<table>
<thead>
<tr>
<th>Title</th>
<th>Bicultural self-efficacy and bicultural identity integration of mainland students in Hong Kong: Their impact on students’ sociocultural adaptation and academic performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Lu, Yiqing (陸依晴)</td>
</tr>
<tr>
<td>Citation</td>
<td>Lu, Y. Q. (2011). Bicultural self-efficacy and bicultural identity integration of Mainland students in Hong Kong: Their impact on students’ sociocultural adaptation and academic performance (Outstanding Academic Papers by Students (OAPS)). Retrieved from City University of Hong Kong, CityU Institutional Repository.</td>
</tr>
<tr>
<td>Issue Date</td>
<td>2011</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/2031/6440">http://hdl.handle.net/2031/6440</a></td>
</tr>
<tr>
<td>Rights</td>
<td>This work is protected by copyright. Reproduction or distribution of the work in any format is prohibited without written permission of the copyright owner. Access is unrestricted.</td>
</tr>
</tbody>
</table>
SS4708 Research Project in Psychology

Research Report

Bicultural self-efficacy and bicultural identity integration of Mainland students in Hong Kong: Their impact on students’ sociocultural adaptation and academic performance

LU Yiqing

Supervisor: Prof. NG Sik Hung
EFFECTS OF BSE AND BII

Abstract

Objectives. The present study aimed at exploring the effects of bicultural self-efficacy (BSE) and bicultural identity integration (BII) on sociocultural adaptation (SCA) and academic performance among Mainland students who studied at universities in Hong Kong and testing the mediating role of BII on the effects of BSE on SCA and academic performance. It also investigated the differences in the above four variables between Foundation Year and Year 1 students.

Methods. One hundred and fifteen Mainland students from City University of Hong Kong, of whom 58 were Foundation Year and 57 were Year 1 students, participated in the survey. The survey consisted of a questionnaire designed to measure levels of BSE, BII, and SCA, academic performance, and some other demographics.

Results. Based on regression analysis, BSE and BII were tested to be significant predictors of SCA, but not academic performance. The proposed mediation models in which the effects of BSE on SCA or academic performance are mediated by BII failed to get statistical support. Besides, the differences between the participants from Foundation Year and Year 1 in BSE and academic performance were significant, while there was no significant difference in BII and SCA.

Discussion. The results show that both BSE and BII are significant predictors of SCA instead of academic performance, which suggests that academic performance may not be an acculturation issue for the Mainland China students in Hong Kong. The insufficiency in the proposed mediation models reveals the possible reciprocal causal relationship between BSE and BII and the possibility of more complex mediation effects. The differences between
EFFECTS OF BSE AND BII

Foundation Year and Year1 are discussed in the context of the participants with the caution of possible cohort effect. Implications for the studies of biculturalism in sojourners are discussed and the suggestions for further study are presented.
Acknowledgements

I express my sincere gratitude to my supervisor, Prof. NG Sik Hung, for his incentive, encouraging, supportive and interactive supervision to my research throughout the whole process.

I am heartily thankful to Dr. HE Wu Jing Mavis and Mr. NG Ting Kin for their kind and supportive help on my statistical analysis.

I would also like to show my thankfulness to Miss Maria Kwok, Ms. Kira Rimrott, Mr. Weith T. Y. Yuen, Mr. WU Qinwu, Mr. LIAO Lvyang, Miss KANG Boer, Miss KONG Jingning, and Mr. LIU Kenan for their assistance on my data collection; I’m also thankful to Miss MA Yuanyuan and Miss CAO Yuan for their contribution to the translation for my questionnaire.

Lastly, I would like to thank to all of the participants for their participation.
EFFECTS OF BSE AND BII

Table of Contents

No table of contents entries found.

List of Tables

Table 1. Internal reliability of the measurement by BSES, two-item BII scale, and SCAS for total participants, Foundation Year group and Year 1 group………………………………………………………………………………18

Table 2. Mean and standard deviation of BSE, BII, SCA, and academic performance for participants in total, Foundation Year group, and Year 1 group…………………………………………………………………………19

Table 3. Hierarchical regression analysis predicting SCA by BSE……………………20

Table 4. Hierarchical regression analysis predicting SCA by BII……………………21

Table 5. Hierarchical regression analysis predicting academic performance by BSE…22

Table 6. Hierarchical regression analysis predicting academic performance by BII…23

Table 7. Internal reliability of the measurement by six subscales of BSES……………24

Table 8. Predictions of academic performance by six factors of BSE…………………..25
List of Figures

Figure 1. Mediation model for BSE, BII, and SCA with standardized coefficient and significance of prediction for each path.................................................................24

Figure 2. Mediation model for bicultural beliefs, BII, and SCA with standardized coefficient and significance of prediction for each path..................................................26

Figure 3. Mediation model for BSE, BII, and SCA in the Foundation Year group with standardized coefficient and significance of prediction for each path........................................................................27

Figure 4. Mediation model for BSE, BII, and SCA in the Year 1 group with standardized coefficient and significance of prediction for each path.................................................28

Figure 5. Revised mediation model for BSE, BII, and SCA with standardized coefficient and significance of prediction for each path....................................................32
EFFECTS OF BSE AND BII
Chapter 1: Introduction and literature review

1.1 Background: A growing group of biculturals in Hong Kong

Since the transfer of sovereignty from United Kingdom to People’s Republic of China, Hong Kong has strengthened its ties with the Mainland in several aspects. In the aspect of education, the recruitment of Mainland students to Hong Kong universities has rendered a match between the students of good quality and the top-rated educational resources (Ching, 2006). With the establishment of policies and the rising popularity of the Hong Kong universities in the Mainland, more and more Mainland students come to Hong Kong for further study.

The recruitment started in 1998, which was indirect—the target students were those who had been admitted to some top universities in Mainland (Zhang, Xie, & Zhao, 2007). It was not until the academic year of 2002-2003 when the University of Hong Kong directly recruited self-funded undergraduate students from the Mainland for the first time (Xinhua News Agency, 2002). Since then, more Hong Kong universities and the Mainland students from more provinces were involved in the recruitment (Zhang et al., 2007). In 2006, over 1300 students were admitted to the eight UCG-funded universities or colleges (Chan, Lam, & Wong, 2007).

Because of the competitiveness of the admission to Hong Kong universities, the Mainland students in Hong Kong are all with good academic records. However, their academic performance and adaptation in Hong Kong were of great variance. From the news reports, it can be seen that they generally were faced with many adaptation issues in terms of language, food, interpersonal relationship, etc. (Cheung, 2000; Cheng, 2007). Some of them overcame their difficulties, while some were still struggling (Ng, Kwok, & Kwok, 2007).
EFFECTS OF BSE AND BII

There were even cases of suicide or suicidal attempts which shocked the Hong Kong society (e.g., Takungpao, 2010).

Therefore, the Mainland students in Hong Kong are becoming a new growing group who identify with both Hong Kong and the Mainland culture. However, there are great individual differences which affect their life in Hong Kong. As a promising group of talents who may contribute to both Hong Kong and the Mainland, it is very meaningful and necessary to study how they perceive themselves and performs as biculturals and how this affect their adaptation and academic performance in Hong Kong.

1.2 Literature review and conceptual framework

1.2.1 General predictors of adaptation and academic performance

Fruitful studies have focused on the adaptation and academic performance of international or bicultural college students. Among them, two of the general predictors were explored—self-efficacy and cultural identity (e.g., Harrison, Chadwick, & Scales, 1996; Hechanova-Alampay, Beehr, Christiansen, & Van Horn, 2002; Schwartz, Zamboanga, Weisskirch, & Wang, 2010).

Specifically, general self-efficacy is an indicator of the adaptation of international students. The students with higher general self-efficacy reported better adjustment (Harrison et al., 1996; Hechanova-Alampay et al., 2002). Since general self-efficacy accounts for a certain proportion of different performance in any fields, especially unfamiliar situations (Tipton & Worthington, 1984), it was proven to be influential in the cross-cultural cases (Harrison et al., 1996). At the same time, self-efficacy of specific domains, i.e., academic
self-efficacy and social self-efficacy, also significantly predicted sociocultural and academic adjustment (Poyrazli, Arbona, Nora, McPherson, & Pisecco, 2002; Gong & Fan, 2006). Concerning the limited prediction power of general self-efficacy, domain-specific self-efficacy was more applicable since the adjustment in nature consisted of several domains (Gong & Fan, 2006). Moreover, in their study, Li and Grasser (2005) focused on another domain-specific construct, cross-cultural self-efficacy, and proved its role as a mediator between international students’ contact with their hosts and their sociocultural adjustment, suggesting a more complex picture of self-efficacy and adaptation.

As for cultural identity, a positive relationship exists between adaptive psychological functioning and the identities of both heritage and host culture (Schwartz et al., 2010; Usborne & Taylor, 2010). In cross-cultural settings, the identities of both cultures were closely related to and contributed to a clear and stable self-concept, which could result in adaptation from an internal perspective (Schwartz et al., 2010). Stronger identity of heritage culture could result in more social difficulty, i.e., less adaptation, because of the unwillingness of acculturation (Ward & Searle, 1991). Even though few study has addressed the impact of cultural identity on the academic achievement of international students, similar effect were discovered on students with different ethnical backgrounds (e.g., Rust, 2008; Weaver, 2010), which presented the possibility of the same role the cultural identity plays on international students.

In summary, both self-efficacy and cultural identity are proven to be significant predictors of adaptation and academic performance. High level of self-efficacy, either general
EFFECTS OF BSE AND BII

or domain-specific, and identities of two cultures can lead to better adaptation and academic performance.

