Contrasts, and Changes in Potential and Actual Psychological Intercultural Adjustment

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Abstract

A comparison was made between students studying abroad (SA) in a foreign culture versus students staying in their home culture (Home) in relation to potential and actual intercultural adjustment. In addition, the SA sample was followed over five time periods from pre-departure, beginning, middle, end, and 3 month follow-up of the study abroad semester. The SA group was higher than the Home group in actual adjustment and most of the measures of potential intercultural adjustment both at the beginning and at the end of the semester. SA students changes in the Intercultural Adjustment Potential Scale (ICAPS) did not support a single theory of adjustment. ICAPS Total and Emotional Regulation scores for the SA group at pre-departure were significantly correlated with actual adjustment three months later at the end of the semester. Actual and potential intercultural adjustment changed in opposite directions over the course of the foreign sojourn. Follow-up measures indicated a continuation of growth in the Critical Thinking scale beyond the end of the study abroad sojourn. In addition, the total intercultural adjustment scale rebounded at follow-up while the actual adjustment remained high indicating preservation of gains brought about by the study abroad experience. Discussion focuses on key features that may enhance both actual and potential intercultural adjustment. This study has implications for selection and preparation of students for their study abroad experience. Likewise, coaching and support activities could be made more effective by considering the changes over time in actual and potential intercultural adjustment of study abroad students.

Introduction

The current study attempts to examine potential and actual intercultural adjustment by addressing several relevant issues through the examination of a) the contrasts between actual and potential intercultural adjustment in people who sojourn in another culture versus those who remain in their own culture; and b) the changes in potential and actual intercultural adjustment of sojourners over time.

Intercultural adjustment

Adjustment to a foreign culture is a complex, multi-level undertaking. Ward and Kennedy (1993) generally divide intercultural adjustment into two levels: psychological adjustment and socio-cultural adjustment. “Psychological adjustment, then, is interwoven with stress and coping processes, whereas sociocultural adaptation is predicated on culture learning” (Ward & Kennedy, 1993, p. 222). While the emphasis in the current study is on psychological adjustment, it is clear that this type of adjustment was influenced by socio-cultural level variables as well. Following the general suggestion of Ward and Kennedy (1993) above, the current study uses the general stress and coping model offered by Lazarus (1999) as a framework for conceptualizing the intercultural adjustment process.
Ward (2001) characterizes the stress and coping theory view of intercultural adjustment as emerging from “cross-cultural transitions entailing a series of stress provoking life changes that tax adjustive resources and require coping responses” (p. 427). In this model cognitive appraisal is an intermediate step between the stressors presented by the foreign culture and the psychological well-being of the individual. Too high a level of environmental stressors combined with too low a level of personal and environmental resources to deal with those stressors leads to the experience of threat with its attendant negative psychological and physiological outcomes. On the other hand, adequate resources and coping abilities leads to the experience of challenge and positive outcomes of self-efficacy, mastery, and other indicators of well-being. Much of the adjustment literature has been focused on problematic responses to intercultural stress in which the appraisal process resulted in a perception of threat (e.g. culture shock (Pederson, 1995), emotional distress (Furukawa & Shibayama, 1995), and anxiety, depression, difficult interpersonal relations (Matsumoto, et al., 2001)). On the other hand, intercultural adjustment can lead to more positive outcomes based on the appraisal of challenge: e.g. gains in self-esteem and personal awareness (Babiker, Cox, & Miller, 1980), increases in self-confidence and positive mood (Matsumoto, et al., 2001). The measurement of intercultural adjustment potential promises to help individuals faced with immersion in a foreign culture by alerting them to the need to bolster personal resources and coping strategies, thus preventing damage to their psychological well-being.

