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Intention to continue using dating apps among Vietnamese young adults: a theory of planned behavior approach

BACKGROUND

Online dating apps (ODAs) have become a prevalent phenomenon among Vietnamese youth, yet empirical research on the psychological drivers of their usage remains scarce. Globally, these apps are widely used by a dynamic and tech-savvy demographic, primarily under 35. This study addresses the research gap by using the theory of planned behavior (TPB) to investigate the roles of attitude, subjective norm, and perceived behavioral control (PBC) in predicting intention to continue using ODAs. The study also explores the moderating role of PBC in this relationship, providing a useful framework for understanding these behavioral patterns.

PARTICIPANTS AND PROCEDURE

A convenience sample of 940 young adults ($M_{\text{age}} = 21.2$, $SD_{\text{age}} = 2.48$) who had used ODAs for at least one month completed an online survey. Data were analyzed using hierarchical multiple regression with demographic controls. Interaction terms were included to test moderation effects.

RESULTS

Attitude was the strongest predictor of intention to continue using ODAs ($\beta = .47$, $p < .001$), followed by subjective norm ($\beta = .09$, $p = .002$). PBC did not exhibit a significant direct effect but moderated the relationship between subjective norm and intention to continue using ODAs ($\beta = .06$, $p = .016$).

CONCLUSIONS

The findings support the utility of TPB in explaining the intention to continue using ODAs in the Vietnamese context. Practical implications include the potential to enhance user attitudes through positive experiences and to leverage social norms among individuals with high perceived control.

KEY WORDS

online dating apps; theory of planned behavior; Vietnamese young adults

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BACKGROUND

CONTEXT

The rapid expansion of mobile technologies has transformed how young adults initiate and maintain romantic relationships, with online dating apps (ODAs) becoming a prominent platform for social interaction. As digital dating becomes increasingly normalized, research attention has shifted from initial adoption toward intention to continue using ODAs, which reflects how technology becomes embedded in everyday relational practices (Curry, 2024; Sumter et al., 2017).

Online dating is not only a technological behavior but also a socially embedded practice shaped by individual evaluations and perceived social expectations. The theory of planned behavior (TPB) provides a useful framework for understanding these dynamics, conceptualizing intention as a function of attitude, subjective norm, and perceived behavioral control (Ajzen, 1991, 2002). Prior research indicates that online dating app use is strongly influenced by relational motivations and social contexts rather than purely instrumental considerations (Chan, 2017; Sumter et al., 2017).

Recent demographic evidence further underscores the relevance of examining intention to continue using ODAs. A national survey in Vietnam reported that a notable proportion of single individuals have no intention to marry or to have children, reflecting shifting relationship priorities among young adults (Southern Institute of Social Sciences, 2025). These trends suggest that continued engagement with online dating platforms may represent adaptive forms of relationship exploration within evolving social norms.

THEORETICAL FRAMEWORK: THE THEORY OF PLANNED BEHAVIOR

The TPB, originally derived from the theory of reasoned action (Fishbein & Ajzen, 1975) and developed by Ajzen (1991), is among the most widely used theoretical frameworks for predicting and explaining intentional behaviors. The TPB asserts that an individual's behavioral intention serves as the most proximal determinant of actual behavior and is shaped by three core components:

Attitude toward the behavior (ATT): the degree to which an individual evaluates a given behavior favorably or unfavorably. The attitudinal construct comprises two components: instrumental attitude (cognitive-evaluation) and affective attitude (experiential-emotion) (Ajzen, 1991, 2002). Instrumental attitude reflects the perceived usefulness and outcome value of performing the behavior (e.g., useful–useless, beneficial–harmful, effective–ineffective), whereas affective attitude reflects the emotional and

experiential responses associated with the behavior (e.g., enjoyable–unenjoyable, pleasant–unpleasant, interesting–boring) (Ajzen, 2002). In the context of ODAs, instrumental attitude is revealed through users' evaluations of the functional benefits of application use, such as its usefulness, convenience, and effectiveness in achieving salient goals, including partner seeking, expanding one's social network or saving time in initiating romantic interactions (Chan, 2017; Finkel et al., 2012; Hobbs et al., 2017). By contrast, affective attitude demonstrates the experiential outcomes derived from using ODAs such as feelings of positivity, enjoyment, and emotional gratification (Cruz et al., 2024; Perić et al., 2025). Given that ODA use is inherently technology-mediated, instrumental evaluations of the behavior may share conceptual similarities with technology acceptance constructs, particularly perceived usefulness and performance expectancy (Davis, 1989; Venkatesh et al., 2003).

Subjective norm (SN): the perceived social pressure from significant others to engage or not engage in the behavior. Fishbein and Ajzen (2010) conceptualized this construct as comprising two components: injunctive norms (perceptions of whether significant others approve or disapprove) and descriptive norms (perceptions of what others actually do). Norms regarding the use of ODAs refer to individuals' perceptions of the prevalence of online dating app usage among their friends and broader social network (Castro & Barrada, 2020; Schreurs et al., 2020).

Perceived behavioral control (PBC): the extent to which an individual believes they possess the ability and resources necessary to perform the behavior (Ajzen, 1991). Ajzen (2002) further clarified that PBC comprises self-efficacy (the confidence in one's capability to perform the behavior) and controllability (the belief that the performance of the behavior is under one's conscious control). In the context of using ODAs, PBC refers to the extent to which users perceive that they possess the abilities and enabling conditions to engage in the behavior, including operating the application, managing potential risks and regulating relevant factors (Chan, 2017; Tanner & Tabo, 2018).

