Investigating the Individual Difference Antecedents of Perceived Enjoyment in the Acceptance of Blogging

Yi-Shun Wang, Hsin-Hui Lin, Yi-Wen Liao

Abstract—With the proliferation of Weblogs (blogs) use in educational contexts, gaining a better understanding of why students are willing to utilize blog systems has become an important topic for practitioners and academics. While perceived enjoyment has been found to have a significant influence on behavioral intentions to use blogs or hedonic systems, few studies have investigated the antecedents of perceived enjoyment in the acceptance of blogging. The main purpose of the present study is to explore the individual difference antecedents of perceived enjoyment and examine how they influence behavioral intention to blog through the mediation of perceived enjoyment. Based on the previous literature, the Big Five personality traits (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience), as well as computer self-efficacy and personal innovation in information technology (PIIT), are hypothesized as potential antecedents of perceived enjoyment in the acceptance of blogging. Data collected from 358 respondents in Taiwan are tested against the research model using the structural equation modeling approach. The results indicate that extraversion, agreeableness, conscientiousness, and PIIT have a significant influence on perceived enjoyment, which in turn significantly influences the behavioral intention to blog. These findings lead to several important implications for future research.

Keywords—Individual difference, Big Five personality traits, perceived enjoyment, blogging

I. INTRODUCTION

WEBLOGS typically describe a personal diary, kept on the Web, which can be edited by an end-user – even one with few Web publication skills [42]. According to Wikipedia [71], a blog (a contraction of the term "Web log") is a Web site usually maintained by a person that includes regular entries of commentary, descriptions of events, or other material such as graphics or video. As a log on the Web, a blog is kept mostly in a reverse chronological order with the latest entry at the top of the web page, and can easily refer to other Internet locations via hyperlinks [26]. The activity of updating a blog is known as "blogging" and someone who keeps a blog is a "blogger."

With the proliferation of Weblogs (blogs) use in educational contexts [46, 66], gaining a better understanding of why users are willing to utilize blog systems has become an important topic for practitioners and academics.

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Blogs nowadays are increasingly attracting young people who wish to share their daily activities with their friends and keep up with exsiting relationships [42]. Thus, there is a need for research to explore the factors affecting users' acceptance of blogging. Prior studies have suggested that perceived enjoyment is a salient predictor of behaviorial intention to use blogs or hedonic systems [25, 38, 39, 57, 61]. However, few studies have empirically investigated the antecedents of perceived enjoyment and the mediating role that perceived enjoyment plays in the acceptance of blogging. Benbasat and Barki [13] contend that research should continuously explore the antecedents of beliefs about using information technology (IT) (e.g., perceived usefulness, perceived ease of use, and perceived enjoyment). In fact, previous studies have suggested that individual differences are important antecedents of beliefs about using IT [3, 37, 40, 63, 64, 65]. Further, Hsu and Lin [38] contend that some people may not participate in blogging due to the effort required to start and maintain an active blog, including entering periodic updates. This implies that the behavior of blogging is different from that of reading a blog, and that individual differences and/or personality traits may have a significant influence on perceived enjoyment of and behavioral intentions towards blogging.

Therefore, the focus of this study is on understanding the various individual difference antecedents of perceived enjoyment in the acceptance of blogging. The remainder of this paper is organized as follows. In the next two sections, we discuss the conceptualization and theoretical antecedents of perceived enjoyment, and also propose the research model and hypotheses based on the previous literature. This is followed by descriptions of the construct measures and the data collection methods used in this study. We then present the results of the data analysis and hypothesis testing. Finally, we conclude with practical and theoretical implications of the findings, as well as suggestions for future research.

