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Ruby Pi-Ju Yang & Kimberly A. Noels

Department of Psychology, University of Alberta, Edmonton, Canada

Version of record first published: 18 Apr 2012

To cite this article: Ruby Pi-Ju Yang & Kimberly A. Noels (2012): The possible selves of international students and their cross-cultural adjustment in Canada, International Journal of Psychology, DOI:10.1080/00207594.2012.660161

To link to this article: http://dx.doi.org/10.1080/00207594.2012.660161

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The possible selves of international students and their cross-cultural adjustment in Canada

Ruby Pi-Ju Yang and Kimberly A. Noels
Department of Psychology, University of Alberta, Edmonton, Canada

We assessed 93 international students’ reports of their expected and feared possible selves in terms of their thematic content and configuration, and examined the relations between possible selves and cultural adjustment in Canada. The results showed that international students mostly envisioned possible selves in career, education, intrapersonal, and interpersonal domains, and reported more balanced configurations of possible selves. Balanced possible selves in the educational domain were associated with better psychological well-being, but balanced selves in the intrapersonal domains were linked with more frequent sociocultural difficulties. The findings suggest that the content of international students’ possible selves reflects not only their academic-focused and career-inspired sojourn, but also their intercultural experiences with various ethnic groups in the Canadian multicultural society. As well, they speak to the motivational significance of possible selves, particularly the balanced possible selves, for supporting international students’ motivation to pursue an international education and for facilitating a successful cross-cultural sojourn.

Keywords: Possible selves; International students; Cultural adjustment.
Corresponding with the increase in cross-cultural mobility of postsecondary students, there is a growing body of research on how and why international students decide to embark on and persist at an academic sojourn and how this motivation is linked to a successful academic outcome and cross-cultural adjustment. A variety of frameworks have been used to address this issue: Some researchers have highlighted the influence of external forces (e.g., economic wealth of the country, better research facilities) (e.g., Chen, 2006; Mazzarol & Soutar, 2002); others have stressed the importance of internal factors or personality differences (e.g., achievement orientation, family/work value, level of autonomy) (e.g., Boneva & Frieze, 2001; Chirkov, Safdar, de Guzman, & Playford, 2008; Frieze, Hansen, & Boneva, 2006).

These frameworks, however, focus on what international students currently report to be their reason for the academic sojourn, but do not articulate their future desires, ambitions, and expectations surrounding their sojourn. We maintain that much of the motivation behind international students' academic mobility to pursue a foreign education is contingent on their imagined sense of themselves in the future, including what they desire and expect to become or what they think pursuing an education abroad may hold for them in the future. Thus, another useful approach to understanding international students' academic mobility and its link to cross-cultural adaptation is to consider their future possible selves. This study not only extends the understanding of the psychology of international sojourners, but also extends research on the self-concept by examining the possible selves in a culturally diverse group of international students.

POSSIBLE SELVES

Possible selves are future-oriented and malleable components of the self-concept developed within specific sociocultural contexts. They include not only personalized mental representations of events, but also simulated actions and behavioral strategies for approaching desired future selves and avoiding feared future selves (Cross & Markus, 1991; Markus & Nurius, 1986; Markus & Ruvolo, 1989). According to Markus and her colleagues, the manifestation of possible selves bridges individuals' past experiences, current life circumstances and behavior, and purposive future goals by providing action plans for change over time (Markus & Nurius, 1986; Markus & Ruvolo, 1989). According to these researchers, certain types of possible selves are highly motivational in that they maximize individuals' potential and energize individuals' actions for approaching desirable possible selves and avoiding feared possible selves (Markus & Nurius, 1986; Markus & Ruvolo, 1989).

Researchers have proposed that motivation is reinforced when a positive possible self (e.g., hopes, dreams, goals) is balanced with a corresponding negative possible self (e.g., fears, threats, failures) in the same domain (Markus & Ruvolo, 1989). Individuals who form a balance between their positive and negative possible selves in the same domain have a positive goal to strive for (e.g., being a university student), and also strive to prevent the personal consequence of not meeting that goal (e.g., being a school drop-out) (Oyserman & Markus, 1990a, 1990b). Thus, the motivation gained by having balanced possible selves in the same domain is suggested to be heightened because only strategies and actions relevant to simultaneously increasing the possibility of attaining the positive self and avoiding the negative self will be attempted (Hoyle & Sherrill, 2006; Markus & Ruvolo, 1989; Oyserman & Markus, 1990a, 1990b). Several studies have demonstrated the motivational significance of balanced possible selves, particularly in the academic realm (e.g., Oyserman & Markus, 1990a; Oyersman, Bybee, & Terry, 2006).