1.2.2 Biculturalism

With the development of global communication and mobility, biculturals, the people who possess two cultural identities, are drawing more and more attention in psychological research. Recent studies also involved sojourners, including non-local students, as biculturals, addressing the relationship between biculturalism, and their adjustment and well-being (e.g., Thomas, 1996; Furnham, 2004; Moore, 2009). Therefore, when studying the Mainland students in Hong Kong, new insights can be drawn from the perspective of biculturalism.

In the exploration of acculturation, Berry’s (2005) four strategies—assimilation, integration, separation, and marginalization—were developed based on how much one can retain the heritage identity and identify with the host culture. Among these four, “integration” was regarded as a support for the possibility of being bicultural (Benet-Martínez & Haritatos, 2005). In the review of LaFromboise, Coleman, and Gerton (1993), an “alternation model” was also concluded as the best strategy for the acquisition a new culture because of the coexistence of two cultural identities and the absence of internal conflicts and strain.

1.2.3 Bicultural competence and bicultural self-efficacy

Believing that it is possible for individuals to know about and fit in two different cultures without compromising their cultural identity, LaFromboise et al. (1993) put forward six dimensions of bicultural competence, including knowledge, positive attitudes, bicultural efficacy, communication skills, role repertoire, and sense of groundedness. Specifically, (a)
EFFECTS OF BSE AND BII

knowledge stood for one’s awareness of the knowledge of several aspects within two cultures; (b) positive attitudes referred to how positive one viewed both cultures; (c) bicultural efficacy represented the belief of how well one could function within two cultures; (d) communication skills included both verbal and non-verbal abilities; (e) role repertoire meant the proper roles of two cultures one would be willing to take; and (f) sense of groundedness represented the social closeness and the extent of connection and belonging (LaFromboise et al., 1993).

Theses six dimensions were important indicators of the adaptation and achievement for a bicultural individual in cross-cultural settings.

Based on this theoretical contribution, David, Okazaki, & Saw (2009) developed a construct named bicultural self-efficacy (BSE) and a scale for measuring BSE according to the six dimensions mentioned above. Besides, one dimension originally named “bicultural efficacy” in LaFromboise et al. (1993) was refined as “bicultural belief”. David et al. (2009) found out that BSE was an indicator of psychological well-being of bicultural college students.

According to the review above, it is quite clear about the closeness between bicultural competence and BSE. Moreover, David et al. (2009) put forward the definition of bicultural competence, which is as follows.

…bicultural competence, which may be defined as the ability to engage in the social interactional tasks necessary to initiate and maintain interpersonal relationships in both one’s heritage culture and the mainstream culture, as well as one’s ability to
EFFECTS OF BSE AND BII

satisfactorily and appropriately behave and function in both the heritage culture and the mainstream culture (David et al., 2009, p. 212).

At the same time, David et al. (2009) defined BSE as the belief of the bicultural competence of oneself. Therefore, even though there is no previous study about the effect of BSE on adaptation and academic performance of Mainland students, it is reasonable to expect BSE as a significant predictor.

1.2.4 Bicultural identity integration

Although the strategy “integration” proposed by Berry (2005) supported biculturalism, it failed to draw its complexity—it would be more meaningful to investigate how to integrate (Benet-Martínez & Haritatos, 2005). Thus, a construct called bicultural identity integration (BII) was developed, with the definition as the biculturals’ perception about “…their mainstream and ethnic cultural identities as compatible and integrated vs. oppositional and difficult to integrate” (Benet-Martínez, Leu, Lee, & Morris, 2002, p. 9). According to this definition, BII is dichotomous: People with high BII find it easy and less ambivalent to deal with two cultures, but those who have low BII are likely to experience difficulties and confusion in their bicultural life (Benet-Martínez & Haritatos, 2005; Chen, Benet-Martínez, & Bond, 2008).

It is found that biculturals can operate their cognition and behavior by switching cultural frames based on the external cultural stimulus (Hong, Morris, Chiu, & Benet-Martínez, 2000). However, this is moderated by BII: People with high BII switched their cultural frame in congruent with the cultural cues, but those of low BII switched to the opposite frame.
EFFECTS OF BSE AND BII

(Benet-Martínez et al., 2002). The contrast effect of people with low BII might a result of the internalizing the perceived conflict of the two cultures (Haritatos & Benet-Martínez, 2002). In this way, people with low BII were more prone to the ambivalence of the social involvement of both cultures, but people with high BII were better psychologically adjusted (Chen et al., 2008). Therefore, BII can be expected to predict the adaptation and academic performance of Mainland students.

1.2.5 Mediation model

Apart from the proposed theoretical roles of BSE and BII as predictors for adaptation and academic performance, there was also a relationship between BSE and BII. As indicated by David et al. (2009), people with high BSE would be less likely to perceive the two cultural as oppositional, i.e., more likely to be with high BII. Moreover, their relationship could be not only correlational, but also causal.

In exploring the conceptual components of BII, two formative indicators were indentified: cultural conflict and cultural distance (Benet-Martínez & Haritatos, 2005). Specifically, cultural conflict referred to the perception of how contrast or harmonious the two cultural identities are, while cultural distance represented the extent of separation or overlap between the two identities (Haritatos & Benet-Martínez, 2002). Based on a path analysis, linguistic stress during acculturation was a predictor of both cultural distance and cultural conflict. Moreover, lower level of bicultural competence was proven to be the antecedent of cultural distance while acculturation stress of interpersonal relation was the antecedent of cultural conflict (Benet-Martínez & Haritatos, 2005).
EFFECTS OF BSE AND BII

It is important to note that these antecedents were not theoretically identical with BSE, but they overlapped with it. For example, the stress in language and interpersonal relationship was highly related to the dimensions like communication skills and social groundedness in BSE. The measurement of bicultural competence in Benet-Martínez and Haritatos (2005) was theoretically derived from what LaFromboise et al. (1993) proposed, although only cultural identification and language proficiency were included. Therefore, it is logical and reasonable to speculate that BSE is the antecedent of BII. In this way, BII might work as a mediator in the effect of BSE on adaptation and academic performance.

1.2.6 Differences between the bicultural students with different year of study

The pattern of sociocultural and psychological adjustment over the time of acculturation was investigated by some longitudinal studies (e.g., Ward, Okura, Kennedy, & Kojima, 1998). Although there were fluctuations and variations in the pattern, generally, the shorter the acculturation is, the more difficult the sociocultural adjustment will be (Ward & Kennedy, 1999; Ward, Bochner, & Furnham, 2001; Hechanova-Alampay et al., 2002). Besides, sociocultural adaptation (SCA) should be distinguished from psychological one since the former is about how much one can fit in behaviorally while the latter one focuses on psychological well-being (Searle & Ward, 1990). In this way, academic performance can be regarded as the sociocultural part.

At the same time, there are studies showing a positive correlation between the length of residence in host country and intercultural social self-efficacy (Mak & Tran, 2001) and social self-efficacy (Lin & Betz, 2009). Similarly, the longer one lives in the region of host culture,
EFFECTS OF BSE AND BII

the less cultural differences he will perceive and less intrapersonal conflict of cultural identity he will experience (Leong & Ward, 2000).

The findings above suggest that Mainland China students in Year 1 (the second year of study) are more socially adapted and academically competent than those in Foundation Year (the first year of study) because of the additional one year of acculturation. It is also reasonable to predict that Foundation Year Mainland students have lower level of BSE and BII, compared with Year 1 students. Moreover, the proposed mediation model composed of BSE, BII, and sociocultural adjustment/academic performance may also different between these two groups of students.

1.2.7 Complexity of bicultural self-efficacy

Because of its theoretical closeness with bicultural competence, BSE is a multi-dimensional construct, too. This triggers the consideration of the power of six different factors. LaFromboise et al. (1993) proposed that the six factors were not equally important. They didn’t develop simultaneously, either. Specifically, according to LaFromboise et al. (1993), there is a hierarchical relation among all the factors—knowledge, bicultural belief, and positive attitudes are in fundamental level, labeled as “affective and cognitive dimension” (p. 408), while a higher level called “behavioral aspect” (p. 408) consists of communication ability and role repertoire. Besides, both levels account for the development of social groundedness. However, this hypothetical relation lacks empirical support.
EFFECTS OF BSE AND BII

Therefore, it is necessary to test the effects of both the overall BSE and the six different factors based on a priori concepts. Although no specific predictions for each factor can be made, it is still meaningful to explore their effects respectively as a post hoc testing.

1.2.8 Other covariance factors

Apart from BSE and BII, other variables also influence sociocultural adaptation and academic performance. Gender can influence or moderate the adjustment of international students (Lee, Park, & Kim, 2009; Long, Yan, Yang, & Van Oudenhoven, 2009). The younger age of arrival can lead to better adaptation (Kuo & Roysircar, 2006; Stevens, 1999).

Studies also show that the degree of sociocultural adaptation is influenced by how much one’s background is different from the host culture (Ward & Kennedy, 1993; Searle & Ward, 1990). In the case of the Mainland China students, such difference is quite significant in terms of economic development, which can be seen from the reflections of the Mainland students in Hong Kong Baptist University (Chen, 2010), apart from language. Moreover, students from different colleges may be faced with different tasks and requirements academically.

Therefore, the variables of gender, age, economic similarity between Hong Kong and hometown are included as covariates on sociocultural adjustment and academic performance. Besides, an additional covariate, college, is for academic performance.
1.3 Research purposes and hypotheses

The present research aims at testing the effects of BSE and BII on SCA and academic performance of the Mainland students in Hong Kong and investigating the within group differences by year of study. The hypotheses are as follows:

H1: BSE positively predicts SCA (H1a) and academic performance (H1b). In other words, the increase in the level of BSE predicts better SCA (H1a) and academic performance (H1b).

H2: BII positively predicts SCA (H2a) and academic performance (H2b). In other words, the increase in the level of BII predicts better of SCA (H2a) and academic performance (H2b).