II. THEORETICAL MODEL

The theoretical model underpinning this study is shown in Figure 1. The model suggests that the Big Five personality traits (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience), as well as computer self-efficacy and personal innovation in information technology (PIIT) serve as antecedents of the perceived enjoyment of blogging, which in turn is a determinant of the behavioral intention to blog. The following sections elaborate on the constructs that make up the model and the proposed relationships among them.
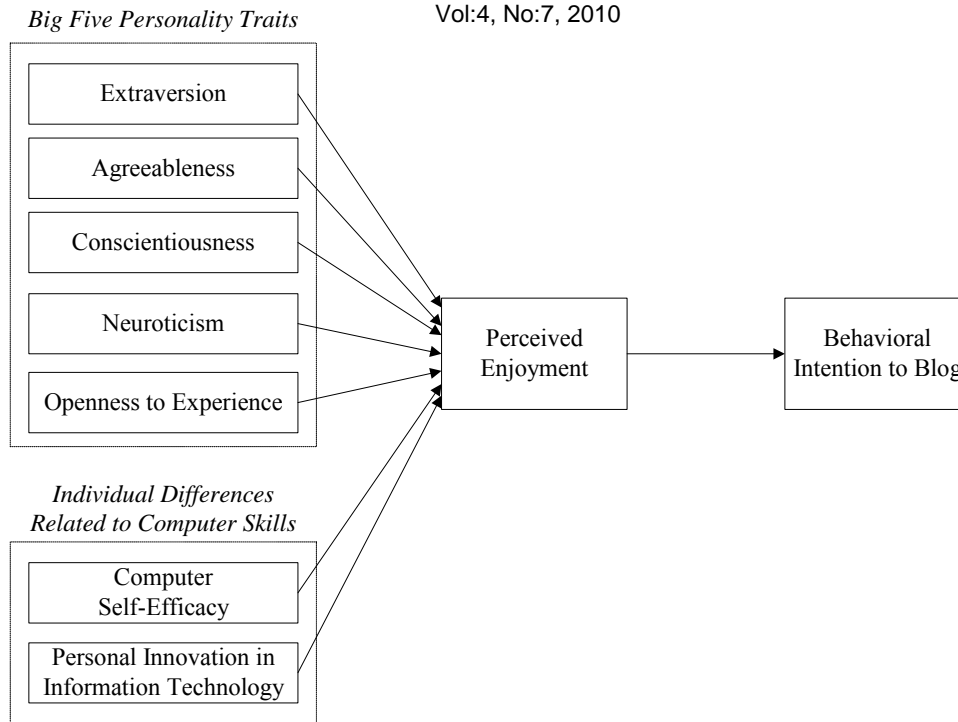
Big Five Personality Traits

Fig. 1 Research model

A. Perceived Enjoyment

Motivation theorists have distinguished between the effects of extrinsic and intrinsic motivation on individual behaviors [22, 23]. Intrinsic motivation refers to the pleasure and satisfaction gained from performing a behavior [24], while extrinsic motivation emphasizes performing a behavior to achieve specific goals or rewards [59]. Intrinsic motivators are believed to play an important role in computer usage. Prior studies have proposed that intrinsic motivators, such as perceived enjoyment [21, 61] can explain the behavioral intention to use information systems. Based on Davis et al. [21], perceived enjoyment in this study is defined as the extent to which the activity of blogging is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated.

Prior studies also suggest that perceived enjoyment has a significant influence on behavioral intention to use blogs/hedonic systems [39, 60, 61]. Given that a blog is a form of a hedonic system, perceived enjoyment is expected to have a salient influence on behavioral intention to blog. Hsu and Lin [38] also provide empirical evidence supporting that perceived enjoyment is positively associated with blog usage intention. Therefore, we posit the following hypothesis:

H1: Perceived enjoyment is positively related to behavioral intention to blog.

While the importance of perceived-enjoyment-related constructs in predicting user intention to utilize IT has been emphasized in prior studies [1, 17, 21, 38, 39, 53, 61], few studies have been conducted to empirically investigate the antecedents of perceived enjoyment in the acceptance of blogging. Furthermore, Agarwal and Karahanna [1] suggest that understanding what causes individuals to hold certain beliefs about the target IT would be of value not only to practitioners responsible for the implementation and deployment of IT, but also to researchers interested in clarifying the paths through which IT use behavior is manifested. Therefore, this study seeks to explore the antecedents of perceived enjoyment and the mediating role that perceived enjoyment plays in the acceptance and use of blogging.

According to the Theory of Reasoned Action (TRA) [8,27] or the Theory of Planned Behavior (TPB) [6, 7], external stimuli indirectly influence a person's attitude toward a certain behavior by influencing his or her salient beliefs about the consequences of performing the behavior. Thus, it is believed that external stimuli might influence a person's behavioral intention to blog through the mediation of perceived enjoyment. Individual differences are important external stimuli of the beliefs about using IT [3, 37, 40, 63, 64, 65]. Consistent with practice in information systems (IS) research literature [9, 35], individual differences include user factors such as personality and demographic variables, as well as situational variables that account for circumstance-based differences such as experience and training. Individual differences are believed to be most relevant to both IS success [35, 73] and IT acceptance research [3, 37, 40, 54]. Prior research on IT acceptance also supports that individual differences can significantly influence behavioral intention to use IT via beliefs about using IT [37, 65, 69]. Thus, individual differences are expected to have an indirect effect on blogging intention

through their direct effect on perceived enjoyment. Considering that Big Five personality traits, computer self-efficacy, and personal innovation in information technology appear to be the most researched individual difference variables in the field of information and educational technology acceptance [2, 10, 16, 32, 37], this study proposes two categories of individual difference antecedents of perceived enjoyment in the acceptance of blogging: (1) the Big Five personality traits and (2) individual differences related to computer skills. The following sections elaborate on the theoretical foundations and derive hypotheses.