Intention (INT) represents an individual's degree of readiness to perform a specific behavior (Ajzen, 1991). Unlike other constructs such as attitude or PBC, which are multidimensional in nature, intention is typically measured by using a set of highly consistent items, often phrased with statements such as: "I will..."; "I intend to..." (Ajzen, 2002). In the context of this study, intention is conceptualized as the degree to which an individual is willing and prepared to continue using ODAs for intended purposes in the foreseeable future (John et al., 2025; Liew et al., 2023).

Although online dating applications are digital technologies, this study adopts the TPB because the focus is on the intention to continue a socially embedded relational behavior rather than technology adop-

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tion itself. While the technology acceptance model (TAM) and the unified theory of acceptance and use of technology (UTAUT) explain technology acceptance through factors such as usefulness, ease of use, and performance expectancy (Davis, 1989; Venkatesh et al., 2003), TPB emphasizes attitudes, social expectations, and perceived control as determinants of behavioral intention (Ajzen, 1991). Continued ODA use involves not only evaluations of technological features but also social approval, relationship expectations, self-presentation, and interpersonal motivations, making the TPB particularly suitable for this context. The TPB has been extensively applied across multiple domains, including studies on online behaviors such as smartphone addiction (Yue et al., 2022), sexting intentions (Dodaj et al., 2024), and the intention to continue using ODAs (Baek & Lee, 2025). In the context of online dating, attitudes may reflect beliefs about benefits (e.g., finding a compatible partner, saving time) versus perceived risks (e.g., privacy violations, negative social judgments). Subjective norm captures the degree of social acceptance and the influence of peers and significant others, whereas the PBC encompasses beliefs about controlling external conditions (e.g., access to devices, time, internet connectivity) and internal capabilities (e.g., communication skills, creating an appealing profile) when using ODAs.

LITERATURE REVIEW

Attitude and intention to continue using ODAs. A substantial body of research suggests that attitude is the most robust predictor of intention to continue using ODAs. Carpenter and McEwan (2016) found that American college students who held positive attitudes toward Tinder exhibited stronger intentions to use the platform, largely due to its engaging interface, interactive design, and ability to connect with potential partners. Siddiqui et al. (2023) found that in India, attitude moderated the impact of barriers such as usage concerns on the intention to adopt ODAs, indicating that positive attitudes can reduce the negative effect of such barriers. Additionally, Sumter et al. (2017), in a study of Dutch youth, demonstrated that attitude can function as a moderator in the relationship between social factors (e.g., peer influence, social norms) and intention to continue using ODAs. A positive attitude may mitigate negative stereotypes surrounding “finding love online.” In Asian contexts, the study by Moslehpour et al. (2024) showed a positive effect of attitude on users’ intentions to use ODAs.

Subjective norm and intention. Liew et al. (2023) reported that social influence – defined as the extent to which users perceive encouragement or approval from significant others regarding online dating app use – significantly predicts intention to continue using ODAs. Their findings indicate that when individu-

als perceive that their friends and acquaintances hold favorable attitudes toward ODAs, they are more likely to sustain engagement with these platforms. In Asian contexts, subjective norm has shown a significant effect on users’ intention to continue using ODAs (Chan, 2020; Moslehpour et al., 2024). In the digital age, subjective norm also derives from media trends and online cultural narratives (Ranzini & Lutz, 2016).

Perceived behavioral control (PBC) and intention to continue using ODAs. Hobbs et al. (2017) emphasized that Tinder users actively manage partner selection, interaction strategies, and self-presentation, suggesting that perceptions of competence and perceived control when navigating the platform can shape patterns of interaction, whereas concerns about privacy and information disclosure may function as constraining factors. In addition, the study by Moslehpour et al. (2024) also indicates that self-efficacy exerts a positive influence on users’ intention to use online dating apps.

In addition to its direct effect, PBC may also serve a moderating role in the relationship between attitude, subjective norm, and behavioral intention. While examining diverse behaviors (e.g., voting, household waste reduction and energy consumption), La Barbera and Ajzen (2024) found that higher levels of PBC tend to strengthen the relative importance of ATT in predicting intention, whereas PBC tends to weaken the relative importance of SN. Additional meta-analytic evidence provides further support for this moderating role. Hagger et al. (2022) analyzed 206 studies and found that PBC significantly amplifies both the attitude–intention and the subjective norm–intention relationship. More recent domain-specific studies further confirmed theoretically refined extensions of the original TPB framework. For instance, Kim et al. (2025) found that PBC moderates the relationship between subjective norm and intention in predicting COVID-19 vaccination intentions among pregnant women. Specifically, among individuals with high perceived control over access to vaccination services, positive attitudes and subjective norm strongly predicted intention, whereas these effects were substantially weaker among those with low levels of PBC. Similarly, Zhang (2024) demonstrated that PBC moderates the effects of both attitude and subjective norm on intention toward academic cheating.

PRESENT STUDY

Most existing research on ODAs has been conducted using samples from Western or developed Asian countries and has predominantly focused on the direct effects of predictive factors on usage intentions. Consequently, the conditional mechanisms through which attitude and subjective norm are translated into intentions to continue the behavior – specifi-

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cally, the moderating role of PBC – have not been sufficiently examined in contexts that demand a high level of individual autonomy. Moreover, given that online dating behaviors are intertwined with moral norms and social stigma (Cama, 2021; Chan et al., 2024; Low et al., 2022; Wu & Trottier, 2022), the decision to continue using ODAs is shaped not only by personal attitudes or perceived social norms, but also by PBC. Therefore, individuals’ perceived level of behavioral control may determine whether attitude and subjective norm are effectively translated into intentions to continue the usage behavior.