H3: BII mediates the effects of BSE on SCA (H3a) and academic performance (H3b)

H4: The Mainland students who are in Year 1 have higher level of BSE (H4a), BII (H4b), SCA (H4c), and better academic performance (H4d) than those in Foundation Year.
Chapter 2: Method

2.1 Participants

One hundred and fifteen Mainland students from City University of Hong Kong participated in the present study by convenient sampling. Specifically, there are 55 males and 60 females, and 58 of them are in Foundation Year while 57 are in Year 1. Their age range is from 18 to 22 with a mean of 19.21 (SD = 1.00). Twenty of the participants are from College of Liberal Arts and Humanities, while 43 are in College of Business. At the same time, 47 participants study in College of Science and Engineering, while 4 are from School of Creative Media. The remaining one is from School of Law.

The participants were approached through class visit, direct questionnaire distribution in student residence and campus, and indirect questionnaire distribution through mutual friends.

2.2 Materials

2.2.1 BSE

The Bicultural Self-efficacy Scale (BSES) was adopted from David et al. (2009). To adjust to the context of the Mainland students in Hong Kong, there were some changes in wording. Specifically, “mainstream American” was changed into “Hong Kong people” and “people from the same heritage culture as myself” was replaced by “people from Mainland China.” One of the original item, which was “I am proficient in both standard English and the language of my heritage culture (e.g., urban street talk, Spanish, etc.).”, is split into two—“I am proficient in English.” and “I am proficient in Cantonese.”. This scale was translated into
EFFECTS OF BSE AND BII

Chinese. A 9-point scale was used for the participants to indicate how much they agree with each item, in which “1” means “strongly disagree” while “9” means “strongly agree”.

2.2.2 BII

BII was measured by the Chinese version of the two items developed by Ng, Yam, & Lai (2007). Some words were also adjusted to be more in accordance with the grammar in Mandarin. A 9-point scale is used for the participants to indicate the degree of their agreement with each item, in which “1” means “weak” while “9” means “strong”.

2.2.3 SCA

The Sociocultural Adaptation Scale (SCAS) was developed by Ward and Kennedy (1999) with 40 items in total. However, the number of items is flexible according to the characteristics of the sample. Moreover, twenty of the items were proven to constitute two dimensions of SCA based on factor analysis: (a) Cultural empathy and relatedness; (b) Impersonal endeavors and perils (Ward and Kennedy, 1999). Thus, these items were adopted although three of them are excluded because they were not related to the Mainland students. Besides, four items about college life were also included. Therefore, there were in total 21 items included in the present study and they were translated into Chinese. A 9-point scale was used for the participants to how much difficulty they experience in Hong Kong in the description of each item, in which “1” means “no difficulty” while “9” means “extreme difficulty”.

2.2.4 Academic performance
EFFECTS OF BSE AND BII

Academic performance was measured based on the participants’ indication of the range of their Semester Grade Point Average (for Foundation Year students) or Cumulative Grade Point Average (for Year 1 students). There were nine continuous ranges in total, and except for the first and the last ones, the others were all with same interval (See Appendix A and Appendix B). If one participant chooses the first interval, this person will score “1” for academic performance. Similarly, if the last interval is indicated, this participant will score “9”. In this way, academic performance was measured based on a 9-point scoring.

2.2.5 Other covariates

The participants were also required to indicate their gender and college and write down their age, the name of the province and the city they come from.

One of the covariates, economic similarity, was operationalized by the coding of the province and city. The province was coded based on the Gross Domestic Product (GDP) of each province in 2009, and the city was coded according to the research on the competitiveness of the cities in 2009 done by Chinese Academy of Social Sciences (n.d.). The GDP of Hong Kong in 2009 is 1,622.2 Hong Kong dollars (Census and Statistics Department, n.d.), so those provinces which has GDP over 1,000 Chinese Yuan, according to the statistics on the website of National Bureau of Statistics of China (n.d.), were considered as similar to Hong Kong. As for competitiveness, Chinese Academy of Social Sciences (n.d.) reported the top ten competitive cities in which Hong Kong ranked number one. The other nine cities were regarded as similar to Hong Kong, although two of them were excluded since they are of Taiwan. The similar provinces are Beijing, Hebei, Liaoning, Shanghai, Anhui,
EFFECTS OF BSE AND BII

Fujian, Shandong, Henan, Hunan, Guangdong, and Sichuan, and the similar cities include Shenzhen, Shanghai, Beijing, Guangzhou, Qingdao, Tianjin, and Suzhou. If the province of one participant’s hometown is within those twelve, this person will get one mark. If not, he will get zero. It will be the same if the city this participant comes from is within the seven competitive ones. In this way, economic similarity was operationalized as the sum of these two scores, ranging from 0 to 2.

2.3 Procedure

2.3.1 Back translation

After the adjustment of wording in BSES (David et al., 2009) and the selection of the items of SCAS (Ward & Kennedy, 1999), I translated these two scales into Chinese. Then, the Chinese version of BSES and SCAS were back-translated into English by other two undergraduate Mainland students who are good at both Chinese and English. After the comparison of the original and back-translated versions and the discussion between me and my supervisor and tutor, the Chinese translation was revised. To adjust to the bicultural context of Mainland students, the questionnaire was bilingual with English and simplified Chinese.

2.3.2 Pilot test

Ten Mainland students, five males and five females, of City University of Hong Kong participated the pilot test. Although these students were not in Foundation Year or Year 1, their language proficiency was believed to be comparable to the target group. According to their comments on the Chinese version of the items and the discussion between the researcher
EFFECTS OF BSE AND BII

and her supervisor, the translation was further adjusted and finalized. Besides, one item of BSES, which had its original English version as “I can switch easily between English/Cantonese and Putonghua.”, had the Corrected Item-total Correlation of -.079, and if this item were deleted, the Cronbach’s Alpha of the whole BSES would increase from .825 to .845. Therefore, this one was removed.

2.3.3 Dealing with order effect

According to Bradburn & Mason (1964), consistency effect and fatigue effect may occur because of the item order in questionnaire. The former one means that the participant’s response to one item can affect the judgment towards other items of the same factor in later part. To deal with this effect, the orders of BSES and SCAS were randomized to avoid grouping the items of the same factor together. Fatigue effect can occur when the participant feels tired when answering the later part of the questionnaire. Thus, the questionnaire of the present study was edited into two versions—one has the reverse order of the items of BSES, two BII items, and SCAS, compared with the other one. The two versions were distributed in about the equal amount. The numbers of the participants doing either version are 58 and 57 respectively.
Chapter 3: Results

3.1 Data analysis

SPSS 17.0 was used for most of the data analysis. Specifically, for H1 and H2 of the hypotheses, hierarchical regression was adopted so that the effect of BSE and BII could be tested when all of the covariates were controlled in Block 1. To test the effects of BSE and BII on SCA, the covariates were age, gender, and economic similarity. One more covariate, college, was included when testing the prediction of BSE and BII on academic performance. Besides, since the variable “college” was categorical with five categories, it was recoded into four dummy variables. The variable “gender” was also recoded into dummy variable. As for H4, independent t-test was run in SPSS 17.0 to compare the difference between the participants of Foundation Year and of Year 1. Cohen’s d for the effect size of significant differences were calculated through an online calculator (http://www.uccs.edu/~faculty/lbecker/) made by Becker (1999).

To test the mediation models proposed, simple linear regression and hierarchical regression were run in SPSS 17.0 based on Baron and Kenny’s (1986) steps. Besides, Sobel Test (Baron & Kenny, 1986) was used to test the indirect effect through online calculator in the webpage (http://www.people.ku.edu/~preacher/sobel/sobel.htm) made by Preacher and Leonardelli (2010). However, since Sobel test can be conservative (Preacher & Hayes, 2004; Kenny, 2009), bootstrapping (Preacher & Hayes, 2008) was also adopted for indirect effect testing through SPSS script for bootstrapping written by Preacher and Hayes (2008).
EFFECTS OF BSE AND BII

Bootstrapping is a nonparametric way to estimate effect-size by sampling with replacement, i.e., a large number (usually 1000) of samples of original sample size (Preacher & Hayes, 2004). To test mediation, the mean and standard deviation of the indirect effect $ab$, which is the product of the effects in path a (between independent variable (IV) and mediator) and path b (between mediator and dependent variable (DV) with the control of IV), is computed over the large number of bootstrap sample. Based on the confidence interval of 95%, the lower and upper limits of $ab$ are output. If zero is not within these two limits, then the indirect effect is significantly not zero at $p < .05$ (Preacher & Hayes, 2004).