**Intercultural adjustment potential**

The potential to make a successful adjustment to a different culture calls upon personal resources and coping strategies (Ward, 2001) that may exist in different types and quantities in individuals prior to departure from their home culture. Clearly, one’s specific experiences in a new culture will affect one’s adjustment; but, individuals also bring with them personal characteristics and codified prior learnings that may predispose them to appraise stressors differently, and thus, respond well or poorly to the stressors inherent in adjusting to a different culture. Matsumoto and his colleagues (Matsumoto, LeRoux, Bernhard, & Grey, 2002) define intercultural adjustment potential as “the ability to adapt successfully to life in a cultural environment different than that which one is accustomed to” (p. 3). They identify four factors that contribute to potentially successful intercultural adjustment: emotional regulation, openness, flexibility, and critical thinking. A person with a high potential to adjust well to a different culture will be able 1) to temper their emotional arousal (e.g. anxiety and anger) at unexpected events in the new culture so that they do not react impulsively, 2) to welcome and even seek out new experiences and situations, 3) to generate new responses and new ways of thinking about events and people in the new culture, and 4) to reflect on experiences in the new culture in order to create new understandings about the self and both new and home cultures. This combination of factors as the basis for the potential to adjust well to a different culture has high face validity as well as strong research support (Matsumoto, et al., 2001).

**Actual and potential intercultural adjustment**

Matsumoto and his colleagues (Matsumoto, et al., 2001; Matsumoto et al., in press; Matsumoto, LeRoux, Bernhard, & Gray, 2002) have done substantial work in documenting the psychometric properties of the ICAPS scale as well as describing the relationship of the scale to psychological adjustment and other variables. The current study extends that work in several ways.
First, it would be useful to note differences in actual and potential adjustment between individuals who sojourned in a foreign culture in comparison to those who chose to remain in their own culture. For example, there is some suggestion that individuals voluntarily choosing to sojourn in a foreign culture may show higher levels of adjustment prior to their sojourn than do individuals not choosing such travel (Berry, 1997). This reaction may be based on enthusiasm and excitement concerning the “adventure” of experiencing a new culture. At the same time, the concept of culture shock (Pedersen, 1995) indicates that actual adjustment of sojourners may decrease during their stay in the foreign culture before returning to its original level. Thus, comparison of sojourners to those who stayed home suggests the following hypotheses:

Hypothesis 1a. At the beginning of their foreign sojourn, study abroad students will show higher intercultural adjustment potential and higher actual adjustment than students who stay at home.

Hypothesis 1b. This distinction will be maintained at the end of the study abroad semester.

Second, at the heart of the concept of intercultural adjustment potential is its ability to predict actual adjustment to a new culture. Matsumoto and his colleagues use this prediction as one of the bases for the development of the ICAPS (Matsumoto, et al., 2001). Most of the studies reported by Matsumoto and his colleagues were concurrent; that is, they measured the relation of the ICAPS with other indicators of adjustment measured at the same point in time. In the few studies that related ICAPS to future adjustment, the time period between measures was either quite short, or unspecified (Matsumoto, et al., in press). Therefore, from a longitudinal perspective the following hypothesis was tested: Hypothesis 2. For study abroad students, intercultural adjustment potential at pre-departure will predict actual adjustment at the end of the foreign culture sojourn.

Third, there has been no documentation of how the potential for intercultural adjustment may change during a foreign sojourn nor how potential and actual adjustment may be related to each other during a sojourn. The culture shock paradigm (Pedersen, 1995) would suggest that actual adjustment would dip and then recover during a sojourn. In contrast, it may be that potential for intercultural adjustment may increase over a sojourn, since individuals are being exposed to the broadening effects of exposure to a different culture. Two hypotheses are proposed: Hypothesis 3a. For study abroad students, intercultural adjustment potential will increase over their stay in a foreign culture. Hypothesis 3b. For study abroad students, actual adjustment will decrease then return to baseline during their stay in a foreign culture.

Methods

Participants

A group of 19 students from U.S. universities who studied abroad for three months (SA) were matched with 46 students who stayed in the U.S. during the same semester (Home). The Home students were enrolled in a social psychology class that dealt in a didactic manner with some of the same concepts that the SA students were actually experiencing by virtue of their study abroad placement; such as stereotyping, in-group—out-group labeling, individualism—collectivism, etc. The groups were matched for age (19 to 25, with 83% in the 20-22 range), gender (54% women), and class standing (all juniors and seniors).