This gap becomes particularly prominent in culturally transitional contexts, where traditional social norms coexist with individualization trends. Within such environments, individuals are simultaneously shaped by social expectations and compelled to rely on their perceived competence and behavioral control when making behavioral decisions.

The Vietnamese context presents a distinct cultural backdrop, characterized by the persistence of traditional norms and stereotypes regarding online dating. Domestic studies on online dating applications remain scarce and have primarily focused on descriptive analyses of current trends or have targeted specific subpopulations, such as homosexual males (Safarnejad et al., 2017; Son et al., 2019), without comprehensively examining TPB constructs or testing the moderating role of PBC in the relationships among

attitude, subjective norm, and intention to continue using ODAs among young adults in general. Accordingly, examining the moderating role of PBC in the relationship between attitudes, subjective norm, and the intention of Vietnamese young adults to continue using ODAs is not only of practical relevance but also contributes to extending the explanatory power of TPB within culturally transitional contexts.

The present study aimed to evaluate the applicability of TPB in predicting Vietnamese youths’ intention to continue the behavior and to investigate whether PBC moderates the associations between attitude, subjective norm, and intention. Specifically, the following hypotheses were formulated:

H1a: Attitude (ATT) is positively associated with intention to continue using ODAs.

H1b: Subjective norm (SN) is positively associated with intention to continue using ODAs.

H1c: Perceived behavioral control (PBC) is positively associated with intention to continue using ODAs.

H2a: PBC moderates the relationship between subjective norm and intention to continue using ODAs.

H2b: PBC moderates the relationship between attitude and intention to continue using ODAs.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

A convenience sampling approach was used for participant recruitment. Data were collected through an online survey platform. Eligibility criteria included (a) being at least 18 years old and (b) having used at least one online dating application for a minimum of one month. Individuals who had not engaged with an ODA continuously during the preceding month were excluded from the study. Participants reported a wide range of usage durations, with 41.0% having used ODAs for 1-3 months, 15.6% for 4-6 months, 15.5% for 6 months to one year, and 27.9% reporting use for more than one year.

Table 1 presents the descriptive characteristics of the study sample. The final sample consisted of 940 participants, the majority of whom were female (76.4%), while 23.6% identified as male. Participants had a mean age of 21.2 years (*SD* = 2.48). Detailed information regarding participants’ education level and occupational status is provided in Table 1.

PROCEDURE

The online survey link was distributed through multiple online channels commonly used by young adults in March 2025. First, the link was shared via widely used ODAs (i.e., Tinder, Bumble, OkCupid). The researchers created user profiles that briefly introduced

Table 1

Descriptive statistics of participant characteristics (N = 940)

Variables	<i>n</i>	Valid %
Gender		
Male	222	23.6
Female	717	76.4
Age (<i>M, SD</i>)	21.2	2.48
Education level		
High school diploma	347	37.0
Vocational diploma	18	1.9
Bachelor’s degree	547	58.3
Postgraduate degree	26	2.8
Occupation status		
Employed	151	16.2
Student	618	66.2
Student, employed	148	15.8
Not employed	17	1.8

Note. Missing data: 1 for gender, 2 for education level, and 6 for occupation status.

the study in the profile description. Study information was disclosed to ODA users through profile content and, where applicable, through direct communication following mutual matching. In addition, the survey link was disseminated through social media platforms (i.e., Facebook) using conventional online recruitment methods, including posts made by the researchers in personal and academic networks. These posts briefly introduced the study purpose and eligibility criteria and invited individuals to participate. Prior to survey initiation, all potential participants received detailed information about the study objectives, their rights as participants, and the confidentiality of their responses. Participants were informed that they could withdraw at any time without consequences.

The research protocol received ethical approval from the Ethics Committee of the University of Social Sciences and Humanities, Vietnam National University, Hanoi.

MEASURES

The measurement scales for attitude (ATT), subjective norm (SN), and perceived behavioral control (PBC) were developed following a systematic scale development procedure grounded in the theory of planned behavior (Ajzen, 1991) and following suggestions from Fishbein and Ajzen (2010). First, the theoretical framework and operational definitions of each construct were specified. Semi-structured in-depth interviews were conducted with 19 young adults who were currently using online dating applications to explore beliefs and experiences related to the TPB components. Based on the qualitative findings, an initial item pool was generated and organized into corresponding subscales. The draft scale was then reviewed by the research team to assess wording, structure, and content relevance. The measurements of TPB components are described in detail below.

Attitude toward using ODAs (ATT) measures the degree to which individuals hold favorable or unfavorable evaluations of using ODAs. The items capture affective evaluation, comfort level, perceived usefulness, perceived functional benefits, and time efficiency in seeking relationships. It consists of five items (i.e., “Using dating apps helps me expand opportunities to find a suitable partner compared to other meeting methods”). In the present study, this scale showed good internal consistency (Cronbach’s $\alpha = .79$).

Subjective norm regarding using ODAs (SN) was defined as perceived social pressure or normative influence from significant others and broader social groups. The three items reflect peer usage influence, perceived popularity among young people, and observational influence from others’ successful experiences (e.g., “I use dating apps because they are becoming increasingly popular among young people”). Follow-

ing the measurement model evaluation, SN3 was removed due to cross-loading concerns. The retained two-item scale demonstrated moderate internal consistency in the present sample (Cronbach’s $\alpha = .60$). Given the limited number of retained indicators, this construct should be interpreted as a relatively narrow measure of perceived normative influence rather than a comprehensive assessment of subjective norm.