3.2 Reliability and descriptive statistics

As shown in Table 1, there is high internal reliability of the measurement by BSES, the two-item BII scale, and SCAS. They are still reliable when separating the data into two groups—Foundation Year group and Year 1 group according to Table 1. Since the BII scale has two items only, the inter-item correlations for this scale were calculated, which was .66 for total participants, .64 for Foundation Year group, and .69 for Year 1 group.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Foundation Year</td>
<td>Year 1</td>
</tr>
<tr>
<td>BSES</td>
<td>26</td>
<td>.95</td>
<td>.95</td>
<td>.95</td>
</tr>
<tr>
<td>Two-item BII scale</td>
<td>2</td>
<td>.79</td>
<td>.78</td>
<td>.82</td>
</tr>
<tr>
<td>SCAS</td>
<td>21</td>
<td>.93</td>
<td>.93</td>
<td>.94</td>
</tr>
</tbody>
</table>
EFFECTS OF BSE AND BII

Table 2
Mean and standard deviation of BSE, BII, SCA, and academic performance for participants in total, Foundation Year group, and Year 1 group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSE(^a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>6.28</td>
<td>1.21</td>
</tr>
<tr>
<td>Foundation Year</td>
<td>53</td>
<td>6.01</td>
<td>1.19</td>
</tr>
<tr>
<td>Year 1</td>
<td>53</td>
<td>6.56</td>
<td>1.19</td>
</tr>
<tr>
<td>BII(^b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>114</td>
<td>5.27</td>
<td>2.05</td>
</tr>
<tr>
<td>Foundation Year</td>
<td>58</td>
<td>5.20</td>
<td>1.98</td>
</tr>
<tr>
<td>Year 1</td>
<td>56</td>
<td>5.35</td>
<td>2.14</td>
</tr>
<tr>
<td>SCAS(^c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>6.67</td>
<td>1.19</td>
</tr>
<tr>
<td>Foundation Year</td>
<td>57</td>
<td>6.56</td>
<td>1.13</td>
</tr>
<tr>
<td>Year 1</td>
<td>55</td>
<td>6.77</td>
<td>1.25</td>
</tr>
<tr>
<td>Academic Performance(^d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>5.75</td>
<td>1.87</td>
</tr>
<tr>
<td>Foundation Year</td>
<td>56</td>
<td>5.36</td>
<td>1.78</td>
</tr>
<tr>
<td>Year 1</td>
<td>56</td>
<td>6.14</td>
<td>1.88</td>
</tr>
<tr>
<td>Economic similarity(^e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>.73</td>
<td>.79</td>
</tr>
<tr>
<td>Foundation Year</td>
<td>55</td>
<td>.67</td>
<td>.82</td>
</tr>
<tr>
<td>Year 1</td>
<td>53</td>
<td>.79</td>
<td>.77</td>
</tr>
</tbody>
</table>

Note. The variation in sample size is because of the different valid responses in different variables.

\(^a\) The response of BSES ranges from 1 to 9 in which “1” means “strongly disagree” while “9” means “strongly agree”.

\(^b\) The response of BII scale ranges from 1 to 9 in which “1” means “weak” while “9” means “strong”.

\(^c\) The response of SCAS ranges from 1 to 9. However, the data of SCAS has been reverse coded so that “1” means “extreme difficulty” while “9” means “no difficulty”.

\(^d\) The response of academic performance ranges from 1 to 9 in which “1” represents the interval “≤2.69” while “9” represents “≥4.00”. The higher the score is, the better the academic performance is.

\(^e\) Economic similarity is coded based on the province and city reported by participants. It ranges from 0 to 2. The higher the score is, the more economically similar to Hong Kong one’s province and city are.

The descriptives of mean and standard deviation of BSE, BII, SCA, academic performance, and economic similarity for the participants in total and the two groups (Foundation Year and Year 1) respectively are presented in Table 2. While originally “1” means “no difficulty” and “9” stands for “extreme difficulty” in SCAS, it is reversed during
EFFECTS OF BSE AND BII

data analysis so that all of the variables are coded in the same direction. Thus, the
descriptives for SCA are what after reverse coding.

3.3 Regression

To test how much BSE and BII predict SCA respectively, hierarchical regression was
performed with the control of covariates age, gender (recoded into dummy variable), and
economic similarity in Block 1. The results are shown in Table 3 and 4 respectively, and it
can be seen that both BSE and BII significantly and positively predicts SCA. Therefore, the
hypotheses H1a and H2a are supported.

Table 3
Hierarchical regression analysis predicting SCA by BSE

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-dumm y</td>
<td>.23</td>
<td>.26</td>
<td>.10</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>.07</td>
<td>.13</td>
<td>.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>.02</td>
<td>.17</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Similarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td></td>
<td></td>
<td>.26</td>
<td>.25***</td>
</tr>
<tr>
<td>Gender-dumm y</td>
<td>.26</td>
<td>.23</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.03</td>
<td>.11</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>-.13</td>
<td>.15</td>
<td>-.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Similarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSE</td>
<td>.49</td>
<td>.09</td>
<td>.51***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .01, *** p < .001

Similar steps were performed to test the respective predictions of academic performance
by BSE and BII. College, which is recoded into four dummy variables, age, gender (recoded
into dummy variable), and economic similarity were included in the covariates in Block 1.

The results are presented in Table 5 and 6. Since no significance is achieved for the
EFFECTS OF BSE AND BII

respective prediction of BSE and BII on academic performance, the hypotheses H1b and H2b are rejected.

Table 4
Hierarchical regression analysis predicting SCA by BII

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td></td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Gender-dumm</td>
<td>.15</td>
<td>.25</td>
<td>.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.11</td>
<td>.12</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Similarity</td>
<td>.02</td>
<td>.16</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td></td>
<td>.12</td>
<td>.11**</td>
<td></td>
</tr>
<tr>
<td>Gender-dumm</td>
<td>.13</td>
<td>.24</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.13</td>
<td>.12</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Similarity</td>
<td>.01</td>
<td>.15</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BII</td>
<td>.20</td>
<td>.06</td>
<td>.33**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05, ** p < .01, *** p < .001

3.4 Mediation model

3.4.1 Two models in H3

Simple linear regression between BSE and BII and hierarchical regression were performed to test the two mediation models in H3 according to Baron and Kenny’s (1986) steps. Same as the testing for H1 and H2, the sets of covariates were included in hierarchical regression analysis.

Based on the steps for testing mediation effect proposed by Baron and Kenny (1986), IV of the mediation model must significantly predict DV (i.e., significant effect in path c) first.

Since H1b is rejected, the hypothesized mediation model in H3b, consisting of BSE, BII, and academic performance, is rejected based on Baron and Kenny (1986). Although previous
study also pointed out that the first step of Baron and Kenny (1986) was not necessary (Preacher & Hayes, 2004), the mediation effect of H3b still cannot meet the requirement of the other steps. For example, when BSE is controlled, the effect of BII on academic performance is not significant ($B = .004$, $SE B = .115$, $β = .004$, $t(85) = .031$, $p = .975$).

Therefore, H3b is rejected.

Table 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE B$</th>
<th>$β$</th>
<th>$R^2$</th>
<th>$ΔR^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-dummy</td>
<td>.36</td>
<td>.41</td>
<td>.09</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Age</td>
<td>.19</td>
<td>.20</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Similarity</td>
<td>-.46</td>
<td>.26</td>
<td>-.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-a-dummy1</td>
<td>2.29</td>
<td>1.95</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy2</td>
<td>3.36</td>
<td>1.93</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy3</td>
<td>3.56</td>
<td>1.95</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy4</td>
<td>2.84</td>
<td>2.18</td>
<td>.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-dummy</td>
<td>.35</td>
<td>.41</td>
<td>.09</td>
<td>.15</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>.19</td>
<td>.20</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Similarity</td>
<td>-.43</td>
<td>.26</td>
<td>-.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy1</td>
<td>2.35</td>
<td>1.95</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy2</td>
<td>3.50</td>
<td>1.94</td>
<td>.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy3</td>
<td>3.61</td>
<td>1.95</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College-dummy4</td>
<td>2.98</td>
<td>2.19</td>
<td>.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSE</td>
<td>-.14</td>
<td>.16</td>
<td>-.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

a Since college is a categorical variable with five categories, it is recoded into four dummy variables for regression analysis.

As for the mediation effect in the model of H3a, the first step (path c) is met (for H1a is supported), so is the second one (path a), as BSE has significant positive effects on BII ($B = .78$, $SE B = .14$, $β = .47$, $t(103) = 5.46$, $p < .001$). However, after controlling BSE, BII has
EFFECTS OF BSE AND BII

no significant effects on SCA (path b) \((B = .07, SE B = .07, \beta = .12, t(87) = 1.09, p = .28)\)

although the prediction of BSE remains significant (path c’) \((B = .44, SE B = .11, \beta = .45, t(87) = 4.14, p < .001)\). The results of testing the H3a mediation model is summarized and presented in Figure 1. No mediation effect exists according to Baron and Kenny (1986).

Sobel test result \((Z = .98, p = .32)\) also shows insignificant indirect effect. By using bootstrapping with bootstrap sample of 1000, the true indirect effect estimated lies between -.03 to .17 with 95% level of confidence, which reveals that zero cannot be significantly excluded. Therefore, H3a is rejected.

Table 6
Hierarchical regression analysis predicting academic performance by BII

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
</table>
|                    | \(B\)   | \(SE B\) | \(\beta\) | \(R^2\) | \(\Delta R^2\)
| Gender-dummy       | .31     | .38     | .08      |        | .16    |
| Age                | .24     | .19     | .12      |        | .16    |
| Economic Similarity| -.49    | .25     | -.21     |        |        |
| College\(^a\)-dummy1 | 2.20   | 1.88    | .46      |        | .16    |
| College-dummy2     | 3.16    | 1.87    | .81      |        | .00\(^b\) |
| College-dummy3     | 3.42    | 1.88    | .89      |        |        |
| College-dummy4     | 2.28    | 2.03    | .23      |        |        |

| Gender-dummy       | .30     | .38     | .08      |        | .16    |
| Age                | .23     | .19     | .12      |        | .00\(^b\) |
| Economic Similarity| -.49    | .25     | -.21     |        |        |
| College-dummy1     | 2.21    | 1.89    | .46      |        |        |
| College-dummy2     | 3.18    | 1.87    | .81      |        |        |
| College-dummy3     | 3.43    | 1.89    | .89      |        |        |
| College-dummy4     | 2.32    | 2.05    | .24      |        |        |
| BII                | -.03    | .09     | -.03     |        |        |

Note. \(^a\) Since college is a categorical variable with five categories, it is recoded into four dummy variables for regression analysis.

\(^b\) \(\Delta R^2\) for Model 2 is less than .01.
Figure 1. Mediation model for BSE, BII, and SCA with standardized coefficient and significance of prediction for each path. Path a is from BSE to BII. Path b is the label for the one from BII to SCA. Both path c and path c' represent the ones from BSE to SCA. The number in blanket represents the path c'.
* p < .05, ** p < .01, *** p < .001

3.4.2 Post hoc testing of six exploratory models

Considering the different roles of the six factors of BSE, it is necessary to test the six exploratory mediation models based on a priori concepts of the factors of BSE to see how BII mediates the effect of each factor of BSE on SCA and academic performance.