B. 2.2 Big Five Personality Traits

Trait theorists believe that traits result in consistent behavior patterns over time and across situations [72]. Previous research has shown evidence of the ability of traits to predict important behavioral variables without reference to the situation [12]. The Big Five personality factors have been widely accepted in the field of personality research for many years [14, 19, 43, 44], and researchers have argued that no assessment of personality is complete without measuring these five basic factors [5]. Previous research on the relationship between personality traits and Internet use was often based on an examination of the five-factor traits [11, 32, 34, 47, 50, 72]. As aforementioned, the Big Five personality factors include: (1) extraversion, (2) agreeableness, (3) conscientiousness, (4) neuroticism, and (5) openness to experience. This study extends the exploration of the influence of the Big Five personality traits on perceived enjoyment of blogging. We now briefly describe each trait together with an associated hypothesis.

Extraversion refers to an individual's level of comfort with interpersonal relationships and is characterized by sociability, ambition, warmth, gregariousness, assertiveness and other experiences of positive affect [47]. We suggest that an individual with a high level of extraversion tends to enjoy sharing her/his opinions and life experiences with others, and thus might associate blogging with higher perceived enjoyment than an individual with a lower level of extraversion. Amichai-Hamburger and Ben-Artzi [11] also found that extraversion was positively related to the use of either information or leisure services in the Internet. Thus, the following hypothesis is posited:

H2: Extraversion is positively related to perceived enjoyment of blogging.

Agreeableness refers to an individual's ability to get along with others and is associated with altruism, friendliness, modesty, and the tendencies to be gentle and understanding [47]. Individuals who score high on agreeableness tend to be soft-hearted, trusting, and helpful, whereas those who score low on agreeableness tend to be ruthless, suspicious, and uncooperative [32]. Korukonda [47] also contends that agreeable people tend to be good-natured in their dealings with others, whether they are coworkers, supervisors, or subordinates. Based on the literature, we suggest that individuals with a high level of agreeableness are more likely to enjoy sharing their valuable

experiences with others in order to carry out their altruistic behaviors, and thus might associated blogging with higher perceived enjoyment than individuals with a lower level of agreeableness. Therefore, the following hypothesis is proposed:

H3: Agreeableness is positively related to perceived enjoyment of blogging.

Conscientiousness refers to an individual's tendency to be systematic, thorough, careful, responsible, and self-disciplined, as well as to focus on relatively few goals [31]. Thus, individuals who score high on conscientiousness tend to be well-organized, careful, and self-disciplined, as opposed to disorganized, careless, and weak-willed [32]. Landers and Lounsbury [50] found that conscientiousness was significantly and negatively related to the percent of Internet time spent on leisure, whereas it was significantly and positively related to the percent used for academic purposes. This implies that an individual with a high level of conscientiousness tends to avoid spending much time on Internet leisure services such as blogging, and thus might exhibit lower perceived enjoyment of blogging than an individual with a lower level of conscientiousness. Thus, the following hypothesis is tested:

H4: Conscientiousness is negatively related to perceived enjoyment of blogging.

Neuroticism refers to an individual's tendency to be worried, temperamental and prone to stress, anger, and hostility (as opposed to its counter-measure of Emotional Stability which implies a tendency to be calm and relaxed) [47]. Individuals who score high on neuroticism tend to be emotionally unstable: they are anxious, insecure, and self-pitying, whereas those who score low tend to be calm, secure, and self-satisfied [32].

Woszczynski et al. [72] suggest that those individuals with a high level of emotional stability are less likely to suffer from computer anxiety, which is characterized by fear, frustration, and nervousness in computer interactions, and further, that individuals who are not anxious in their computer interactions are more likely to explore how a software package works through a state of flow (playfulness). This implies that neuroticism is negatively related to the perceived enjoyment of using computer software. However, Hamburger and Ben-Artzi [34] found that neuroticism was not related to the use of either social or leisure services in the Internet. Amichai-Hamburger and Ben-Artzi [11] also found that for their entire sample, neuroticism was not related to the use of either social, information, or leisure services in the Internet. Based on these empirical findings, we also argue that neuroticism is not related to perceived enjoyment of blogging, and thus posit the following hypothesis:

H5: Neuroticism is not related to perceived enjoyment of blogging.

