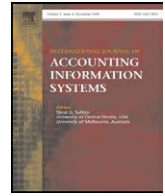




Contents lists available at [ScienceDirect](#)

International Journal of Accounting Information Systems



Technology acceptance: Not all organisations or workers may be the same

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ARTICLE INFO

Article history:

Received 1 August 2009

Accepted 28 September 2009

Keywords:

Technology acceptance

Not-for-profit

Volitional control

Attitude

ABSTRACT

The Technology Acceptance Model (TAM) is widely accepted by researchers in the IT field as a reliable tool able to predict acceptance of new technology by individuals. The majority of these studies have used participants (both students and non-students) from within traditional businesses functions, e.g., accounting and finance. The ability of TAM to predict technology acceptance across all situations is not well documented. During the past decade there has been an increasing interest in research within Not-for-Profit (NFP) organisations. This paper considers whether people likely to pursue careers within the NFP sector have different attitudes to technology and whether such differences affect the measures used within technology acceptance models. A survey of business and social science undergraduate students, those most likely to enter careers in the Business vs. the NFP sector, indicated differences between the two groups that may impact on the technology acceptance models.

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1. Introduction

The Technology Acceptance Model (TAM) (Davis, 1989; Davis et al., 1989) has been and still is used extensively to predict acceptance of new technology by individuals (e.g., Benamati and Rajkumar, 2008; Khalifa and Ning Shen, 2008). The central argument of TAM is that two beliefs, perceived usefulness and perceived ease of use, determine an individual's behavioural intention to use a system. Although TAM is still widely used, its universality to predict across all situations has recently been called into question (McCoy et al., 2007).

TAM assumes that a user's intention to use technology is formed in relation to a particular artefact. A user's intention to use a particular technological artefact, however, can be affected by prior experiences with other technological artefacts. These prior experiences form our individual differences (cognitive style,

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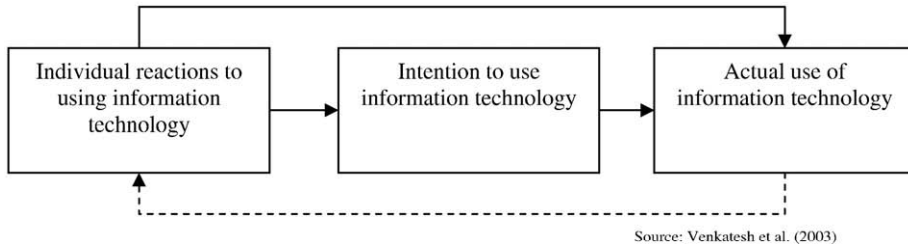


Fig. 1. Basic concept of user acceptance models.

personality traits, demographics, and situational variables) affecting our technology use (Yi et al., 2005/2006; Karahanna et al., 2002).

Consider the following anecdote. A colleague, during an interview with a student, asked why they were interested in studying Human Services. The student responded, “Because I don’t want to have to use a computer like I would if I worked in the business sector”. This anecdote led the researchers to question whether users’ views of technology, differ prior to entering the work environment, thus affecting their technology acceptance within the workplace.

Research into career choice has primarily focused on people entering their ‘jobs’ and not the reasons behind their decision (Correll, 2001). Attitudes and perceptions of specific careers impact on career choice. Attitude plays a greater role in career choice than job opportunities, future career growth, and long-term earning potential (Gupta and Houtz, 2000). With this in mind, a person’s positive or negative attitude towards technology, formed by prior experience with technology, may influence their preferred career choice. This choice in turn affects their chosen undergraduate degree.

The purpose of this paper is to investigate whether two groups of people likely to enter very different careers, have *ex ante* different attitudes to technology that in turn could affect the variables contained in technology acceptance models. In particular we explore the relationship between attitude, perceived usefulness, and perceived ease of use in relation to technology for business students and social science students. These students were seen as persons who had made decisions concerning their future career by their chosen course of study.

The results reveal differences between the groups in relation to the technology acceptance variables. The research provides some insight into the relationship between attitude to technological factors and a student’s chosen area of study. The results may impact on the manner in which firms need to handle different users when implementing new technologies.

This paper is structured as follows. Section 1 discusses the theory behind technology acceptance and career choice, before presenting the link between these two areas. The next two sections describe the research method and the results. Finally, the conclusion presents the implications, limitations, and directions for future research.