CONFIGURATIONS OF POSSIBLE SELVES IN SOCIOCULTURAL CONTEXTS

In one of the few cross-cultural studies concerning culturally different motivational tendencies on possible selves, Unemori, Omorogie, and Markus (2004) reasoned that heightened motivation conferred by balancing a positive desirable possible self (e.g., a positive expected self—being a university student) with a countervailing possible self of opposing valence in the same domain...
(e.g., a negative or feared self—dropping out of a university) appears to be grounded in “approaching optimistic or idealistic, aspirations and avoiding potential threats and failure” (Unemori et al., 2004, p. 324). The pairing of balanced possible selves is considered to be akin to the self-enhancement tendency emphasized in European-American cultural contexts, as such a pattern motivates individuals to approach idealistic/optimistic goals and avoid undesirable end states. The balanced configuration of possible selves is suggested to be relatively more common in the European-American cultural context (Unemori et al., 2004).

To illuminate the cultural difference in motivational tendency in the configuration of possible selves, Unemori et al. (2004) proposed another configuration of possible selves—matched possible selves—which consists of the pairing of an expected self with a negative connotation (e.g., expecting to become overweight) and a feared self in the same domain (e.g., fearing being in poor health). Matched possible selves reflect a chronic focus of one’s attention and efforts on areas of personal weakness. A matched configuration of possible selves has motivational significance because it allows individuals to anticipate potential problems and engage in behaviors that direct their energy and resources toward correcting their shortcomings and improving themselves so that they can prevent or manage those foreseeable difficulties, and thereby avoid undesirable end states (Unemori et al., 2004, p. 325). The matched configuration of possible selves is considered to be more prevalent in East-Asian cultural contexts, and particularly in Japan (Unemori et al., 2004). In their study, Unemori et al. (2004) found that the configuration of balanced possible selves was predominant in the Chilean and Euro-Americans sample, but the configuration of matched possible selves was more evident in Japanese and Japanese-Americans samples, reflecting sociocultural differences in generating possible selves (Unemori et al., 2004).

OBJECTIVES OF THE STUDY

The present study has two objectives. First, little research to date has examined possible selves in a cross-cultural context using different ethnic groups (but see Briones, Tabernero, & Arenas, 2011; Waid & Frazier, 2003; Yowell, 2000), and none that we know of has explored the possible selves of international students in terms of the content and configurations proposed by Unemori et al. (2004). Thus, the first objective of the study is to explore the content and configuration of possible selves of international students who are studying in Canada. Second, taking into consideration that certain configurations of possible selves provide motivational incentives, it might be expected that balanced possible selves in particular would predict feelings of well-being and fewer difficulties with engaging in the host society. Thus, the second objective of the study is to explore the relations between psychological and sociocultural adjustment and possible selves of international students in Canada, particularly the balanced configuration of possible selves in important domains. It is hypothesized that to the extent that international students hold balanced configurations of possible selves, they would experience better psychological well-being and fewer sociocultural difficulties.

METHOD

Participants and procedure

Participants included 93 international students (51.1% males) at a university in Western Canada with a student body of just over 34,200, of which international students make up 11.82%. All were non-native English speakers and they ranged in age from 18 to 47 years, with a mean of 25.63 years (SD = 5.05). Participants were individuals of more than 30 ethnic groups, with Chinese
as the most frequent self-identified nationality (28%). Approximately 89% of participants were from regions that typically have more interdependent-oriented cultural contexts, and of that group, 69% were from East and South Asian countries (e.g., Bangladesh, China, Hong Kong, India, Japan, Korea, Malaysia, and Thailand), 19% were from Latin and South America (e.g., Brazil, Chile, Colombia, Mexico, Peru, and Venezuela), 6% were from Middle Eastern countries (e.g., Iran, Kuwait, and Pakistan), and 6% were from Africa (Egypt, Nigeria, Saudi Arabia, and Tanzania) (Hofstede, 2001; Oyserman, Coon, & Kemmelmeier, 2002). The mean length of residence in Canada was 2.04 years (SD = 1.84). An email invitation containing the link to an online survey was sent through the international student network listserv managed by the university’s international center. All participants received a $10 honorarium in appreciation of their participation.

