

The Effects of Achievement Goals and Face Orientation on Instrumental Help-Seeking. Perceived Attitude as Mediator

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Abstract

The purpose of this research was to examine the effects of achievement goals and face orientation as potential predictors of help-seeking behavior and the role of perceived attitude as a mediator on instrumental help-seeking intentions. The results indicated that achievement goals, face orientation, and students' perceived attitudes toward help-seeking influenced the intentions of instrumental help-seeking. Additionally, although face orientation negatively influenced help-seeking in Eastern society, the students' perceived attitude toward help-seeking mediated the relationship between face orientation and help-seeking; thus, the total effect of face orientation on help-seeking was positive. Furthermore, the path from face orientation to perceived attitudes toward help-seeking was more significant in the female group. These findings emphasize that, from a cultural context, students' perceived attitudes play an important integrating role with regard to face orientation in instrumental help-seeking for students.

Keywords: *Entrepreneurship education, Mentor co-teaching, Entrepreneurial intention, Entrepreneurial passion, Theory of planned behavior*

INTRODUCTION

When students encounter ambiguity and difficulty in their learning process, such as having trouble understanding test materials, solving problems, or completing assigned homework, they often rely on strategies such as considering a text more slowly, organizing class notes, reviewing previous work, or searching for information available on the Internet (Karabenick, 2003; 2004). Increasing attention has been given to the question of how constructs of achievement cognitions and motivations, such as achievement goals, friendship goals, and perceived attitude orientations, affect students' help-seeking behaviors (Karabenick, 2003; 2004; Roussel et al., 2011). Several studies have demonstrated that the factors that promote student help-seeking and success among Asia students are not always the same as those found among Western students (Chang, 2014; Chou, 1996; King et al., 2016; Yu & Jin, 2016). A series of comparative studies in learning between different student backgrounds found that Chinese students tend to be quiet, passive, less involved in class, and reluctant when it comes to asking challenging questions (Volet & Renshaw, 2001). Moreover, Asian students are much less inclined to participate in classroom activities than Australian ones (Baker et al., 1991; Mullins et al., 1995). Furthermore, 96% of Asian Canadians are shy in class, compared with 38% of Canadian students (Duncan & Paulhus, 1999). A 2014 research report of the Ministry of Science and Technology of Taiwan indicated that 88% of undergraduates in Taiwan are afraid to ask a naive question or are afraid of being laughed at for being stupid by classmates. This consequence of asking questions may make a student think that he or she is dumb (Karabenick, 2004). Cross-cultural research on student learning has found differences in achievement-related behaviors between Asian and Western societies (Stevenson et al., 1985; Sue & Okazaki, 1990). Chinese society is different from Western society; some of the differences may be due to the "face" problem of Chinese students (Huang et al., 2002). There is surprisingly little research pertaining to how achievement goals and face orientation are constructed and consequently influence the help-seeking behaviors of undergraduate students. Therefore, the present study aimed to fill this gap in the literature by exploring the underlying processes by which students' perceptions of face culture affect their help-seeking by shaping their motivation within the Chinese cultural context. The current study focused on instrumental help-seeking and investigated the influences of achievement goals, face orientation, and perceived attitudes toward help-seeking, specifically, the idea that students' perceived attitudes toward help-seeking mediate relationships between achievement goals and face orientation and the intention to undertake instrumental help-seeking.

LITERATURE REVIEW

Achievement Goals and Instrumental Help-Seeking

The attempts of previous studies to address these questions have been dominated by achievement goal theory and the fact that students' willingness or reluctance to ask for help depends on what they are striving to achieve. In

achievement goal theory, two types of goals were initially defined (Dweck & Leggett, 1988): Mastery and performance goals. Some researchers also incorporated the approach–avoidance distinction to further advance the theoretical framework of goal orientations (Elliot & Covington, 2001). Each of the goals may be bifurcated in terms of approach (focus on competence) and avoidance (focus on incompetence). Although previous studies have suggested a three-component conceptualization of goal orientations (without the mastery–avoidance goal) (Elliot & Murayama, 2008), the current research chose a 2×2 framework defined by mastery–approach, mastery–avoidance, performance–approach, and performance–avoidance (Elliot & McGregor, 2001). Previous studies described the distinction between seeking instrumental help, which can result in greater autonomy, (e.g., by asking for a hint rather than an answer) and seeking executive help, which promotes learner dependency, (e.g., by asking for direct help to avoid time or work) (Gall, 1981). The current research focused on seeking instrumental help. Existing studies have found that mastery–approach goals were positive predictors of instrumental help-seeking (Kaplan et al., 2009; Karabenick, 2004; Ryan & Pintrich, 1997) and that mastery–approach goals and mastery–avoidance goals were positive predictors of instrumental help-seeking, while performance–avoidance goals were negative predictors (Roussel et al., 2011). Thus, hypothesis H₁ can be formulated as follows:

H₁: Achievement goals are expected to predict instrumental help-seeking.

Face Orientation and Instrumental Help-Seeking

Hu (1944) has been referred to as a pioneer in face culture research. He indicated that “face” can be defined by an individual in the community having achieved success and access to social status or prestige. However, Chou (1996) and Chang (2014) argued that face feelings of individuals change due to different circumstances in Chinese society. In other words, the personal face in China may change due to different circumstances or a change in state, thus producing a different behavior model. Empirical research has also verified that the concept of face must cover two kinds of constructs: acquisitive-face orientation and protective-face orientation (Chou, 1996). The acquisitive face promotes the individual’s face, and such people actively strive for access to face opportunities, attempt to express themselves, and hope to attain recognition and appreciation from others. This is a protective mechanism. Such people try to avoid losing face and are more careful, in a self-protective way, to avoid damage to their image in front of others and so obtain a more negative evaluation (Chou, 1996). Although Goffman (1955) argued that “face work” is a common phenomenon of human social interaction. Compared with Western society, the concept in Chinese society is rich and the Chinese refer to the face of a relationship as seeking harmony in the Confucian context. Previous researchers have indicated that the Chinese believe that face is the respect or prestige that others give to an individual (Cheng, 1986). Previous studies have also indicated that the “face culture” of teachers carries images of wisdom, excellence, and perfection, given that Taiwan is subject to a strong Confucian influence (Cheng, 2015). Past studies have found that while Eastern students liked to ask questions during in-depth classroom discussions, they still considered “face” to be an important factor (Huang et al., 2002). Fwu (2008) surveyed Eastern society students and found that acquisitive face concern is positively correlated with the tendency to answer questions, while protective face concern is negatively correlated. In the current research, the face orientation of undergraduate students in Taiwan may affect their help-seeking behavior and their perceived attitudes toward seeking help. Thus, hypothesis H₂ can be formulated as follows:

H₂: Such face orientations are expected to predict instrumental help-seeking.

Perceived Attitudes as Mediating Constructs

Newman (1990) investigated whether attitudes toward help-seeking were the causal linkage between motivational factors and help-seeking behaviors. We examined several attitude variables derived from previous work and investigated attitudes toward help-seeking (Karabenick & Knapp, 1991; Newman, 1990; Roussel et al., 2011). Some studies have indicated that a dichotomy should be used to differentiate student attitudes toward help-seeking (Karabenick, 2004; Ryan & Pintrich, 1997). An attitude of perceived benefits reflects an understanding that help-seeking is a useful strategy that promotes learning, whereas one of the perceived costs reflects a threat to self-worth engendered by help-seeking, because the need for help is constructed to be evidence of low ability and, thus, may incur negative reactions from others (Newman, 1990). Existing studies indicate that the perceived benefits of help-seeking partially mediate the direct relationship between the two mastery-based goals and instrumental help-seeking; additionally, the perceived costs of help-seeking partially mediate the direct negative relationship between performance–avoidance goals and instrumental help-seeking (Roussel et al., 2011). From this perspective, we first point out that previous studies investigating help-seeking behaviors showed that perceived attitude plays a mediating role, such as that between achievement goals and help-seeking behavior (Ryan & Pintrich 1997; Ryan et al., 2001). Second, previous research has also verified that the concept of face must cover two kinds of constructs: acquisitive-face orientation and protective-face orientation (Chou, 1996). This may be explained by the fact that the former corresponds to acquired benefits and the latter to paying a cost in terms of human mental status. Previous research had considered whether the tradeoff choice is a cost or a benefit when the student perceives his help-seeking behavior with a social status goal orientation (Ryan et al., 2001). This argument implies that the face of Chinese society indirectly affects students through their perceived attitude toward help-seeking behavior.