Perceived behavioral control over using ODAs (PBC) was conceptualized as individuals’ perceived ease, capability, and control over using ODAs. The three items assess ease of use, perceived autonomy in interaction control, and confidence in managing potential risks (e.g., “I can actively choose and control the level of interaction with others on dating apps”). The scale demonstrated moderate internal consistency in the present sample (Cronbach’s $\alpha = .61$), indicating that findings involving PBC should be interpreted cautiously.

The intention to continue using ODAs (INT) scale, which evaluates individuals’ self-reported likelihood and commitment to use ODAs in the future, was adapted from Moslehpour et al. (2024). The original six-item scale included three items grounded in the TAM framework and three grounded in the TPB framework; in the present study, only the TPB-based items were retained (e.g., “I intend to continue using dating apps in the future”), while the TAM-based items were excluded. The adapted three-item scale demonstrated good internal consistency in the current sample, with a Cronbach’s α of .78.

All items were rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). For each scale, higher scores reflect a higher level of the measured construct: more positive attitudes, a stronger subjective norm, greater perceived behavioral control, and stronger intention to continue using ODAs, respectively. Scale scores were computed as the mean of all item scores, with no items reverse-coded.

Demographic variables, including gender, age, and education level, were included as control variables rather than primary predictors. This decision was based on prior research showing that online dating app use and related behaviors vary across sociodemographic groups (e.g., Castro & Barrada, 2020; Sumter & Vandenbosch, 2018). Including these variables allowed us to estimate the unique associations between the core TPB constructs and intention to continue using ODAs after accounting for background demographic differences.

DATA ANALYSIS

Data screening was conducted prior to the main analyses. Of the 1,166 responses initially recorded, 17 were excluded because participants had not continuously engaged with at least one online dating

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application over the preceding month. In addition, four attention-check items were embedded in the questionnaire, requiring participants to select a pre-specified response option on Likert-type items. Participants who failed three or more of the four attention-check items were excluded ($n = 172$). Finally, responses showing evidence of careless responding were removed ($n = 37$). After applying these exclusion criteria, the final sample consisted of 940 participants.

All statistical analyses were performed using Jamovi, version 2.6.17 (The Jamovi Project, 2024). Descriptive statistics – including means, standard deviations, and Pearson zero-order correlations – were computed for all continuous variables. Hierarchical multiple regression analysis was conducted to examine the predictors of intention to continue using ODAs. Variables were entered in three sequential steps based on theoretical and methodological considerations. In Step 1, participants' age, gender, and education level were entered to control for potential demographic effects. Categorical variables (gender and education level) were dummy-coded, with male and bachelor's degree regarded as the respective reference categories. In Step 2, the three core components of the theory of planned behavior – attitude, subjective norm, and perceived behavioral control (PBC) – were entered simultaneously to examine their associations with intention to continue using ODAs. In Step 3, two interaction terms (attitude $\times$ PBC and subjective norm $\times$ PBC) were entered to test the moderating role of PBC in the relationships between attitude, subjective norm, and intention to continue using ODAs. Prior to creating interaction terms, all continuous predictors were mean-centered to reduce multicollinearity. Model comparisons were based on changes in explained variance (ΔR^2) and F -change statistics to assess the incremental contribution of the interaction terms. Where significant interactions were observed, simple slopes analyses were conducted at low (-1 SD), mean, and high ($+1$ SD) levels of PBC, following established recommendations (Aiken et al., 1991).

RESULTS

MEASUREMENT MODEL

Prior to hypothesis testing, the measurement model of the TPB components and intention to continue using ODAs was tested to examine the validity of the study variables. The initial model demonstrated acceptable fit, $\chi^2(71) = 301.60$, $p < .001$, CFI = .93, TLI = .91, RMSEA = .06. Modification indices suggested residual correlations within two item pairs: ATT1–ATT2 and ATT4–ATT5. Allowing these error terms to correlate is conceptually grounded and reflects the clear overlap in item meaning rather than a purely data-driven modification to improve fit. Specifically,

ATT1 (“I believe that using dating apps is an enjoyable and worthwhile experience”) and ATT2 (“I feel comfortable using online dating applications to seek a relationship”) both reflect the affective or experiential component of attitude toward using ODAs. In contrast, ATT4 (“I value the features of dating apps that help me match with individuals who meet my personal criteria”) and ATT5 (“Using dating apps can help me save time in finding a suitable relationship”) both reflect the instrumental or practical component of attitude, particularly the perceived functional benefits and efficiency of ODA use. Thus, the residual correlations were allowed because each item pair shared specific content beyond the general attitude factor. This modification improved model fit, $\chi^2(69) = 212.70$, $p < .001$, CFI = .96, TLI = .94, RMSEA = .05. Nevertheless, these correlated residuals also indicate some degree of localized item dependence among conceptually similar attitude items. Therefore, although the modified model demonstrated improved fit, this modification suggests that future studies should further refine the attitude scale to reduce item redundancy and more clearly distinguish between the affective and instrumental components of attitude toward ODA use.

Subsequent examination of modification indices further revealed substantial cross-loading concerns for item SN3 within the subjective norm construct. Therefore, SN3 was removed to improve construct purity. The final refined model demonstrated good fit, $\chi^2(57) = 131.16$, $p < .001$, CFI = .98, TLI = .97, RMSEA = .04. However, this improvement should be interpreted alongside the measurement limitations of the SN and PBC scales. In particular, the removal of SN3 resulted in a two-item subjective norm factor, and both SN and PBC showed only moderate internal consistency. Therefore, although the final measurement model provided acceptable global fit, the substantive interpretation of these constructs – especially subjective norm – should remain cautious.