Materials

Possible selves

Participants filled out an open-ended possible selves instrument designed to elicit information about their future possible selves (Cross & Markus, 1991; Markus & Nurius, 1986). Participants were asked to list three expected possible selves and three feared possible selves that would apply by the time they finish their study in Canada. The probes for the expected and feared selves (cf. Cross & Markus, 1991; Unemori et al., 2004) in this study were as follows.

Everyone thinks about the future to some extent. When doing so, we usually think about the kinds of experiences that are in store for us and the kinds of people we might possibly become. Some of these future experiences are very much desired, hoped-for and expected, and others are worried about or feared.

Think a minute about your time/experiences as an international student in Canada. What do you expect you will be like or fear being like by the time you finish your studies in Canada? Please list three expected possible selves and three feared possible selves that you currently imagine for yourself by the time you finish your study in Canada.

Three expected selves and three feared possible selves were provided by 84.9% of the participants.

Coding

The responses were coded using the scheme developed by Unemori et al. (2004; see also Oyserman & Markus, 1990a, 1990b), which consisted of the following thematic domains (with examples drawn from the present data).

1. Intrapersonal (e.g., more confident, more maturity, self-reliant, happy).
2. Interpersonal (e.g., get friends of different nationalities, accepting).
3. Career (e.g., working in an industry as an engineer, join a top research company after my PhD).
4. Education (e.g., obtain my master’s degree, finish my studies on time).
5. Extracurricular activities (e.g., travel, being a volunteer).
6. Attainment of material goods (e.g., earn a pretty good income, being financially stable).
7. Health (be in a better shape and health, keep fit).

Following a preliminary inspection of the responses, two additional categories were developed to reflect characteristics specific to these international students. These domains are:

8. Migration (e.g., going back to the country I am from and get a job there, staying in Canada to continue my education).
9. Language (e.g., able to speak fluent English, to be proficient in English)

Two individuals blind to the hypotheses coded the open-ended possible selves and were instructed to code each possible self response that was considered codable. Each coding category with examples was discussed thoroughly with coders in the meetings prior to the actual coding. Disagreements were resolved by discussing the ambiguous possible selves responses and inconsistencies in the coding between the two coders. The appropriate coding that was decided on with consensus was applied to the relevant category. Following this procedure, for each category of expected self and each category of feared self, participants received a content score ranging from 0 (0 selves in a domain) to 3 (3 total selves in a domain). The average interrater agreement was satisfactory to high (κ = .98–1.00 for expected possible selves; κ = .90–1.00 for feared possible selves).

The coding for balanced and matched configuration of possible selves was also adapted from
Unemori et al.’s (2004) coding scheme. A balanced pair of possible selves consists of a positive expected self (e.g., becoming a university faculty member) and a feared self (e.g., being unemployed). A matched pair of possible selves includes a negative expected self (e.g., an engineer without much knowledge of physical applications to skills) and a feared self (e.g., engineer without skills). Coders were instructed to form whatever pairs were possible, such that each expected and feared possible self response could be paired more than once and crosscoded for balanced or matched pairing. Each participant thus received a score for the balanced and matched pair of configuration with a total ranging from 0 (none paired) to 9 (all paired).1

Cross-cultural adjustment

Psychological adjustment was assessed using the 10-item short-form Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). Participants indicated the severity of their feelings on a four-point scale. Positively worded items were reversed, such that a high mean score indicated a high level of depression. Sociocultural adjustment was assessed using Ward and Kennedy’s (1999) 28-item Sociocultural Adaptation Scale. Using a 5-point scale, participants indicated their perceived difficulties in managing everyday intercultural encounters in Canada. A high mean score indicated a high level of social difficulty. In the present study, the Cronbach alpha for psychological adjustment was .79 and for sociocultural adjustment was .93. The scores of these two adjustment scales yielded a significant, but low, positive intercorrelation ($r = .38$, $p < .05$).

RESULTS AND DISCUSSION

Content and configuration of international students’ possible selves

The first objective of the study was to explore international students’ possible selves by content and by configuration. Mean scores, standard deviations, and examples of possible selves for each domain of expected and feared possible selves are presented in Table 1. The most frequently mentioned domain of expected possible selves was the career domain, followed by the intrapersonal and education domains. For feared possible selves, international students again reported career selves more often than selves in other domains, followed by selves in the interpersonal and education domains.