Table 7
Internal reliability of the measurement by six subscales of BSES

<table>
<thead>
<tr>
<th></th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social groundedness</td>
<td>7</td>
<td>.93</td>
</tr>
<tr>
<td>Communication ability</td>
<td>4</td>
<td>.64</td>
</tr>
<tr>
<td>Positive attitude</td>
<td>4</td>
<td>.85</td>
</tr>
<tr>
<td>Knowledge</td>
<td>4</td>
<td>.81</td>
</tr>
<tr>
<td>Role repertoire</td>
<td>3</td>
<td>.76</td>
</tr>
<tr>
<td>Bicultural beliefs</td>
<td>4</td>
<td>.79</td>
</tr>
</tbody>
</table>

Note. According to the questionnaire of Appendix A, social groundedness includes item 1, 4, 11, 13, 16, 18, and 21; communication ability includes item 2, 8, 10, and 24; positive attitudes includes item 3, 7, 15, and 25; knowledge includes item 14, 17, 19, and 22; role repertoire includes item 5, 12, and 20; bicultural beliefs includes item 6, 9, 23, and 26.
Table 8

*Predictions of academic performance by six factors of BSE*

<table>
<thead>
<tr>
<th>Factors</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social groundedness</td>
<td>-.08</td>
<td>.12</td>
<td>-.06</td>
</tr>
<tr>
<td>Communication ability</td>
<td>-.04</td>
<td>.14</td>
<td>-.03</td>
</tr>
<tr>
<td>Positive attitude</td>
<td>-.13</td>
<td>.13</td>
<td>-.10</td>
</tr>
<tr>
<td>Knowledge</td>
<td>-.06</td>
<td>.13</td>
<td>-.05</td>
</tr>
<tr>
<td>Role repertoire</td>
<td>-.10</td>
<td>.13</td>
<td>-.08</td>
</tr>
<tr>
<td>Bicultural beliefs</td>
<td>-.11</td>
<td>.14</td>
<td>-.08</td>
</tr>
</tbody>
</table>

*Note.* *p* < .05, **p** < .01, ***p*** < .001

The predictions by each of the six factors were tested separately in six hierarchal regression models with gender, age, college, and economic similarity in Model 1, while each factor was added in Model 2 of its corresponding regression model.

As shown in Table 7, the six subscales of BSES all show acceptable internal reliability (Although Cronbach’s alpha for the subscale “Communication ability” is lower than .70, considering the limited number of items, it is still regarded as reliable.). However, since none of the six factors can significantly predict academic performance (Table 8), only the testing of SCA as dependent variable is performed.

Among the six factors, only the effect of bicultural belief is significantly mediated by BII since it significantly predict SCA (path c: $B = .28, SE B = .09, \beta = .31, t(96) = 3.17, \ p < .01$) and BII (path a: $B = .51, SE B = .14, \beta = .34, t(111) = 3.77, \ p < .001$). When bicultural beliefs is controlled, BII still has significant effect on SCA (path b: $B = .14, SE B = .06, \beta = .24, t(95) = 2.41, \ p < .05$), and so does bicultural beliefs (path c’: $B = .20, SE B = .09, \beta = .22, t(95) = 2.17, \ p < .05$). So there is a partial mediation effect in the model of bicultural beliefs, BII, and SCA, according to Baron and Kenny (1986), as summarized in Figure 2.
EFFECTS OF BSE AND BII

The indirect effect of this model is also proven to be significant (Sobel test: $Z = 1.96$, $p < .05$; Bootstrapping with bootstrap sample as 1000: from .01 to .17 at 95% level of confidence). Therefore, other than mediating the effect of BSE as a whole, it is likely that BII only mediate the effects of bicultural beliefs, but not other factors.

![Diagram](image)

Figure 2. Mediation model for bicultural beliefs, BII, and SCA with standardized coefficient and significance of prediction for each path. Path a is from bicultural beliefs to BII. Path b is the label for the one from BII to SCA. Both path c and path c’ represent the ones from bicultural beliefs to SCA. The number in blanket represents the path c’.

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

3.5 Differences between Foundation Year and Year 1

3.5.1 Differences in H4

Independent t-test was run to test the differences between Foundation Year group and Year 1 group. As shown in Table 2, Year 1 group score higher than Foundation Year group in all of the four variables. However, according to the results of one-tailed independent t-tested, such differences are significant only in BSE ($t(104) = -2.39, p < .01, d = -.46$) and academic performance ($t(110) = -2.27, p < .05, d = -.43$), but not in BII ($t(112) = -.39, p = .35$) and SCA ($t(110) = -.93, p = .18$). The significant differences are in medium effect size. Therefore, H4a and H4d are supported while H4b and H4c are rejected.
3.5.2 Exploratory testing: Difference in the mediation model of BSE, BII, and SCA

Because of the differences in some variables between Foundation Year group and Year 1 group, there may be differences in the proposed mediation model of H3 as well. However, BSE was still not a significant predictor for academic performance in either group (Foundation Year: $B = -.19, SE B = .22, \beta = -.13, t(39) = -.85, p = .40$; Year 1: $B = -.35, SE B = .25, \beta = -.21, t(40) = -1.40, p = .17$), so the testing was only for the model consisting of BSE, BII, and SCA.

The mediation effect is not significant in either group, as shown in Figure 3 and Figure 4.

The indirect effect tests for both groups are not significant, either (For Foundation Year group: Sobel test, $Z = 1.07, p = .29$; Bootstrapping with bootstrap sample of 1000, from -.06 to .26 at 95% level of confidence; For Year 1 group: Sobel test, $Z = .61, p = .54$; Bootstrapping with bootstrap sample of 1000, from -.05 to .26 at 95% level of confidence).

![Figure 3. Mediation model for BSE, BII, and SCA in the Foundation Year group with standardized coefficient and significance of prediction for each path. Path a is from BSE to BII. Path b is the label for the one from BII to SCA. Both path c and path $c'$ represent the ones from BSE to SCA. The number in blanket represents the path $c'$.](image-url)

* $p < .05$, ** $p < .01$, *** $p < .001$, a $p = .05$
EFFECTS OF BSE AND BII

Figure 4. Mediation model for BSE, BII, and SCA in the Year 1 group with standardized coefficient and significance of prediction for each path. Path a is from BSE to BII. Path b is the label for the one from BII to SCA. Both path c and path c’ represent the ones from BSE to SCA. The number in blanket represents the path c’.

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

However, there is minor difference in the testing of mediation between the two groups.

Based on Baron and Kenny’s (1986) steps, both group show significant prediction of BSE in path a (For Foundation Year group: $B = .83$, $SE B = .19$, $\beta = .51$, $t(51) = 4.26$, $p < .001$; For Year 1 group: $B = .75$, $SE B = .22$, $\beta = .43$, $t(50) = 3.38$, $p < .01$) and path c (For Foundation Year group: $B = .41$, $SE B = .13$, $\beta = .42$, $t(43) = 3.19$, $p < .01$; For Year 1 group: $B = .72$, $SE B = .14$, $\beta = .68$, $t(40) = 5.14$, $p < .001$). When BSE is controlled, the prediction of BII to SCA is not significant for both groups (Path b for Foundation Year group: $B = .11$, $SE B = .10$, $\beta = .17$, $t(42) = 1.08$, $p = .29$; Path b for Year 1 group: $B = .05$, $SE B = .08$, $\beta = .09$, $t(39) = .66$, $p = .52$). However, at the same time, the significance of BSE’s prediction in Foundation Year group becomes only marginal (Path c’: $B = .32$, $SE B = .16$, $\beta = .33$, $t(42) = 2.03$, $p = .05$) while it is still high in Year 1 group (Path c’: $B = .69$, $SE B = .15$, $\beta = .64$, $t(39) = 4.51$, $p < .001$). Therefore, it seems that the effects of BSE on SCA are higher and less likely to be mediated by BII in Year 1 group.
Chapter 4: Discussion and conclusion

4.1 Discussion

With the aim of testing the effects of BSE and BII on SCA and academic performance among the Mainland students in Hong Kong and the differences between Foundation Year group and Year 1 group, the present study shows that both BSE and BII are significant predictors of SCA, but not academic performance. The mediation of BII on the effect of BSE is not supported. The Year 1 group is significantly higher than their counterpart of Foundation Year in BSE and academic performance, but not in BII and SCA. In summary, hypotheses H1a, H2a, H4a, and H4d are supported, but the others are rejected.

There are also some exploratory testing in the mediation of BII on the six factors of BSE respectively and the different pictures of the proposed mediation model of H3a between the two groups of different year of study. It is found that, among the six factors of BSE, only the effect of bicultural beliefs is mediated by BII. When comparing the proposed mediation effect between the two groups, the effects of BSE on SCA are seemed to be higher and less likely to be mediated by BII in Year 1 group than Foundation Year group.

4.1.1 The prediction of BSE and BII on academic performance

It is an interesting finding that BSE and BII are significant predictors of SCA but not academic performance, since only the former one confirm the previous assumptions about the role of BSE and BII in acculturation and adjustment. One possible reason is that academic performance is unrelated to acculturation. Previous studies have shown that language proficiency and learning strategies are important factors influencing the academic
EFFECTS OF BSE AND BII

performance of international students (Stoynoff, 1997; Ying, 2003). As for the case of the Mainland students in Hong Kong, these two factors are unlikely to be related to their acculturation to Hong Kong.

Specifically, English is the language used for academic work in Hong Kong. Even though this is different from the universities in Mainland China, English is also an important part of education in Mainland China (Hu, 2005), and there is still growing requirements for English proficiency in Mainland China. For example, there is a national test in Mainland China called “College English Test Band 4 and Band 6”, which is a standard examination for the evaluation of college students’ English proficiency and it has become an important criterion for the employment of college students (CET, n.d.). Therefore, English proficiency may not be an acculturation issue for the Mainland students since they have already been dealing with it for years, even before they came to Hong Kong.