Third, the benefits of help-seeking reflect that this is a useful strategy that promotes learning (Newman, 1990; Wolters et al., 2003). In addition, the costs of help-seeking have been consistently described as a threat or detriment to self-esteem, and can increase or decrease the likelihood that students will ask for help (Karabenick, 2003; Ryan et al., 2001). In summary, the students' perceived attitudes influence their help-seeking behavior. Thus, hypotheses H₃–H₅ can be formulated as follows:

H₃: The perceived attitudes toward help-seeking mediate the relationship between achievement goals and instrumental help-seeking.

H₄: The perceived attitudes toward help-seeking mediate the relationship between face orientation and instrumental help-seeking.

H₅: The perceived attitudes toward help-seeking are expected to predict instrumental help-seeking.

Role of Gender in Help-Seeking

Gender difference is a very important topic in motivation, learning, help-seeking, and achievement studies (Nie & Liem, 2013). The research has shown that gender differences in learning and achievement may be due to gender differences in motivation and social expectation. Thorkildsen & Nicholls (1998) found that boys scored higher on ego orientation and that girls scored higher on task orientation. Yeung et al. (2011) indicated that girls were more learning focused than boys, and Schunk et al., (2010) found that gender differences in achievement goals seemed to be inconclusive in studies conducted with non-North American students. Previous studies have found that there are gender differences in seeking adaptive forms of help when students need to seek help. For example, Salomon & Strobel (1997) found that girls sought help more readily than boys, and Gall (2006) indicated that the girls among black middle-school students in a working-class neighborhood were more likely than the boys to seek help from their peers. Previous research has also indicated there are gender differences in perceived attitude toward help-seeking. Cheong et al. (2004), after controlling for motivation and computer science competence, found that girls were more likely to seek adaptive help and were more likely to perceive the benefits of help-seeking than boys. Moreover, previous research has indicated gender differences in help-seeking attitudes across national boundaries; in general, females are significantly more likely than males to have positive attitudes toward seeking professional psychological help (Tata & Leong 1994; Yeh 2002). In summary, this research proposed a hypothesis framework stating that instrumental help-seeking can be affected by achievement goals, faces orientation, and perceived attitudes toward help-seeking (see Fig. 1).

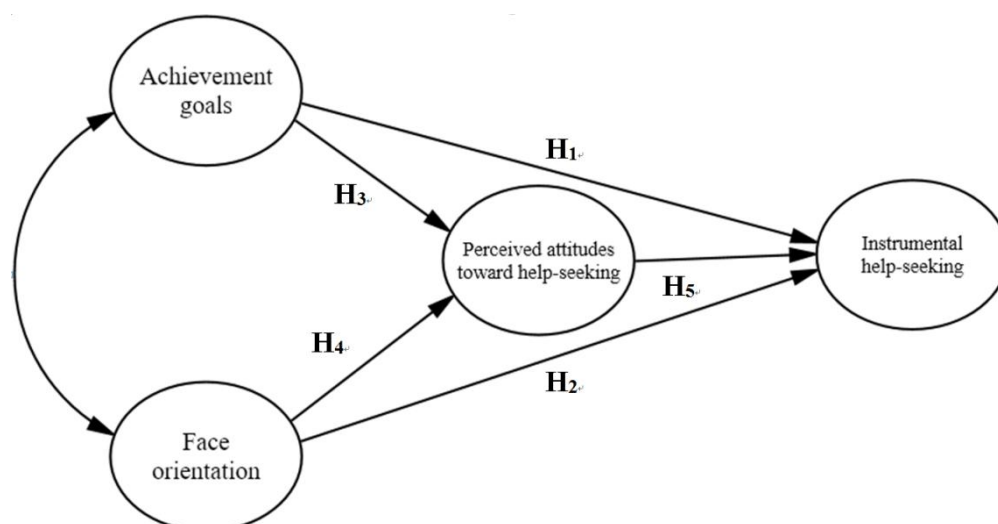


Fig. 1. Hypotheses framework

METHODOLOGY

Participants

The data were acquired during the second term of the school year from undergraduate business students enrolled in an Introduction to Accounting course in Taiwan using a self-reported questionnaire. The 565 participants were volunteers who were assured of confidentiality, and these students were free to withdraw at any time without repercussion. During the first week of the term (T1), the participants completed a face-orientation questionnaire. One week later (T2), the participants completed a survey of achievement goals and perceived attitudes. After an additional week (T3), they completed an instrumental help-seeking scale. All measures were completed in group sessions including 35-50 participants. Between time 1 and time 3, 29% of the initial respondents dropped out, leaving 400 respondents for analysis. The mean age of the respondents was 17.85 years (SD = 0.95); 185 (46%) were male and 215 (54%) were female.