ZERO-ORDER CORRELATIONS

Table 2 describes the means, standard deviations, and zero-order Pearson correlations of the main variables. Intention to continue using ODAs was moderately and positively correlated with attitude and weakly correlated with both subjective norm and PBC. Among independent variables, attitude and perceived behavioral control were moderately to strongly correlated, whereas subjective norm showed weak positive correlations with both attitude and PBC.

HIERARCHICAL MULTIPLE REGRESSION

Table 3 presents the results of a hierarchical multiple regression analysis examining predictors of intention

Table 2*Means, standard deviations, and zero-order correlations of variables (N = 940)*

Variables	<i>M</i>	<i>SD</i>	1	2	3	4
1. Behavioral intention	2.86	0.88	–			
2. Attitude	3.53	0.71	.49***	–		
3. Subjective norm	3.25	0.99	.18***	.17***	–	
4. Perceived behavioral control	3.77	0.74	.18***	.38***	.13***	–

Note. *** $p < .001$.*Intention
to continue using
dating apps
among young
adults***Table 3***Hierarchical multiple regression analysis (N = 940)*

Variables	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Intercept	3.13***	0.06		3.03***	0.06	.19	3.02***	0.06	.18
Gender (Ref. Male)				–0.20***	0.06	–.23			
Female	–0.32***	0.07	–.36				–0.21***	0.06	–.23
Education (Ref. Bachelor's degree)				–0.06	0.06	–.06			
High school diploma	–0.10	0.06	–.11				–0.05	0.06	–.06
Vocational diploma	0.10	0.19	.12	0.22	0.16	.25	0.23	0.16	.26
Postgraduate degree	0.27	0.21	.31	0.11	0.19	.13	0.10	0.19	.11
Age	0.04**	0.01	.10	0.01	0.01	.04	0.01	0.01	.03
Attitude				0.57***	0.04	.46	0.58***	0.04	.47
Subjective norm				0.09***	0.03	.10	0.08**	0.03	.09
Perceived behavioral control				–0.04	0.04	–.04	–0.02	0.04	–.01
Attitude $\times$ PBC							0.01	0.04	.01
Subjective norm $\times$ PBC							0.08*	0.03	.06
<i>F</i> -statistics	$F(5, 918) = 9.94***$			$F(8, 895) = 39.22***$			$F(10, 893) = 32.27***$		
Adjusted R^2	.041			.253			.257		

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. PBC – perceived behavioral control.

to continue using ODAs based on the TPB, while controlling for demographic variables.

Model 1, which included only demographic variables (age, gender, and education level), was statistically significant and explained 4.1% of the variance in intention to continue using ODAs.

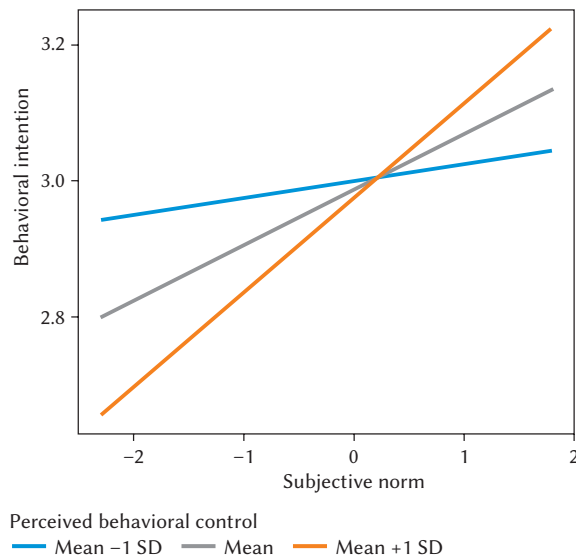
Model 2, which added the three TPB components (attitude, subjective norm, and perceived behavioral control) was statistically significant and explained 25.3% of the variance in intention to continue using ODAs. This represented a substantial and statistically significant increase in explained variance compared to Model 1 ($\Delta R^2 = .212$, $\Delta F(3, 895) = 85.92$, $p < .001$). Among the TPB components, attitude emerged as the

strongest positive predictor ($\beta = .46$, $p < .001$; H1a supported), representing a moderate-to-strong effect, followed by subjective norm ($\beta = .10$, $p < .01$; H1b supported), which reflected a small but significant effect. Perceived behavioral control was not a significant predictor ($\beta = -.04$, $p > .05$; H1c not supported).

Model 3 introduced two interaction terms (attitude $\times$ PBC and subjective norm $\times$ PBC) to examine the moderating role of PBC. Regarding the interaction effects, while the attitude $\times$ PBC interaction was not significant ($\beta = .01$, $p = .786$; H2b not supported), the subjective norm $\times$ PBC interaction was significant ($\beta = .06$, $p = .016$; H2a supported), indicating that the association between subjective norm and intention

Figure 1

Perceived behavioral control moderating the relationship between subjective norm and behavioral intention



depends on the level of perceived behavioral control. However, the addition of the interaction terms produced only a modest improvement in explained variance compared with Model 2 ($\Delta R^2 = .006$), although the change was statistically significant, $F(2, 893) = 3.85$, $p = .028$. This suggests that the moderating effect of PBC, while statistically detectable, should be interpreted as small in magnitude.