Openness to experience refers to a person's receptivity to

new ideas and experiences [47]. Individuals who score high on openness to experience are imaginative, prefer variety, and independent, whereas those who score low are down-to-earth, prefer routines, and tend to be conformers [32]. Woszczynski et al., [72] suggest that openness to experience is positively related to both optimum stimulation level (OSL) and cognitive spontaneity in microcomputer interactions, which, in turn, are positively related to the state of flow. This implies that that openness to experience is positively related to the perceived enjoyment of using computer software.

Guadagno et al. [32] contend that blogging is both a form of self-expression as well as a form of online behavior, so it is reasonable to assume that creative individuals who are willing to try new things are also likely to blog. They also found that openness to experience was significantly and positively related to blogging. Based on the above-mentioned results, we suggest that individuals with a high level of openness to experience are more likely to enjoy initial attempts at blogging and thus exhibit higher perceived enjoyment of blogging as compared to individuals with a lower level of openness to experience. Therefore, we test the following hypothesis:

H6: Openness to experience is positively related to perceived enjoyment of blogging.

Individual Differences Related to Computer Skills

Computer self-efficacy and PIIT appear to be the most researched individual difference antecedents of the beliefs about using IT in the field of information systems [1, 37, 58, 67, 69]. Thus, the influences of computer self-efficacy and PIIT on perceived enjoyment of blogging are examined in this study.

Computer self-efficacy refers to individuals' judgment of their capabilities to use computers in diverse situations [18]. Previous IT acceptance research results have confirmed the critical role that computer self-efficacy plays in understanding individual responses to information technology [4, 16, 41, 45]. We contend that an individual with a high level of computer self-efficacy is more likely to express confidence in blogging and thus exhibit a higher level of enjoyment perception of blogging than an individual with a lower level of computer self-efficacy. Previous research also suggests that computer self-efficacy/skill is an antecedent of the perceived-enjoyment-related constructs [17, 30, 36, 48, 55]. Therefore, we expect computer self-efficacy to have a positive influence on perceived enjoyment of blogging and posit the following hypothesis:

H7: Computer self-efficacy is positively related to perceived enjoyment of blogging.

Personal innovation in information technology (PIIT) is "the willingness of an individual to try out any new information technology" [2, p.206]. Agarwal et al. [4] suggest that individuals who score high on PITT are more likely to seek out stimulating experiences, and demonstrate more confidence in their capacity to use a new technology. Agarwal and Karahannal [1] also contend that individuals

an innate propensity to be more innovative with computers are more likely to be predisposed to experience episodes of cognitive absorption. Based on the definition of PIIT, we suggest that individuals with a high level of PIIT are more likely to enjoy initial blogging experiences and thus have higher perceived enjoyment of blogging than individuals with a lower level of PIIT. Thus, we test the hypothesis:

H8: PIIT is positively related to perceived enjoyment of blogging.

III. METHOD

A. Measures

The survey questionnaire consisted of two parts. The first recorded the respondents' demographic data, and the second concerned respondents' perceptions of each construct in the research model. Extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were measured using the Big Five Inventory [14]. Items measuring perceived enjoyment were adapted from van der Heijden's [61] perceived enjoyment measures and modified to fit the specific technology studied, and items measuring computer self-efficacy were adapted from the original instrument of computer self-efficacy developed by Compeau and Higgins [18]. PIIT was measured using the four-item scale proposed by Agarwal and Prasad [2]. Finally, items adapted from Venkatesh and Davis [62] were used to measure behavioral intention to blog. Likert scales (1-7), with anchors ranging from "strongly disagree" to "strongly agree," were used for all construct items. The questionnaire also contains demographic questions.

B. Sample

Data used to test the research model was gathered from a sample of 358 respondents in Taiwan. Respondents were asked to participate in a survey. Willing respondents were first introduced to the definition of blogging as defined in this study. Respondents then self-administered the questionnaire and were asked to circle the response that best described their level of agreement with the statements. In terms of the respondents, 37.4% were male, and their age distributions were as follows: under 20 (30.2%), 21-30 (50.3%), 31-40 (15.9%), 41-50 (3.1%), and over 50 (0.5%). The respondents had an average of 9.3 years of computer experience (S.D. = 1.98) and 7.2 years of Internet experience (S.D. = 2.13). Also, 81.2% of the respondents had attained a degree at the collegiate level or above.

