The Theory of Planned Behavior Augmented with Cognitive Cultural Intelligence and Work-Related Perceptions in Predicting Intention to Work Abroad

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Abstract—This research examined university students’ intention to pursue employment abroad after finishing their studies. While most studies on predicting career choice among students relied exclusively on utilizing the theory of planned behavior (TPB), this study augmented the TPB with cognitive cultural intelligence (cognitive CQ), serving as a moderator, and work-related perspectives, serving as another predictor. Participants were 153 students, who were studying business administration in a university in Turkey. The results indicated that subjective norms and perceived behavioral control but not attitudes predicted the intention and, hence, partially supported the TPB. Students’ perceptions of overseas career development opportunities were found to be another predictor of the intention to work abroad. Also, this study revealed that cognitive CQ had moderating effects on the translation of subjective norms and perceived behavioral control into intention. Such findings contribute to the understanding of the TPB and offer useful implications for organizations selecting employees for overseas assignments and those recruiting foreign employees.

Index Terms—career development, cultural intelligence, international career, theory of planned behavior, university students, working abroad

I. INTRODUCTION

International careers, which involve moving to countries other than one’s home country, are increasingly pursued in today’s world of globalization. Pursuers of such careers, who traditionally were senior managers, now include increasing numbers of new graduates [1]. These young expatriates attract the attention of firms seeking the most talented people regardless of their nationality [2]. However, effective recruitment of expatriates is a challenge requiring a good understanding of their expatriate aspirations [3].

A number of studies have identified various predictors of a person’s desire or decision to enter career abroad. These include, but are not limited to, lack of regular employment, low wages, personal network, family members, relatives, friends, and career development [4].

Nevertheless, little attention has been paid to the decision-making processes. Studies that looked at decision making with regard to international careers among university students regularly relied exclusively on utilizing Ajzen’s [5] theory of planned behavior (TPB) [6] [7]. The present study augmented the TPB with cognitive cultural intelligence (cognitive CQ) [8], which served as a moderating variable, and work-related perceptions, which served as another predictor. The outcome variable of interest in this study was students’ intention to pursue employment abroad after finishing studies, which has not yet been extensively investigated.

II. HYPOTHESIS DEVELOPMENT

A. Theory of Planned Behavior

Several scholars have successfully applied the TPB as a theoretical framework to areas such as sport, consumers, politics, and health in predicting behavioral intentions [9] [10-14]. Such an application has recently been common and successful with studies intended to understand behaviors and decision making among university students [6] [7] [15]. The TPB is based on the assumptions that most human behavior is guided by volitional control and can be predicted from intentions alone. Weerasinghe and Kumar’s studies [6] showed an inconsistency in the predictability of the model. In agreeing with the TPB, the most proximal determinant of behavior is a person’s intention to engage in an act, which reflects the effort that someone intends to exert in order to perform the behavior. Intention, in turn, is a function of three determinants. The first determinant is the person’s attitude toward the behavior, referring to the positive or negative evaluation of performing the behavior. The second determinant is the subjective norm, reflecting the person’s perception of social pressure regarding the performance of the behavior. The third determinant is perceived behavioral control, which refers to the person’s perception of control over performance of the behavior. Perceived behavioral control was added to
the TPB to deal with situations in which people may lack complete volitional control over the behavior of interest. Individuals with high levels of perceived behavioral control should be more inclined to perform the behavior. Perceived behavioral control has often been found to improve prediction over intention [16] especially when the behavior is not under complete volitional control and to the extent that it is an accurate reflection of actual behavioral control. Based on this knowledge, a set of hypotheses were proposed.

H1: Dimensions of planned behavior have impact on intention to work abroad.
H1a: Attitudes have impact on intention to work abroad.
H1b: Subjective norms have impact on intention to work abroad.
H1c: Perceived behavioral control has impact on intention to work abroad.

B. Work-Related Perceptions

Decisions to work abroad have also been explained by using the push-pull model. According to this model, various factors push or pull a person toward overseas work [17]. Research has shown that expatriates are particularly pulled toward work outside their home country by three work-related motivations, namely favorable conditions of labor market [17-20], attractive working conditions [17] [19], and good prospects of career progression [7] [19] [21]. Thus, if students perceive that a foreign nation offers more employment opportunities, better job conditions, and/or more chances to advance their career, they may develop an inclination to work there after they graduate. On this basis, we proposed another set of hypotheses.

