

The Interplay of Gender, Habit, and Individual Differences in Predicting Trying Intentions

Full papers

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Abstract

We report results of a study investigating the interplay between gender and various aspects of individual propensity to resist change in predicting IS habit and intentions to try a new system. We also explore the relationship between habit, gender, and personal innovativeness with IT in predicting trying intentions. Our research context is student collaboration in group projects. Results indicate that gender plays a key role in affecting both habit development and trying intentions.

Keywords

IS habit, gender, resistance to change, individual differences

Introduction

There has been an increased interest in studying information systems (IS) habits in recent years. A keyword search in the AIS eLibrary yields only 23 articles containing the word “habit” in 2004, but 143 articles referencing habit in 2014. Understanding IS habits is important as they not only support continued IS use, but may also lead to inertia that negatively impacts new system adoption and use. A number of recent studies (e.g., Oulasvirta et al., 2011) have even indicated that poorly regulated habits in the realms of internet, gaming, and social media use may lead to harmful addictions. Thus, it is important to understand how IS habits develop, so that we can design appropriate interventions to better support the development of “good” usage habits, and better disrupt or discourage “bad” usage habits. Yet most studies investigating the antecedents of IS habit have ignored the role of individual differences in making one more prone to developing IS habits. For example, while Polites and Karahanna (2012) included several individual differences as controls in their examination of the mediating role of inertia in the relationship between incumbent system habit and new system perceptions and usage intentions, they did not investigate the impact of these various individual differences on habit itself. Further, we know very little about how IS habit and individual differences might interact in impacting system acceptance.

One particularly interesting individual difference that has received limited attention in extant habit research is gender. We know that males and females differ in their task orientation and approaches to socialization, and that these differences may affect new system usage intentions (Venkatesh et al., 2003). However, we don’t know whether gender can increase one’s propensity to develop usage habits, or (all else being equal), make an individual less likely to “break out” of their usage habits and try something new. Thus, our study seeks to answer the following research questions:

RQ 1: Does gender interact with innate personality traits to make an individual more prone to developing IS usage habits?

RQ 2: Does gender interact with both incumbent system habits and innate personality traits to make an individual less likely to try a newly introduced system?

We build on prior work by examining the role of several key individual differences – gender, personal innovativeness with IT (PIIT), and individual propensity to resist change (PTRC) – in the development of

IS habits. We include the latter two constructs due to the intuitive nature of their role in embracing or resisting IS-related change. We also examine the interplay between these individual differences and IS habit in predicting intentions to try a new system. We consider trying intentions to be a particularly interesting dependent variable for two reasons. First, extant research offers conflicting views on habit's downstream consequences. On one hand, habit leads to inertia, which should lower new system usage intentions. On the other hand, habitual users may honestly want to *try* a new system, but ultimately fail due to habit's subconscious control over actual behavior. Second, not all technology acceptance decisions can be made in a vacuum. Many popular systems in use today are designed to support group collaboration and communication. Without buy-in from others in the group, the best any one individual can do is to voice intentions to *try* using the system for group-oriented tasks. Our study thus has important practical implications, as interventions to disrupt habits and encourage new system usage will differ depending not only on the type of system being investigated, but also on whether habitual users are in fact willing to at least *try* it (Verplanken and Wood, 2006).

We begin with a brief review of IS habit and the role of individual differences in IS acceptance. Next, we present our research model, methodology, and results. We close with a discussion of theoretical and practical implications.

Theoretical Background

IS Habit, Its Antecedents, and Consequences

Habits represent “learned sequences of acts that have become automatic responses to specific cues, and are functional in obtaining certain goals or end-states” (Verplanken and Aarts 1999, p. 104). Habits are a specific type of goal-directed automaticity in which the individual is (at least to some extent) unaware of the triggers to their behavior, and the behavior itself is both mentally efficient to perform and difficult to control (Bargh 1994). Habit is frequently incorporated into the Theory of Planned Behavior (TPB) (Ajzen 1985), where it is viewed as a component of actual behavioral control. IS habits have been shown to positively impact usage perceptions and intentions, as well as actual continued use (Kim and Malhotra 2005; Limayem et al. 2007). However, incumbent system habits may lead to inertia that lowers perceptions of the value of a new system (Polites and Karahanna 2012). It is possible, nevertheless, that habitual users may voice willingness to *try* a new system, but later fail in their attempts due to the strength of their subconscious habit.