Measures

The measures used in the current research were based on existing measures with demonstrated reliability and validity from the literature. The surveys were in traditional Chinese. All of the items included in the survey were compiled in English and then translated into Mandarin by translation/back-translation (Brislin, 1976). The author and back-translator engaged in a thorough discussion of the text to evaluate the consistency and correct any discrepancies between the original and the back-translation versions. All items except “Face orientation” were rated using a seven-point scale, with 1 corresponding to “total disagreement” and 7 corresponding to “total agreement.” Some items were reworded slightly for adaptation to the present setting.

Achievement goals.

Elliot & Murayama’s (2008) scale, a revised form of Elliot & McGregor (2001) Achievement Goals Questionnaire (AGQ) was used. Three items were used to assess each goal: mastery-approach (sample item: “My goal is to learn as much as possible”), mastery-avoidance (sample item: “My goal is to avoid learning less than I possibly could”), performance-approach (sample item: “My goal is to do better than other students”), and performance-avoidance (sample item: “My goal is to avoid performing worse than other students”). High values indicate high levels of achievement goals. Cronbach’s alpha values were 0.86, 0.84, 0.92, and 0.93 respectively.

Face orientation

A revised form of Chou (1996) & Chang’s (2014) face orientation scale was adopted. Student responses to the items assessing face orientation when the student had a learning problem were analyzed by a principal component factor analysis with oblique rotation. As expected, the items loaded on two factors, which reflected four items of acquisitive face orientation (sample item: “I like others to pay attention to me and even respect me”) and four items protective face orientation (sample item: “I will be careful to avoid mistakes”) (see Table 1), respectively. The rating scales were anchored at 1 (never) and 7 (always). Cronbach’s alpha values were 0.95 and 0.93.

Table 1

Factor loadings for items assessing acquisitive-face orientation and protective-face orientation of help seeking

In the classroom	acquisitive-face	protective-face
I like others to pay attention to me and even respect me	0.73	0.31
My own advantages should be expressed to show people	0.69	0.21
I like to be the focus of attention	0.72	0.24
I will fight for the opportunity to face the performance of my face	0.74	0.17
I was careful to avoid the wrong words	0.29	0.81
I will be careful to avoid mistakes	0.20	0.68
I hope not to leave someone else bad impression	0.27	0.74
I'm afraid someone else will laugh at me	0.28	0.79
Percentage of variance accounted for	39.68	17.31
Eigenvalue	.349	1.51

Perceived Attitudes Toward Instrumental Help-Seeking.

Newman’s (1990) Attitudes Toward Help-Seeking Questionnaire (ATHSQ) was used. The scales were adjusted slightly to make them more specifically focused on university students as a source of help. Three items were used to assess the perceived benefits of help-seeking (sample item: “I think that asking a teacher or schoolmates a question helps me learn”), and five items were used to assess the perceived costs of help-seeking (sample item: “I think schoolmates might think I am dumb when I ask a teacher or schoolmates a question”). High values indicate high levels of perceived attitudes toward help-seeking. Cronbach’s alpha values were 0.93 and 0.92.

Instrumental Help-Seeking

The Help-Seeking Questionnaire (HSQ) from Newman (1990) was adopted, and four items were used to assess students’ intentions to seek help for the purpose of learning and understanding. The items focused on a teacher or schoolmates as the source of help (sample item: “When I need help understanding how to do a problem, I ask my teacher or schoolmates”). High values indicate high levels of student intention to seek help. Cronbach’s alpha value was 0.89.

RESULTS

Since the maximum likelihood estimation procedure was demonstrated in this study, the normality assumption is not seriously violated (Curran et al.,1996). Moreover, in order to prove normal distribution, we also follow the metrics suggested by Kline (2005) that the absolute value of Skewness and Kurtosis should not be greater than 3 and 10. Overall, all items in this research model were within the guidelines and could be considered fairly normal for further analysis.