H2: Work related perceptions have impact on intention to work abroad.
H2a: Labor market has impact on intention to work abroad.
H2b: Working conditions have impact on intention to work abroad.
H2c: Career development has impact on intention to work abroad.

C. Cognitive Cultural Intelligence

Drawing from the experiences and advices from scholars, who have been suggesting that the model of TPB would benefit more by the inclusion of more constructs in terms of explanatory quality [22], this research therefore linked the TPB with the cultural intelligence (CQ) model to fulfill this purpose. Cultures are collective, complex entities of unique customs and transactions. Students or individuals intending to pursue career abroad must build up cultural knowledge to adequately adapt to an unfamiliar culture. CQ, originally conceptualized by Earley and Mosakows [8], shows promise in assisting this changeover. Ang, Rockstuhl and Tan [23] reckoned that with the continuing influence of globalization in every aspect of human life including work environment, understanding why some people thrive in intercultural contexts more than others has never been more crucial than now. Evans [24] examined the expatriate success and found that those higher with CQ adapt better than those with culturally compatible personality factors. In addition, Remhof, Gunkel and Schlägel’s study [25] aimed at examining CQ influence factors among German business students’ intention to work abroad revealed that some key CQ factors have influence on the intention to work abroad. Among these factors is cognitive CQ, which refers to an individual’s knowledge of similarities and differences between cultures [26]. Because working and living in a foreign country involves the ability to deal with unfamiliar cultural environments which can be very different from those in one’s own country, cognitive CQ may influence the effects that the TPB constructs and the work-related perceptions have on the intention to work abroad. To illustrate, a high level of cognitive CQ should imply an open attitude toward working in other countries; higher cognitive CQ should mean more awareness of working abroad and, hence, more positive subjective norm; and the more knowledge about the country of destination, the more behavioral control a person should perceive regarding working there. Therefore, we proposed two more hypotheses. All hypotheses are illustrated in Fig. 1.

H3: Cognitive CQ has moderating effect on the relation between planned behavior and intention to work abroad.
H4: Cognitive CQ has moderating effect on the relation between work-related perceptions and intention to work abroad.

III. METHODOLOGY

A. Measures and Research Instrument

A multi-item questionnaire measured on a five-point interval scale was used in this study. Intention to work abroad was measured by four items developed by Weerasinghe and Kumar [6]. The variables derived from the TPB namely, attitudes, subjective norms, and perceived behavioral control, were measured by twelve items adapted from questionnaires used by Paris & Van den Broucke [27] and Weerasinghe and Kumar [6]. Work-related perceptions were also measured with twelve items partly adapted from Schnusenberg, de Jong & Goel [7] and Nikos et al. [18]. Cognitive CQ was assessed with six items based on the scale developed by Van Dyne [28].

Figure 1. The model depicting the hypothesized relationships
B. Sampling and Data Collection

It was assumed that university students would have an idea about their careers after graduation once they made a decision to study in a particular department. With this assumption, data for this study were collected from students enrolled to Marmara University Business Administration department. 200 questionnaires were distributed and 153 usable questionnaires were obtained with a 76.5 % return rate. 56.9 % of the students were females and 43.1 % of the students were males. Average age was 21.40 with 2.40 standard deviation.