Recognized antecedents of IS habit include satisfactory and frequently repeated use in a stable context, as well as comprehensiveness of use (Limayem et al. 2007). More recent studies have added deficiencies in self-regulation mechanisms including poor mood regulation (Lee and Jahng 2013; Thadani and Cheung 2011). A handful of studies incorporating IS habit have included demographic or other individual difference variables as controls, but few if any IS studies have explicitly hypothesized the effect that these individual differences may have on the development of IS habits.

Individual Differences That May Impact IS Habits

The Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al. 2003) posits that both gender and age moderate the impact of various beliefs and perceptions on usage intention. Specifically, men are considered more task-oriented than women, making performance expectancy more salient for them. Younger workers are also believed to be more motivated by extrinsic rewards. Conversely, effort expectancy and social influence are believed to be more salient for women and older workers. Finally, UTAUT proposes that age moderates the impact of facilitating conditions on actual usage behavior, in that older workers often need more assistance in using technology. One might expect older individuals to be more habit-prone; however, no studies to date have investigated the relationships between gender, age, and IS habit.

PIIT, defined as one's willingness to try out new technology (Agarwal and Prasad 1998), is another individual difference known to impact new system perceptions and usage intentions. Intuitively, high PIIT individuals may still develop IS usage habits (just as people who are innovative in other ways still form many habits in their daily lives), though one would expect them to be less inert. Nevertheless, PIIT's interplay with habit in predicting downstream consequences has not been formally tested.

Individual Propensity to Resist Change

Oreg (2003) proposed PTRC as a superordinate construct, based on sources of resistance that are grounded in an individual's personality. PTRC includes a behavioral component ("actions or intentions to act in response to change"), an affective component ("how one feels about change"), and a cognitive component ("what one thinks about change") (Oreg 2006). These three components are represented by four dimensions: the behavioral dimension of routine seeking, the affective dimensions of emotional reaction to imposed change and short-term focus, and the cognitive dimension of cognitive rigidity.

Routine seeking reflects an individual's tendency to incorporate routines into their life, and a preference for familiar situations with limited stimulation and novelty. *Emotional reaction to imposed change* reflects "the amount of stress and uneasiness the individual experiences when confronted with change" (Oreg 2003, p.693), and implies a lack of psychological resilience. It is based on the view that some individuals do not like to have control over their life situation taken away from them by imposed, rather than self-initiated, change, and are less able to deal with the stress associated with that change. *Short-term thinkers*, in contrast, tend to focus on immediate inconveniences or adverse effects of a change (Oreg 2003). They do not like to have to do more work in the short term due to changes, and will allow the short-term inconvenience to distract them from considering options with a long term benefit. Finally, individuals with high levels of *cognitive rigidity* do not change their minds easily; they find it more difficult to do so and thus do it less often. In addition, they may be close-minded and less willing and able to adjust to new situations (Oreg 2003).

PTRC has been investigated as an antecedent to many different beliefs and behaviors related to IS use (see Laumer and Eckhardt 2010; Maier et al. 2012). However, IS research has not yet explored the role of PTRC in influencing the development of IS habits. Further, there is a paucity of studies exploring the interplay between gender and PTRC across all disciplines. In the next section, we present our research model hypothesizing the impact of selected individual differences on both (subconscious) incumbent system habit and (conscious) new system trying intentions.

Research Model

We use *intentions to try* a newly introduced system as our ultimate dependent variable (Figure 1). This construct is grounded in the theory of trying (Bagozzi and Warsaw 1990), and is particularly appropriate given our investigation of collaboration tools for group projects – a usage decision that one cannot necessarily make on their own if teammates do not concur.

Extant research offers conflicting views on whether the relationship between habit and trying intentions will be positive or negative. On one hand, habit increases inertia, thereby indirectly reducing perceptions and intentions related to new system usage (Polites and Karahanna 2012). On the other hand, it is entirely possible for a habitual user of one system to recognize the benefits of another, and thereby voice intentions to try it. Yet these "good intentions" may never lead to bonafide change, since habits are difficult to control in daily practice and action slips may occur (Tykocinski and Pittman 1998). A habitual user may even realize that their engrained habits will make it more difficult to change, and recognize their need to make a concerted, conscious effort to try to change (Gollwitzer and Schaal 1998). Thus, while theory implies that habit should lower trying intentions as a consequence of inertia, we acknowledge the possibility of finding a different result.