2. Background literature

2.1. TAM – a model of technology acceptance

Numerous models exist to understand the process of acceptance of a new technology by an individual (e.g., Fishbein and Ajzen, 1975; Davis, 1989; Thompson et al., 1991; Davis et al., 1992). The majority of these models focus on an individual’s ability to accept new technology within specific circumstances. Of the Intention Models, or Behavioural Decision theories, the most popular and well supported are the Theory of Planned Behaviour (Ajzen, 1985, 1991) and the Technology Acceptance Model (Davis et al., 1989)¹.

The basic conceptual framework of TAM is that an individual’s reaction to using technology, in terms of their perception of ease of use and usefulness, affects their intention to use technology. Their intention to use technology ultimately affects their actual usage (see Fig. 1). Researchers have extensively tested TAM

¹ TAM is widely cited in MIS literature, e.g., Business Source Premier recorded Davis (1989) as cited 601 times in its database.

and shown it to explain a high proportion of the variance in usage intention, thus illustrating its ability to predict acceptance of new technology by an individual employee (Venkatesh and Davis, 2000).

Researchers have, however, begun questioning the generalisability of TAM. TAM does not always hold across all cultural groups (McCoy et al., 2007), thus questioning the universality of TAM as a predictor of intention to use in all environments and calling for research to test TAM across a wider variety of situations. This lack of variety is further supported when considering TAM research published since 1989 has 63% of the studies conducted within the USA (Yousafzai et al., 2007). Furthermore, the focus of testing has been within the business or for-profit sector and using participants from within traditional business functions (Venkatesh et al., 2003). There is however, another business sector, the not-for-profit (NFP) sector.

Differences exist between for-profit and NFP organisations. Exemplifying firm type differences within the two sectors are environmental demands, managerial roles, managerial perceptions of external control, and work-related attitudes among employees (Damanpour, 1991; Cunningham et al., 2004; Saidel and Cour, 2003). Furthermore, there are significant personality differences between social work students and students in other disciplines (Dettlaff et al., 2006). These individual differences may influence technology use directly or they may moderate a user's perceptions of technology (Yi et al., 2005/2006). Additionally, demand for NFP services is stretching their resources (Saidel and Cour, 2003). Therefore, allocating NFP funds for service delivery is an important priority. Diverting of funds from service delivery to technology makes the requirement for acceptance of the technology artefact crucial. The differences between the two sectors provide a lens for comparing technology acceptance in the different environments.

2.2. Student career choices

Career motivation is internal and comprises three elements: (1) how central one's career is to one's overall identity, (2) the degree to which individuals have realistic expectations, and (3) our psychological fragility when faced with uncertain situations (Feldman, 2003). Therefore, we choose careers based on internal motivations that fit us as individuals. However, why do we choose a particular career in the first place?

Our choice of a career is often not something that most people would consider we make early in our life. Career orientated decisions, however, may be made by a young person at ages 11–17 (Adya and Kaiser, 2005). Choices made in the selection of school or subjects and/or access to technology may also affect a person's future career orientation. Elements beyond a person's control, e.g., environment, cultural expectations, social class, family background, reference groups, socioeconomic factors, race, and gender, influence a person's vocational decision (Jackling and Keneley, 2009; De Lange et al., 2006). Furthermore, students considering non-accounting occupations base their decision on the intrinsic attributes of a job and the high initial earnings to choose a career whereas accounting students looked at the long-term earnings and promising job-market opportunities (Felton et al., 1994).

2.3. TAM and career choice

TAM normally focuses on an individual's ability to accept technology within specific circumstances. The current research follows a generalist rather than system-specific view on IS acceptance and utilization referring to a user's perception of their ability to use a computer in general (without regard to a particular computing task, application, or environment) (Hasan, 2006). Thus, the current research investigates TAM, specifically perceived ease of use and perceived usefulness, to abstract computer usage i.e. technology acceptance more generally and not in relation to a specific artefact.

During the development of TAM, Davis et al. (1989) found that attitude was not significant. An attitude is defined as “a learned predisposition to respond to an object... in a consistently favourable or unfavourable way” (Kothandapani, 1971, p. 321). A person's attitude to IS is important as it affects an individual's behaviour and social influence — attitude has a social function. Attitude is contagious; people express their own and listen to others in the work environment (Yang and Yoo, 2004).