Measurement Assessment

Hair et al. (2009) emphasize items belonging to a specific construct should converge and share a high proportion of variance. Fornell & Larcker (1981) indicated there are three major indicators that can be used to verify the convergent validity, including factor loading, average variance extracted (AVE), and construct reliability (CR). According to the statistics of first-order confirmatory factor analysis (CFA), all of the construct factor loadings were greater than 0.7 in all constructs. All of the construct values of AVE were greater than 0.50, and all of the construct values of CR were greater than 0.70, as shown in Table 2. Therefore, it can be said that all constructs in the research model showed acceptable convergence, meaning that the convergent validity of the model was satisfactory (Hair et al., 2009; Fornell & Larcker, 1981).

Discriminant validity refers to the degree to which a construct is truly distinct from other constructs. Average Variance Extracted (AVE), a factor-based method for assessing discriminant validity was proposed by Fornell and Larcker (1981) and they suggested that the levels of square root of the AVE for each construct should be greater than the correlation involving the constructs. As can be seen from Table 2, the diagonals indicate the square roots of the AVE. These are all greater than the correlation coefficients 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. This result therefore suggests that discriminant validity is established.

Table 2

Descriptive statistics of all constructs as well as their inter-collections.

Variable	1	2	3	4	5	6	7	8	9
1 Mastery-approach goals	(.82)	.37**	.42**	.06	.17**	.19**	.15**	.10*	.13*
2 Mastery-avoidance goals		(.81)	.31**	.25**	.27**	.28**	.23**	-.07	.29**
3 Performance-approach goals			(.89)	.07	.28**	.27**	.25**	-.03	.30**
4 Performance-avoidance goals				(.81)	.26**	.26**	.38**	-.16**	.41**
5 Face acquisition					(.90)	.84**	.38**	-.41**	.30**
6 Face protection						(.88)	.37**	-.43**	.27**
7 Help-seeking benefit							(.91)	-.28**	.50**
8 Help-seeking cost								(.91)	-.11*
9 Instrumental help-seeking									(.83)
Mean	4.33	5.28	5.09	5.62	5.63	5.53	5.51	3.22	5.37
Standard deviation	1.41	1.19	1.41	1.18	1.33	1.31	1.23	1.94	1.18
Composite reliability	0.86	0.85	0.92	0.85	0.95	0.93	0.93	0.96	0.90
Average variable extracted	0.68	0.65	0.80	0.65	0.81	0.77	0.83	0.83	0.69
Observed range	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7

Diagonal (in brackets): square root of AVE from observed variables (items); off-diagonal: correlations between constructs * $p < .05$; ** $p < .01$

Valuation of Structure Model Fit

The fit indices for the model were as follows: $\chi^2 = 1129.32$, $df = 450$, Norm $\chi^2 = 2.51$ (< 5), GFI = 0.85 (> 0.80), AGFI = 0.82 (> 0.80), CFI = 0.94 (> 0.90), and RMSEA = 0.06 (< 0.08). Based on these values, most researchers would consider this model to be reasonable and representative of the data (Hair et al., 2009; Kline, 2005). All items in the model had significant parameter estimates with standardized estimates greater than 0.50. These results also suggest that these data reflect satisfactory convergent validity for each subscale, because each subscale was able to explain the items it measured better than it was able to explain the items of other subscales (Fornell & Larcker, 1981).

The Structural Model of Instrumental Help-Seeking

The direct, indirect, and total effects of achievement goals on instrumental help-seeking are shown in Table 3. The direct effects of achievement goals, face orientation, and perceived attitudes toward help-seeking and instrumental help-seeking were 0.29, -0.42, and 0.83, respectively. These results indicate that all paths have significant relationships. The indirect effects of achievement goals and face orientation on instrumental help-seeking through perceived attitudes were .24 and .47, respectively. Thus, perceived attitude was the mediator between achievement goals/face orientation and instrumental help-seeking. The total effects of achievement goal, face orientation, and perceived attitudes toward instrumental help-seeking were all positive (0.53, 0.05, and 0.83, respectively). These results illustrate that achievement goals, face orientation, and perceived attitudes all positively influence students' instrumental help-seeking, echoing the results of previous studies. Although, the direct effect of face orientation on instrumental help-seeking was negative (-0.042), the total effect was positive (0.05). Thus, students' perceived attitudes toward help-seeking were an important mediator. The possible reasons for this are discussed below. The research model also indicated a substantial amount of variance in perceived attitudes toward help-seeking ($R^2 = .58$) and instrumental help-seeking ($R^2 = 0.59$).

