J Bus Ethics (2015) 126:247–258
DOI 10.1007/s10551-013-1949-y

University Lecturers' Intention to Teach an Ethics Course: A Test of Competing Models

Pi-Yueh Cheng

Received: 31 August 2013 / Accepted: 28 October 2013 / Published online: 8 November 2013

Abstract Business ethics are the moral principles that apply to all aspects of the business environment at an individual and organizational level. This study addresses the basic perceptions regarding the teaching of business ethics and examines university lecturers' intentions to teach an ethics course. For the present research, the authors conducted a cross study to evaluate whether three variations of the theory of planned behavior, namely, TPB, decomposed TPB (DTPB), and the revised theory of planned behavior (RTPB), could adequately predict teaching of ethics course (TEC) behaviors. The participants were from southern, middle, and northern Taiwan. A structural equation model applied to a final sample of 200 usable questionnaires demonstrated that individual attitudes, subjective norms, perceived behavioral control, and teacher self-efficacy (TSE) influence intentions, but do not influence report behavior of those involved in teaching an ethics course. Among the three variations of TPB-based models, RTPB provided better explanation of variance in intentions to TEC. The present research highlights the importance of TSE, especially because TSE plays a key role in RTPB. The theoretical implications of this study relate to the application of TPB to TEC.

Keywords Business ethics education · Intention to teach · Theory of planned behavior · Teacher self-efficacy

P.-Y. Cheng (✉)
Department of Finance, Tainan University of Technology, 529, Zhongzheng Rd., Yongkang District, Tainan, Taiwan
e-mail: t20030@mail.tut.edu.tw

Introduction

Recently, there has been growing interest throughout the world in ethics and ethics education. For example, ethics has become a popular subject in business management as evidenced by the 107,000,000 entries on Google and the 957,356 academic papers on this subject (data according to ProQuest, one of the major databases for academic journals). Previous research has indicated that universities should offer an ethics course to students (Ali et al. 2012). Additionally, professional associations and accrediting agencies, such as the Association to Advance Collegiate Schools of Business (AACSB) and the European Quality Improvement System (EQUIS), have strongly encouraged the inclusion of ethics courses in curricula (Wu et al. 2010).

The present research found that, in most universities in Taiwan, ethics courses were taught by lecturers who had majored in business management (Taiwan Ministry of Education 2012). However, if lecturers do not have knowledge of ethics cases in specific domains, the effectiveness of their teaching may be poor (Boatright 2008). In fact, many recent studies have emphasized the "case study method" in ethics education. For example, Eschenfelder (2011) indicated that case studies played an important role in ethics education in public relations, and Overton (2006) adopted the case study method for teaching ethics in a financial planning curriculum to enhance students' interest in learning. Because lecturers with majors in business management may not be familiar with professional knowledge in fields such as finance, hospitality, medical treatment, and information technology, they may face some difficulty if the case study method for teaching ethics is adopted. The present research implies that if the ethics courses of each academic department were taught by a lecturer who understands the specific industry case, the teaching effect would be improved.

Previous studies have investigated that the theory of planned behavior (TPB) (Ajzen 1988) can be used to predict behavioral intention in relation to various domains, such as predicting students' voluntary attendance at peer study session for statistics (White et al. 2011) and predicting undergraduates' intentions toward taking a second language proficiency test (Lin and Chiou 2010). Armitage and Conner (2001) reviewed 185 independent studies published through the end of 1997 and concluded that TPB accounted for 27 and 39 % of the variance in behavior and intentions, respectively. Hence it could be argued that inclusion of additional variables within the TPB framework is necessary to improve its explanatory power. With respect to teaching, many studies have indicated that teacher self-efficacy (TSE) is an important factor (e.g., Lumpe et al. 2000; Sadaf et al. 2012).

Blanthorne et al. (2007) surveyed lecturers' opinions of ethics courses and found that the issue of who teaches an ethic course is an important topic. Past studies have indicated that lecturers' intentions and beliefs are important factors in effective teaching (Lumpe et al. 2000), but few studies have investigated the intentions of university lecturers toward teaching ethics courses. Ali et al. (2012) examined perceptions among university lecturers regarding the teaching of business ethics to business graduates. However, only the mean and standard deviation were calculated to analyze the tendency of university lecturers' perceptions, and their study did not reveal some factors predicting lecturers' intentions toward ethics courses. In this study, TPB, decomposed TPB, and RTPB (revised theory of planned behavior; TPB integrated with self-efficacy) were used to explore the intentions of university lecturers toward teaching ethics courses. The mentioned competing models were also tested to see which model produced a better fit.

Theoretical Background and Model Reviews

The theory of reasoned action (TRA), TPB, and DTPB are intention–behavior models that have been widely used to study education-related human behaviors. These models focus on understanding attitudes, subjective norms (SN), perceived behavioral control (PBC), TSE, and intentions, such as intentions of teaching ethics courses (TEC) and indicate that behaviors of TEC interact with one another. Thus the theoretical background begins with previous studies of ethics education and a brief descriptive overview of these three models. Although similar in many ways, the models exhibit a number of subtle differences important to the critiques and hypotheses addressed in this study.

