

DOCUMENT RESUME

ED 245 591

HE 017 295

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 TITLE The Impact of Study Abroad on Personal Development of College Students.
 PUB DATE Apr 84
 NOTE 3lp.; Paper presented at the Annual Meeting of the American Educational Research Association (68th, New Orleans, LA, April 23-27, 1984). Tabular data may not reproduce well.
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Church Related Colleges; *College Students; Higher Education; *Individual Development; Longitudinal Studies; *Student Development; *Study Abroad

ABSTRACT

The relationship between selected aspects of personal development and a study abroad experience was investigated. The longitudinal data were collected before studying abroad, after returning from abroad, and 1 year later. The Omnibus Personality Inventory (Form F) was administered to a group of students preparing to study abroad during 1980-1981 (126 students from a small, midwestern Mennonite college), and to a comparison group of 90 students (45 students in an eastern Mennonite college and 45 students in a western Mennonite college). The Debriefing Interview Guide was also administered to encourage and guide discussions between a trained interviewer and students after returning from study abroad. The findings suggest that changes in three dimensions of personality functioning were associated with study abroad: increased interest in reflective thought and in the arts, literature, and culture; increased interest in the welfare of others; and increased self-confidence and sense of well being. An increased tolerance for ambiguity and interest in reflective thought combined with greater sensitivity and emotionality, and an increased interest in the esthetic suggest that study abroad can be an important general education component of the liberal arts curriculum. (SW)

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ED245591

THE IMPACT OF STUDY ABROAD ON PERSONAL DEVELOPMENT
OF COLLEGE STUDENTS

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Presented at the meeting of the American Educational Research
Association, New Orleans, April 1984

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C10771

The Impact of Study Abroad On Personal Development of College Students

Because many aspects of a foreign culture pose unique and potent challenges, it is likely that studying and living abroad for an extended period of time is conducive to personal development. More than 30 studies of the effects of study abroad on the personal development of American college or university students have been reported since 1958. Nevertheless, according to the Council on International Exchange Committee on Academic Programs Abroad (CIEE), the need for additional information about the impact of study abroad is still great (Vaughn, 1981).

The purpose of this study was to determine whether changes in selected aspects of personal development were associated with a study abroad experience. The following questions were used to guide the study: (1) Did the direction and degree of personal development exhibited by study abroad participants differ from those of counterparts who did not study abroad? (2) Which of these changes, if any, persisted one year later? (3) What particular experiences abroad were associated various aspects of personal development?

Theoretical Perspective and Related Literature

The guiding theoretical perspective for this study is the interactionist paradigm in which social, emotional, and intellectual development (Perry, 1970; Piaget, 1969; Sanford, 1966) is thought to be a function of the interaction between the person and the environment. The challenge-response theory (Sanford, 1962, 1967) suggests that college student development occurs in response to novel situations and ideas which are difficult to

assimilate, given the student's present "world view." That is, previously learned responses are rendered non-functional and, to retain situational mastery, the student must "accomodate" or develop new responses (Piaget, 1969).

Most of the studies used pencil and paper instruments in an effort to record personal development in college students studying abroad. About a third also made use of interviews either in place of or to supplement the results from pencil and paper inventories. The findings from these two methods of data collection are summarized separately because their findings are of particular interest to the present study.

Pencil and Paper Instruments

Investigators have recorded increases in self concept (Carello & Greiser, 1976; Leonard, 1959), self confidence (Hensley & Price, 1977; Pelowski, 1979), and instrumental autonomy (Beechy, 1979; Nash, 1976; Pfnister, 1972; Pyle, 1981). Also, study abroad has been linked to enhanced interpersonal communication skills (Pfinister, 1972) and an increased tolerance for persons different from self (Mc Guigan, 1958, 1959; Pace, 1959; Pfinster, 1972; Stauffer, 1973). In addition, certain aspects of intellectual development such as liberalization of attitudes, values, and interests (Carsello & Grieser, 1976; Leonard, 1959; Marion, 1980), increased capacity for critical thinking and tolerance for ambiguity (Beechy, 1979; Hensley & Price, 1977; Sell, 1980), and an enhanced appreciation for the aesthetic (Billigneier & Forman, 1975) have been exhibited by students after studying abroad.

Not all of the studies of the study abroad experience employing pencil and paper instrumentation have resulted in significant findings. For example, Kafka (1968) did not discover any changes on measures of

worldmindedness or dogmatism when students returned from living and studying abroad. Using the Allport-Vernon-Lindsey Study of Values and Rokeach's Values and Dogmatism scales, Morgan (1972) was unable to document any statistically significant changes in personality functioning associated with study abroad.