Measures

Intercultural Potential Scale (ICAPS). The ICAPS consists of 55 items with responses
given on a scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). A total score (ICAPS Total) was computed by summing all items (24 reverse coded) with higher scores indicating greater adjustment potential (Matsumoto, et al., 2001). Four factor scores were also derived – Emotion Regulation (ER): the ability to modulate one’s emotional reactions to avoid employing psychological defenses, Openness (OP): the ability to engage in learning about the new culture, Flexibility (FL): being free of over-attachment to previous ways of thinking and willingness to tolerate ambiguity, and Critical Thinking (CT): the ability to generate creative, new hypotheses about incidents in the new culture that go beyond one’s home cultural framework.

Satisfaction with Life Scale (SWLS). The SWLS is a five item questionnaire using a seven point Likert scale to rate overall satisfaction with life using questions such as “In most ways my life is close to my ideal” (Diener, Emmons, Larsen, & Griffin, 1985). The SWLS can be viewed as a measure of psychological adjustment since the scale demonstrated moderately strong criterion validity with several measures of psychological well-being (Diener, Emmons, Larsen, & Griffin, 1985 pp. 72-73).

Procedures
SA students’ voluntary participation was requested at five points in time: within one month prior to departure for their study abroad experience, during the beginning, middle, and end of the academic term of the study abroad experience, and the three months following.

Home students’ voluntary participation was solicited as one of several extra-credit activities in two sections of a social psychology course at a university in the United States at the beginning and at the end of the same term as the SA group’s foreign stay.

Results and Discussion
Results will be presented in the order of the hypotheses proposed previously.

Hypotheses 1a and 1b: Contrasts between Stay at Home and Study Abroad Groups
Repeated measures ANOVA’s comparing Groups (SA and Home) across two Time periods (T1= beginning of the semester, T2= end of the semester) indicated that the SA group was significantly higher on Emotional Regulation ($F (1, 61) = 3.96, p = .05$), Critical Thinking ($F (1, 61) = 5.19, p < .05$), and Satisfaction with Life ($F (1, 61) = 11.53, p < .001$) (see figure 1). There were no significant differences across time, and no significant interactions. Examination of univariate F’s indicated that the SA group was significantly higher than the Home group on Emotional Regulation and Satisfaction with Life both at the beginning and at the end of the term. The SA group was higher on ICAPS Total at the beginning of the term, but not at the end; the SA group was higher on Critical Thinking at the end of the term, but not at the beginning.

In summary, hypothesis 1a, that the SA group would be higher on intercultural adjustment potential and personal adjustment at the beginning of the semester, was supported for ICAPS Total, Emotional Regulation, and Satisfaction with Life, but not for Openness, Flexibility, and Critical Thinking. Students higher on some of the intercultural adjustment potential, and actual adjustment scales seem to have self-selected for a foreign exchange experience, but that difference did not extend to all intercultural adjustment factors. Hypothesis 1b, that SA students would be higher than Home students on intercultural adjustment potential
and personal adjustment at the end of the semester, was supported for Emotional Regulation, Critical Thinking, and Satisfaction with Life. ICAPS Total was not significantly different at the end of the semester. With the exception of ICAPS Total, the SA students either maintained or added to their levels of intercultural adjustment potential and personal adjustment over the course of their foreign sojourn.

**Hypothesis 2: Predictive validity for ICAPS**

For the total sample, SA and Home groups combined \((n = 63)\), two indices of intercultural adjustment potential measured at the beginning of the term were predictive of higher personal adjustment or satisfaction with life at the end of the term 10 weeks later (ICAPS Total = .386, \(p < .01\), Emotional Regulation = .424, \(p < .001\)), thus giving some credence to both the predictive validity of the ICAPS Total score, and to the notion that Emotional Regulation may be a “gatekeeper” for intercultural adjustment potential (Matsumoto, et al., 2001).

In an even stronger test of the predictive validity, two indices of intercultural adjustment potential measured in the SA group alone \((n = 17)\) prior to departure for their foreign culture sojourn were predictive of higher personal adjustment approximately four months later at the end of the academic term (ICAPS Total = .734, \(p < .001\), Emotional Regulation = .619, \(p < .01\)). Although not all factor scores showed significance, this result shows strong support for hypothesis 2 and seems to support the notion of ICAPS as a measure of potential for intercultural adjustment that demonstrates relatively high level of accuracy of prediction even over a long time period.