Ethics Education

Living in a society necessitates that people live together in a trustful environment. Thus issues related to business ethics have in the last few decades become important in many advanced western economies. Studies have increasingly highlighted the need to incorporate ethics into business education (e.g., Lau 2010). Moreover, ethics issues can be turned into students' presentation and discussion within the business classroom to make the course interesting. For instance, Sims and Felton (2006) reported that "in Jan 2003 the AACSB proposed new standards suggesting that schools make teaching ethics a higher priority and move ethics to 'first and foremost' topical importance" (p. 29). Mintz (2006) explained the use of reflective learning techniques to create and deliver a new ethics course. Ghaffari et al. (2008) explored the implementation of ethics in U.K. accounting programs. These studies identified two approaches for the incorporation of ethics education in curricula: one involves offering a stand-alone course and the other involves integrating relevant ethics education into various courses. Applicable to each of the two approaches of ethics curricula design is Boatright's (2008) caution that if lecturers do not understand ethics cases in specific domains, they may be less effective in teaching ethics. Hence, it is important to understand lecturers' perceptions toward teaching business ethics.

The TPB

Fishbein and Ajzen (1975) indicated that an individual's intention to perform an action has two basic antecedents: attitude toward behavior and SN. Attitude refers to the degree to which a person has a favorable or unfavorable evaluation of the behavior in question. SN toward a behavior are defined as perceived social pressure to perform or not perform the behavior. In previous studies, empirical findings have shown that attitudes and SN toward various behaviors make significant contributions to the prediction of intentions (Ajzen 2001). TRA has been shown to be useful for predicting social behaviors in many functional domains, but its predictive power suffers for behaviors that are not under subjects' total volitional control. To explain behaviors not "completely" under volitional control, Ajzen and Madden (1986) introduced TPB (Ajzen 1987). Otherwise identical to TRA, it differs by the addition of a new antecedent to intentions and behavior, perceived behavior control (PBC). PBC is defined as "the person's belief as to how easy or difficult performance of the behavior is likely to be" (Ajzen and Madden 1986, p. 457). For the intentions of teaching an ethics course, attitude has been shown to be a critical personal factor because one's perceptions about how to determine their

decisions influence one's judgment. People may consider teaching an ethics course if they believe that it will be personally important and valuable to them (Kuo and Young 2008). SN are another important factor in teaching an ethics course. A positive organizational climate can influence the formation of SN, for example, undergraduates' SN affect their intentions to take examinations for professional certification (Ali et al. 2012). Previous studies have indicated that an individual's behavioral intention has a positive effect on his/her behavior (Ali et al. 2012). Hypotheses H1–H3 are therefore formulated as follows:

H1 The more favorable an individual's attitude toward teaching an ethics course, the stronger his/her behavioral intention to teach the ethics course.

H2 The stronger an individual's perceived subjective norms toward teaching an ethics course, the stronger his/her behavioral intention to teach the ethics course.

H3 The stronger the behavioral intention to teach an ethics course, the stronger he/she will report behavior to teach an ethics course.

According to TPB, the immediate predictors of behavior are intentions, which are determined by attitude, SNs, and PBC (Ajzen 1985). Attitudes are a person's overall evaluations of a behavior; whereas a SN consists of the person's belief about whether significant others think he/she should engage in that behavior (Ajzen 1985). PBC has both direct and mediated effects (by behavior intention) on behavior and refers to the person's perception of control on engaging in that behavior (Ajzen 1985). In addition, PBC refers to the perceived ease or difficulty of performing the behavior, and the amount of control one has over the achievement of personal goals (Kuo and Young 2008). The addition of these new constructs to TPB has been found to improve its predictive power significantly (Åberg 2001). Past research has indicated that TPB can be applied to many different education domains (e.g., Blanchard et al. 2008). Thus, the TPB model may predict the behavioral intentions and behavior of university lecturers in regard to teaching an ethics course:

H4 The greater an individual's perceived behavioral control of teaching an ethics course, the stronger his/her behavioral intention to teach an ethics course.

H5 The greater the individual's perceived behavioral control of teaching an ethics course, the stronger he/she will report behavior to teach an ethics course.

The DTPB

TPB has received much attention in the literature and has met with some degree of success in predicting various behaviors in an expectancy-value model of attitude–behavior relationships (Ajzen 1988). One of the advantages of the TPB model is predictive ability to identify determinants of behaviors. However, Armitage and Conner (2001) argued that inclusion of additional variables within the TPB framework is necessary to improve its explanatory power. "Self-efficacy" was proposed to serve as a salient anteceding belief of PBC in DTPB (Taylor and Todd 1995). Self-efficacy refers to a person's judgment of his/her capabilities to organize and execute the courses of action required to attain designated types of performances (Bandura 1986). In other words, it is essentially an individual's self-confidence in his/her ability to perform a behavior (Bandura 1977). Self-efficacy also reflects the judgment that an individual makes about his/her capabilities to mobilize the courses of action needed to orchestrate the future performance of a specific task (Gist and Mitchell 1992). For the teaching intentions of lecturers, teacher self-efficacy is an important factor (e.g., Lumpe et al. 2000). Thus, hypothesis H6 can be formulated as follows:

H6 The greater the individual's perceived teacher self-efficacy, the stronger the perceived behavioral control of teaching ethics he/she has.