Workers in the social studies discipline area have a specific attitude to their work (Saidel and Cour, 2003). They are committed to the public good of an organisation's mission, seek more work-related challenges, look for job and task variety, autonomy and collegiality, and place a high value on non-monetary compensation. Thus, staff are often working for non profit motivated social reasons, and as such may be less likely to see the

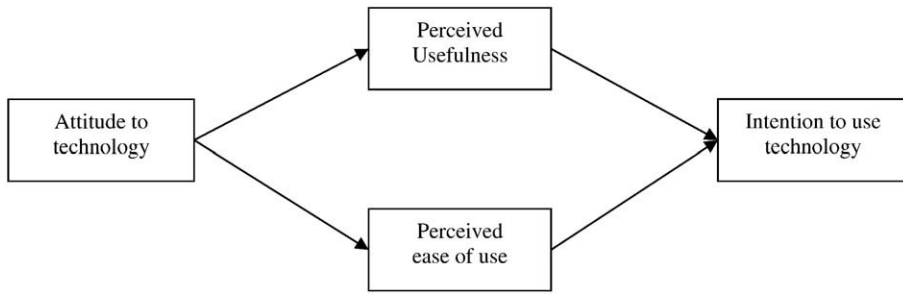


Fig. 2. Research model.

advantages of technology within their chosen work field. It is anticipated that a person choosing a business based career and those choosing a social science based career will differ in their attitude towards technology. This difference in attitude will affect their perceptions about the usefulness of technology and the ease of use of technology (see Fig. 2).

3. Research methodology

This research examines the different TAM constructs and attitude via a questionnaire administered to undergraduate business and social studies students. These students are considered as the future workers within the specific areas of business or social studies and as such have the same basic beliefs and values as workers (Voich, 1995).

3.1. Participants

The participants were surveyed in their respective compulsory first year disciplinary introductory course. The questionnaire was administered in class during the second week of semester. A total of 355 undergraduate students participated in the research. Of the 216 business students enrolled 181 (84%) responded and 174 (87%) of the 200 social studies students².

3.2. Measures

Respondents were required to complete two parts to the survey. The first section of the survey required respondents to provide basic demographic information about their use of computers including the amount and occurrence of computer usage³. The second section of the questionnaire required respondents to indicate their agreement or disagreement with a series of statements concerning computer usage based on future career choices or work environments. This section measured the constructs of perceived usefulness, perceived ease of use, attitude, and volitional control.

Perceived usefulness (*Pu*) is defined by Venkatesh and Davis (2000, p187) as the “extent to which a person believes that using the system will enhance his or her job performance”. This construct was based on prior research (Igbaria et al., 1995) and measured using modified items to make them

² There was no discernable difference in entry requirements and participant demographics for both programs. Of the total respondents, five were removed due to incompleteness, i.e., responding to less than 66% of questions. Participation was voluntary with no identifying details collected.

³ Based on previous studies (Igbaria et al., 1995; Winter et al., 1998) two indicators of computer usage were used (1) perceived daily use (2) perceived frequency of use. Therefore, individuals were asked to indicate the amount of time spent on an average day on the computer, ranging from “Almost never” to “More than 3 hours” on a six point scale. Frequency of use was measured also on a six point scale ranging from “Less than once a month” to “Several times a day”. Participants were also required to indicate whether they shared the computer with others (1 = Never Share; 7 = Extensively Share) and their level of satisfaction with their current computer system (1 = Very Satisfied; 7 = Very Unsatisfied).

specifically relevant to the future careers of the respondent. Each respondent was asked to indicate their agreement or disagreement with five statements (see Table 4 for questions) using a seven point Likert-type scale.

Perceived ease of use (Peu) refers to the “extent to which a person believes that using the system will be free of effort” Venkatesh and Davis (2000, p187). This construct was based on prior research by Igbaria et al. (1995). To measure this construct the respondent was asked to indicate their agreement or disagreement with four statements (see Table 4 for questions) using a seven point Likert-type scale.