As for learning strategies, as mentioned before, all of the Mainland China students admitted to Hong Kong universities are highly competitive in academic work (Cheng, 2007). Thus, they are willing to pay efforts and adopt effective strategies in learning. It may not be an acculturation issue for them, either.

4.1.2 Mediation model of BSE, BII, and SCA

The proposed mediation model consisting of BSE, BII, and SCA fails to get statistical support. Nonetheless, the empirical research about BSE, its six factors, and BII is lacking. Thus, the following interpretation and discussion are only theoretically-based and tentative.

4.1.2.1 A revised model
EFFECTS OF BSE AND BII

Based on the testing according to Baron and Kenny’s (1986) steps, it is likely that BSE is in fact the mediator which mediates the effects of BII on SCA, so that the model can be revised (as shown in Figure 5). There is a perfect mediation effect in this revised model. However, it lacks research support that BII is the antecedent of BSE, and it will also be too hasty to reject that BSE is the antecedent of BII.

Considering the definitions of BSE and BII, it is very difficult to test the causal relationship between these two constructs. However, as pointed out by Benet-Martínez & Haritatos (2005), in the path analysis between the antecedents they proposed and BII, there may be bidirectional effects. Therefore, theoretically, BSE and BII are likely to interact as both cause and effect. As a perception of one’s own competence in specific domains (David et al., 2009), BSE can influence how one forms his or her cultural identities according to the perceived overall performance in two cultures. At the same time, BII captures a general sense of how distant and conflict one’s cultural identities are (Benet-Martínez et al., 2002), so it can direct one’s perception of specific cultural competence as well. This is in line with what proposed by LaFromboise et al. (1993) that there is a reciprocal causal relationship between cultural identity and six aspects of bicultural competence. Thus, the possibility of the significant mediation effect in the revised model can be justified.
4.1.2.2 Exploratory mediation model of bicultural beliefs, BII, and SCA

It is important to note that what is discussed above is not enough to reject the proposed mediation model in H3. However, according to the exploratory testing of six mediation models developed from a priori concepts of the factors of BSE, it is suggested that there are variation among the six factors while BII only mediates bicultural beliefs.

As found in the exploratory testing, the effect of bicultural belief on SCA is partially mediated by BII. Among the six factors of BSE, bicultural belief tends to be a more general one which is conceptually closely related to BII, especially culture conflict, since it stands for the level of confidence that one can effectively function in both cultures without the need of compromising one’s cultural identities (LaFromboise et al., 1993). Although empirical support is lacking, it is reasonable to suggest that bicultural beliefs is the antecedent of both BII and SCA. The more confident one is in bicultural beliefs, the less likely that he or she will perceive cultural identities as distant and conflict, while be better adapted. Thus, the
EFFECTS OF BSE AND BII

exploratory mediation model of bicultural beliefs, BII and SCA is supported not only statistically, but also theoretically.

Moreover, it is also possible that, the specific factors, rather than an overall BSE, provide a better picture of one’s perceived competence in two cultures. LaFromboise et al. (1993) has proposed a hierarchical relation for the six dimensions of bicultural competence in which bicultural belief is categorized into affective and cognitive aspect, which is quite fundamental. Therefore, it is reasonable that bicultural belief is the only factor which is mediated by BII because of its theoretical relatedness with BII and SCA as well as its fundamental role in the perception of bicultural competences.

4.1.2.3 More complex mediation effect

In the exploratory testing of the proposed mediation model of H3 in Foundation Year group and Year 1 group respectively, it is found that BSE is less mediated by BII in the Year 1 group. Therefore, there is possibility that year of study is a moderator for the mediation effect among BSE, BII, and SCA, which can be called moderated mediation (Kenny, 2009).

While it is also found that BSE has more effects in SCA in Year 1 group, the role of BSE will be certainly moderated by year of study, no matter it is IV or moderator. However, because of the various possibility of the actual mediation model consisting of BSE, BII, and SCA mentioned above, it will be even more difficult to make any more detailed prediction about moderated mediation, especially when there is not enough research support.

In summary, the insignificance of the testing of the proposed mediation model in H3a reflects the possible interpretation that (a) BSE is in fact the mediator while BII is IV; (b)
EFFECTS OF BSE AND BII

only bicultural beliefs is mediated by BII; (c) there is a moderated mediation among BSE, BII, SCA, and year of study.

4.1.3 Differences between Foundation Year group and Year 1 group

It receives statistical support that the participants of Year 1 are higher than those in Foundation Year in BSE and academic performance, which confirms the previous assumption. It reflects that the longer acculturation experience one has, the more biculturally competent Mainland students will perceive themselves, and the better academic performance they will have.

However, there is no significant difference between these two groups in BII. Possible reason is that BII is a changing process instead of a stable variable. Cheng’s (2005) study showed that, the BII of the participated biculturals would be higher if positive cultural experience was recalled, while BII would be lower after the recall of less positive experience. Besides, some personality traits were shown to be the antecedents of BII (Benet-Martínez & Haritatos, 2005). Thus, as suggested by Cheng, Lee, and Benet-Martínez (2006), BII is a process which varies across different external and internal situations. In this way, the influence of the length of acculturation can be minor.

Nonetheless, the difference in SCA also fails to achieve significance. It is quite contradictory to previous findings (e.g., Ward & Kennedy, 1999; Ward et al., 2001). One possible explanation is that as the first-year student in university, Foundation Year students receive many supports from the university and student associations which provide programs to assist their adjustment in local life. With these supports, the adaptation of Foundation Year
EFFECTS OF BSE AND BII

students is not worse than Year 1 students. Besides, as shown in Kalmuss, Davidson, and Cushman (1992), the higher the expectation one has, the more difficulties in adjustment he or she will encounter. It is plausible that, apart from social learning during acculturation, the Year 1 students also learn to have higher self-expectation in their performance in Hong Kong. Thus, their perceived difficulties in social adaptation do not reduce and are not different from Foundation Year group.

The interpretation of both the insignificant differences and the significant ones must be cautious since the testing in present study in cross-sectional while its theoretical base is from longitudinal studies (e.g., Ward & Kennedy, 1999). All of the findings of the comparison between Foundation Year group and Year 1 group can be possibly just a result of cohort effect (Searle & Ward, 1990).

4.2 Implications and applications

The present study explores the field of biculturalism and social adjustment among the biculturals who are from Mainland China and studying in Hong Kong. It reveals that the measurements of BSE, SCA, and the two items of BII are applicable to the Mainland students in Hong Kong.

The prediction of BSE and BII on SCA respectively contribute to the theoretical field about BSE and BII. While previous studies only show that these two variables have effects on psychological well-being (e.g., David et al., 2009; Chen et al., 2008), the present study proves that they can also affect social adjustment. Thus, the effects of BSE and BII are extended.
EFFECTS OF BSE AND BII

The present study includes the first attempt to explore the relationship and interaction between BSE and BII. Even though the testing of the proposed mediation model doesn’t achieve significance, it reflects that there is a reciprocal causal relationship between these two variables. This finding provides a possible direction for further study to testing the interaction between BSE and BII.

It is also the first time to put the Mainland students in Hong Kong as a target group of biculturs in biculturalism study. Thus, biculturalism is not limited to immigrants and sojourners from another country. It can be applied to sojourners whose host region is not far away from their hometown and their original culture overlaps, to some extent, with the culture of their host region.

Finally, since BSE and BII are proven to be significant predictors of SCA, the measurements of these two can be adopted by universities and student associations to test their target Mainland China students as a reference or evaluation of their design and planning about support programs. Moreover, since there is no difference in SCA between the two groups of the present study, it is reasonable for universities and student associations to provide supports not restricted to the first-year Mainland students.

4.3 Limitations and future study

4.3.1 Limitations

There are some limitations in the present study. First, although the target group is the Mainland students in Hong Kong, only the Foundation Year and Year 1 students in City
EFFECTS OF BSE AND BII

University of Hong Kong are included through convenient sampling. This may set limits for generalizing the findings of this study to all the Mainland China students.

Second, to test the proposed effect of length of acculturation based on previous longitudinal studies, cross-sectional design is adopted. The possible cohort effect can affect both significant and insignificant results. Therefore, the interpretation and application of these results should be cautious.

Third, there is also limitation in the testing and interpretation of mediation models. The tentative post hoc testing of the proposed mediation model in H3 is based on a priori concepts of the six factors of BSE. It cannot rule out the possibility that each factor is measured invalidly. At the same time, the interpretation of the results about the testing of the proposed mediation model is just theoretically based so that it is, in a sense, hypothetical. Empirical support is needed.

4.3.2 Future study

As for future study about the Mainland students in Hong Kong, it is better to recruit participants from all the universities in Hong Kong with random sampling. The results will be more meaningful and generalizable only when the participants are representative.

The findings about the differences between Foundation Year group and Year 1 group should be tested in a longitudinal design. In this way, possible cohort effect can be excluded. Instead, it detects the causal role of year of study.

Apart from the above, it is meaningful to validate the six factors of BSE among the Mainland students in Hong Kong with factor analysis and test the mediation effect of the six
EFFECTS OF BSE AND BII

mediation models including BII, SCA, and each of the six factors. More complex picture and in-depth view can be detected regarding the interaction between BSE and BII.

Finally, it is also a good direction to test the moderated mediation among BSE, BII, SCA, and year of study. For instance, the possible moderator, year of study, may determine when BSE will be IV while BII will be mediator, when the effects of BSE will be stronger, or the effects of which factors of BSE will be mediated by BII.