IV. RESULTS

A. Exploratory Factor Analyses

Prior to regression analyses Exploratory Factor Analyses (EFA) were conducted to test the underlying patterns of measurement scales. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests indicated the appropriateness of data for conducting factor analyses. Principal component factoring and varimax rotation were employed to the data set. “Theory of planned behavior” emerged into three factors as expected. The factors were named as attitudes, subjective norms, and perceived behavioral control in line with literature. However, in “work-related perceptions” items measuring labor market were eliminated due to low factor loadings and, as a result, two factors, working conditions and career development, were achieved. Cognitive CQ and intention to work abroad were unidimensional as expected. Then Cronbach’s α reliability analyses were applied to measure internal consistency of the constructs.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>#</th>
<th>AV</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory of planned behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>4</td>
<td>21.52</td>
<td>.82</td>
</tr>
<tr>
<td>Subjective norms</td>
<td>4</td>
<td>21.40</td>
<td>.80</td>
</tr>
<tr>
<td>Perceived behavioral control</td>
<td>4</td>
<td>20.81</td>
<td>.75</td>
</tr>
<tr>
<td>Work related perceptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working conditions</td>
<td>4</td>
<td>24.76</td>
<td>.64</td>
</tr>
<tr>
<td>Career development</td>
<td>4</td>
<td>31.01</td>
<td>.78</td>
</tr>
<tr>
<td>Cognitive CQ</td>
<td>5</td>
<td>54.63</td>
<td>.79</td>
</tr>
<tr>
<td>Intention to work abroad</td>
<td>4</td>
<td>67.96</td>
<td>.84</td>
</tr>
</tbody>
</table>

# = number of items, AV = average variance extracted, α = Cronbach reliability

As can be seen from Table I, reliabilities for constructs were all above the acceptable threshold .70 except working conditions. Nunnally (1974), as cited in DeVellis [29], has suggested a value of 0.70 as lower limit; however, it can decrease to 0.60. In addition, there is a positive relation between alpha coefficient and the number of items [29], [30]. Therefore, summed scores of the scales were calculated and new variables were formed and used for further analyses.

B. Regression Analyses

After the prior tests and calculation of summed scores, to test the research model, hierarchical multiple regression analysis was performed. Since the moderating effect of cognitive CQ was hypothesized, independent variables were first standardized and then product terms were calculated with the moderating variables [31], [32]. These standardized variables and the interactions were used in two-step hierarchical multiple regression.

| TABLE II. TESTING THE MODERATING EFFECTS USING HIERARCHICAL MULTIPLE REGRESSION |
|---------------------------------------------|------|------|------|------|------|------|
| Independent variables                      | B    | Std. B| t    | R    | R²   | F    |
| Step 1                                      |      |      |      |      |      |      |
| Attitudes                                  | .08  | .10  | 1.24 | .76  | .53  | 26.19**|
| Subjective norms                           | .19  | .23  | 3.27**| .79  | .58  | 46.19**|
| Perceived BC                               | .34  | .39  | 4.89**| .83  | .63  | 67.19**|
| Working conditions                         | .03  | .04  | .56  | .73  | .53  | 26.19**|
| Career development                         | .15  | .18  | 2.42* | .77  | .53  | 26.19**|
| Cognitive CQ                               | .04  | .05  | .86  | .73  | .53  | 26.19**|
| Step 2                                      |      |      |      |      |      |      |
| Attitudes                                  | .10  | .11  | 1.43 | .76  | .53  | 26.19**|
| Subjective norms                           | .20  | .25  | 3.56**| .81  | .58  | 36.19**|
| Perceived BC                               | .32  | .36  | 4.69**| .83  | .63  | 67.19**|
| Working conditions                         | .01  | .01  | .14  | .76  | .53  | 26.19**|
| Career development                         | .16  | .20  | 2.60* | .77  | .53  | 26.19**|
| Cognitive CQ                               | .03  | .04  | .60  | .76  | .53  | 26.19**|
| Attitudes X                                | -0.07| -0.10| -1.00| .76  | .53  | 26.19**|
| Subjective norms X                         | -0.16| -0.20| -2.92**| .76  | .53  | 26.19**|
| Cognitive CQ                               | -0.18| -0.25| 3.27**| .82  | .58  | 16.52**|
| Perceived BC X Cognitive CQ                | -0.04| -0.05| -0.63| .76  | .53  | 16.52**|
| Working cond. X C Cognitive CQ             | -0.03| -0.04| -0.50| .76  | .53  | 16.52**|
| Career dev. X Cognitive CQ                 |      |      |      |      |      |      |

Dependent variable: intention to work abroad

*p < .05, **p < .01

The results can be seen in Table II. In step 1, it was found that “subjective norms”, “perceived behavioral control” and “career development” had significant effect
on “intention to work abroad”, whereas “attitudes”, “working conditions” and the moderating variable “cognitive CQ” did not have significant direct effects. In step 2, when we included the product terms, it was seen that “cognitive CQ” did have interaction effect on “subjective norms” and “perceived behavioral control” but not on “career development.” The regression model explained the 58% of variance in intention to work abroad \( (F (132) = 16.52, R = .76) \).