Attitude (Att) is defined as ‘a learned predisposition to respond to an object... in a consistently favourable or unfavourable way’ (Kothandapani, 1971, p. 321). Four statements (see Table 4 for questions) assessed attitude using a seven point Likert-type scale indicating agreement or disagreement with the statements. This construct was based on prior research (Winter et al., 1998) and measured using modified items to make them specifically relevant to the future work of the respondent.

Volitional control (Vc) is the ability of people to act in a manner that is consistent with their attitudes (Winter et al., 1998). This was measured with two statements (see Table 4 for questions) using a seven point Likert-type scale by indicating agreement or disagreement. This measure was included for completeness and as a control to ensure that the two groups of participants had no significant differences in the manner in which they acted in relation to their attitudes i.e. ensure they appear to act in a manner consistent with their attitude.

Data coding was carried out by one of the researchers before verification by all researchers and the data analysed using SPSS R15 and AMOS R17. Where necessary questions were reverse coded.

4. Results

4.1. Demographics

The average age of respondents was 19 years for the business students (ages ranged from 16 to 36, with 81.6% between 17 and 20) and 26 years for the social studies students (ages ranged from 17 and 59, with 78% aged between 17 and 20) (see Table 1). Only 43.2% of the business students were female whereas 70.1% of the social studies students were female. These proportions are consistent with the proportions in the Australian workforce (Australian Bureau of Statistics, 2003; Australian Institute of Health and Welfare, 2003). The majority of the respondents were also in their first year of university study (Business 76.7% and Social Studies 90.8%).

Details of the participant's computer usage revealed that on average business students spend a significantly greater amount of time per day on a computer and also used their computers significantly

Table 1
Participant demographics.

	Percent	
	Business	Social studies
<i>Gender</i>		
Male	49.4	27.6
Female	43.2	70.1
<i>Year of university study</i>		
1st	76.7	90.8
2nd	11.9	5.7
3rd	0.6	0.6
4th	1.7	0
Over 4 years	0.6	0
<i>Age</i>		
Under 20	81.6	78
Over 20	18.4	22

Table 2

Computer usage for participants.

	Percent	
	Business	Social studies
<i>Average computer use per day</i>		
Almost never	0	4.0
Less than 1/2 h	5.7	8.6
From 1/2 h to 1 h	20.5	31.0
1–2 h	24.4	29.9
2–3 h	29.0	11.5
More than 3 h	20.5	14.9
<i>How often used</i>		
Less than once a month	0.6	0.6
Once a month	0	0.6
A few times a month	1.7	1.7
A few times a week	15.9	27.0
About once a day	36.4	43.1
Several times a day	45.5	27.0

more often per day. Business students used their computer for between 2 and 3 h per day whereas social studies students used their computer between 30 min and 1 h per day (see Table 2). 49.5% of business students spend more than 2 h using a computer compared with 26.4% of social studies students. Business students on average used their computer several times per day whereas social studies students on average used their computer about once a day. Social studies students shared the computer with others significantly more than the business students (business mean = 3.08, business std dev = 1.90; social studies mean = 3.74, social studies std dev = 2.09, $t_{(348)} = 4.28$, $p < .05$). Both groups were not statistically significantly different with their levels of satisfaction with their current computer.

4.2. Statistical results

A one-way between-groups multivariate analysis of variance (MANOVA) was performed to investigate group differences. Four dependent variables were used: perceived usefulness (Pu), perceived ease of use (Peu), attitude (Att), and volitional control (Vc). Summated scores were used to allow for generalisation of results. The independent variable was area of study e.g. business or social studies. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance–covariance matrices, and multicollinearity, with no serious violations noted.

Comparing the business group with the social studies group, MANOVA results, reported in Table 3, indicate that perceived ease of use of technology was significantly associated with the area of study ($F_{(1, 331)} = 8.14$, $p = 0.004$). The means for both groups indicate that business students perceived technology easier to use than the social studies students.

Comparing the business students with social studies group, MANOVA results, reported in Table 3, indicate that perceived usefulness of technology was significantly associated with the area of study ($F_{(1, 331)} = 23.85$, $p = 0.000$). The means for both groups indicate that business students perceived technology more useful than the social studies students.

Comparing the business students with social studies group, MANOVA results, reported in Table 3, indicate that attitude to technology was not significantly associated with the area of study ($F_{(1, 331)} = 5.29$, $p = 0.022$)⁴.

