulties or language barriers to ensure they fully understood the study before participating. For the online survey, written consent was embedded at the beginning of the form, where participants had to agree before proceeding. This combination of oral and written consent ensured full transparency and compliance with ethical standards. In accordance with an online survey, researcher-reported questionnaires were administrated to reach senior citizens with vision difficulties.

Purposive sampling was employed to collect data from the streaming users. To prevent the possibility of common method bias, the survey was created and followed the recommendation of Podsakoff et al. (2003). Following the proposal of Podsakoff et al. (2003), certain essential steps have been taken to lessen the possibility of common bias. For example, to protect respondents' privacy and confidentiality, the study segregated the measurement of the survey's variables. It also used statistical tools to assess the level of measurement estimation bias. Providently, the bias estimate is highly unlikely to be correct, as evidenced by convergent validity and discriminant validity. A total of 376 valid responses were extracted from 508 returned questionnaires. Screening questions were included to exclude respondents who do not listen to music streaming from taking the survey. Table 1 shows the respondents' demographic attributes. It shows that respondents are aged above 60 years old, the highest is the respondents who are aged between 65 and 69 (25.3%). The respondents are mainly business owners (27%) and earn 10 K or less monthly (40.7%). Of them, 44.4% are men and 55.6% are women. The average time spent daily on music streaming is one hour or less, while most activities are sending messages and playing social media.

To assess respondents' beliefs toward all items measured, 5-Likert rating anchor scales were used, ranging from strongly disagree to strongly agree. The questionnaire items were developed from the existing and well-tested scales provided by previous studies. Following Brislin's approach (1970), all items were translated and back translated into Thai. The initial version of the questionnaire used in the study was pretested with a convenience sample to detect item formulation and any language-related difficulties. In particular, the measurement items in this study were adopted from prior studies. Because of the differences in context between the current study and the previous study, which focused on software package adoption, while the current study focuses on music streaming services, the contents of the VAM items were significantly replaced with music streaming.

Intention to subscribe to fee-based services was assessed with three items (e.g. 'I would consider using the paid tier of the music streaming service'.) adapted from Fernandes and Guerra (2019). Perceived value was measured with four items developed by Wang et al. (2013). Examples of items used in this

Table 1. Characteristics of the respondents.

Characteristics ($N = 376$)	Frequency	Percentage
Gender		
Female	209	55.6
Male	167	44.4
Age group		
60–64	138	36.7
65–69	153	40.7
70–74	44	11.7
75 and above	41	10.9
Monthly income (baht)		
Less than 10,000	153	40.7
10,001–20,000	77	20.5
20,0001–30,000	27	7.2
More than 30,000	119	31.6
Occupation		
Business Owner	102	27
Civil servant	50	13
Employee at private sector	67	18
Agriculture	89	24
Retired	60	16
Others	8	2
Hour spends on music streaming per day		
Less than 1 h	155	41.2
1–2 h	142	37.8
3–4 h	56	14.9
5–6 h	10	2.7
7 h and above	13	3.5

Source: Authors own work.

Table 2. Validity and reliability tests.

Exploratory factor analysis	Loadings
Constructs and items	
Perceived Value (PV) (Cronbach's alpha = 0.905)	
Compared to the fee I need to pay; the use of music streaming services offers value for money	0.730
Compared to the effort I need to put in, the use of music streaming services is beneficial to me.	0.952
Compared to the time I need to spend; the use of music streaming services is worthwhile to me.	0.913
Overall, the use of music streaming service delivers good value.	0.939
Ownership Inclination (OC) (Cronbach's alpha = 0.941)	
I often try to download good songs.	0.908
I would love to download all the good songs.	0.898
I would love to download many songs to build my collection.	0.882
I prefer to own the music file (downloading) rather than access the music file through streaming.	0.829
I like to download to build a collection of digital music.	0.729
Intention to subscribe (IS) (Cronbach's alpha = 0.944)	
I would consider using the paid tier of the music streaming service.	0.898
I would be willing to pay to access the paid tier of the music streaming service.	0.927
In the near future, I would consider purchasing access to music streaming services.	0.874

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study are 'Compared to the fee I need to pay, the use of music streaming service offers value for money' and 'Compared to the effort I need to put in, the use of music streaming service is beneficial to me'. The last construct, ownership inclination, was assessed using five items adopted from Ng and Yew (2017) (e.g. 'I would love to download many songs to build my collection'). The sample size for the study is determined by the item-to-response ratio that for each set of variables, the ratio should be ten to one (Hair et al., 2014, p. 100). The questionnaire contains 12 items; consequently, for inferential statistics testing, 120–376 samples are adequate.