The RTPB

According to the TPB, human behavior is predicted by three types of components: behavioral beliefs, normative beliefs, and control beliefs (Ajzen 1988). Ajzen (2002) also stated that PBC is constructed of two separate components: controllability and self-efficacy. Tavousi et al. (2009) indicated that self-efficacy and PBC are two control factors that are used in several theories and models. Past studies have indicated that there is evidence supporting a distinction between self-efficacy and PBC (e.g., Terry and O'Leary 1995). Several researchers have argued that PBC should be used to refer to external constraints on behavior and that self-efficacy should be used to refer to internal control factors (White et al. 1994). In a meta-analysis of the effect of self-efficacy on successful task performance, it was found that people with high self-efficacy performed better than those with low self-efficacy (Stajkovic and Luthans 1998). An important distinction between general self-efficacy, which refers to capability beliefs regarding a wide variety of tasks, and task-specific self-efficacy, which refers to efficacy beliefs for a specific task or domain, should be made (Stajkovic and Luthans 2003). Interest in the role of self-efficacy in education settings is largely based on its demonstrated link to lecturer behaviors (see Gibson and Dembo 1984). For example, Woolfolk and Hoy (1990) indicated that teacher self-efficacy affects their general orientation toward teaching and their specific pedagogical

approaches. Additionally, Tschnnen-Moran and Hoy (2007) found that the support of peers and the community at-large was related to strong self-efficacy beliefs. Thus, hypothesis H7 and H8 can be reformulated as follows:

H7 The greater an individual's perceived teacher self-efficacy, the stronger his/her behavioral intention to teach an ethics course.

H8 The greater an individual's perceived teacher self-efficacy, the stronger he/she will report behavior (RB) to teach an ethics course.

In brief, three research models are evaluated in this study. Figure 1a–c shows the research models, and Table 1 lists the research hypotheses. It should be noted that the formulation in Fig. 1c, representing DTPB, and teacher self-efficacy are antecedent to PBC.

Methods

Subjects

Data were collected in two phases, separated by a period of about 2 months, from the finance programs of 20 universities across Taiwan. In both phases of data gathering, a self-administrated questionnaire was used. The first part of the research consisted of questions about attitude, SN, PBC, TSE, and behavioral intention about teaching an ethics course. After 2 months, all the participants ($N = 225$) in the first phase received an invitation to report their behavior regarding teaching an ethics course. A total of 220 lecturers completed both phases of questionnaires. Of these responses, 20 incomplete questionnaires were excluded, leaving 200 questionnaires for data analysis. The respondents included 111 men and 89 women with an age range of 35–60 years ($M = 41.21$, $SD = 8.24$) and teaching experience of 2–28 years ($M = 10.25$, $SD = 4.25$). The mean difference between the top one-third (i.e., the top 66) and bottom one-third (bottom 66) of all respondents was assessed to test for nonresponse bias, and no significant statistical differences were obtained in relation to the variables addressed in this research (Armstrong and Overton 1977).

Measures

These measures of the present research are based on existing measures with demonstrated reliability and validity according to the existing literature. The items of the scales used in the survey were compiled in English and then translated into Mandarin by translation/back-translation (Brislin 1976). Some items were slightly reworded for adaptation to the present research setting.

Attitude (A)

According to the findings of Ajzen (1991), an individual's attitude toward a behavior, which is equivalent to that person's overall assessment of performing the behavior, includes two mutually exclusive components, instrumental and experiential. In this study, attitude toward teaching ethics courses was directly assessed by asking respondents to evaluate four items using a seven-point semantic differential scale, anchored by 1, which indicated total disagreement, and 7, which indicated total agreement. Two items, valuable/worthless and challenging/meaningless, assessed the instrumental component, and two items, easy/difficult and pleasant/obnoxious, measured the experiential component. Cronbach's α for this construct was .88.

Subjective Norms

A SN is an individual's perception that salient social referents favor or oppose engaging in a particular behavior (Fishbein and Ajzen 1975; Mussweiler and Ruter 2003). In this study, SN were assessed by asking respondents to rate two items addressing whether salient social referents favored or opposed teaching an ethics course: respondents were asked to answer on a seven-point scale in which 1 indicated total disagreement and 7 indicated total agreement (e.g., "My colleague thinks that I should teach an ethics course." and "Most of my friends approve of me teaching an ethics course."). Cronbach's α was .76.