Comparing the business students with social studies group, MANOVA results, reported in Table 3, indicate that volitional control was significantly associated with the area of study ($F_{(1, 331)} = 9.96$, $p = 0.002$). As previously stated, volitional control is the ability of people to act in a manner that is

⁴ Significance is measured by using a Bonferroni adjusted alpha level of 0.0125.

Table 3

Effect of group on the overall model and each DV.

Source	Df	Mean squared	F value	Pr > F ^a	Business	Social studies
					Mean ^b	Mean ^b
Combined DV	4		6.10	0.000		
Pu	1	691.09	23.85	.000	28.753	25.867
Peu	1	202.05	8.51	.004	22.151	20.59
Att	1	104.21	5.29	.022	21.012	19.892
Vc	1	54.90	9.96	.002	10.765	9.952

Each row of the table represents the results for each dependent variable.

^a Significance is measured by using a Bonferroni adjusted alpha level of .0125.^b 1 = strongly disagree 7 = strongly agree.**Table 4**

Final factors and measurement items.

Factor	Measurement items
Perceived usefulness	Pu1 Using computers will improve my future career performance.
	Pu2 Using computers will enhance my effectiveness in my future career.
	Pu3 Using computers will increase my productivity in my future career.
	Pu4 I believe computers will be useful in my future career.
	Pu5 Using computers provides me with information that would lead to better decisions.
Perceived ease of use	Peu1 Learning to use computers is easy for me.
	Peu2 I find it easy to get computers to do what I want to do.
	Peu3 It would be easy for me to become skilful at using computers.
	Peu4 I find computers easy to use.
Negative attitude	Att3 If it were possible in my future work, I would prefer to delegate computer tasks to someone else.
	Att4 In my future work I would avoid the computer at all possible cost.
Positive attitude and volitional control	Att1 If it were possible in future work, I would computerise most of my tasks.
	Att2 If I could choose, in my future work I would prefer to use the computer.
	Vc1 When considering computers in the workplace, I see them as a tool to be used at my convenience.
	Vc2 In my future career I would consider my job is to use a computer.

consistent with their attitudes. Thus, the results indicate that one subset of students tends to act in alignment with their attitude and the other group of students does not.

4.3. Post hoc analysis of differences between business and social science students

Post hoc analysis using exploratory factor analysis and structural equation modelling (SEM) was performed to isolate specific differences between the two groups of students. Exploratory factor analysis was conducted to examine the loading of the items on the specified dimensions. Table 4 presents the final factors and measurement items.

To test 'goodness of fit' SEM was performed using AMOS 17 software. The final model is presented in Table 5 and in Figs. 3 and 4 (Chi-square (χ^2) = 675.014; degrees of freedom (DF) = 255; p = 0.000; χ^2 /DF = 2.647; Comparative Fit Index = .935; RMSEA⁵ = 0.049). Table 5 panel A presents the four factors and the significance of the relationships between them. Table 5 panel B presents the factors and measurement items showing that all are significant.

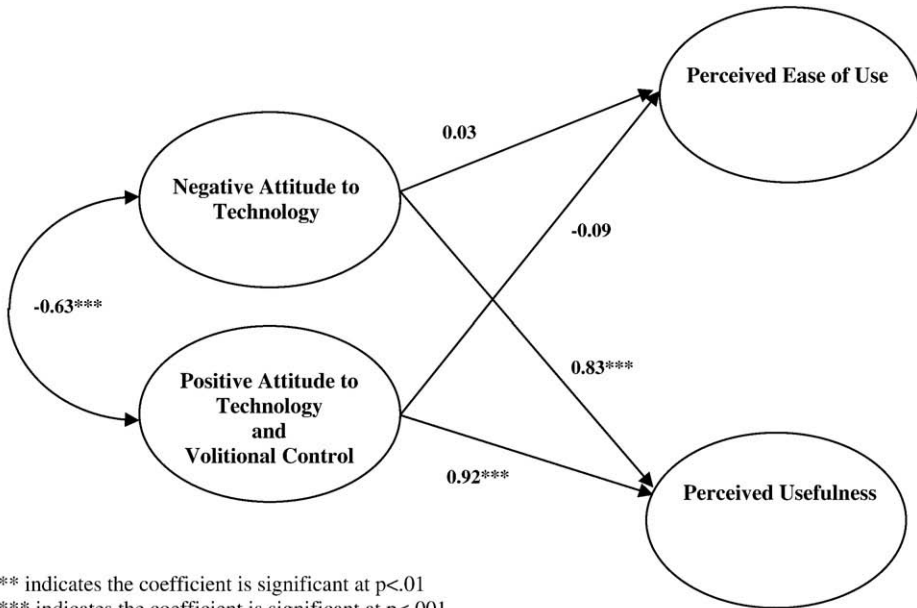
The results indicate for business students a significant positive relationship between a person's positive attitude to technology and their perceived usefulness of the technology. Moreover, Fig. 3 also indicates a significant positive relationship between a person's negative attitude to technology and their perceived usefulness of the technology. Thus, irrespective of a business student's attitude to technology they perceive