**Hypotheses 3a and 3b: Changes in the Study Abroad Group**

Figure 2 shows how the intercultural adjustment potential factor scores for the SA group, expressed as T-scores, changed over five time periods. SA group averages for both Critical Thinking and Emotional Regulation were above the average for the ICAPS norm group (50) at pre-departure. While Emotional Regulation dipped slightly during the middle of the term before returning to about the pre-departure level, Critical Thinking increased steadily from the beginning to the end of the term, and on into follow-up. SA group averages for Flexibility and Openness started below the average for the norm group (50) and remained below that norm throughout the following time periods. Flexibility, however, did increase at a statistically significant level between pre-departure and the end of the term \((t\text{-value} = -2.63, p < .05)\). The largest increase in Flexibility occurred between pre-departure and the middle of the term. Openness stayed virtually unchanged across the time periods. The pattern of changes illustrated in Figure 2 does not exclusively support one theory of intercultural adjustment over another. The dip in Emotional Regulation in the middle of the term might indicate a pattern of culture shock (Oberg, 1960); whereas, the increases in Critical Thinking and Flexibility might indicate a continuous pattern of learning consistent with social learning (Ward, 2001) or anxiety/uncertainty management (Gudykunst, 1995) models of intercultural adjustment.

Interestingly, for the SA group, the index of the potential for intercultural adjustment (ICAPS Total) changed in almost mirror image fashion in relation to the index for actual personal psychological adjustment (SWLS) (see Figure 3). The decrease in ICAPS Total from pre-departure to the end of the term was not statistically significant; however, the increase of Satisfaction with Life between pre-departure and the end of the term did reach statistical significance \((t\text{-value} = -2.21, p < .05)\). The decrease in ICAPS Total for the SA group over their
stay in a foreign culture was unexpected. Clearly, the SA group did adjust well to the foreign culture in which they stayed. Not only did the Satisfaction with Life scores increase significantly, but also self-report rating scales of adjustment and satisfaction were quite high (4.24 and 4.62 respectively on a 5 point scale), as well as ratings of intercultural adjustment by the foreign families with whom the students lived during the semester (3.92 on a 5 point scale). Looked at a different way, the relationship between ICAPS Total and SWLS in the SA group across time showed changes. At pre-departure, the scales were significantly correlated \((r = .506, p < .04)\). However, at the beginning of the semester, they lost their significant correlation \((r = .348)\) only to increase that relationship over the succeeding time periods (mid-semester \(r = .589, p < .02\); end of the semester \(r = .786, p < .001\); follow-up \(r = .715, p < .001\)). The contrast across time between measures of potential as opposed to actual adjustment and the variation in relationship of those measures raises questions about the relationship between these concepts as the actual intercultural adjustment process is underway. The rebound of intercultural adjustment potential at follow-up may indicate that such potential may be expended during the study abroad sojourn, but recoup when adjustment demands are lifted.

Hypotheses 3a and 3b garnered mixed support. Actual psychological adjustment (SWLS) and two factor scales for adjustment potential (Flexibility and Critical Thinking) increased during the SA group’s stay in a foreign culture. Although no intercultural potential score decreased to the level of statistical significance, the trend for ICAPS Total goes counter to hypothesis 3a. In addition, actual adjustment rose steadily, not showing the dip associated with culture shock, as predicted in hypothesis 3b. Clearly, the processes involved in relationships between actual versus potential intercultural adjustment need to be examined further.