Perceived Behavioral Control

According to the theory of Ajzen (1991), PBC can be assessed by asking respondents about the difficulty of teaching an ethics course. For this study, the measure included three items rated on a seven-point scale on which 1 indicated total disagreement and 7 indicated total agreement (e.g., "I have no time to teach an ethics course."). Cronbach's α was .81.

Teacher Self-Efficacy (TSE)

TSE measures one's belief regarding one's own competence to complete a task and reach goals. Six items were adapted from Schwarzer et al. (1999) and Watson (2006), and respondents were asked about the extent to which they wanted to teach an ethics course. Items pertaining to this construct were also rated on a seven-point scale on which 1 indicated total disagreement and 7 indicated total agreement (e.g., "If I have any difficulty when teaching for the ethics courses, then I will solve the problem when I can get assistance from my classmates." and "When I have

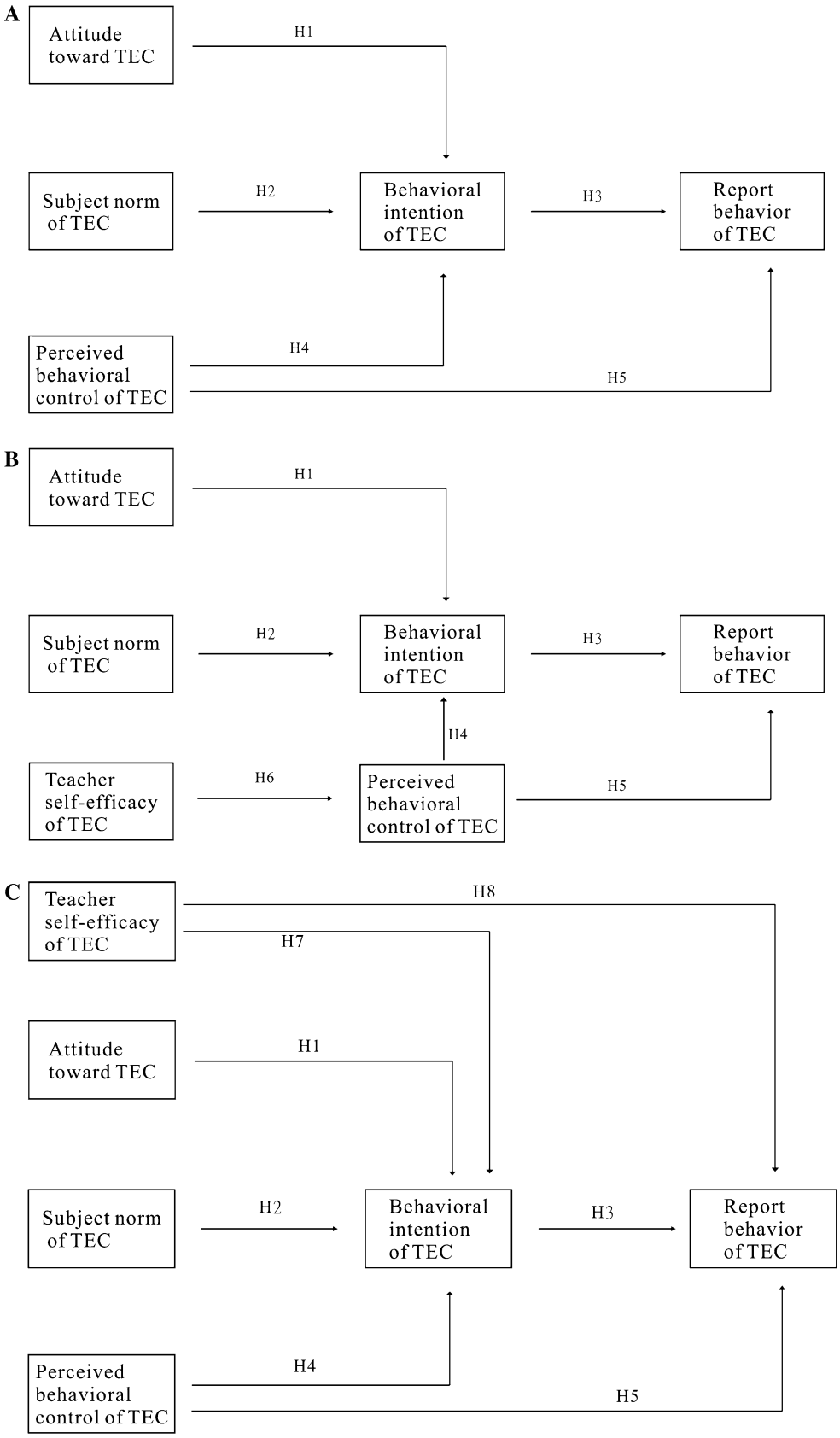

Fig. 1 **a** The TPB (Ajzen 1985). **b** The DTPB (Taylor and Todd 1995). **c** The RTPB. *TEC* teach ethics course