⁵ Root mean square error of approximation.

Table 5

Regression weights.

		Business students				Social studies students			
		Estimate	S.E.	C.R.	p	Estimate	S.E.	C.R.	p
<i>Panel A – four main factors</i>									
PEU	← Positive attitude to technology and volitional control	0.83	0.10	7.99	***	0.54	0.21	2.53	0.01
PU	← Negative attitude to technology	−0.09	0.06	−1.52	0.13	0.41	0.32	1.28	0.20
PU	← Positive attitude to technology and volitional control	0.92	0.11	8.41	***	0.96	0.27	3.57	***
PEU	← Negative attitude to technology	0.03	0.05	0.47	0.64	−0.21	0.26	−0.81	0.42
<i>Panel B – factors and measurement items</i>									
Att4	← Negative attitude to technology	1.00				1.00			
Att3	← Negative attitude to technology	0.47	0.16	2.92	0.00	0.85	0.14	5.89	***
Att2	← Positive attitude to technology and volitional control	1.06	0.13	8.51	***	0.92	0.10	9.56	***
Att1	← Positive attitude to technology and volitional control	1.00				1.00			
PEU4	← Perceived ease of use	1.06	0.08	13.60	***	0.91	0.05	17.35	***
PEU2	← Perceived ease of use	1.07	0.08	13.62	***	0.95	0.06	17.23	***
PEU1	← Perceived ease of use	1.00				1.00			
VC1	← Positive attitude to technology and volitional control	0.94	0.11	8.74	***	0.58	0.08	7.42	***
VC2	← Positive attitude to technology and volitional control	0.91	0.13	7.11	***	0.70	0.10	6.86	***
PU5	← Perceived usefulness	0.84	0.07	11.35	***	0.73	0.08	9.66	***
PU1	← Perceived usefulness	1.00				1.00			
PU2	← Perceived usefulness	0.94	0.07	13.91	***	0.94	0.06	16.91	***
PU3	← Perceived usefulness	1.00	0.07	15.37	***	0.89	0.06	15.22	***
PU4	← Perceived usefulness	0.88	0.07	13.14	***	0.79	0.07	11.69	***
PEU3	← Perceived ease of use	1.08	0.08	14.22	***	0.83	0.05	15.69	***