4.4 Conclusion

As the first attempt to test the effects of BSE and BII on social adjustment and the interaction between BSE and BII among a growing group of biculturals—Mainland China students in Hong Kong, the present study fills the gap about the prediction of BSE and BII, expands the field of biculturalism studies to Mainland China students, and provides future directions for testing the role of length of acculturation and the possible moderated mediation among BSE, BII, SCA, and year of study. This study is hoped to trigger the awareness of necessities in studying the Mainland China students in Hong Kong and the interests of investigating the interaction and effects of the bicultural constructs like BSE and BII.
EFFECTS OF BSE AND BII

References

doi:10.1037/0022-3514.51.6.1173


doi:10.1111/j.1467-6494.2005.00337.x

doi:10.1177/0022022102033005005


EFFECTS OF BSE AND BII


Retrieved from


CET. (n.d.). *CET overview.* Retrieved from

http://www.en.cet.edu.cn/overv_displaynews.asp?id=277 and

http://www.en.cet.edu.cn/overv_displaynews.asp?id=280


doi:10.1111/j.1467-6494.2008.00505.x

EFFECTS OF BSE AND BII

*and Engineering, 66* (2-B) Retrieved from

http://search.proquest.com/docview/621062859


EFFECTS OF BSE AND BII


EFFECTS OF BSE AND BII


EFFECTS OF BSE AND BII


Takungpao. (2010). *Ke da nei di sheng ge mai zi sha huo jiu [A Mainland student of the Hong Kong University of Science and Technology had suicidal attempt of cutting wrist and was rescued].* Retrieved from http://source.takungpao.com/news/10/08/10/GW-1294388.htm


EFFECTS OF BSE AND BII


*Dissertation Abstracts International Section A: Humanities and Social Sciences,*
EFFECTS OF BSE AND BII

70(8-A). Retrieved from
http://search.proquest.com/docview/622199170?accountid=10134

Xinhua News Agency. (2002). Xiang gang jiang zhao shou di yi pi nei di ben ke sheng, ru xue ke ping gao kao cheng ji [Hong Kong universities are going to recruit the first group of Mainland with the score of National College Entrance Examination as reference for admission]. Retrieved from http://big5.china.com.cn/chinese/EDU-c/171699.htm


EFFECTS OF BSE AND BII

Appendices

Appendix A

Questionnaire: Version 1

香港城市大学  
应用社会科学系  
心理学三年级研究计划  
调查问卷

您好！我是香港城市大学心理学三年级的学生。我正在进行一项有关在香港城市大学的内地学生的文化身份、自我效能以及在香港的适应程度的研究。该项研究属于心理学三年级研究计划。

填写问卷需时约5分钟。各项问题的回答并无对错之分，请根据个人情况独立完成。此份问卷所搜集的信息将以无记名形式保密，仅用于研究目的。问卷将在研究计划结束之后（约2011年6月）销毁。

您的参与纯属自愿，您可以随时拒绝继续参与研究，无须任何理由。若有疑问，请电邮至xxx@gmail.com。

Part 1（第一部分）

Please indicate how much you agree/disagree with the following items  
请指出你对于以下各项的同意/反对程度

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Quite disagree</th>
<th>Disagree</th>
<th>Slightly disagree</th>
<th>Neutral</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Quite agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

1. I can develop new relationships with both Hong Kong people as well as people from Mainland  1 2 3 4 5 6 7 8 9
### EFFECTS OF BSE AND BII

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>I am proficient in English. 我可以熟练地使用英语。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>I have respect for the cultures of both Hong Kong and Mainland China. 我对香港和内地的文化都尊重。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>I feel like I fit in when I am with Hong Kong people as well as people from Mainland China. 当与香港人或是与内地人在一起的时候，我都能感觉到融</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>5.</td>
<td>I am confident that I can learn new aspects of the culture of both Hong Kong and Mainland China. 我相信我能学习香港文化和内地文化中新的方面。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>6.</td>
<td>It is acceptable for an individual from Hong Kong to participate in two different cultures. 一个香港人参与到两种不同的文化是可以接受的。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>7.</td>
<td>I have a generally positive attitude toward both Hong Kong people and people from Mainland China. 总体上，我对香港人和内地人都有正面的看法。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>8.</td>
<td>I can communicate my ideas effectively to both Hong Kong people and people from Mainland China. 我与香港人、内地人都能有效地交流我的观点。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>It is acceptable for an individual from Mainland China culture to participate in two different cultures. 一个内地人参与到两种不同的文化是可以接受的。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>10.</td>
<td>I can communicate my feelings effectively to both Hong Kong people and people from Mainland China. 我与香港人、内地人都能有效地交流我的感受。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>11.</td>
<td>I feel comfortable attending a gathering of mostly Hong Kong people as well as a gathering of mostly people from Mainland China. 无论是参加香港人占多数的聚会，或者内地人占多数的聚会，我都能感觉舒服自在。</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>12.</td>
<td>An individual can alter his or her behavior to fit a particular social context.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>EFFECTS OF BSE AND BII</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I have an extensive network of Hong Kong people as well as an extensive network of people from Mainland China. I 在香港人和内地人中间都有广阔的人际网络。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I am knowledgeable about the values important to Hong Kong people as well as to people from Mainland China. 我熟知香港人以及内地人重视的价值观念。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I have generally positive feelings about the cultures of both Mainland China and Hong Kong. 总体上，我对内地和香港的文化都有积极的感受。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I have strong ties with Hong Kong people as well as people from Mainland China. 我和香港人、内地人都有紧密的联系。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I am knowledgeable about the holidays celebrated both by Hong Kong people and by people from Mainland China. 我熟知香港人和内地人庆祝的节日。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I feel at ease around both Hong Kong people and people from Mainland China. 无论身边有香港人还是有内地人，我都能感觉轻松。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I am knowledgeable about the history of both Hong Kong and Mainland China. 我熟知香港和内地的历史。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I can choose the degree and manner by which I affiliate with each culture. 我能够选择从属于每种文化的程度与方式。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I can count on both Hong Kong people and people from Mainland China. 我可以仰仗香港人和内地人。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>I am knowledgeable about the gender roles and expectations of both Hong Kong people and people from Mainland China. 我熟知香港人和内地人的性别角色及其期望。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### EFFECTS OF BSE AND BII

<table>
<thead>
<tr>
<th></th>
<th>Being bicultural does not mean I have to compromise my sense of cultural identity.拥有两种文化背景并不意味着我必须妥协我的文化身份认同感。</th>
<th>1 2 3 4 5 6 7 8 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>I am proficient in Cantonese.我可以熟练地使用粤语。</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>25.</td>
<td>I take pride in the cultures of both Hong Kong and Mainland China.我对香港和内地的文化都引以为豪。</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>26.</td>
<td>It is possible for an individual to have a sense of belonging in two cultures without compromising his or her sense of cultural identity.一个人能够对两种文化有归属感，并且无损于他/她的文化身份认同感。</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

---

### Part 2 (第二部分)

**Please indicate how much you agree with the following items by using the 1 to 9 scale**

*请利用1至9的度量范围，指出你对于以下各项同意程度*

1. I feel part of a combined culture of Hong Kong and Mainland China (e.g., I feel being the product of Hong Kong and Mainland China cultures most of the time).我觉得自己是香港与中国大陆的文化结合体的一部分（例如，我常常觉得自己是香港与中国大陆文化二者的产物）。

| 1 2 3 4 5 6 7 8 9 |
| 1 | 2 3 4 5 6 7 8 9 |

2. I feel I can move freely between Hong Kong and Mainland China cultures without any conflicts.我能够轻松穿梭于香港与中国大陆文化之间而不感到任何冲突。

| 1 2 3 4 5 6 7 8 9 |
| 1 | 2 3 4 5 6 7 8 9 |
**Part 3 (第三部分)**

Please indicate how much difficulty you experience in Hong Kong in each of these areas.
请指出你在香港期间经历以下各项事务时有多困难

Use the following 1 to 9 scale.
请使用1-9的度量范围

<table>
<thead>
<tr>
<th>No difficulty</th>
<th>Slight difficulty</th>
<th>Moderate difficulty</th>
<th>Great difficulty</th>
<th>Extreme difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>不困难</td>
<td>轻微困难</td>
<td>中等困难</td>
<td>非常困难</td>
<td>极度困难</td>
</tr>
</tbody>
</table>

1. Making friends.

2. Dealing with people in authority (e.g., your professors, the officials of CityU, the government, or LOCPG HK, etc.)
   与有权威的人打交道（例如你的教授，城大的、政府的或中联办的官员，等等）

3. Taking Hong Kong people’s perspective on the culture.
   从香港人的角度了解当地文化

4. Dealing with the staff at the university who is not from Mainland China
   与不是来自内地的大学职员打交道

5. Making yourself understood.
   表达你自己的意思让别人了解

6. Seeing things from Hong Kong people’s point of view.
   从香港人的角度看待事情

7. Dealing with someone who is unpleasant.
   与使人不愉快的人打交道

8. Communicating with people of a different cultural background
   与有不同文化背景的人交流

9. Understanding ethnic or cultural differences.
   理解种族与文化差异

10. Dealing with unsatisfactory service.
    处理令你不满意的服务

11. Relating to members of the opposite sex.
    与异性建立关系
### Part 4 (第四部分)

**When answering the following No. 1, 3, 4, 5, 6, please tick (✓) as appropriate**

在回答第1、3、4、5、6题时，请勾出(✓)合适选项

1. Gender（性别）:  
   - [ ] M (男)  
   - [ ] F (女)  

2. Age（年龄）: ____________

3. College（学院）:  
   - [ ] College of Liberal Arts and Social Science  人文社会科学院  
   - [ ] College of Business  商学院  
   - [ ] College of Science and Engineering  科学及工程学院  
   - [ ] School of Creative Media  创意媒体学院
EFFECTS OF BSE AND BII