Gender and income were used as control variables in this study because research has shown a theoretical and empirical relationship between these attributes and older buying intention (Roy et al., 2023). The value of the Cronbach's alpha coefficient was initially calculated to test the reliability of the model variables and to evaluate the construct validity and reliability of variables in the current study. Nunnally (1978) recommends that the alpha value of all variables be greater than 0.7. Next, to confirm the validity of the measurement items, the researchers used SPSS to perform exploratory factor analysis. This was used to test for convergent validity. The result exhibits no cross-loading items, indicating a convergent

Table 3. Descriptive results.

	N = 376	$\bar{X}$	SD	CR	AVE	MSV	(1)	(2)	(3)
(1)	Intention to subscribe	1.842	1.157	0.949	0.861	0.349	0.928		
(2)	Perceived value	3.768	0.953	0.918	0.740	0.008	−0.091	0.860	
(3)	Ownership inclination	2.500	1.128	0.942	0.765	0.349	0.591	0.017	0.875

Notes: CR: Composite reliability; AVE: Average variance extracted; MSV: Maximum shared variance. The squared average variance extracted appears on the diagonal.

validity of the current study's measurement items. Table 2 illustrates the reliability and validity of the measurement items used in this study.

The researcher computed the average variance extracted (AVE), maximum shared squared variance (MSV), and composite reliability (CR). The convergent validity of the model is confirmed by the results, which show that all variables' AVEs are greater than 0.5 and their CR values are greater than 0.7 (Hair, Black, Babin, & Anderson, 2014). To assess discriminant validity, each variable's AVE was compared with the respectable MSV, and the square roots of AVE were greater than the inter-construct correlations, as presented in Table 3. As a result, the conditions for discriminant validity are met. Because all data were collected by self-report, there was a risk of common method bias. To determine whether the common method effect is present, Harman's single factor was examined. The total variance derived from a single factor is 33.14%, which is below the 50% recommended threshold by Podsaoff and associates (2003). The results of these analyses might not enable to rule out the potential of bias in this study; still, the common method variance does not seem to have a significant impact on how the results are interpreted. Furthermore, the level of satisfaction with convergent and discriminant validity, as presented in Tables 2 and 3, adds to the evidence that common method bias does not exist.

Results

Table 2 displays descriptive statistical results for all variables in the study, including descriptive data and correlation coefficients. The study used Hayes's (2018) SPSS add-on software to test the model's significance. The method is based on a standard least-squares regression using bootstrapping. All assumptions were evaluated before hypotheses testing to ensure that the dataset did not contradict any OLS regression assumptions. The assumptions include normality, homoscedasticity, linearity, and independence. The bootstrap technique is used to assess the indirect mediating influence of a variable if the point estimate of the mediating variable is zero within a 95% bias-corrected and accelerated confidence range. In other words, with a no-point estimate within the zero-internal, a mediating variable is statistically significant. The study performed bootstrap analyses using PROCESS Macro with the mediation analysis on model 4. The PROCESS Macro was chosen due to its robust capabilities in estimating mediation and moderation effects within regression-based frameworks. Its bootstrapping technique ensures reliable confidence intervals, especially for indirect effects, making it particularly suitable for exploring the mediating role of ownership inclination between perceived value and intention to subscribe. In the current investigation, data from 5000 bootstrap samples were used, and a significant level was established at 95% confidence level. SPSS version 25 was used to analyze the data.

The positive significant association between the variables of ownership inclination and intention to subscribe was presented in Table 2. In contrast, a negative relationship was also found between perceived value and intention to subscribe. To determine the mediation of ownership inclination in the correlation between perceived value and the intention to subscribe, the regression-based approach and bootstrap method were employed. Table 4 shows the results of the study.

Table 4 illustrated the effect of perceived value (PV) on intention to subscribe (IS) and mediated by ownership inclination (OC). The statistical analysis was started by testing the direct effect between PV and IS. Unexpectedly, the total effect of PV was found significant but with a negative relationship (β = −.147, SE = .053, p < .001), therefore, H1 is not supported. A review of the direct effect of mediating variable OS on IS (β = 0.541, SE = .042, t = 12.65, p < .001) was found at significant level. Next, the OC was

Table 4. Statistical results.