Table 1 Research hypotheses

Hypotheses	
H1	The more favorable the individual's attitude toward teaching ethics course, the stronger his/her behavioral intention to teach ethics course
H2	The stronger the individual's perceived subject norms toward teaching ethics course, the stronger his/her behavioral intention to teach ethics course
H3	The stronger behavioral intention to teach ethics course, the stronger he/she report behavior to teach ethics course
H4	The greater the individual's perceived behavioral control of teaching ethics course, the stronger his/her behavioral intention to teach ethics course
H5	The greater the individual's perceived behavioral control of teaching ethics course, the stronger he/she report behavior to teach ethics course
H6	The greater the individual's perceived teacher self-efficacy, the stronger perceived behavioral control of teaching ethics he/she has
H7	The greater the individual's perceived teacher self-efficacy, the stronger his/her behavioral intention to teach ethics course
H8	The greater the individual's perceived teacher self-efficacy, the stronger he/she report behavior to teach ethics course

sufficient time to teach, I believe I can solve any difficult problem by myself."). Cronbach's α was .87.

Behavioral Intentions (BI)

Following the study of Ajzen (1991), this measure consisted of two items rated on a seven-point scale on which 1 indicated total disagreement and 7 indicated total agreement (e.g., "I intend to teach an ethics course next semester."). Cronbach's α was .69.

Report Behavior

Following Ajzen (1991), this measure consisted of two items rated on a seven-point scale on which 1 indicated total disagreement and 7 indicated total agreement (e.g., "I will begin to prepare teaching materials about ethics"). Cronbach's α was .70.

Common Method Variance (CMV)

Due to the longitudinal nature of the present study, CMV (Podsakoff et al. 2003; Spector 2006) should not be a concern. At first, the KMO (Kaiser–Meyer–Olkin) value was measured. Thus, the KMO = .70 of the measurements were used in the study is greater than .5 for a satisfactory exploratory factor analysis (Kaiser 1974). Then, following the suggestion of Harman's single-factor test, the unrotated factor solution involving 17 items of all five variables was examined using exploratory analysis (EFA) (See Chen and Tang 2013). Five factors with eigenvalue greater than one were identified. Total variance explained for the emerging factor analysis model is 64.86 %. and for the five factors the variance are: A (31.72 %), PBC (14.34 %), BI (8.08 %), TE (6.41 %), and SN (4.31 %), respectively. No single factor accounted for the majority of the variance in the independent and criterion variables. It can be concluded that CMV bias is not a threat to the validity of the variance.

Results

Because maximum likelihood estimation procedures were used in this study, the normality assumption could not be severely violated (Curran et al. 1996). Following the guidelines for severe nonnormality (i.e., absolute value of skewness > 3; absolute value of kurtosis > 10) proposed by Kline (2005), all of the items of this research model fell well within the guidelines and could be regarded as fairly normal for purposes of further analysis. In the following, using Analysis of Moment Structures (AMOS) 16.0, we report on (1) measurement assessment and (2) evaluation of structure model fit and hypothesis testing of the three models.

Measurement Assessment

Below the measurement assessment of the scales including convergent and discriminant validity are reported.

Convergent Validity

According to Hair et al. (2006), items belonging to a specific construct should converge and share a high proportion of the variance (i.e., convergent validity). Three major indicators of convergent validity have been advocated by studies: factor loading, average variance extracted (AVE), and construct reliability (CR) (Fornell and Larcker 1981). As see in Table 2, the factor loading for all of the items in the research model ranged from .77 to .94. The values of AVE were .50 except for RB (AVE = .45), and values of CR were > .70 except for RB (CR = .62). Therefore, it could be said almost all constructs in the research model show acceptable convergence meaning that the convergent validity of the model is satisfactory.

Discriminant Validity

Discriminant validity addresses the extent to which constructs differ from one another. The root of the AVE for a specific construct must be greater than the correlation estimates between that construct and all other constructs to achieve adequate discriminant validity (Fornell and

Table 2 Descriptive data for the measures and bivariate correlation in research model (RTPB)

Variable	*M*	*SD*	CR	AVE	1	2	3	4	5	6
1. Attitude	5.36	1.26	.88	.66	(.81)					
2. Subjective norm	5.07	1.62	.82	.70	.37**	(.84)				
3. Perceived behavioral control	4.21	1.09	.86	.67	.67**	.39**	(.82)			
4. Teacher efficacy	3.14	0.52	.92	.65	.27**	.26**	.27**	(.79)		
5. Behavioral intention	4.69	1.42	.88	.78	.56*	.48**	.61**	.35**	(.88)	
6. RB	5.15	1.13	.62	.45	.64*	.42**	.48**	.23**	.53**	(.67)

Diagonal (in brackets): square root of AVE from observed variables (items); off-diagonal: correlations between constructs

* $p < .05$; ** $p < .01$

Larcker 1981). Table 2 shows separate correlation matrices for constructs in the research model. The diagonal indicates the square roots of the AVE. These were all greater than the correlation coefficients (i.e., the off-diagonal elements) in the corresponding rows and columns. This result implies that each construct shared greater variance with its subordinate items than with other items subordinate to other constructs. Hair et al. (2006) suggested that discriminant validity was achieved when an item was correlated more strongly with items in the same construct than with items in other constructs. Thus, a satisfactory level of discriminant validity was obtained at the item level for this research model.