Figure 1 illustrates the moderating role of perceived behavioral control in the relationship between subjective norm and intention to continue using ODAs. As shown, the association between subjective norm and behavioral intention becomes increasingly positive as perceived behavioral control rises. Specifically, individuals with high levels of perceived control (+1 SD) exhibit a notably stronger association between subjective norm and intention, compared to those with average or low levels of control. Results of the simple slopes analysis further clarify this interaction. At low levels of perceived behavioral control (-1 SD), subjective norm did not significantly predict the intention to continue using online dating apps ($b = 0.03$, $p = .501$). However, at mean levels ($b = 0.08$, $p = .002$) and high levels of PBC (+1 SD) ($b = 0.14$, $p < .001$), the relationship was statistically significant. These findings suggest that perceived behavioral control may modestly strengthen the association between perceived social expectations and intention to continue using ODAs.

DISCUSSION

The results indicate that the TPB framework provides a modest yet statistically viable explanatory power for Vietnamese youths' intention to continue using

ODAs, accounting for approximately 25.7% of the total variance. Among the three TPB constructs, attitude emerged as the strongest and most significant predictor of intention to continue using ODAs, followed by subjective norm, whereas PBC did not exert a direct significant effect. Nonetheless, PBC showed a statistically significant but modest moderating effect: it slightly strengthened the association between subjective norm and intention to continue using ODAs, whereas the attitude $\times$ PBC interaction was not significant. These findings suggest that the formation of intention to continue using ODAs among Vietnamese young adults is primarily driven by their personal evaluation of the behavior, while social influences appear to have a stronger effect among individuals with higher levels of perceived behavioral control.

THE ROLE OF DEMOGRAPHIC VARIABLES

Beyond the core TPB predictors, the hierarchical regression analysis revealed several noteworthy patterns among the demographic control variables. In Model 1, age showed a small but significant positive association with intention to continue using ODAs. However, this association became non-significant after attitude, subjective norm, and perceived behavioral control were entered into the model. This attenuation suggests that age-related differences in intention to continue using ODAs may be partly explained by TPB-related psychological factors, rather than age itself. Gender, by contrast, showed a significant and consistent association with intention to continue using ODAs across all models. Compared with male users, female users reported lower intention to continue using ODAs, even after controlling for age, education, TPB constructs, and interaction terms. This pattern may reflect gendered experiences of online dating environments. Prior research suggests that women may face greater concerns related to safety, unwanted interactions, reputational risks, and social stigma in digital dating contexts, which could reduce their willingness to sustain long-term engagement with ODAs (Cama, 2021; Low et al., 2022; Wu & Trotter, 2022). However, because the present study did not directly measure perceived safety, harassment, or stigma, this interpretation remains tentative and should be examined directly in future research.

ATTITUDE AND THE INTENTION TO CONTINUE USING ODAS

The key finding of this study is that attitude emerged as the strongest and most significant predictor of intention to continue using ODAs. Additionally, the Pearson correlation between attitude and intention was moderate, supporting hypothesis H1a and under-

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scoring the critical role of attitude in shaping Vietnamese youths' intention to continue using ODAs. This finding is consistent with previous research. For instance, Park and Ok (2008), in their empirical study on the determinants of web portal continuance intentions, demonstrated that user attitude functions as a critical driver of sustained platform engagement. Similarly, Baek and Lee (2025) also found attitude to be the most influential predictor of intention to continue using ODAs among mobile application users. However, findings are not entirely uniform across cultural contexts. For instance, Moslehpour et al. (2024) combined TPB and the TAM to examine the intention to continue using ODAs among Indonesian participants and found that attitude, subjective norm, and self-efficacy exerted relatively equal influences on intention, with no single factor emerging as clearly dominant.

SUBJECTIVE NORM AND INTENTION TO CONTINUE USING ODAS

In the present study, subjective norm exhibited a weak but statistically significant positive correlation with intention to continue using ODAs and served as a weaker predictor compared to attitude. Despite the modest effect size, this finding supports hypothesis H1b, suggesting an association between peer influence and Vietnamese youths' intention to continue using ODAs. Peers may encourage ODA use by communicating perceived benefits and recommending these platforms to others. This is consistent with Peng and Cao's (2017) findings, which indicated that social influence – particularly peer influence – is associated with individuals' adoption of ODAs. Peer influence has been widely documented in various behavioral domains beyond online dating applications. For example, reference groups exert a strong influence on opinion expression (Oshagan, 1996), and individuals within friendship networks often exhibit behavioral convergence (Cohen, 1977).

However, the weaker effect of subjective norm compared to attitude may signal a shift in social perceptions of online dating in Vietnam. The formation of intention to continue using ODAs may be more individualized within this specific cohort, suggesting that personal attitude carries more weight than perceived social pressure among digitally active young users.

It is noteworthy that the sample primarily comprised young individuals who are frequent smartphone users – characteristics associated with high levels of technology acceptance and favorable attitudes toward ODAs. Previous research has shown that young people are generally proactive in adopting digital technologies and integrating them into personal, social, and emotional domains of life (Albescu, 2022; Tapscott, 2008). Smartphones not only provide

convenience but also signify a transformation in how relationships are initiated and maintained.

Moreover, for young adults matching this study's demographic profile, individual evaluations rather than external social pressures play a dominant role in shaping intention to continue using ODAs. Recent studies suggest that today's youth are increasingly distancing themselves from conventional expectations related to marriage and family, prioritizing autonomy in their romantic and sexual relationships (Giddens, 2013; Mengzhen et al., 2024). These relationships often emphasize emotional and sexual fulfillment without the constraints of traditional marital expectations. Technological advancement and exposure to Western online dating models have further contributed to changing perceptions among Vietnamese youth, facilitating greater acceptance and normalization of this dating format. Taken together, these societal and cultural shifts may help explain why, within this cohort, personal evaluations generally carry more weight than external social pressure in shaping the intention to continue using ODAs.