*** indicates the coefficient is significant at $p < 0.001$.**Fig. 3.** The effect of the factors for business students.

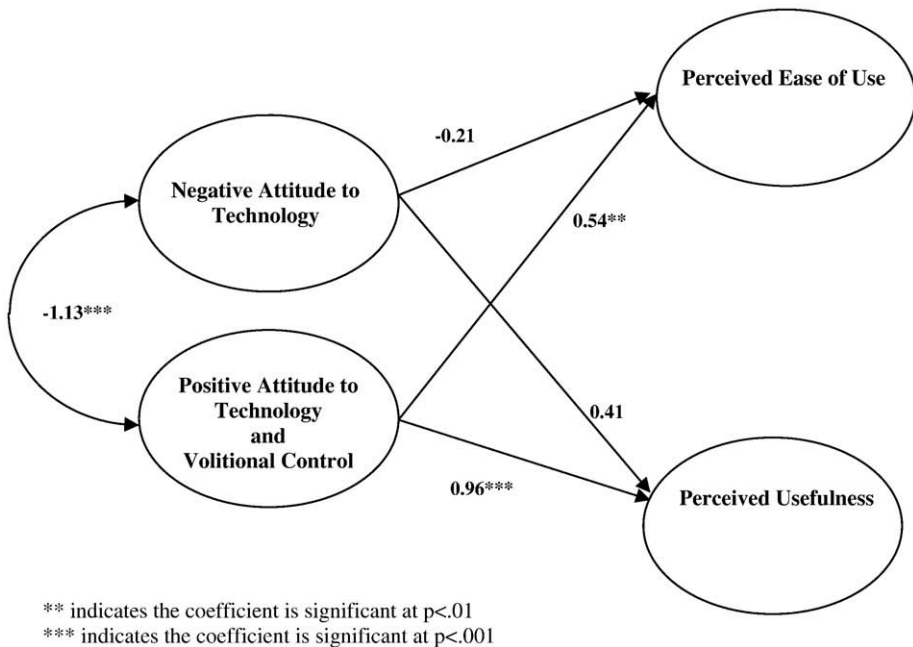


Fig. 4. The effect of the factors for social science students.

technology to be useful. The results also indicate that the business students attitude (whether positive or negative) is not associated with their perception of the ease of use of technology.

The results indicate for social science students a significant positive relationship between a person's positive attitude to technology and their perceived usefulness of the technology. Moreover, Fig. 4 also indicates a significant positive relationship between a person's positive attitude to technology and their perceived ease of use of the technology. Therefore, a social science student with a positive attitude to technology perceives technology to be useful and easy to use. The results also indicate that the social science student's negative attitude is not significantly associated with their perception of the ease of use for technology or perceived usefulness of the technology and may be a deeper overarching negative view to technology as a whole.

Therefore, from this analysis it appears that social science students are more likely to act in accordance with their attitudes than business students. Business students irrespective of their attitude perceive technology to be useful.

5. Conclusion, limitations, and future research

This research provides some insight into the relationship between technological related factors and a student's chosen area of study. The results indicated that social studies students (and thus those more likely to enter careers within not-for-profit organisations) perceived technology to be less useful, not as easy to use, and while they did not differ significantly in their attitude to technology, their attitude towards technology had an affect on both their perceptions of the usefulness and ease of use of technology.

The findings have potential implications for researchers using models such as TAM. The type of employees within a firm and their attitudes may need to be considered when considering technology implementation and acceptance. That is, implementing new technology within an accounting firm may need to be handled differently to the same technology rollout in a community centre. An additional implication from this research is that as organisations are implementing technology they need to recognise that users are not a homogeneous group. An organisation may need to tailor the implementation of technology to suit the differing attitude of its

workers. Groupings within organisations may need to be considered differently, e.g., accounting, marketing, and sales, versus social roles when it comes to the use of models for acceptance of technology. Therefore, implementing new technology in a community centre for their accountants may need to be handled differently to a technology rollout in a community centre for their social workers.

The usual caveats associated with survey-based research apply. Furthermore, the research only considers business students and their social studies counterparts as a single grouping as opposed to their various sub-disciplines e.g., accounting, economics, counselling, community development, etc.

The results suggest some initial understanding of the differences in attitude towards technology in future users and as such a number of opportunities exist for future research. Two are briefly mentioned here. First, further research using a larger sample and involving a broader range of sub-disciplines is required to verify the findings. Second, with increasing globalisation, the combinations of aspects such as culture and career orientations need to be considered jointly when examining the issues of technology acceptance.