☐ School of Law 法律学院
☐ Others, please specify (其他，请具体说明): ______________

4. Year of study (年级):
☐ Foundation Year 基础年 (go to No. 5, 请移至第 5 题)
☐ Year 1 一年级 (go to No. 6, 请移至第 6 题)

5. If you are in Foundation Year, please indicate the range of your GPA
如果你是基础年学生，请指出你的 GPA 所在范围

<table>
<thead>
<tr>
<th>≤2.69</th>
<th>2.70-2.89</th>
<th>2.80-2.99</th>
<th>3.00-3.19</th>
<th>3.20-3.39</th>
<th>3.40-3.59</th>
<th>3.60-3.79</th>
<th>3.80-3.99</th>
<th>≥4.00</th>
</tr>
</thead>
</table>

6. If you are in Year 1, please choose the range of your CGPA
如果你是一年级学生，请指出你的 CGPA 所在范围

<table>
<thead>
<tr>
<th>≤2.69</th>
<th>2.70-2.89</th>
<th>2.80-2.99</th>
<th>3.00-3.19</th>
<th>3.20-3.39</th>
<th>3.40-3.59</th>
<th>3.60-3.79</th>
<th>3.80-3.99</th>
<th>≥4.00</th>
</tr>
</thead>
</table>

7. Which province are you from (你来自哪一个省份)? __________

8. Which city are you from (你来自哪一个城市)? ______________

The End 完

Thanks for your participation! 感謝您的參與!
Appendix B

Questionnaire: Version 2

香港城市大学
编号：2___
应用社会科学系
心理学三年级研究计划
调查问卷

您好！我是香港城市大学心理学三年级的学生。我正在进行一项有关在香港城市大学的内地学生的文化身份、自我效能以及在香港的适应程度的研究。该项研究属于心理学三年级研究计划。

填写问卷需时约 5 分钟。各项问题的回答并无对错之分，请根据个人情况独立完成。此份问卷所搜集的信息将以无记名形式保密，仅用于研究目的。问卷将在研究计划结束之后（约 2011 年 6 月）销毁。

您的参与纯属自愿，您可以随时拒绝继续参与研究，无须任何理由。若有疑问，请电邮至 xxxx@gmail.com。

Part 1(第一部分)

Please indicate how much difficulty you experience in Hong Kong in each of these areas.
请指出你在香港期间经历以下各项事务时有多困难
Use the following 1 to 9 scale.
请使用1-9的度量范围

不困难 轻微困难 中等困难 非常困难 极度困难
1 2 3 4 5 6 7 8 9

1. Expressing your ideas in class
在课堂上发表你的意见

2. Understanding the Hong Kong value system.
理解香港的价值体系

3. Coping with academic work
应付学业
### EFFECTS OF BSE AND BII

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>The pace of life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>5.</td>
<td>Being able to see two sides of an inter-cultural issue.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>6.</td>
<td>Understanding what is required of you at university.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>7.</td>
<td>Family relationships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>8.</td>
<td>Understanding Hong Kong people’s world view.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>9.</td>
<td>Finding your way around.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10.</td>
<td>Understanding the Hong Kong’s political system.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>11.</td>
<td>Relating to members of the opposite sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>12.</td>
<td>Dealing with unsatisfactory service.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>13.</td>
<td>Understanding ethnic or cultural differences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>14.</td>
<td>Communicating with people of a different cultural background.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>15.</td>
<td>Dealing with someone who is unpleasant.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>16.</td>
<td>Seeing things from Hong Kong people’s point of view.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>17.</td>
<td>Making yourself understood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>18.</td>
<td>Dealing with the staff at the university who is not from Mainland China</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>19.</td>
<td>Taking Hong Kong people’s perspective on the culture.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>
### EFFECTS OF BSE AND BII

<table>
<thead>
<tr>
<th>20.</th>
<th>Dealing with people in authority (e.g., your professors, the officials of CityU, the government, or LOCPG HK, etc.)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>与有权威的人打交道（例如你的教授，城大的、政府的或中联办的官员，等等）</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>21.</th>
<th>Making friends.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>交朋友</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Part 2 (第二部分)

*Please indicate how much you agree with the following items by using the 1 to 9 scale*

*请利用1 至 9的度量范围，指出你对于以下各项同意程度*

*Weak 弱 Strong 强*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I feel I can move freely between Hong Kong and Mainland China cultures without any conflicts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>我能够轻松穿梭于香港与中国大陆文化之间而不感到任何冲突。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>I feel part of a combined culture of Hong Kong and Mainland China (e.g., I feel being the product of Hong Kong and Mainland China cultures most of the time).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>我觉得自己是香港与中国大陆的文化结合体的一部分（例如，我常常觉得自己是香港与中国大陆文化二者的产物）。</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Part 3 (第三部分)

*Please indicate how much you agree/disagree with the following items*

*请指出你对于以下各项的同意/反对程度*

---

---
1. It is possible for an individual to have a sense of belonging in two cultures without compromising his or her sense of cultural identity.  
一个人能够对两种文化有归属感，并且无损于他/她的文化身份认同感。

2. I take pride in the cultures of both Hong Kong and Mainland China.  
我对香港和内地的文化都引以为豪。

3. I am proficient in Cantonese.  
我可以熟练地使用粤语。

4. Being bicultural does not mean I have to compromise my sense of cultural identity.  
拥有两种文化背景并不意味着我必须妥协我的文化身份认同感。

5. I am knowledgeable about the gender roles and expectations of both Hong Kong people and people from Mainland China.  
我熟知香港人和内地人的性别角色及其期望。

6. I can count on both Hong Kong people and people from Mainland China.  
我可以仰仗香港人和内地人。

7. I can choose the degree and manner by which I affiliate with each culture.  
我能够选择从属于每种文化的程度与方式。

8. I am knowledgeable about the history of both Hong Kong and Mainland China.  
我熟知香港和内地的历史。

9. I feel at ease around both Hong Kong people and people from Mainland China.  
无论身边有香港人还是有内地人，我都能感觉轻松。

10. I am knowledgeable about the holidays celebrated both by Hong Kong people and by people from Mainland China.  

### EFFECTS OF BSE AND BII

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 11. | I have strong ties with Hong Kong people as well as people from Mainland China.  
我和香港人、内地人都有紧密的联系。 | 1 2 3 4 5 6 7 8 9 |
| 12. | I have generally positive feelings about the cultures of both Mainland China and Hong Kong.  
总体上，我对内地和香港的文化都有积极的感受。 | 1 2 3 4 5 6 7 8 9 |
| 13. | I am knowledgeable about the values important to Hong Kong people as well as to people from Mainland China.  
我熟知香港人以及内地人重视的价值观念。 | 1 2 3 4 5 6 7 8 9 |
| 14. | I have an extensive network of Hong Kong people as well as an extensive network of people from Mainland China.  
我在香港人和内地人中间都有广阔的人际网络。 | 1 2 3 4 5 6 7 8 9 |
| 15. | An individual can alter his or her behavior to fit a particular social context.  
人有能力改变他/她的行为以融入所处的社会环境。 | 1 2 3 4 5 6 7 8 9 |
| 16. | I feel comfortable attending a gathering of mostly Hong Kong people as well as a gathering of mostly people from Mainland China.  
无论是参加香港人占多数的聚会，或者内地人占多数的聚会，我都能感觉舒服自在。 | 1 2 3 4 5 6 7 8 9 |
| 17. | I can communicate my feelings effectively to both Hong Kong people and people from Mainland China.  
我与香港人、内地人都能有效地交流我的感受。 | 1 2 3 4 5 6 7 8 9 |
| 18. | It is acceptable for an individual from Mainland China culture to participate in two different cultures.  
一个内地人参与到两种不同的文化是可以接受的。 | 1 2 3 4 5 6 7 8 9 |
| 19. | I can communicate my ideas effectively to both Hong Kong people and people from Mainland China.  
我与香港人、内地人都能有效地交流我的观点。 | 1 2 3 4 5 6 7 8 9 |
### Part 4 (第四部分)

When answering the following No. 1, 3, 4, 5, 6, please tick (✔) as appropriate

在回答第 1、3、4、5、6 题时，请勾出(✔)合适选项

1. Gender (性别)：
   - □ M (男)
   - □ F (女)

2. Age (年龄)：____________

3. College (学院)：
   - □ College of Liberal Arts and Social Science 人文社会科学院
   - □ College of Business 商学院
   - □ College of Science and Engineering 科学及工程学院
EFFECTS OF BSE AND BII

☐ School of Creative Media 创意媒体学院
☐ School of Law 法律学院
☐ Others, please specify (其他，请具体说明): ____________

4. Year of study（年级）:
☐ Foundation Year 基础年 (go to No. 5, 请移至第 5 题)
☐ Year 1 一年级 (go to No. 6, 请移至第 6 题)

5. If you are in Foundation Year, please indicate the range of your GPA
如果你是基础年学生，请指出你的 GPA 所在范围

<table>
<thead>
<tr>
<th>GPA Range</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 2.69</td>
<td>2.70-2.89</td>
<td>2.80-2.99</td>
<td>3.00-3.19</td>
<td>3.20-3.39</td>
<td>3.40-3.59</td>
<td>3.60-3.79</td>
<td>3.80-3.99</td>
</tr>
</tbody>
</table>

6. If you are in Year 1, please choose the range of your CGPA
如果你是一年级学生，请指出你的 CGPA 所在范围

| CGPA Range |  |  |  |  |  |  |  |  |
|------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| ≤ 2.69     | 2.70-2.89        | 2.80-2.99        | 3.00-3.19        | 3.20-3.39        | 3.40-3.59        | 3.60-3.79        | 3.80-3.99        | ≥ 4.00           |

7. Which province are you from (你来自哪一个省份)? ____________

8. Which city are you from (你来自哪一个城市)? _______________

The End 完

Thanks for your participation! 感謝您的參與!