H1. Incumbent system habit will negatively influence trying intentions.

Propensity to Resist Change

While some empirical studies imply a superordinate structure for PTRC, the many studies (including Oreg's original 2003 paper) that have shown differential impacts of PTRC's dimensions on downstream consequences imply that its dimensions do not always move together as required by a superordinate structure. Further, aggregating the dimensions into a single construct with a second-order formative structure may mask the true amount of variance explained by each dimension in the construct's outcome variables. Thus, we decompose PTRC's four dimensions into a "dimension set" (see Polites et al., 2012) to posit unique effects on the endogenous constructs in our model.

Behavioral Dimensions

We propose that the effect of the behavioral component of PTRC on trying intentions will be fully mediated by habit. IS habits form when a system is used repeatedly over time, in a stable performance context, with satisfactory results (Limayem et al. 2007). Given the importance of repetition in habit formation, we would expect that individuals who have a propensity to seek out routines in their daily lives would also be more likely to form IS habits based on those routines. Further, having a strong propensity to prefer routines should only lower one’s intentions to try something new if those routines have truly habituated.

H2. Routine seeking will positively influence incumbent system habit.

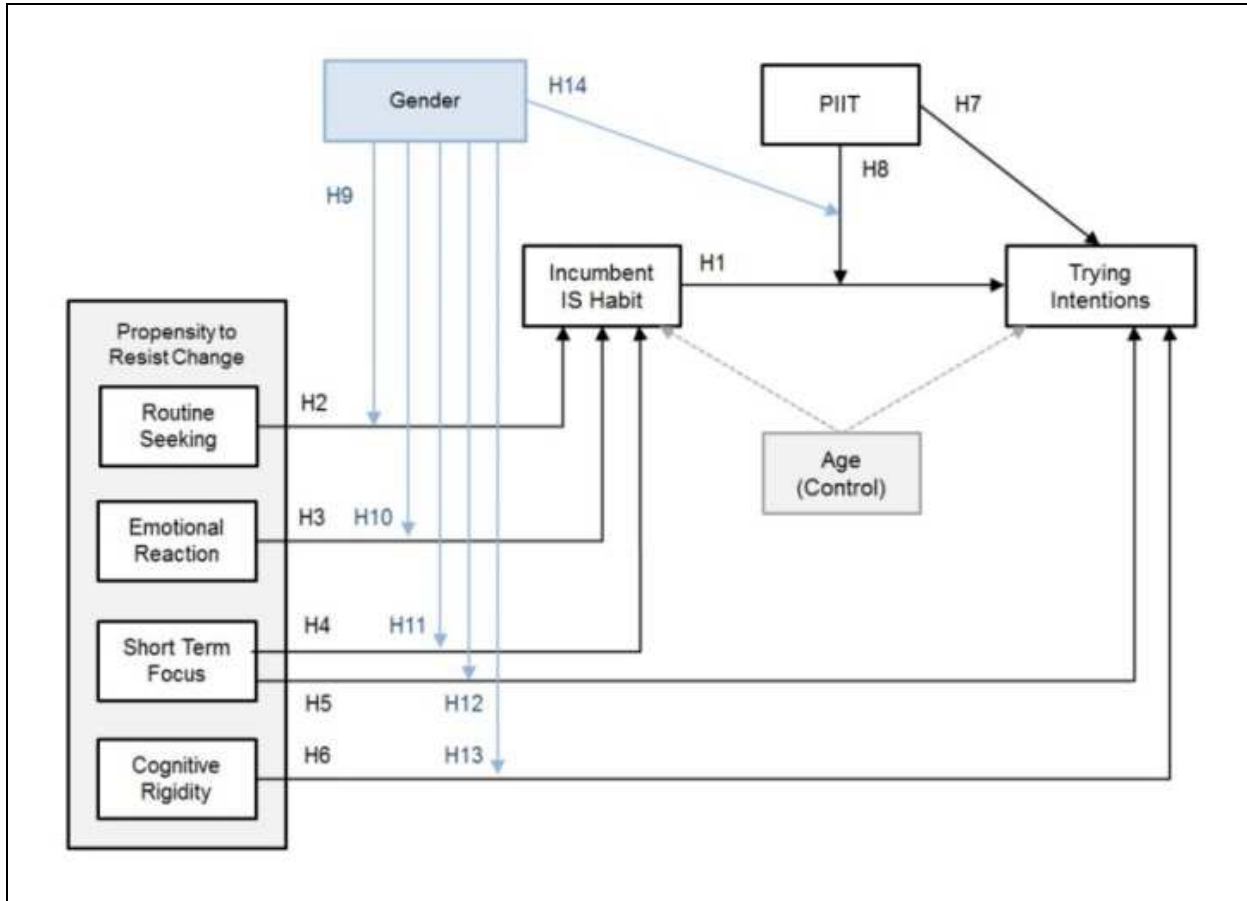


Figure 1. Research Model

Affective Dimensions

We propose that the affective components of PTRC will have an effect on trying intentions that is mediated by habit. However, we expect this effect to differ slightly in regard to emotional reaction to imposed change versus short-term focus in a voluntary usage context.

Habits require little mental capacity to perform. As such, individuals tend to slip back into habitual behaviors when under stress or fatigued (Wood and Quinn 2004). Thus, it is possible that individuals who find forced change to be particularly stressful or unpleasant will also develop the strongest IS habits. For these individuals, continuing to do things in the same way, day after day, reduces stress but also strengthens habits. However, at introduction of a new voluntary IS, one’s emotional reaction to imposed change should not come into play in predicting intentions to try the new system. In this scenario, the individual still has a choice about whether to use the new system or not, and shouldn’t feel unduly

pressured into changing. Therefore, they should not be less (or more) inclined to try out the new system in the absence of a strong habit.

Similarly, individuals who have a short-term focus may recognize the long-term benefits of switching to a new system, but they are not willing to undergo the period of adjustment necessary in the short term (in regard to time and effort) to learn the new system (Oreg 2003). Thus, individuals who seek to continue performing tasks in an efficient manner may be more habit-prone. However, even in the absence of a well-formed habit, individuals with a short-term focus may resist trying out a new voluntary system in order to avoid short term inconvenience.