C. Data Analysis

To test the research model, we used AMOS 4.0, a structural equation modeling (SEM) software. SEM allows researchers to integrate measurement and structural models [15]. The measurement model examines hypothesized links between item and latent variables, whereas the structural model estimates hypothesized paths between exogenous and endogenous latent variables. A latent variable in SEM means a construct, which is an unobserved variable, such as

Big Five personality traits, computer self-efficacy, and PIIT, NFI) 2010 in this study.

mean square error of approximation (RMSEA), and incremental fit index (IFI). As shown in Table 1, all the model-fit indices exceeded their respective common acceptance levels except for the NFI value, thus demonstrating that the measurement model exhibited a reasonably good fit with the data collected ($\chi2/df = 2.162$, AGFI = 0.819, NFI = 0.880, CFI = 0.931, RMSEA = 0.057, and IFI = 0.931). Since the NFI value was just slightly lower than the recommended value of 0.90, this was not a serious model-fit problem. We therefore proceeded to evaluate the psychometric properties of the measurement model in terms of reliability, convergent validity, and discriminant validity.

IV. RESULTS

A. Measurement Model

A confirmatory factor analysis was conducted to test the measurement model. Based on previous research [37, 68], six common model-fit measures were used to assess the

model's overall goodness of fit: the ratio of χ^2 to degrees-of-freedom (df), adjusted goodness-of-fit index (AGFI), normalized fit index (NFI), comparative fit index (NFI), comparative fit index (NFI), comparative fit index (NFI).

TABLE I

FIT INDICES FOR MEASUREMENT AND STRUCTURAL MODELS

Fit Indices	Recommended value	Measurement model	Structural model
$\chi2/df$	≤ 3.00	2.162	2.160
AGFI	≥ 0.80	0.819	0.815
NFI	≥ 0.90	0.880	0.878
CFI	≥ 0.90	0.931	0.930
RMSEA	≤ 0.08	0.057	0.056
IFI	≥ 0.90	0.931	0.930

TABLE II

RELIABILITY, AVERAGE VARIANCE EXTRACTED, AND DISCRIMINANT VALIDITY

Factor	CR	1	2	3	4	5	6	7	8	9
1. Extraversion	0.80	0.58								
2. Agreeableness	0.79	0.29	0.55							
3. Conscientiousness	0.84	0.03	0.19	0.57						
4. Neuroticism	0.86	0.01	0.00	0.00	0.61					
5. Openness to Experience	0.91	0.09	0.09	0.03	0.00	0.62				
6. Computer self-efficacy	0.91	0.00	0.01	0.00	0.00	0.02	0.76			
7. PIIT	0.89	0.01	0.02	0.01	0.00	0.04	0.17	0.67		
8. Perceived enjoyment	0.92	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.75	
9. Intention to blog	0.94	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.39	0.89

CR = composite reliability

Diagonal elements are the average variance extracted. Off-diagonal elements are the shared variance.

Reliability and convergent validity of the factors were estimated by composite reliability and average variance extracted (see Table 2). The interpretation of the composite reliability is similar to that of Cronbach's alpha, except that it also takes into account the actual factor loadings rather than assuming that each item is equally weighted in the composite load determination. Composite reliability for all the factors in our measurement model was above 0.70. The average variances extracted were all above the recommended threshold of 0.50 [33], which means that more than one-half of the variances observed in the items

B. Structural Model

A similar set of fit indices was used to examine the

were accounted for by their hypothesized factors. Thus, all factors in the measurement model exhibited adequate reliability and convergent validity.

To examine discriminant validity, this study compared the shared variance between factors with the average variance extracted of the individual factors [28]. This analysis indicated that the shared variances between factors were lower than the average variance extracted of the individual factors, thus confirming discriminant validity (see Table 2). In summary, the measurement model demonstrated adequate reliability, convergent validity, and discriminant validity.

structural model (see Table 1). Comparison of all fit indices with their corresponding recommended values provided evidence of a good model fit ($\chi2/df = 2.160$, AGFI = 0.815, NFI = 0.878, CFI = 0.930, RMSEA = 0.056, and IFI =

0.930). The fit indices for the structural model were only slightly worse than those for the measurement model in our study. This meant that the structural model was more parsimonious than the measurement model, but it just sacrificed little model-data fit. It was therefore convinced that the potential relationships between the proposed variables were fully captured in the structural model. Thus, we proceeded to examine the path coefficients of the structural model.