This finding suggests that for this group of international students, their primary concern with regard to their future possible selves pertained to career-related opportunities available after graduation. Moreover, although pursuing and furthering their education was another major concern, future goals concerning intrapersonal growth and interpersonal relations (including intercultural relations) were also important in their sojourn. In other words, besides having personalized career and education visions, international students expected themselves to develop intrapersonal qualities that are desirable in the independent-oriented Canadian society (e.g., independent, self-reliant, confident), but feared not being able to expand their interpersonal network or strengthen their relationships (e.g., not able to make friends, having problems with family).

With regard to the configuration of possible selves, means analyses indicated that counter to expectation, international students reported more pairs of balanced possible selves (mean = 2.04) than matched possible selves (mean = 0.03). Figure 1 illustrates the prevalence of domains for balanced possible selves that participants reported. International students reported balanced pairs in the career domain more often than any other domains, followed by the intrapersonal and education domains. Thus, consistent with the analysis of the content of possible selves, international students were more likely to hold balanced possible selves in career, intrapersonal, and education domains.

With regard to the matched possible selves, there were only three pairs (mean = 0.03), which was reported in the career domain by an international student from Pakistan. Thus, we found virtually no evidence of matched configuration of possible selves suggested by Unemori et al. (2004). Because of the occurrence of matched possible selves was very rare, we might conclude that this

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1As an alternative to examining mean scores, a score was calculated to indicate the proportion of balanced selves in each domain to the total number of balanced selves that each participant provided. These analyses also indicated that the career domain was the domain in which people reported the most pairs of balanced selves. The mean proportions are as follows: Career: .67; Education: .10; Intrapersonal: .09; Language: .04; Migration: .03; Material Goods: .03; Interpersonal: .03; Extracurricular: .01; Health: .00. Note that these analyses were based on the 62 participants who provided at least one balanced pair of possible selves.
configuration does not play a pivotal role in international students’ academic-focused sojourn. There are several possible limitations to this claim of the irrelevance of matched possible selves. First, Unemori et al. (2004) examined balanced and matched possible selves using Anglo-American, Chilean, Japanese, and Japanese-American groups. They found that only individuals from Japan and individuals who grew up with Japanese cultural practices and values reported more matched configuration of possible selves. The international students in this study, however, were of multinational backgrounds (with only one participant from Japan), and thus it might be argued that the idea of a matched configuration of possible selves only pertains to individuals from that particular cultural background (i.e., Japanese).

A second possibility is that matched pairs of possible selves may not as prevalent in international students. It is conceivable that international students who embark on an academic sojourn are more independence-oriented than those who stay in their home country, which could be associated with the relatively high rate of balanced possible selves. Thus a comparison with conational peers who remained in the country of origin would be useful to see if this balanced configuration is

### Table 1

<table>
<thead>
<tr>
<th>Domains of possible selves</th>
<th>Mean</th>
<th>SD</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected possible selves</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>.45</td>
<td>.80</td>
<td>Self-reliant</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>.22</td>
<td>.44</td>
<td>Having some good Canadian friends</td>
</tr>
<tr>
<td>Career</td>
<td>1.11</td>
<td>.90</td>
<td>To be research scientist</td>
</tr>
<tr>
<td>Education</td>
<td>.40</td>
<td>.69</td>
<td>Obtain a master’s degree</td>
</tr>
<tr>
<td>Extracurricular activity</td>
<td>.04</td>
<td>.20</td>
<td>Publishing a book</td>
</tr>
<tr>
<td>Attainment of material goods</td>
<td>.15</td>
<td>.39</td>
<td>Saving money for a vehicle</td>
</tr>
<tr>
<td>Health</td>
<td>.02</td>
<td>.15</td>
<td>Being healthy</td>
</tr>
<tr>
<td>Migration</td>
<td>.17</td>
<td>.41</td>
<td>Go back to China</td>
</tr>
<tr>
<td>Language</td>
<td>.11</td>
<td>.31</td>
<td>Improving my communication skills in English</td>
</tr>
<tr>
<td><strong>Feared possible selves</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>.33</td>
<td>.74</td>
<td>Ego-centric</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>.41</td>
<td>.63</td>
<td>Friendless</td>
</tr>
<tr>
<td>Career</td>
<td>.73</td>
<td>.74</td>
<td>Cannot get a good job</td>
</tr>
<tr>
<td>Education</td>
<td>.38</td>
<td>.67</td>
<td>Fail to obtain the pharmacy degree</td>
</tr>
<tr>
<td>Extracurricular activity</td>
<td>.08</td>
<td>.27</td>
<td>Can’t finish writing a book</td>
</tr>
<tr>
<td>Attainment of material goods</td>
<td>.03</td>
<td>.18</td>
<td>Broke</td>
</tr>
<tr>
<td>Health</td>
<td>.09</td>
<td>.28</td>
<td>Getting sick</td>
</tr>
<tr>
<td>Migration</td>
<td>.24</td>
<td>.48</td>
<td>Leave Canada and cannot return</td>
</tr>
<tr>
<td>Language</td>
<td>.10</td>
<td>.30</td>
<td>Don’t get the level of English wanted</td>
</tr>
</tbody>
</table>