H3. Emotional reaction to change will positively influence incumbent system habit.

H4. Short-term focus will positively influence incumbent system habit.

H5. Short-term focus will negatively influence trying intentions.

Cognitive Dimensions

Some individuals have rigid, close-minded ways of thinking; once they have decided that an existing system meets their needs, they are not willing to acknowledge alternatives or try them out. We know of no extant research that addresses the effect of cognitive personality traits on subconscious habits, and a direct link seems unlikely. Rather, we expect that rigid ways of thinking will guide conscious decisions on whether or not to try a new system regardless of one's level of habit.

H6. Cognitive rigidity will negatively influence trying intentions.

Personal Innovativeness with IT

We do not expect PIIT to have an impact on the development of IS habits; however, we include it in our model due to its expected impact on trying intentions. Habits enable individuals to perform tasks more efficiently, and are developed primarily through frequent repetition in a stable context. Thus, even individuals who are very innovative by nature may develop habits in how they carry out tasks using IS. However, they will be less likely to resist adoption of a new system once they have been introduced to it, and may even consciously seek out alternative systems to try. Thus, we expect PIIT to positively impact trying intentions, and we further expect the posited negative relationship between habit and trying intentions to be attenuated (weakened) for high PIIT individuals.

H7. PIIT will positively influence trying intentions.

H8. PIIT will moderate the relationship between habit and trying intentions, such that it is weaker (less negative) for individuals who are high in PIIT.

The Role of Gender

Gender and the Dimensions of PTRC

All individuals, regardless of gender, are capable of developing habits in regard to which IS they use for certain tasks. This is because the necessary conditions for habit formation involve only repeated use in a stable context, with satisfactory results. Thus, we do not expect to see any gender difference in whether being a routine seeker by nature leads to stronger IS habits.

H9. The relationship between routine seeking and incumbent system habit will not differ across genders.

Females have long been stereotyped as being more emotional than males. Regardless of whether this is true, research does indicate that females are more willing than males to publicly express their emotions, and that males are more prone to cling to gender stereotypes, such that they will persevere more even in the face of anxiety (Parke and Gauvain 2008). Thus, we might expect female respondents to provide higher (and arguably, more accurate) responses when asked about their tendency to respond emotionally to change. This in turn should lead to a stronger relationship between emotional reaction to imposed change (ER) and incumbent system habit for females than for males.