At the same time, the significant subjective norm $\times$ PBC interaction suggests that the role of subjective norm is not uniform across users. Rather, perceived behavioral control appears to condition the extent to which perceived social influence translates into intention to continue using ODAs. This finding provides preliminary support for the conditional role of PBC in the subjective norm–intention to continue using ODAs relationship. However, this interpretation should be tempered by two considerations. First, the interaction term explained only a small amount of additional variance beyond the main-effects model, suggesting that its practical significance is limited. Second, the subjective norm scale had measurement limitations: after the removal of SN3, subjective norm was represented by only two indicators, and the internal consistency of the scale was moderate. This reduced measurement precision may have attenuated the observed association between subjective norm and intention, limited the ability of the measure to capture the full conceptual breadth of normative influence, or contributed to less stable estimates of the interaction effect. Therefore, although the findings suggest that perceived social influence remains relevant to the intention to continue using ODAs and may be slightly strengthened under higher levels of perceived behavioral control, both the main effect of subjective norm and its interaction with PBC should be interpreted cautiously.

PERCEIVED BEHAVIORAL CONTROL AND INTENTION TO CONTINUE USING ODAS

Although perceived behavioral control was positively and significantly correlated with intention to

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continue using ODAs, its effect was not statistically significant in the regression model. This suggests that PBC does not play a direct role in predicting intention to continue using ODAs.

According to prior research, when strong barriers to a behavior exist, PBC tends to exert greater predictive power compared to attitude and subjective norm (Ajzen, 1991; Stone et al., 2010). However, in the context of online dating, where barriers are minimal, PBC becomes a secondary predictor. Forming an intention to continue using ODAs does not require substantial personal resources or capabilities, given that many people own smartphones and have stable internet access, and online dating applications are designed to be user-friendly. As reported by the Ministry of Science and Technology (2024), Vietnam had 78.44 million internet users as of January 2024, equivalent to 79.1% of the population, with 88.7% of mobile subscriptions on smartphones, 82.3% of households having broadband fiber connections, and 4G coverage reaching 99.8% of the national territory. Moreover, under Decision No. 805/QĐ-TTg (Prime Minister, 2024), the national strategy for information and communication infrastructure aims for universal smartphone ownership by 2030. Thus, physical resource barriers to using ODAs may be relatively limited for many young users in this sample.

Regarding personal capability, self-confidence in performing the behavior also poses minimal barriers. Firlianty and Almigo (2024) found that college students who use ODAs report greater comfort and confidence when interacting through these apps compared to in-person encounters. Specifically, many students experience shyness in face-to-face interactions but feel confident in texting, profile creation, and photo selection. Research has shown that frequent online social interaction fosters communication confidence by providing a sense of social support in digital environments (Erwin et al., 2004; Haythornthwaite & Wellman, 2002). Consequently, individuals often feel safer, more open, and more self-assured in expressing themselves on digital platforms, including ODAs.

From a theoretical perspective, PBC may not directly influence intention but rather moderate the relationships between attitude, subjective norm, and intention to continue using ODAs. Ajzen (2002) argued that PBC is expected to interact with attitude and subjective norm in determining intention rather than exerting a direct effect. Ajzen and Fishbein (2008) further noted that such interactions occur when predictor variables exhibit sufficient variability to allow interaction terms to emerge meaningfully in the model. The present findings align with this proposition: PBC moderated the effect of subjective norm on intention but did not moderate the attitude–intention to continue using ODAs relationship.

In the Vietnamese context, where technical requirements and access barriers are minimal, PBC may

be insufficient as a direct predictor in this context, where many users may already have sufficient access, skills, and perceived capability to use ODAs. Under such conditions, attitude exerts a stable and dominant influence on intention, regardless of perceived capability. In other words, in an environment where infrastructural and usability barriers are nearly absent, PBC is unlikely to alter the strength of the attitude–intention to continue using ODAs relationship.

Nevertheless, PBC showed a statistically significant but modest moderating role. Specifically, for individuals with higher perceived control over using ODAs, the association between subjective norm and intention to continue using ODAs was stronger. Conversely, for those with lower perceived control, social influence appeared less strongly related to intention. These results are in line with previous research examining digital platform competence and the degree of social influence (Nguyen et al., 2025; Winter & Schreyer, 2025). Given the small incremental variance explained by the interaction terms, this moderation effect should be interpreted cautiously and should not be overstated in terms of practical importance.

This pattern may reflect the dynamics among contemporary Vietnamese youth. At the individual level, increasing trends toward self-determination and personalization in romantic life mean that a positive attitude is sufficient to lead to intention, without needing PBC as a catalyst. Several studies have likewise reported that the increasing salience of autonomy and individualization in romantic relationships plays a key role in individuals’ behavioral engagement (Kluwer et al., 2019; Knee et al., 2013). At the societal level, peer influence persists, and PBC functions as a facilitator that enables social norms to exert a stronger impact on behavioral intention to continue using ODAs. Similar results have been documented in prior research, notably in the studies conducted by Martinez and Lewis (2016) and Hua and Mi (2023). These results partly reflect the characteristics of Vietnamese society as a transitional society, in which increasing individualization coexists with the enduring influence of traditional social norms.