Properties of the causal paths, including standardized path coefficients and significance levels, are shown in Figure 2. The effect of perceived enjoyment on behavioral intention was highly significant (β=0.794); thus, H1 was supported. As expected, extraversion and agreeableness had a significant positive influence on perceived enjoyment (γ=0.219 and γ=0.277, respectively); therefore, H2 and H3 were also supported. Conscientiousness was found to have a

negative effect on perceived enjoyment (γ=-0.185), meaning that H4 was supported. In addition, PIIT was found to be significant in influencing perceived enjoyment (γ=0.333); thus, H8 was supported. Neuroticism was, as expected, found to have no significant effect on perceived enjoyment; thus, H5 was supported. However, openness to experience and computer self-efficacy did not exhibit a significant influence on perceived enjoyment; thus, H6 and H7 were not supported. Altogether, the proposed model accounted for 63 percent of the variance in behavioral intention and 24.5 percent of the variance in perceived enjoyment. The direct and indirect effects of antecedents on consequences were summarized in Table 3. Among the seven individual difference variables, PIIT exerted the strongest direct effect on perceived enjoyment and the strongest indirect effect on behavioral intention.

TABLE III

THE DIRECT AND INDIRECT EFFECTS OF ANTECEDENTS ON CONSEQUENCES

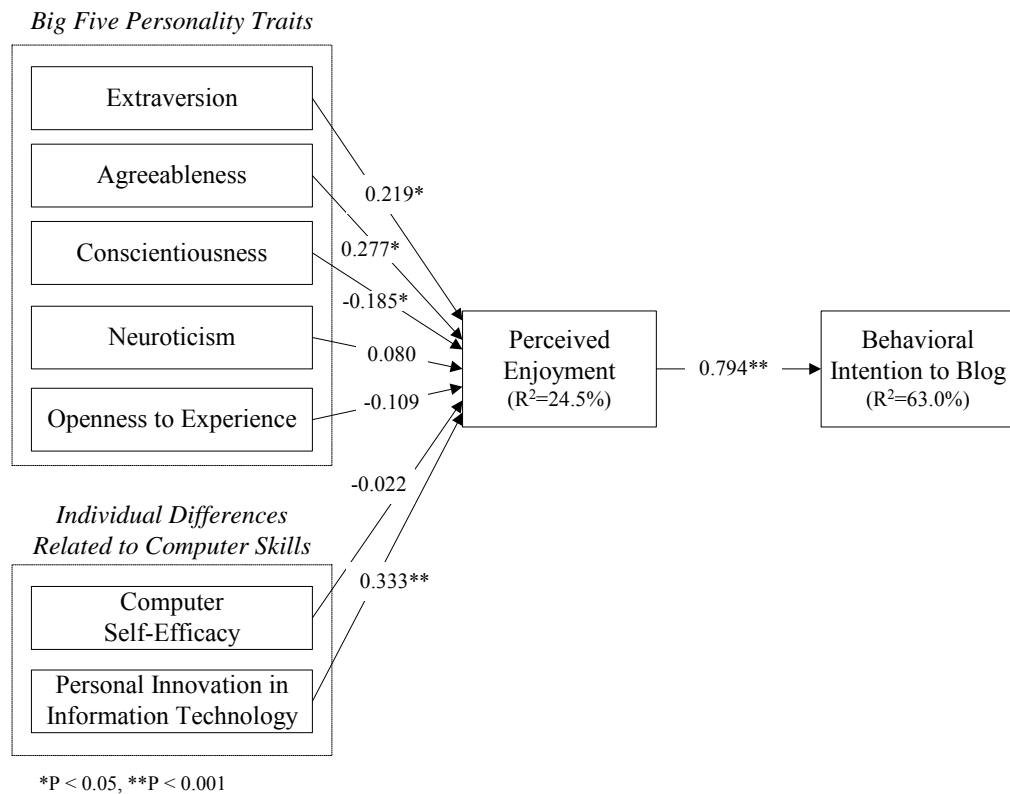|	Direct effect		Indirect effect
	Perceived enjoyment	Behavioral Intention to Blog	Behavioral Intention to Blog
Extraversion	0.219		0.174
Agreeableness	0.277		0.220
Conscientiousness	-0.185		-0.147
Neuroticism	0.080		0.064
Openness to experience	-0.109		-0.087
Computer self-efficacy	-0.022		-0.017
PIIT	0.333		0.264
Perceived enjoyment		0.794	

Fig. 2 Hypotheses testing results

V. DISCUSSION

This study explored the individual difference antecedents of perceived enjoyment and examined how they influence behavioral intention to blog through the mediation of perceived enjoyment. As expected, perceived enjoyment was found to be a significant determinant of blogging intention. That is, individuals who are high in perceived enjoyment of blogging will exhibit a higher level of behavioral intention to write a blog than individuals who are low in perceived enjoyment of blogging. This finding supports previous studies that found a significant relationship between perceived enjoyment and behavioral intention to use blogs/hedonic systems [38, 51, 61]. The result implies that blog platform providers could increase users' intent to blog by promoting their perceived enjoyment of blogging. Actually, the perceived enjoyment of a system can be easily enhanced by improving the system's hedonic elements. Thus, even though we can not change the level of personality traits (e.g., extraversion), if we can increase the level of perceived enjoyment by system improvement, we can still enhance the level of behavioral intention to blog.