The direct effect, in which achievement goals (0.29) were inferior to face orientation (0.57), predicate students' perceived attitudes toward help-seeking. As predictors of instrumental help-seeking, achievement goals, face orientation, and perceived attitudes had direct effects of 0.28, -0.42, and 0.83, respectively. Among them, the influence of perceived attitudes was the best predictor. Table 4 shows that the paths from achievement goals to instrumental help-seeking, face orientation to instrumental help-seeking, achievement goals to perceived attitudes toward help-seeking, face orientation to perceived attitudes toward help-seeking, and perceived attitudes toward help-seeking to instrumental help-seeking were all significant, as indicated by a value of $p < .05$.

Table 3

The effects of achievement goals, face orientation, and perceived attitudes toward help-seeking on instrumental help-seeking.

	Direct effect	Indirect effect	Total effect
Achievement goals	0.287	0.240	0.527
Face orientation	-0.423	0.472	0.049
Perceived attitudes toward help-seeking	0.826	N.A.	0.826

N.A. means "not applicable".

Table 4

Hypotheses-testing

The relationship of path	Path coefficient	Hypotheses
Achievement goals → Instrumental help-seeking	.287*	H ₁ Supported
Face orientation → Instrumental help-seeking	-.423*	H ₂ Supported
Achievement goals → Perceived attitudes toward help-seeking	.291**	H ₃ Supported
Face orientation → Perceived attitudes toward help-seeking	.571***	H ₄ Supported
Perceived attitudes toward help-seeking → Instrumental help-seeking	.826**	H ₅ Supported

* $p < .05$; ** $p < .01$; *** $p < .001$

The Measure Model of Instrumental Help-Seeking

First, the achievement goals included mastery–approach, mastery–avoidance, performance–approach, and performance–avoidance; in the current research, their direct effects were 0.59, 0.49, 0.65, and 0.44, respectively, with explained variances of 35%, 24%, 43%, and 19%. Among them, the influence of performance–approach was the greatest with respect to achievement goal, indicating its role as a better observation variable. Second, the face orientation of help-seeking included the acquisitive face and protective face, with direct effects of .94 and .93 and explained variances of 88% and 86%, respectively. Among them, the influence of acquisitive face was stronger with respect to face orientation, as the key observation variable. Third, perceived attitudes toward help-seeking included the cost of help-seeking and the benefit of help-seeking, with direct effects of -.40 and .68 and explained variances of 16% and 46%, respectively; the benefit of help-seeking was the stronger effect. Finally, instrumental help-seeking was a single-level latent variable, measured using four items; their direct effects were 0.81, 0.75, 0.86, and 0.89 with explained variances of 65%, 56%, 74%, and 79%, respectively. Among them, item 4 (When I didn't understand how to solve a problem, I would ask my schoolmates or teachers and then practice by myself) was the best indicator/observation variable with regard to instrumental help-seeking.

The Subsequent Analysis of Gender Differences

We did further test by analyzing the data by gender. First, we calculated the means for all variables for males and females separately to construct the measured latent variables. The means, standard deviations, and correlations are presented in Table 5. Then, an independent sample t-test was conducted to evaluate the mean differences between males and females. The findings revealed that males showed higher means than females in the all constructs except the means of costs of help-seeking for males were lower than those of females, $t(398) = -2.62$, $p < .05$.

Table 5

Descriptive statistics and zero-order correlations among variables for the two subsamples