There is some evidence that both psychological and sociocultural adjustment may contribute to both potential and actual intercultural adjustment (Searle & Ward, 1990). With the SA sample in the current study, no systematic intercultural education was undertaken prior to departure, but an ongoing class on intercultural communication (ICC) was undertaken throughout the SA student’s stay in the foreign culture. The ICC class focused on general themes concerning intercultural adjustment (e.g. communication, culture shock) as well as specifics regarding the local culture (e.g. customary greetings, navigating the local public transportation system). In addition, a weekly assignment for each student to find and analyze a stressful, cultural-clash incident which then was subjected to group problem solving probably enhanced emotional regulation. Even the Home group increased their ICAPS Total as a result of considering concepts related to successful intercultural adjustment (e.g. stereotypes, in-groups vs out-groups, prejudice). It seems that there may be systematic interventions that may enhance both potential and actual adjustment to a different culture.

Conclusions

The unexpected, mirror-image change of actual versus potential intercultural adjustment of SA students while they were in a foreign culture could be explained using Lazarus’ (1999) formulations concerning stress, appraisal, and coping. Although students’ primary appraisal (i.e. their perception of the level of difficulty in the situation) may have had to be revised upward based on actual exposure to the foreign culture, the students also received support and education in boosting their secondary appraisal (i.e. their knowledge and confidence that they could develop the resources necessary to resolve stressors effectively in the foreign culture). Thus,
they could feel good about dealing with a difficult situation despite having to expend substantial effort.

On a more simplistic level, it may be that the SA students “used up” some their potential for intercultural adjustment as they were called upon to actually adjust to the foreign culture. Consistent with the conservation of resources theory (Hobfoll, 1989), individuals would expend resources under conditions of threat. Hobfoll and Shirom (2001) state that strong resource pools lead to the greater likelihood that persons will seek opportunities to risk resources for increased resource gains. Hobfoll and Shirom (2001) relate such resource acquiring action to factors such as optimism/pessimism, self-efficacy, and self-esteem. The SA group with a high level of initial intercultural adjustment potential could expend that psychological resource to accomplish actual adjustment under difficult conditions. Such a conception supports the notion that the ICAPS measures intercultural adjustment potential rather than the moment-to-moment capacity for such adjustment (Matsumoto, et al., 2004). The concepts of potential and realized adjustment are related, but may function differently from one another. It will be necessary to see if the divergence of development in the concepts found in the current study can be replicated.

Actual and potential intercultural adjustment do seem amenable to change. The Home group in the current study increased their ICAPS Total score after taking a 10 week social psychology course that dealt, in part, with aspects of diversity and culture. The SA group increased actual adjustment and some aspects of intercultural adjustment potential, in part, due to a multi-faceted class on culture and intercultural communication. It seems that three different levels of information can be helpful in increasing actual and potential intercultural adjustment: 1) general information about major concepts and reactions that are a predictable part of the intercultural experience, 2) culture specific information to increase a sense of personal efficacy in dealing with unique aspects of the culture that people have to negotiate, and 3) information and ongoing coaching concerning personality characteristics and coping strategies that might be harnessed during the inevitable clashes between home and foreign culture that sojourners may face. It may be that a modest investment in education and coaching may produce substantial gains in potential and actual adjustment. In addition, gains in ICAPS Total and Critical Thinking at follow-up may indicate an incubation period post sojourn. Combined with the maintenance of satisfaction with life, such gains may demonstrate ongoing benefits from the study abroad experience.

The ICAPS scale (Matsumoto, et al., 2001) shows promise for not only explaining concurrent relationships with actual psychological adjustment, but also for predicting actual adjustment weeks and months into the future for sojourners who face the task of studying and working in a foreign culture. Prior knowledge of future sojourners’ levels of potential for intercultural adjustment might be useful in identifying their risk for failure in a foreign culture, and in designing remedial steps to boost skills and abilities that may encourage better actual adjustment.

Finally, the SA group in this study was quite small; therefore, caution is necessary in generalizing the findings of this study. Replication using larger samples is called for.
References


Figure 1

Comparison of SA and Home groups on ICAPS scores and Satisfaction with Life Scale
Figure 2
Intercultural Adjustment Potential Factor Changes for SA Group across Five Time Periods

Time Periods: Pre-depart, Start, Middle, End, Follow-up

Factors:
- Emotional Reg
- Open
- Flexible
- Critical Think
Figure 2

ICAPS Total and Satisfaction with Life Changes for SA Group across Five Time Periods