Predicting ownership inclination	Coefficients		Bootstrapping 95% Confidence interval	
(R^2 = .136)	Point estimate	*SE*	Lower	Upper
Gender	.175^{ns}	.117	−.047	.389
Income	.020^{ns}	.040	−.057	.097
Perceived value (PV)	.169**	.063	.044	.294
Predicting Intention to subscribe (R^2 = .549)				
Gender	−.106^{ns}	.098	−.291	.087
Income	.023^{ns}	.034	−.048	.092
Perceived value (PV)	−.147***	.053	−.251	−.043
Ownership inclination (OC)	.541***	.042	.457	.625
The Total Indirect Effect	Effect	*SE*	Lower	Upper
PV → OC → Intention to subscribe	.091***	.039	.013	.169

Note: $N = 376$, Bootstrapping: $k = 5000$. **$p < .05$; ***$p < .001$; ns: not significant.

observed if it mediates the relationship between PV and IS by PROCESS Macro Model no.4. Consequently, the indirect relationship was found at a significant level ($\beta = 0.091$, SE = .039, 95% CI [.013, .169]). Furthermore, the model overall estimation was seen to be significant level ($F = 80.10$, $p < .001$) and explained 65% (R^2 =.549) of total variance of intention to subscribe. Thus, H2 and H3 are supported.

Dicussion

This study examined the relationship between perceived value and intention to subscribe for music streaming fee-based among aged groups and tested to confirm the mediating role of ownership inclination. The primary variables that account for senior consumers' behavioral intention to use premium streaming services include perceived value in which it is mediated by ownership inclination. The study focused on identifying the desire to subscribe or purchase of the aging population, which is expanding in terms of its relevance in reshaping markets around the world. It is found that ownership inclination plays the primary factor in encouraging older customers to pay for music streaming services.

Based on a survey of 367 Thai older consumers; the study employed PROCESS macro and bootstrapping technique to test these relationships. The results show that a preference for ownership influences the intention to switch from free to fee music streaming service. It mediates the relationship between perceived value and intention to subscribe to fee-based music streaming. The findings confirm the psychological ownership theory arguing that individuals have the feeling of possession over a target—an object, concept, organization, other person, or songs. Even though streaming services are viewed as an important way to sample music and aid in the creation of one's media library, consumers still prefer to own media files, particularly for the older consumers. The usage of freemium music streaming services facilitates unexpected song discovery, but it may not satisfy the possession desire to collect. Particularly, the findings confirm that ownership inclination is a significant path to influence older people to subscribe for premium music streaming services even if the perceived value is low.

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With little long-term debts and light family burdens, it is projected that seniors, particularly those over the age of 60, will have a large consumption potential in discretionary purchasing power. In contrast to previous research that found a positive significant relationship between perceived value and purchase intention in various contexts such as mobile applications (Zhu et al., 2020), travel insurance (Kai et al., 2021), concert, or retirement housing (Ng et al., 2020), the current study found an inverse relationship. It is not expected that the findings would reveal a negative significant relationship between perceived value and intention to purchase or subscribe for premium. However, it is acknowledged that older people's perceptions of the value of music streaming, as well as their willingness to spend, may differ from other consumers.

One explanation for the surprising result might be that older adults tend to be more thoughtful when making purchase decisions. Such a process necessitates an interval for the older people to become acquainted with the offer, compare values, and examine the benefits and drawbacks of various options given (Migdal-Najman et al., 2020). Seniors have a proclivity for saving, they may be cautious to spend their savings on leisure and/or entertainment activities. Thailand has been in the process of becoming an aging society since 2005. In 2023, there are 12 million people over the age of 60, accounting for

19.21% of the total population of 66 million people. Almost 40% of Thai seniors (those aged 60 and up) work. Older people who continue to work appear to have fewer options; otherwise, they are poorer and work in agriculture. While income from work accounts for most of their income, additional sources include money from their children and a pension. Furthermore, approximately one-quarter of older people who received money from their children received only 1000–4999 baht per year, which is substantially below the World Bank's poverty line of nearly 27,000 baht per year (Chutijurawong & Sangmanachareon, 2023). In terms of pension, Thailand has the world's lowest pension ranking, the older adults are being paid between 600 and 1000 baht per month, depending on their age. For instance, those aged 60–69 receive 600 baht; 70–79 years old receive 700 baht; 80–89 is 800 baht, and those over 90, 1000 baht (Chitviriyakul, 2023). Based on Mercer's latest CFA Institute Global Pension Index survey, Thailand has the world's lowest pension ranking, these numbers indicate that by 2030, more than a quarter of Thailand's population will be 60 or older, with the bulk of them being poor (Jacobs, 2022). Moreover, old age is frequently connected with increased health and disability concerns, which lead to a reduction in an individual's ability to earn an income. This could explain the hesitation to spend their limited money on music streaming. It is vital to lower the perceived value associated with negative intent so that older individuals are more likely to consider a fee-based music streaming subscription. Fortunately, the study discovers the path to motivating the elder consumers to pay for premium streaming service. The finding is in line with the research conducted by Danckwerts and Kenning (2019) who investigated the influence of music-based psychological ownership and user's intention to switch from free to premium streaming services. This consistency in findings indicates that music streaming services should pay attention to enhancing the user's feeling of ownership by addressing the control power of the object, songs, and playlists, in which is absent in freemium based service.