	M	SD	1	2	3	4	5	6	7	8	9
Male sample											
1 Mastery-approach goals	4.12	1.32	-	.37**	.39**	-.01	.13	.10	.02	-.02	.02
2 Mastery-avoidance goals	5.13	1.25		-	.22**	.19**	.23**	.25**	.17*	-.15*	.23**
3 Performance-approach goals	4.92	1.42			-	.07	.25**	.23**	.21**	-.06	.22**
4 Performance-avoidance goals	5.44	1.18				-	.25**	.27**	.41**	-.16*	.42**
5 Face acquisition	5.18	1.47					-	.84**	.36**	-.48*	.24**
6 Face protection	5.05	1.39						-	.34**	-.51**	.22**
7 Help-seeking benefit	5.37	1.29							-	-.31**	.53**
8 Help-seeking cost	3.47	1.80								-	-.11
9 Instrumental help-seeking	5.17	1.24									-
Female sample											
1 Mastery-approach goals	4.57	1.48	-	.34**	.44**	.08	.17*	.21**	.26**	.27**	.19**
2 Mastery-avoidance goals	5.46	1.09		-	.41**	.30**	.26**	.24**	.28**	.06	.34**
3 Performance-approach goals	5.28	1.37			-	.03	.28**	.26**	.27**	.05	.37**
4 Performance-avoidance goals	5.84	1.15				-	.18*	.09	.31**	-.11	-.33**
5 Face acquisition	6.14	0.91					-	.74**	.37**	-.30**	-.31**
6 Face protection	6.09	0.94						-	.37**	-.30**	.23**
7 Help-seeking benefit	5.68	1.15							-	-.21**	.45**
8 Help-seeking cost	2.97	2.02								-	-.04
9 Instrumental help-seeking	5.61	1.06									-

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

Second, path analysis was conducted to examine the relationships among the two latent variables in each of the subsamples. The fit indices suggest that the research models of the male and female subgroups fit the data badly. Only two regression coefficients were significant at the $p < .05$ level: face orientation \rightarrow perceived attitudes of help-seeking ($\beta = 0.22$ for males; $\beta = 0.59$ for females) and achievement goals \rightarrow perceived attitudes of help-seeking ($\beta = .79$ for males; $\beta = .73$ for females). Furthermore, a differences of male and female groups path analysis was conducted, and we only found that the path coefficient of face orientation \rightarrow perceived attitudes of help-seeking for females was significantly greater than for males ($t = 2.07$, $p < .05$).

DISCUSSIONS

Major findings

This study was designed to describe undergraduate students' instrumental help-seeking in university classes by assessing help-seeking antecedents and mediators to help-seeking as assimilated into Eastern culture. The results indicated that the relationships among help-seeking variables are consistent with those of previous studies on younger students and college students (Karabenick & Knapp, 1991; Newman, 2000; Ryan & Pintrich, 1997). The modified research model of face orientation replacing friendship goals explained 59% of the variance in intentions of instrumental help-seeking. The explanation of the variance of the current research, which adopted face-orientation predictive variables, was better than the findings of Roussel et al.'s (2011) ($R^2 = .26$), which adopted friendship goals as predictive variables. These results indicate that face orientation is an important antecedent of university students' help-seeking in Eastern society. The finding echoes that face has an important role in influencing students' help-seeking behaviors (Huang et al. 2002).

With regard to the within-model results, that achievement goals (0.28) were inferior to face orientation (-0.42) predicate the students' intention of instrumental help-seeking; achievement goals (0.28) being inferior to face orientation (0.57) also predicate the students' perceived attitudes toward help-seeking in the research model. Hence, the Chinese personal face will change due to different changes in circumstances and, thus, will produce a different behavioral model (Chou, 1996). The data analysis indicated that perceived attitudes (benefits and costs) toward help-seeking played a mediating role in the relationship between achievement goals (face orientation) and instrumental help-seeking. Further, comparing the mediating effects between perceived attitudes toward help-seeking influencing help-seeking via face orientation and achievement goals, the current research indicated that the indirect effect of face orientation (0.47) was greater than the indirect effect of achievement goals (0.24). Previous research has indicated that face orientation influences the help-seeking behavior of university students in Chinese society (Fwu, 2008). The current research found that the perceived attitude toward help-seeking plays an important mediating role, consistent with the results of Ryan & Pintrich (1997).

This study focused on university students in Taiwan. We found that face orientation negatively influenced their help-seeking behavior. However, the indirect effects of face orientation with regard to help-seeking though perceived attitudes were positive, counteracting the negative direct effect. Thus, the total effect of face orientation toward help-seeking was positive overall. The findings point to students' perceived attitudes playing an important role in integrating face orientation into the instrumental help-seeking model, from a cultural context for Taiwanese students. The current research indicates that the absolute value of benefits (0.68) was greater than the absolute value of cost (-0.40) in perceived attitudes toward help-seeking. Thus, teachers should remind students to focus on the benefits of help-seeking during the teaching process. The present study also found that males had higher scores on most variables. However, by comparing the research models between male and female groups, we found that the path from face orientation to perceived attitudes toward help-seeking (0.59) of the female group was significantly greater than that of the male group (0.22). These findings indicate that in Chinese society, females pay more attention to this than males; thus, teachers should consider different ways of dealing with gender differences in their teaching processes.