THEORETICAL AND PRACTICAL IMPLICATIONS

Theoretical implications. This study extends the applicability of the theory of planned behavior by demonstrating its relevance in explaining technology-mediated relationship behaviors among young adults. Consistent with the TPB framework, intention was shaped by attitude and subjective norm, reinforcing the robustness of the model (Ajzen, 1991). Importantly, the continued significance of subjective norm indicates that perceived social approval remains

a meaningful determinant of behavior in socially sensitive contexts, supporting the conceptualization of normative influence as perceived social pressure (Ajzen, 2002). These findings also align with prior research suggesting that online dating app use is embedded in social and relational dynamics rather than purely individual decision-making processes (Chan, 2017; Fishbein & Ajzen, 1975; Sumter et al., 2017).

Practical implications. The results suggest that initiatives promoting safe and responsible use of ODAs should address peer norms and social expectations in addition to individual attitudes. Digital literacy, relationship education, and sexual health programs may benefit from incorporating discussions on social influence and online relational expectations. For platform designers, the exceptionally modest effect size of the SN $\times$ PBC interaction offers a critical caveat for dating application developers and digital marketers. Rather than misallocating resources toward engineering complex features or marketing campaigns that target the intersection of social pressures and behavioral control, they should prioritize direct enhancement of the core functionalities that shape users' attitudes. As demonstrated by the empirical data, attitude remains the most robust and substantive predictor of users' intention within the model, making it the primary lever for user acquisition and sustainable platform engagement.

Sample representativeness. The demographic profile of the respondents, who were predominantly female (76.4%), highly educated (58.3% holding a bachelor's degree), and recruited through convenience sampling, presents notable boundary conditions. While TPB emphasizes the role of social and cognitive determinants across populations (Ajzen, 1991), these findings should still be interpreted as reflecting the behavioral intentions of a specific, digitally integrated urban youth segment rather than being directly generalized to the broader, heterogeneous population of all Vietnamese young adults.

LIMITATIONS AND FUTURE RESEARCH

Several limitations should be considered when interpreting the findings. First, the cross-sectional design limits the ability to draw causal inferences among the constructs. Longitudinal or experimental research would provide stronger evidence regarding how intentions to continue using online dating applications develop over time (Ajzen, 1991).

Second, the study relied on self-reported measures, which may be affected by social desirability bias given the sensitive nature of online dating behaviors. Future studies could incorporate behavioral indicators or mixed-methods approaches to enhance validity.

Third, the measurement quality of the subjective norm and perceived behavioral control scales rep-

resents an important limitation. Both scales demonstrated only moderate internal consistency, and the removal of SN3 resulted in subjective norm being assessed with only two retained indicators. These limitations may have reduced the precision of estimates involving subjective norm and PBC. Therefore, findings involving subjective norm and PBC, including the significant but modest subjective norm $\times$ PBC interaction and the non-significant direct effect of PBC, should be interpreted cautiously. Future studies should refine these scales by developing additional items that more fully capture subjective norm and PBC, and should further evaluate their psychometric properties using confirmatory factor analysis, composite reliability, and measurement invariance testing.

Fourth, the reliance on a convenience sample that is heavily skewed toward female users (76.4%) and individuals with higher education limits the generalizability of the findings. Male users, young adults from rural regions, or those with different educational and occupational backgrounds may navigate ODAs under different normative pressures and control beliefs. Future research should use probability sampling to capture a more balanced gender distribution and socioeconomic diversity.

Finally, a theoretical limitation concerns the potential overlap between TPB attitude and technology acceptance constructs. Although the study was grounded in TPB, some attitude items may have partially captured evaluations of the technological affordances of ODAs, including perceived usefulness, convenience, and effectiveness. Consequently, the strong predictive role of attitude may reflect both behavioral evaluations and technology-acceptance-related perceptions. To address this, we encourage future studies to explicitly explore the potential value of integrating TPB with the TAM or the UTAUT frameworks. Such theoretical integration could bridge the gap between individual psychological volitions and platform-specific technological attributes, thereby offering deeper insights into how user-interface design and system ease-of-use interact with personal attitudes and social norms.

CONCLUSIONS

This study provides insights into the psychological determinants associated with the intention to continue using ODAs among educated Vietnamese young adults, framed within the TPB. The hierarchical regression results indicate that attitude serves as the most robust predictor, being the strongest factor associated with the intention to continue using ODAs. Furthermore, while subjective norm contributes directly to the decision-making process, PBC does not act as a direct driver. Crucially, regarding the interac-

*Intention
to continue using
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tion effects, while the attitude $\times$ PBC interaction was non-significant, PBC emerged as a significant moderator in the relationship between subjective norm and the intention to continue using ODAs. This indicates that while baseline resources and skills do not alter the effect of personal attitudes, they may play a conditional role in the extent to which perceived social expectations translate into continuous usage intentions.

From a sociological perspective, these findings suggest changes in the ways educated young adults in Vietnam establish personal relationships in the digital era. The use of ODAs is no longer merely a transitory or recreational behavior but is becoming an integral part of modern social life. The results support the utility of the TPB framework in identifying that favorable personal attitudes and supportive peer networks jointly facilitate sustained engagement with these platforms within the surveyed sample.

In summary, the research indicates that the intention to continue using ODAs is associated not only with technical convenience but also with the intersection of individual beliefs and evolving social norms. These findings provide a basis for app developers and psychologists to better understand user behavior, thereby informing efforts to develop safe, healthy, and culturally sensitive online dating environments for Vietnamese youth.

DISCLOSURES

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