H10. Gender will moderate the relationship between ER and habit, such that it is stronger for females.

Trying out a new system implies reduced mental efficiencies in the short term, and more effort invested to break out of pre-existing habits. Individuals who score high on short-term focus (STF) are concerned with such short-term inconveniences of change, and ignore the longer-term benefits. Extant research implies that females, who are less achievement- and task-oriented than males, will be more concerned about the increased effort that they may have to invest if switching to a new system. Males, in contrast, will be more inclined to “power through” (by putting in more effort to overcome constraints) in order to achieve their instrumental goals (Venkatesh et al. 2000). Thus, the relationship between short-term focus (STF) and both habit and trying intentions should be attenuated (weaker) for males.

H11. Gender will moderate the relationship between STF and habit, such that it is stronger for females.

H12. Gender will moderate the relationship between STF and trying intentions, such that it is stronger (more negative) for females.

Males have long been stereotyped as being more stubborn than females (hence the cliché that men never stop and ask for directions). Males are also more task-oriented than females, as we have already discussed. Finally, females have been shown to place a higher priority on socialization, and are more compliant to the demands of individuals in positions of authority (Parke and Gauvain 2008; Venkatesh et al. 2000). Given the posited link between cognitive rigidity and willingness to try a new system, we might expect to see that females scoring high on cognitive rigidity (CR) are nevertheless more likely to at least try a new technology (particularly one that is preferred by superiors or useful for social purposes) before determining that it isn't appropriate for them. Males who score high in CR, in contrast, might be more likely to feel that the current system is meeting their needs just fine, meaning that there is no need to try something new in order to complete the task at hand.

H13. Gender will moderate the relationship between CR and trying intentions, such that it is stronger (more negative) for males.

Gender and PIIT

We argue for a complex, three-way interaction between gender, PIIT, and habit in predicting trying intentions. We have already argued in H8 that high PIIT individuals may develop habits that make their daily lives more efficient, yet be more likely to “break out of” these habits in order to try something new. We also expect gender to be at play in this interaction. This is because, as we have discussed earlier, females place a higher emphasis on socialization and also yield more to pressure from superiors to adopt new behaviors. Whereas habits should reduce intentions to try something new, and PIIT should increase intentions to try something new, females overall will be more likely to try even in the face of a particular level of habit and personal innovativeness.

H14. Gender and PIIT will jointly moderate the relationship between habit and trying intentions, such that the relationship is attenuated (i.e., less negative, or more positive) for females.

Methodology

Items for the four PTRC dimensions were based on Oreg (2003) as modified by Polites and Karahanna (2012). Items for habit (conceptualized as an aggregate second-order construct, since differential impacts of its individual dimensions are not a theoretical focus of our study) were also based on Polites and Karahanna (2012), although we used a reduced set of three items for each of the three habit dimensions, rather than their full 11-item scale. Items for PIIT were based on Agarwal and Prasad (1998), whereas items for trying intentions were modified from previously validated items for usage intention (Venkatesh et al. 2003) (Table 1).

We surveyed 603 undergraduate business students at a large public university. Respondents were asked about their use of collaboration / file sharing tools in group projects. The focal incumbent and new systems were email and Google Docs, respectively. At the time, the majority of the students surveyed were using email, and several instructors had expressed a desire to get their students to discontinue use of email in favor of Google Docs. Further, Google Docs was readily available to students in that it only required signing up for a free Google account to use. Data were collected at two points in time. The first survey included items for the individual difference constructs and habit. The second survey, administered two weeks later, introduced respondents to Google Docs and then asked questions regarding their

perceptions of the tool and intentions to try it out. We excluded responses from students with prior experience using Google Docs, yielding a final sample size of 272 (136 males and 136 females). All but four respondents were under the age of 25. Thus, we used age only as a control variable.