Implications

Some practical implications based on the results of the present study should be highlighted. First, face orientation negatively influences the instrumental help-seeking of students. As such, we suggest that the number of teacher assistants (TAs) be increased during teaching activities. Students may be more willing to ask a TA when they encounter ambiguity or difficulty in their learning process, because the students would be much less driven by face-loss concerns compared to when seeking assistance from teachers or peers. Second, our research indicates that there is a relationship between self-esteem and face orientation and that people from Eastern countries score lower on self-report measures of self-esteem than people from Western countries (Cai et al., 2007; Schmitt & Allik, 2005). These results may be caused by the Confucian tradition, which emphasizes modesty, deference, and self-effacement (Kurman & Sriram, 2002). Thus, it is critical that department policymakers find ways to enhance students' self-esteem, which in turn will improve students' face orientation and promote higher intentions of instrumental help-seeking among students. Finally, although the face orientation of students negatively influenced their help-seeking intentions, the students' perceived attitudes mediated this relationship. Thus, it is important to work towards improving students' perceived attitudes toward help-seeking. We should assist teachers in understanding the students' perceived benefits of help-seeking and decrease their perceived cost. In turn, this would promote intentions with regard to help-seeking on the part of students.

Limitations and future research

Although the results of the present research provide insights into academic implications, this study had several limitations that need to be addressed. First, the current study mainly investigated the factors that influence instrumental help-seeking. However, there are distinctions between seeking instrumental help, which can result in greater autonomy (e.g., asking for hints rather than answers), and executive help seeking, which can maintain student dependency (e.g., asking for direct help that avoids time or work) (Gall, 1981). In addition, goal orientations also have different implications depending on the type of help (Karabenick, 2004). This research provides the means to better understand how students construe the benefits and costs of different help-seeking approaches. In future research, we may compare the factors using the same independent variables and different dependent variables to extend the research model. Second, in this article, we only investigated the intentions of help-seeking from students' individual goals and did not include situational factors such as classroom context. Because different teachers may establish environments that either foster or discourage student help-seeking (Ryan et al., 2001), it is necessary to consider the classroom context or classroom goal structure (Gall, 1981; Karabenick & Sharma, 1994; Newman, 1998; Ryan et al., 1998; Urdan et al., 1998). Future research should adopt a multilevel analysis and, in addition, consider the classroom goal structure at the class level to extend the current research. Third, the current research focused on seeking help from teachers or classmates. However, in fact, teachers have more expertise than classmates (Karabenick, 2003). Furthermore, some learners may have a tendency to seek help from other students, as opposed to teacher assistants, due to face orientation. Future studies would benefit from comparing the relationships among research variables from different sources of help (teachers vs. peers) when learners seek help. Fourth, the students in the study participated in a traditional classroom setting. Although, the teaching and learning environment is gradually becoming more diverse, such as flipped classrooms, online teaching, and MOOCs, different environments may require different help-seeking strategies (Er & Orey, 2016; Hao et al., 2017; Yang et al., 2016). Further research is required to explore the effect factors of students' help-seeking behavior in different learning environments. Lastly, the present research adopted a cross-sectional design. A longitudinal design would be more appropriate for addressing the causal relationships between the predictive variables and the criterion variable.

Conclusion

Despite its limitations, the current study offers worthwhile contributions to help-seeking research. Specifically, it highlights the role of face orientation in the relationships between achievement goals, face orientation, perceived attitudes toward help-seeking, and help-seeking. In summary, we attempted to provide insight into the underlying processes by which perceptions of face culture affect the help-seeking behavior of Taiwanese university students, within a Chinese cultural context; currently, a gap exists in the literature with respect to this focus. Our results indicated that teachers should concentrate on improving students' perceived attitudes toward help-seeking to promote students' intentions with regard to instrumental help-seeking. Therefore, it is important to seek out high-quality learning and teaching practices that can help accounting programs.

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