References

- Adya M, Kaiser KM. Early determinants of women in the IT workforce: a model of girls' career choices. *Inf Technol People* 2005;18:230–59.
- Ajzen I. From intention to action: a theory of planned behaviour. In: Kuhl J, Beckman J, editors. *Action control: from cognitions to behaviours*. New York, NY: Springer; 1985.
- Ajzen I. The theory of planned behaviour. *Organ Behav Hum Decis Process* 1991;50:179–211.
- Australian Bureau of Statistics. *Australian Social Trends 2003*. Australian Bureau of Statistics. Canberra, 2003.
- Australian Institute of Health and Welfare. *Australia's welfare 2003*. Canberra: AIHW; 2003.
- Benamati J, Rajkumar TM. An outsourcing acceptance model: an application of TAM to application development outsourcing decisions. *Inf Resour Manage J* 2008;21:80–102.
- Correll ST. Gender and the career choice process: the role of biased self-assessments. *Am J Soc* 2001;106:1691–730.
- Cunningham B, Nikolai L, Bazley J. *Accounting information for business decisions*. 2nd Edition. Australia: Thomson; 2004.
- Damanpour F. Organizational innovation: a meta-analysis of effects of determinants and moderators. *Acad Manage J* 1991;34:555–90.
- Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quart* 1989;13:319–39.
- Davis FD, Bagozzi RP, Warshaw PR. User acceptance of computer technology: a comparison of two theoretical models. *Manag Sci* 1989;35:36–48.
- Davis FD, Bagozzi RP, Warshaw PR. Extrinsic and intrinsic motivation to use computers in the workplace. *J Appl Soc Psychol* 1992;22:1111–32.
- De Lange P, Jackling B, Gut A. Accounting graduates' perceptions of skills emphasis in undergraduate courses: an investigation from two Victorian universities. *Accounting & Finance* 2006;46:365–86.
- Dettlaff AJ, Moore LS, Dietz TJ. Personality type preferences of social work students: enhancing education through understanding personality variables. *J Bac Soc Work* 2006;11:88–101.
- Feldman DC. The antecedents and consequences of early career indecision among young adults. *Hum Resour Manage Rev* 2003;13:499–531.
- Felton S, Buhr N, Northey M. Factors influencing the business student's choice of a career in chartered accountancy. *Issues Account Educ* 1994;9:131–42.
- Fishbein M, Ajzen I. *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading, MA: Addison-Wesley; 1975.
- Gupta UG, Houtz LE. High school students' perceptions of information skills and careers. *J Ind Technol* 2000;16:1–8.
- Hasan B. Delineating the effects of general and system-specific computer self-efficacy beliefs on IS acceptance. *Inf Manage* 2006;43:565–71.
- Igbaria M, Iivari J, Maragahh H. Why do individuals use computer technology? A Finnish case study. *Inf Manage* 1995;29:227–39.
- Jackling B, Keneley M. Influences on the supply of accounting graduates in Australia: a focus on international students. *Accounting & Finance* 2009;49:14–159.
- Karahanna E, Ahuja M, Srite M, Galvin J. Individual differences and relative advantage: the case of GSS. *Decis Support Syst* 2002;32(4):327–41.
- Khalifa M, Ning Shen K. Explaining the adoption of transactional B2C mobile commerce. *J Enterp Info Manag* 2008;21:110–24.
- Kothandapani V. Validation of feeling, belief, and intention to act as three components of attitude and their contribution to prediction of contraceptive behaviour. *J Pers Soc Psychol* 1971;19:321–33.
- McCoy S, Galletta D, King W. Applying TAM across cultures: the need for caution. *Eur J Inf Syst* 2007;16:81–90.
- Saidel J, Cour S. Information technology and the voluntary sector workplace. *Nonprofit Volunt Sect Q* 2003;32:5–24.
- Thompson RL, Higgins CA, Howell JM. Personal computing: toward a conceptual model of utilization. *MIS Quart* 1991;15:124–43.
- Venkatesh V, Davis F. A theoretical extension of the technology acceptance model: four longitudinal field studies. *Manag Sci* 2000;46:186–204.
- Venkatesh V, Morris M, Davis G, Davis F. User acceptance of information technology: toward a unified view. *MIS Quart* 2003;27:425–78.
- Voich D. *Comparative empirical analysis of cultural values and perceptions of political economy issues*. Westport, CT: Praeger; 1995.
- Winter S, Chudoba K, Gutek B. Attitudes toward computers: when do they predict computer use? *Inf Manage* 1998;34:275–85.
- Yang H, Yoo Y. It's all about attitude: revisiting the technology acceptance model. *Decis Support Syst* 2004;38:19–31.
- Yi U, Wu Z, Tung LL. How individual differences influence technology usage behaviour? Toward an intergrated framework. *J Comput Info Syst* 2005/2006;46:52–63 Winter.
- Yousafzai S, Foxall G, Pallister J. Technology acceptance: a meta-analysis of the TAM: part 1. *J Model Manag* 2007;2:251–80.