Construct	Item	Wording
Routine Seeking	RS1	I generally consider changes to be a negative thing.
	RS3	I like to do the same old things rather than try new and different ones.
	RS4	Whenever my life forms a stable routine, I look for ways to change it. [DROPPED]
Emotional Reaction	ER1	If I were to be informed that there's going to be a significant change regarding the way things are done in my classes, I would probably feel stressed.
	ER2	When I am informed of a change of plans, I tense up a bit.
	ER3	When things don't go according to plans, it stresses me out.
Short-Term Focus	STF2	Often, I feel a bit uncomfortable even about changes that may potentially improve my life.
	STF3	When someone pressures me to change something, I tend to resist it even if I think the change may ultimately benefit me.
	STF4	I sometimes find myself avoiding changes that I know will be good for me.
Cognitive Rigidity	CR1	Once I've come to a conclusion, I'm not likely to change my mind.
	CR3	I don't change my mind easily.
	CR4	My views are very consistent over time. [DROPPED]
Habit-Awareness	AWARE2	Whenever I need to collaborate/share files with my teammates, I choose to use email without even being aware of making the choice.
	AWARE4	Choosing email when I want to collaborate/share files with my teammates is something I do without being aware.
	AWARE6	Choosing email to collaborate/share files with my teammates is something I do unconsciously.
Habit-Controllability	CTRL2	I (would) find it difficult to overcome my tendency to use email to collaborate/share files with my teammates.
	CTRL5	It would be difficult to control my tendency to use email to collaborate/share files with my teammates.
	CTRL7	It is [would be] hard to restrain my urge to use email to collaborate/share files with my teammates.
Habit-Mental Efficiency	EFFCH1	I do not need to devote a lot of mental effort to deciding that I will use email to collaborate/share files with my teammates. [DROPPED]
	EFFCH2	Selecting email to collaborate/share files with my teammates does not involve much thinking.
	EFFCH5	Choosing email to collaborate/share files with my teammates requires little mental energy.
Personal Innovativeness w/ IT	PIIT1	If I heard about a new information technology, I would look for ways to experiment with it.
	PIIT2	Among my peers, I am usually the first to try out new information technologies.
	PIIT4	I like to experiment with new information technologies.
Trying Intentions	Try1	I intend to try using Google Docs to collaborate/share files with my teammates on my future group projects.
	Try2	I plan to try using Google Docs to collaborate/share files with my teammates on my future group projects.
NOTE: Numbers appearing in the item names for each construct are the same as those used in Polites and Karahanna (2012), and are retained for the sake of consistency and traceability. Thus, any missing numbers in the sequencing embedded in the item names should not be taken as an indication that any other items besides those three marked as "[DROPPED]" were included in the initial analysis and then removed.		

Table 1. Survey Items

Analysis and Results

Before testing the research model, we conducted a Harman's single-factor test to investigate the extent of common method bias present in the data set. A principal component factor analysis with Varimax rotation yielded 6 factors with an eigenvalue >1, explaining just under 70% of the total variance. The first (largest) factor explained only 23.5% of the total variance. Further, a single-factor CFA model exhibited extremely poor fit to the data ($\chi^2=3117.7$, $df=231$, $GFI=.389$; $CFI=.106$; $TLI=.021$; $SRMR=.252$; $RMSEA=.215$). Finally, a CFA with a method factor included that was previously run on the same data set (see Polites and Karahanna, 2012) indicated the estimated amount of method bias in the data set at only 1.2%. Thus, common method bias does not appear to be a significant threat to the validity of the results.

Due to the challenges of identifying models containing aggregate constructs in covariance-based SEM, we conducted our analysis using SmartPLS 2.0. The aggregate habit construct was specified in PLS according to the recommendations of Ringle et al. (2012). After dropping three scale items (Table 1) due to problematic factor loadings, all constructs exhibited acceptable levels of composite reliability (>.70) as well as convergent and discriminant validity ($AVE > .50$; square root of AVE > inter-construct correlations) (Chin, 1998; Fornell and Larcker, 1981). The model was run three ways (pooled data set, males only,

females only), and formal tests were conducted to determine whether path differences across genders were statistically significant.¹

Results (Table 2) indicate that, contrary to H1, habit had a marginally significant positive impact on trying intentions. This is not entirely surprising, given theoretical arguments could be made for both a positive and negative effect. RS had a significant positive impact on habit with no gender differences, supporting H2 and H9. ER did not significantly impact habit in the pooled sample, but there was a marginally significant gender effect supporting a stronger relationship for females. Thus, H10 was supported, while H3 was not. Contrary to H4 and H5, STF did not have a direct impact on either habit or trying intentions in the pooled sample; the gender effect was significant for STF-trying intentions but not for STF-habit, thus supporting H12 but not H11. CR had a significant negative impact on trying intentions, with the effect stronger for males (supporting H6 and H13).