**Table 1** Mean prevalence scores and standard deviations of expected and feared possible selves

**Figure 1.** Prevalence of balanced configuration of possible selves by domain.
specific to sojourners or migrants. A third possibility is that international students’ high report of balanced possible selves is the result of adapting to the independently oriented North American cultural context. The motivational propensity underlying the matched possible selves may not serve well for international students who must cope with dynamics of independently oriented North American classrooms. Thus, adaptation to the new cultural context might necessitate a change in motivational strategies. Such a possibility of acculturative change is best examined with a longitudinal design; however, the data of the present study do not suggest that more recent arrivals exhibit a motivational profile that is any different from those who have lived in Canada for a longer period of time.

Relations between balanced configuration of possible selves by domain and adjustment measures

The second objective of the study was to consider how possible selves in domains relevant to international students might be related to their cultural adjustment. To this end, correlational analyses examined the relation between scores on the adjustment measures and the balanced configurations of possible selves across domains. The result yielded two significant correlations. The first showed that international students with more balanced pairs of possible selves in the education domain were less depressed (r = −.23, p < .05). This finding is consistent with the interpretation that a balanced motivational orientation promotes well-being, possibly because it also promotes successful academic outcomes. Information on resources available to international students (e.g., international student services on campus, peer support programs) could be obtained long before international students’ arrival in the host institution which may be facilitative in managing educational challenges for international students. Thus these positive preparations and motivation to “aim high” in their educational pursuit would be predictive of better psychological adjustment.

Contrary to the prediction, the second significant correlation indicated that the more balanced pairs of possible selves international students reported in the intrapersonal domain, the higher was their sociocultural difficulty (r = .28, p < .01). This finding might suggest that difficulties in adapting to the Canadian cultural context make salient the need to develop personal traits that would facilitate international students’ social integration into Canadian society. It also suggests that international students must learn to appropriately present personal attributes in order to interact not only with host-nationals (i.e., Canadians), but with conational and students of other cultural backgrounds (Kashima & Loh, 2006; Ward et al., 2001). In sum, we suggest that international students should aim to have flexibility and to cultivate resilience in the intrapersonal domain in order to deal with the interactive aspect of daily life in Canada.

CONCLUSION

It has been argued that possible selves serve a motivational function, and the findings of this study suggest they also are also related to international students’ cross-cultural adjustment. Imagining one’s future career, envisioning one’s educational outcomes, forecasting intrapersonal growth, and anticipating interpersonal relationships are important aspects of the possible selves that international students hold during their sojourn in Canada. Although this study was limited by its exploratory and correlational design, having balanced educational and intrapersonal possible selves appears to be related to international students’ emotional well-being and sociocultural competence in Canada respectively. The relatively infrequent report of matched possible selves in this study also raised the important question of whether the motivational tendency reflected in matched possible selves is highly culture-/context-specific, and is not applicable in many cultural contexts.

Recent research on possible selves has shed more light on the motivational significance of possible selves in regulating or promoting behaviors (Hoyle & Sherrill, 2006; Oyserman et al., 2006; Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Oyserman & James, 2008), and future research with international students could examine motivational effectiveness of possible selves and incorporate the role of self-regulatory behaviors or strategies in international students’ goal pursuit during their cultural adjustment in the host society. Moreover, longitudinal research with inclusion of a domestic comparison student group would better allow researchers to examine patterns of possible selves, and to assess how possible selves serve as motivational carriers that predict well-being and facilitate cultural adjustment over time. On the whole, this line of research has considerable potential to further our understanding and our insight into the dynamics of goal
pursuit and adjustment challenges faced by international students, with a view to facilitating a satisfying and successful academic sojourn.

Manuscript received February 2011
Revised manuscript accepted August 2011
First published online April 2012

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