Evaluating Structure Model Fit and Hypothesis Testing of the Three Models

Hair et al. (2006) proposed that the following diagnostic indices be used to determine the overall fit of a model: normed χ^2, goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA).

The TPB Model

The analysis of the structural model used in the TPB model produced the following results: $\chi^2 = 109.90$, df = 57, GFI = .92, AGFI = .88, CFI = .97, and RMSEA = .07. According to Button et al. (1996, p. 34), "for the RMSEA, values less than .08 indicate a 'relatively good fit' of the model, and values less .10 are considered 'fair.'" Moreover, Baumgartner and Homburg (1996) claimed that a GFI and an AGFI lower than .90 represent a reasonable and suggestive fit. Table 3 shows the fit indices and explanatory power. These indices showed that the model constituted a mediocre fit. Table 4 shows that the paths from attitude, SN, and PBC to intention, and the paths from PBC and intention to behavior are all significant, as indicated by a value of $p < .05$. The value of R^2 shows that attitude, SN, and perceived behavior control explained 41 % of the variance toward teaching an ethics course and that PBC and behavioral intentions explained 25 % of the variance in RB (see Table 3 and Fig. 2a).

The DTPB Model

The analysis of the structural model used in the DTPB model produced the following results: $\chi^2 = 383.99$, df = 145, GFI = .86, AGFI = .81, CFI = .90, and

Table 3 Fit indices and explanatory power for three research models

Model goodness of fit indexes	Suggested value	TPB	DTPB	RTPB
χ^2	–	109.90	383.99	336.20
df	–	57	145	142
Norm χ^2	< 5	1.93	2.65	2.37
GFI	> .8	.92	.86	.87
AGFI	> .8	.88	.81	.82
CFI	> .9	.97	.90	.90
RMSEA	< .10	.07	.09	.08
R^2_{PBC}	–	–	.04	
R^2_{BI}	–	.41	.42	.45
R^2_{RB}	–	.25	.28	.30

Table 4 Significance of individual paths in three models

Path	Path coefficient			Hypotheses for RTPB
	TPB	DTPB	RTPB	
Attitude → BI	.49**	.57**	.34*	H1 (supported)
SN → BI	.34**	.40**	.15	H2 (not supported)
BI → RB	.33*	.33**	.25*	H3 (supported)
PBC → BI	.28**	.41**	.39**	H4 (supported)
PBC → RB	.23	.21*	.37**	H5 (supported)
TSE → PBC	–	.20*	–	H6 (supported)
TSE → BI			.20*	H7 (supported)
TSE → RB			.04	H8 (not supported)