As expected, PIIT has a direct positive effect on trying intentions (supporting H7). However, the proposed habit*PIIT and gender*habit*PIIT interactions were not significant. Further tests indicate that interaction between gender and PIIT is significant – specifically, females with high PIIT are more likely to express intentions to try a new system. Thus, this finding partially supports H14. Age had a marginally significant positive relationship with both habit (0.08, $p < .10$) and trying intentions (0.06, $p < .10$). Extant literature would argue that older individuals are more “stuck in their ways” and less likely to try something new, yet we found older students to be slightly *more* likely to voice intentions to try a new collaboration system on future group projects. Perhaps this is due to older students having more experience with coordination challenges (they have worked on more group projects in school, and may even hold jobs requiring substantial group work), and therefore being more willing to try something new to resolve these problems.

Hyp	Path	Result (Pooled)	Supported?	Hyp	Path	Path (M)	Path (F)	T-Stat	Supported?
H1	H→Try (-)	0.081*	No	H9	G*RS→H (no difference)	0.054 (0.133)	0.182 (0.152)	0.634	Yes
H2	RS→H (+)	0.135**	Yes	H10	G*ER→H (F>M)	-0.084 (0.149)	0.211* (0.165)	1.327	Yes (.10)
H3	ER→H (+)	0.097	No	H11	G*STF→H (F>M)	0.188 (0.189)	-0.057 (0.170)	0.969	No
H4	STF→H (+)	-0.008	No	H12	G*STF→Try (F>M)	0.207** (0.101)	-0.120* (0.089)	2.446	Yes
H5	STF→Try (-)	0.049	No	H13	G*CR→Try (M>F)	-0.366*** (0.078)	-0.106 (0.097)	2.098	Yes
H6	CR→Try (-)	-0.250***	Yes	H14	G*PIIT*H→Try (F<M)	0.140* (0.105)	-0.007 (0.089)	1.071	Partial
H7	PIIT→Try (+)	0.150**	Yes		(G*H→Try)	0.108 (0.157)	-0.018 (0.095)	0.691	
H8	PIIT*H→Try (-)	0.038	No		(G*PIIT→Try)	0.083 (0.097)	0.297*** (0.085)	1.662	

* $p < .10$, ** $p < .05$, *** $p < .01$; H9 is a two-tailed test, all other tests are one-tailed

Table 2. Hypothesis Testing Results

A series of follow-up ANOVA tests found significant differences in overall construct scores across genders. Not surprisingly, females scored higher than males on ER ($p = .000$) and STF ($p = .044$), whereas males scored higher than females on PIIT ($p = .001$). More unexpectedly, females scored higher on two of the three dimensions of habit (awareness ($p = .000$) and controllability ($p = .030$)), as well as on trying intentions ($p = .026$). One potential argument for the latter might be that females place more emphasis on socialization issues than males, and therefore a new technology tool that might improve collaboration (which is social by nature) might be preferred by females.

¹ Due to the use of SmartPLS 2.0, it was not possible for us to conduct the more rigorous form of multi-group analysis / interaction testing that is now available in SmartPLS 3.0. As an alternative approach to validating our results for this preliminary study, we tested the model on the full sample by explicitly adding interaction terms to the model, and received similar results as shown in Table 2.

Conclusion

Our study extends theoretical understanding of the antecedents and consequences of IS habits by emphasizing the important role played by gender and other individual differences in encouraging habit development and intentions to try a new collaboration technology. Specifically, we see that several relationships tested on a pooled sample show nonsignificant effects even though substantial gender effects do in fact exist. This finding emphasizes the importance of explicitly taking gender into account in studies on IS resistance to change. From a practical perspective, our study suggests ways that practitioners can design more effective managerial interventions when implementing a new IS. Specifically, incumbent system habits do not necessarily imply an unwillingness to try a new system. However, if this new usage is not encouraged, inertia may lead to action slips that prevent successful adoption. Managers should focus on the social aspects of new technologies where female users are concerned. Given cognitive rigidity is the most salient factor inhibiting trying intentions for males, managers should focus on convincing males of the utilitarian advantages of a new IS. Future studies should seek to replicate our results in other contexts, focusing on different system-task combinations.

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