This empirical study examines a boundary condition for the impact of perceived value on the older adults' willingness to purchase or subscribe to the fee-based in which reinforcement by ownership inclination. According to the value-intention model, perceived value drives a specific behavior, such as purchase intention, by arising from the trade-off between advantages and sacrifices (Dodds & Monroe, 1985). Notably, individual's ownership inclination acts as the intervention between perceived value and intention to subscribe to fee based. The ageing segment is varied in character, with needs based on the consumers' subjective as well as chronological age (Tongren, 1988). Furthermore, the variety in preferences and behavioral aspects was influenced by the social-cultural conditions that different markets demanded. According to recent studies, marketers should no longer treat older adults in stereotypical ways. As a result, the current study provides empirical evidence to the psychological ownership literature in support of its function as an intervention that mediate the link between senior consumers' perceived value and purchase intention; thus, this study's primary contribution is to create and evaluate a parsimony model that incorporates the Value-based Adoption Model's theoretical underpinnings and psychological ownership theory in explaining the senior's attitude and intention that may lead to further behavior. The study adds to the set of boundary conditions that could affect how customers' purchase intentions manifest. Specifically, the study extends the VAM model through the inclusion of psychological needs and age.

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The study's understanding may offer some recommendations for managerial decisions and marketing campaigns. It contributes to the psychological ownership theory by demonstrating how ownership inclination mediates the relationship between perceived value and behavioral intention. This highlights the unique psychological needs of older adults in digital consumption contexts, emphasizing the importance of perceived possession in influencing subscription behaviors. Since ownership inclination plays an important role in this study in which influence the elders' intention to subscribe for premium music streaming service even their perceived value is low. The study advances the value-based adoption model by incorporating ownership inclination as a psychological mediator, providing a more nuanced understanding of how perceived value translates into purchase intentions among aging consumers. Given this finding, suppliers of music streaming services should focus not only on competitive pricing methods, advertising, and extending the music library, but also on marketing strategies that inspire customers' sentiments of ownership and possession. Danckwerts and Kenning (2019) suggested the words 'my' or 'mine' could likely be successful based on their findings and including the current study. Future research could replicate the examination in other contexts or countries to increase generalizability, as the current

study focused on senior citizens in Thailand, whereas attitudes and even technological savvy and preference of the elder may differ in other cultures and contexts. Testing additional individual difference variables, like gender, in moderating the interrelationship is also advised. The relationship between perceived value, ownership inclination, and intention to buy or subscribe to premium services, for instance, may be moderated by gender. For example, men aged 25–29 years and over 50 years reported spending more money on music than women of a similar age. Future research can investigate the various causes of this, as well as why males are more prone to spend money on music than women of the same age (Lonsdale & North, 2011).

Conclusion

The purpose of this study was to investigate how ownership inclination affects older consumers' use of music streaming services. Grounded in the Value adoption model and theory of psychological ownership, the results suggest that the possession of owning items like songs and the feeling of mastery over the tunes is the most significant factor. Although seniors may be wary about spending their savings on leisure and/or entertainment activities. Among the older people, music streaming is perceived as having minimal value, however this negative viewpoint can be countered by boosting the sensation of owing and belonging. As a result, music streaming services should implement marketing methods that instill in users a sense of ownership and possession.

Authors' contributions

Pannawit Sanitnarathorn contributions to Project Administration, Conceptualization, Supervision, Funding acquisition, Validation, Writing—original draft the article, Writing—review & editing the article. Wanny Oentoro: (Corresponding author) contributions to Conceptualization, Methodology, Project Administration, Formal analysis, Data curation, Visualization, Validation, Writing—original draft the article, Writing—review & edit the article. Onouma Thmmapol contributions to Conceptualization, Supervision, Validation, Writing—review & editing the article. Sichon Thongma contributions to Investigation, Resources—acquisition of data. All authors have read and approved the final work.

Ethical statement

The study was approved by the ethics committee of Assumption University.

Informed consent

Prior to the data collection, all participants were given the consent statement in the welcome screen. It is clearly written and stated that this is anonymous, and the respondent may quit the survey at any time with no consequences.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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Data availability statement

Asst. Prof. Dr. Wanny Oentoro, among all the authors, is responsible for providing the data for the data availability statement. Data and materials supporting this work can be accessed upon reasonable request.

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