Extraversion was found to have a direct positive effect on perceived enjoyment of blogging and an indirect positive effect on behavioral intention to blog. This finding is partially in line with the work of Amichai-Hamburger and Ben-Artzi [11], who found that extraversion was positively associated with the use of either information or leisure services in the Internet. However, it is inconsistent with the results of Landers and Lounsbury [50] and Guadagno et al. [32], who found that the relationship between extraversion and Internet usage/blogging was not significant. This inconsistency may be due to cultural differences. Our finding implies that in Taiwan, extraverts who tend to like discussing details of their personal lives via online social interaction are more likely to believe that blogging is funny and thus exhibit a higher blogging intention as compared to introverts. To promote the blogging behaviors, blog managers can first focus on the extraverts as the target users. Once some users start blogging and become familiar with blog systems, they may begin to persuade their colleagues and friends to adopt the systems, facilitating the diffusion of blogging behaviors.

Agreeableness was also observed to be a direct antecedent of perceived enjoyment, and an indirect determinant of blogging intention. Hsu and Lin [38] also found that altruism (similar to agreeableness) was positively associated with behavioral intention to use blogs for their Taiwanese sample. However, our finding is inconsistent with the works of Landers and Lounsbury [50] and Guadagno et al. [32], who found no significant relationship between agreeableness and Internet usage/blogging. Thus, there may also exist cultural differences in the relationship between agreeableness and blogging behavior. Our finding reflects that fact that in Taiwan, individuals who are good-natured, trusting, and helpful tend to enjoy sharing their life experiences with others in order to realize their altruistic behaviors, and thus are likely to develop higher perceived enjoyment of blogging and behavioral intention to blog than

who score low on agreeableness. Blog managers can also take advantage of the positive relationship between agreeableness and blogging intention in promoting their blog systems. Namely, they can first attract persons with agreeableness personality to use their blog systems. When the number of bloggers reaches a critical mass point, the number of later bloggers is likely to grow rapidly.

Interestingly, conscientiousness was found to have a significant negative influence on perceived enjoyment, which in turn was a determinant of blogging intention. This finding is similar to that of Landers and Lounsbury [50], who found that conscientiousness was positively associated with relative Internet usage for academic purposes, but negatively associated with relative Internet usage for leisure functions. Given that blogging is a leisure-related activity in a voluntary use context, blogging may be fun and more appealing to less conscientious people. However, Guadagno et al. [32] found that there was no significant relationship between conscientiousness and blogging. The finding of this study indicates that in Taiwan, people who are thorough, responsible, and self-disciplined are likely to report lower levels of perceived enjoyment and blogging intention than less conscientious people. One possible explanation for this phenomenon is that more responsible people tend to spend more time on their performance-related activities, such as working for organizations and studying for classes, leaving them with less time to spend on leisure-related activities such as blogging.

As expected, this study found that the direct or indirect effect of neuroticism on perceived enjoyment and blogging intention was not significant. This result is different from Woszczynski, et al.'s [72] argument that higher emotional stability (i.e., lower neuroticism) leads to lower computer anxiety and then a higher state of playfulness. Our finding is also inconsistent with the results of Guadagno et al. [32], who found that neuroticism was positively associated with blogging within a larger sample. However, given that blogging is a form of social and leisure service in the Internet, our finding is partially consistent with the results of Hamburger and Ben-Artzi [34], who found that for their entire sample, neuroticism was not associated with the use of either social or leisure services in the Internet. Amichai-Hamburger and Ben-Artzi [11] also found that for their entire sample, neuroticism was not related to the use of either social, information, or leisure services in the Internet. The mixed results mentioned above may be due to gender differences. In fact, several previous researchers have suggested a gender difference in the influence of neuroticism on blogging or Internet usage behavior. For example, Amichai-Hamburger and Ben-Artzi [11] found that for women, neuroticism was negatively related to the use of Internet leisure service, whereas for men, neuroticism was not related to the use of either social, information, or leisure services in the Internet. Further, Guadagno et al. [32] also found that women rated as high in neuroticism reported blogging more than women rated low in neuroticism, but that no significant differences existed for men.