To summarize, H1b and H1c were supported but not H1a since two of the dimensions had significant impact on intention to work abroad. Therefore, H1 was partially supported. The second hypothesis was revised after the exploratory factor analysis as “labor market” was not among the dimensions anymore. Hence, we could not test H2a. H2 was also partially supported since only “career development” had significant impact on dependent variable.

H3 was the moderation effect of “cognitive CQ” on the relation between “planned behavior” and “intention to work abroad”. Both the main effect of “attitudes” and the interaction with “cognitive CQ” were not significant. However, “subjective norms” \( (B = .20) \) and the interaction with “cognitive CQ” \( (B = -.16) \) were significant, indicating partial moderating effect.

Likewise “perceived behavioral control” also had both significant main effect \( (B = .32) \) and interaction with “cognitive CQ” \( (B = .18) \), indicating partial moderating effect. The moderation can be seen in Fig. 3. Higher the “perceived behavioral control” of students higher will be their “intention to work abroad”. However, when the “perceived behavioral control” is low, if the “cognitive CQ” is high, then “intention to work abroad” will be lower than when both “perceived behavioral control” and the “cognitive CQ” are low. On the other hand, when the “perceived behavioral control” is high, even if “cognitive CQ” is low, “intention to work abroad” will be high and if both “perceived behavioral control” and “cognitive CQ” are high the “intention to work” will be highest.

V. DISCUSSIONS AND CONCLUSIONS

The present study had two main objectives. The first objective was to examine predictors of students’ intention to work abroad after graduation comprising three constructs based on the TPB, namely, attitudes toward behavior, subjective norms, and perceived behavioral control, and work-related perceptions. The results of the study, which indicated that subjective norms and perceived behavioral control but not attitudes predicted the intention, partially support the TPB. Although the lack of significant finding for attitudes was inconsistent with the TPB as originally proposed by Ajzen [5] and with most research using the TPB in prediction of intentions in other contexts [6] [10] [13], it concurred with Kyle et al.’s findings [33], which were based on a study of students’ intention to achieve a high grade. Such result might result from most of the students having favorable attitudes toward working abroad after finishing their studies. The findings of this study also suggested students’ perceptions of overseas career development opportunities as another significant predictor of their intention to work abroad. While past research has identified career development as a pull factor toward overseas work [19] [21], our research furthers this knowledge by revealing its role in individuals’ decision-making process, or more specifically, the formulation of behavioral intention.

The second objective of the study was to examine the moderating role of cognitive CQ in the prediction of the intention to work abroad. The finding that cognitive CQ had moderating effects on the translation of subjective norms and perceived behavioral control into intention complemented the TPB. It revealed that students who had high subjective norms but low cognitive CQ and those who had high perceived behavioral control and high cognitive CQ possessed stronger intention to work abroad than other students. On the contrary, students who had low subjective norms and low cognitive CQ and those who had low perceived behavioral control but high cognitive CQ had weaker intention to work abroad than others.

Our major contribution to the existing body of knowledge is three fold. First, we applied the TPB, a frequently used and well accepted theory, to the context of predicting the intention to work abroad after
graduation from university. Secondly, we improved the present literature on the TPB by adding a work-related perception factor, career development, to strengthen the predictability. Finally, we added the cognitive CQ to serve the role as a moderator in the TPB.

Practically, our model can be used by scholars, experts, and human capital development professionals to develop policies and implement new strategies on how to hire foreign workers and most certainly in collaboration with career development centers within universities. This study also offers useful implications particularly for organizations which are seeking employees for potential overseas assignments. To be more specific, the human resource management may want to apply the predictors of intention to work abroad in selection of suitable current employees or in recruitment of new ones to avoid rejection of such tasks due to the lack of willingness to relocate.

Nevertheless, our research had sampling limitations, including the small sample size and the use of first and second-year undergraduate students, who might not yet put much thought into their plans after graduation. Future research may conduct studies across different departments and compare the results and may examine the moderating effect of other dimensions of CQ, namely, metacognitive CQ, motivational CQ, and behavioral CQ.

REFERENCES


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