* $p < .05$; ** $p < .01$

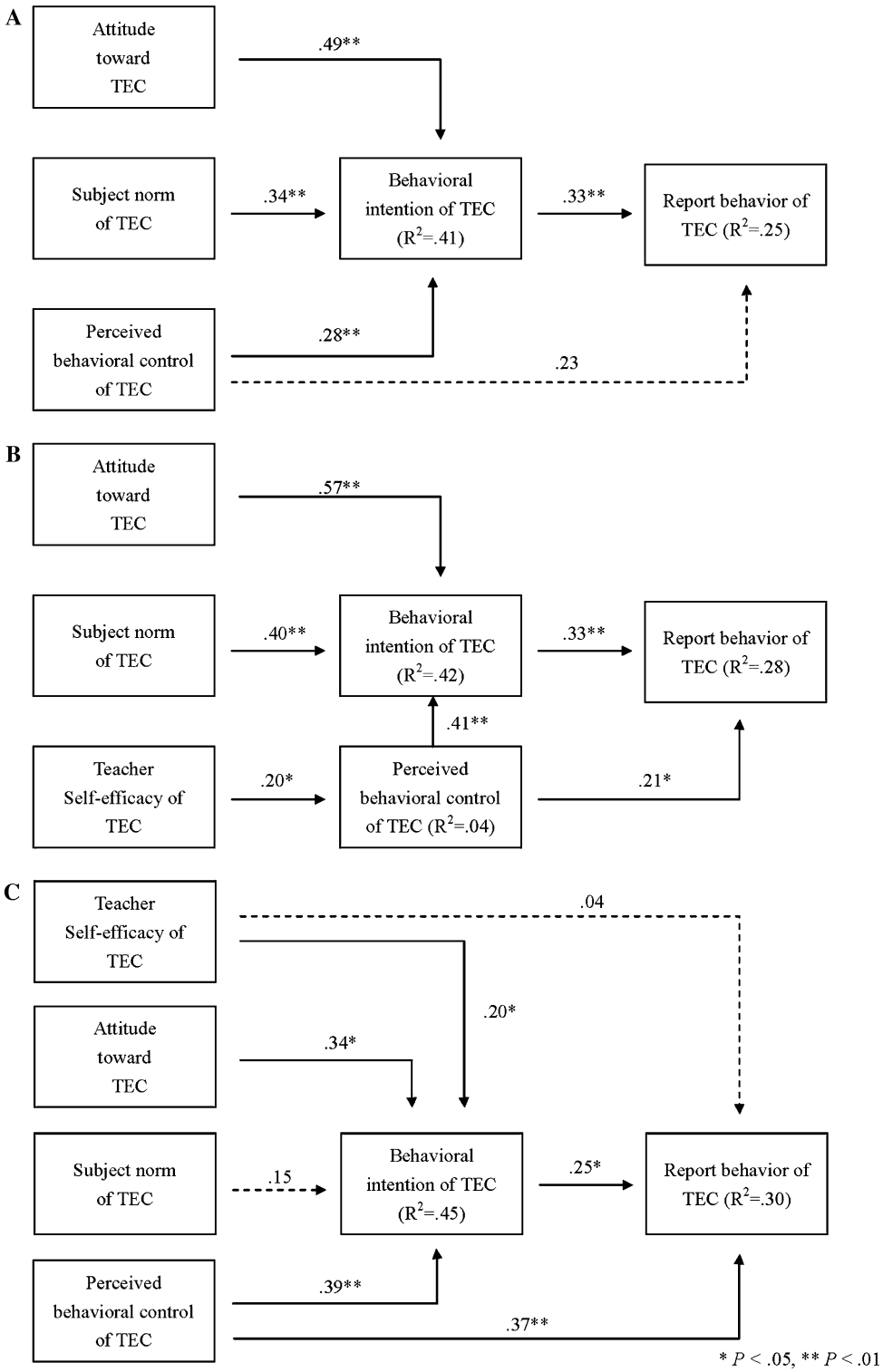

Fig. 2 **a** The results of TPB model test. **b** The results of DTPB model test. **c** The results of RTPB model test

RMSEA = .09. According to Button et al. (1996, p. 34), as shown in Table 3, the fit indices and explanatory power and these indices show that this model also constituted a mediocre fit. Table 4 shows that the path from TSE to PBC, the paths from attitude and PBC to intention, and the paths from PBC and intention to behavior are all significant as indicated by a value of $p < .05$. However, the path from SN to intention toward teaching an ethics course is not significant. The value of R^2 shows that attitude and perceived behavior control explain 42 % of the variance

toward teaching an ethics course that PBC and behavioral intentions explain 28 % of the variance in RB, and that TSE explains 4 % of the variance in PBC toward teaching an ethics course (see Table 3 and Fig. 2b).

The RTPB Model

Analysis of the structural model used in the DTPB model produced the following results: $\chi^2 = 336.20$, df = 142, GFI = .87, AGFI = .82, CFI = .90, and RMSEA = .08. According to Button et al. (1996, p. 34), Table 3 shows the fit indices and explanatory power and these indices show that the model also constituted a mediocre fit. Table 4 shows that the paths of attitude, TSE, and PBC to intention and the paths from PBC and intention to behavior are all significant, as indicated by $p < .05$. However, the path from SN to intention toward teaching an ethics course and the path from TSE to RB are not significant. The value of R^2 shows that attitude, TSE, and perceived behavior control explain 45 % of the variance toward teaching an ethics course and that PBC and behavioral intentions explain 30 % of the variance in RB toward teaching an ethics course (see Table 3 and Fig. 2c).

Discussion

The previous section presented results of the testing of three competing TPB-based models for predicting lecturer intentions and behavior to teaching an ethics course. The R^2 values for all three models show that attitude, SN, PBC, and TSE provide satisfactory explanations of variance in the lecturers' intentions to teach an ethics course (> 40 %). In addition, the RTPB model had the greatest predicative power of all three models. In the RTPB model, three path coefficients represented the most influential antecedents of lecturer intention to teach an ethics course: PBC, attitudes, and TSE, in that order. However, SN was not a significant predictor, which is consistent with previous findings regarding lecturers' intentions to teach financial literacy in Singapore (Teo et al. 2011). The results suggest that lecturer intentions to teach an ethics course were driven more by personal reasons than by environmental factors.

Within the RTPB model, TSE is a significant predictor of intention, but, after 2 months, TSE was not a significant predictor of RB. In practice, when faced with the choice of teaching an ethics course, lecturers have many considerations (e.g., the preparation of a new course and whether an original course can be taught by someone else). So, despite an intention of teaching an ethics course, lecturers may finally decide not to follow through on their intention. Another reason may be that the title of "lecturer" in Taiwan, with a strong "face culture," carries images of wisdom, excellence, and perfection given that Taiwan is subject to a strong Confucian influence (Kuo and Young 2008). The lecturers may have a face intention to teach an ethics course, but do not consider other questions that may influence whether they really will teach the ethics course.