This study also confirmed that PIIT was significant in influencing perceived enjoyment of blogging and behavioral intention to blog. The results imply that individuals high in

PIIT are more likely to perceive the enjoyment of blogging and thus develop a higher level of blogging intention than individuals low in PIIT. In fact, people with high levels of PIIT tend to be early IT adopters – those who are first to adopt new IT such as blogs. Based on our finding, blog managers could attract the early IT adopters with higher level of PIIT to use their blog systems by developing some contents suitable and attractive to the group. Once the early IT adopters decide to blog, they can employ their social influence to persuade their colleague, friends and/or subordinates into blogging, which will further facilitate the diffusion of blogging behaviors. In addition, through training and education in schools, government, business, and society, people's level of PIIT may be developed, which will in turn increase their perceived enjoyment of blogging and blogging intention in the long run.

Unexpectedly, openness to experience and computer self-efficacy were found to be insignificant in influencing perceived enjoyment of blogging and behavioral intention to blog. These findings are inconsistent with Guadagno et al. [32], who found that the relationship between openness to new experience and blogging was significant. One possible explanation for this inconsistency is the presence of PIIT in the model, as this may have resulted in openness to experience and computer self-efficacy becoming insignificant in predicting perceived enjoyment and behavioral intention. Since PIIT conceptually overlaps both openness to experience and computer self-efficacy, PIIT serves as a more salient factor as compared to openness to experience and computer self-efficacy in influencing perceived enjoyment of blogging and intention to blog.

VI. CONCLUSION AND LIMITATIONS

This study contributes to a more thorough understanding of the various individual difference antecedents of perceived enjoyment in the acceptance of blogging. The results indicate that extraversion, agreeableness, conscientiousness, and PIIT have a significant influence on perceived enjoyment, which in turn significantly influences behavioral intention to blog. These findings suggest several important implications for future research.

However, there are also some limitations associated with the present study that may be addressed in the future. First, investigation of the various individual difference antecedents of perceived enjoyment in the acceptance of hedonic systems is a relatively new area for researchers. The discussed findings and their implications were obtained from just one study that examined a particular type of systems (i.e., blogs) and targeted a specific user group in Taiwan. Thus, caution must be taken when generalizing our findings and discussion to other types of hedonic systems or user groups. Future research is needed to generalize the findings of this study and extend the discussion to additional types of hedonic systems or user groups.

Second, this study did not incorporate all of the individual difference antecedents of perceived enjoyment in the model. Hence, there may be a need to search for additional individual difference factors that can improve our ability to predict perceived enjoyment. Potential individual difference antecedents of perceived enjoyment may include computer anxiety [52, 65], computer playfulness [70], gender differences [29], roles with regard to technology [3], need for closure [10, 49], locus of control [10, 56]; tenure in workforce [3], level of education [3], prior experience [3], participation in training [3], and domain knowledge [37]. Future research can examine if these factors represent antecedents of perceived enjoyment of blogging.

Third, we did not include the Technology Acceptance Model's perceived usefulness and perceived ease of use in our research model. However, perceived enjoyment has been incorporated into the TAM as a new TAM variable [20, 60, 61]. The effects of the Big Five traits, computer self-efficacy, and PIIT on perceived enjoyment may change if we consider perceived usefulness and perceived ease of use in the research model. Future research could be conducted to examine the mediating roles of perceived enjoyment when adding perceived usefulness and perceived ease of use to the model.

Fourth, this study did not examine the moderating effect of potential variables on the relationships between individual differences and perceived enjoyment. Prior studies suggest that the effect of neuroticism on blogging/Internet usage is moderated by gender [11, 32, 34]. Thus, there may exist some moderators that can moderate the influence of personality traits on perceived enjoyment. Thus, future researchers could explore the moderators and use them to change the influence of personality traits on perceived enjoyment. If we can do so, even though we can not change the level of personality traits, we can still enhance the positive effect, or alleviate the negative effect, of personality traits (e.g., extraversion or conscientiousness) on perceived enjoyment, which, in turn, change the behavioral intention to blog.

Fifth, H5 was described as a null hypothesis in this study. However, the null hypothesis can not be proven true while it can be proven false. Caution needs to be taken when explaining the result of the hypothesis test. The result indicated that we did not have enough evidence to reject H5. Therefore, we can only conclude that H5 was not false rather than concluding that H5 was true. Further research could be conducted to test if there is enough evidence to reject the hypothesis.

Finally, this study was conducted using a snapshot research approach. Additional research efforts are needed to evaluate the validity of the investigated model and our findings. Longitudinal evidence might enhance our understanding of the relationships between individual differences and perceived enjoyment in the acceptance of blogging.

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