The education system has a rigid hierarchical structure that is tightly controlled by the government (Elmore 1995; Herrera and Pina-Stranger 2010). The lecturer community, therefore, is under pressure to be a mistake-free culture, which may cause lecturers to be reluctant to try unfamiliar things (e.g., teaching a new course). To demonstrate the possible effect of this mistake-free culture, we conducted an analysis of the moderating effect on the paths of PBC and TSE to behavior. We used the process method developed by Kuo and Young (2008) and used a median value (= 5) of SN to divide the samples into two groups. For those who perceived the SN as favorable (i.e., whose perceived SN were greater than or equal to the median), the path from intention of teaching ethics to reported behavior was significant ($\beta = .36$, $p < .01$). The value of R^2 shows that intention, perceived behavior control, and TSE explained 38 % of the variance toward RB. Yet, for those who perceived the SN as unfavorable (i.e., whose perceived SN were less than the median), the path from intention of teaching ethics to reported behavior is significant ($\beta = .49$, $p < .01$). The value of R^2 shows that intention, perceived behavior control, and TSE explain 48 % of the variance toward RB. This means that in the cultural environments where mistakes could be tolerated, the lecturers' intentions and behavior were consistent. In contrast, in the cultural environment where mistakes could not be tolerated, although lecturers had higher intentions, they would not follow through with consistent behavior. In other words, the predictive power of intention was lower in this situation.

Implications

Fishbein and Ajzen (1975) argued that TRA can only be applied to volitional behavior. Ajzen and Madden (1986) introduced TPB to explain behaviors that are not "completely" under volitional control. Armitage and Conner (2001) indicated that TPB accounted for only 39 and 27 % of the variance in intention and behavior, respectively. Therefore, Manstead and Parker (1995) showed that adding some measures to the standard TPB construct significantly improved the predictive utility of TPB. The main purpose of the present study was to compare TPB, decomposed DTPB, and RTPB, TPB integrated with TSE, to explore the intentions of university lecturer s with respect to teaching an ethics course and also to investigate a test of competing models. The results showed that RTPB (TPB integrated with TSE) indeed improved the predicative power of

standard TPB. In other words, for certain subjects, researchers may find a special predictor effect of intention and behavior. From the results of this study, the following practice implications also emerge. First, department heads should enhance TSE. Next, high level support from learning aids, teaching materials, and available guidance from experts may improve lecturers' attitudes and behavior.

Conclusions

The present research aims to address the basic perceptions regarding the teaching of business ethics and examines university lectures' intentions to teach an ethics course. The findings of this study indicate that TPB with integrated TSE indeed improves the predicative power of standard TPB. Moreover, the RTPB model was superior to both the TPB and DTPB models. In order to encourage professional lecturers to teach an ethics courses, it is critical that department heads enhance their teachers' self-efficacy, which, in turn, will lead to greater positive intentions to teach ethics courses (TEC). A complete package system should be designed to help school administrators promote the TEC.

Limitations and Future Research

It is important to recognize the limitations of this study. First, although the sample was broadly representative of the population from which it was drawn, it was neither large nor randomly selected. Second, this study should be followed by similar research using different samples. The results of this study can be extended with comparative studies in different countries or among different groups of lecturers. Third, in the current study, a self-report measure for assessing intended behavior was employed. Using a direct measure of actual behavior may strengthen the link between target predictors and actual participation in teaching behavior. Finally, teacher self-efficacy was included in the model of the present study. General self-efficacy and TSE are different constructs. Future studies should also investigate which variables are strong predictors of intentions and behavior toward teaching an ethics course.

Acknowledgments The author would like to thank the National Science Council of Republic of China for financially supporting this research (NSC 100-2511-S-165-002), and Prof. Chin-Sheng Wan and two anonymous reviewers for their constructive comments.

Appendix

See Table 5.

Table 5 List of questionnaire items by construct

Construct	Items
Attitude	Teaching an ethics course is valuable/worthless
	Teaching an ethics course is challenging/meaningless
	Teaching an ethics course is easy/difficult
	Teaching an ethics course is pleasant/obnoxious
Subjective norms	My colleague thinks that I should teach an ethics course
	Most of my friends approve of me teaching an ethics course
Perceived behavioral control	I have no time to teach an ethics course
	I have learning resources to support my ethics course study
	I know how to prepare the TEC
Teacher self-efficacy	When I try really hard, I am able to reach even the most difficult students
	I am convinced that, as time goes by, I will continue to become more and more capable of helping to address my students'needs
	Even if I get disrupted while teaching, I am confident that I can maintain my composure and continue to teach well
	I am confident in my ability to be responsive to my students' needs even if I am having a bad day
	If I have any difficulty when teaching for the ethics courses, then I will solve the problem when I can get assistance from my colleagues
	When I have sufficient time to prepare, I believe I can solve any difficult teaching problem by myself
Behavioral intentions	I intend to teach an ethics course next semester
	I have some ideas regarding teaching an ethics course
Report behavior	I will begin to prepare teaching materials about ethics
	I will invite my colleagues involved in the teaching of business ethics next semester

TEC teach ethics course

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