Interviews

Of the ten studies in which interviews were used either exclusively or to augment the findings from pencil and paper inventories (Beechy, 1979; Carsullo & Greiser, 1976; Garraty & Adams, 1959; Herman, 1970; James, 1976; Leonard, 1959; Morgan, 1972; Pfnister, 1972; Pyle, 1981), all but Smith (1957) reported important effects attributed to the study abroad experience. In general, the kinds of personality development documented through interviews with participants were consistent with those measured by pencil and paper instruments (e.g., increased self confidence, tolerance of persons from other cultures, sense of independence).

Relatively few researchers have attempted to link specific experiences abroad with changes in personality functioning. Frequency of contact with non-Americans (Hensley & Sell, 1979) and the quality of the host family (Pelowski, 1979) were positively related to increased self esteem and self reliance. The extent to which students were exposed to various aspects of the host culture also has been linked to liberalized attitudes (Marion, 1980; Smith, 1970).

Many of the studies employed longitudinal designs and 12 used some form of comparison group to control for differences in biographical (e.g., year in school) and psychological characteristics (e.g., self confidence) of participants. To date, no study has combined the following elements in an

attempt to document personal development associated with study abroad: (1) longitudinal design with data collected at three points (before studying abroad--pre-test, upon return from abroad--post-test, and one year later--post post-test); (2) a comparison group selected from comparable institutions; (3) standardized instrumentation; and (4) interviews with participants conducted by trained interviewers. With these methodological features, reasonably firm conclusions about the relationship between study abroad and personal development should be possible.

Method

Personal development was defined as selected dimensions of normal personality functioning and intellectual activity comprised of attitudes, values, and interests thought to be relevant to activities common to the college experience (Heist & Yonge, 1968). College students were viewed as capable of personal development with the type and degree of development contingent upon past experiences and the challenges encountered while living and studying abroad. Change refers to relative movement (positive or negative change) on personality functioning scales included on the Omnibus Personality Inventory.

Instrumentation

Two instruments were employed. The Omnibus Personality Inventory (Form F) has been used frequently in longitudinal studies "to provide a meaningful differentiating description of students [and] personality change" (Heist & Yonge, 1968, p. 3). OPI validation data reflect many statistically significant correlations with other personality assessment instruments suggesting concurrent validity. The OPI is comprised of 385 items constructed primarily to assess attitudes and interests relevant to two

domains: (1) intellectualism and (2) social-emotional adjustment. Each item loads on one or more of 14 scales: Thinking Introversion (TI) measures a liking for reflective thought and academic activities; Theoretical Orientation (TO) measures an interest in and a preference for dealing with theoretical concerns and problems and for using the scientific method in thinking; Estheticism (Es) assesses interest in artistic matters and esthetic stimuli; Complexity (Co) assesses tolerance for dealing with flexibility, ambiguity, uncertainty, diversity, and complexity; Autonomy (Au) measures liberal, non-authoritarian thinking and need for independence; Religious Orientation (RO) assesses degree of religious liberalism; Social Extroversion (SE) measures preferred style of relating to others in a social context; Impulse Expression (IE) assesses readiness to express impulse and to seek gratification; Personal Integration (PI) assesses degree of personal adjustment; Anxiety Level (AL) assesses level of anxiety and social adjustment; Altruism (Am) indicates the level of concern for the feelings and welfare of others; Practical Outlook (PO) measures interest in practical, applied activities and material possessions; Masculinity-Femininity (MF) reflects some of the differences between the attitudes and interests of men and women; Response Bias (RB) assesses the respondent's test-taking attitudes (Heist & Yonge, 1968).

The Debriefing Interview Guide (DIG) was developed specifically for this study to encourage and guide discussions between a trained interviewer and students after returning from studying abroad. The goals of the debriefing session were: (1) to provide a structured opportunity for students to reflect on their experience abroad and to gain insight into personal changes (if any) that occurred during this period, (2) to supplement and validate the findings reflected by the OPI profile, and (3)

to identify specific kinds of experiences abroad associated with particular aspects of personal development. The DIG structured the interview in the following manner.

The interviewer attempted to put the student at ease by encouraging the student to talk in general terms about the host family and the experience abroad. The interviewer asked specific questions about the student's perspective of the host culture (customs, political climate, economy, etc.) to encourage the student to make comparisons between North American and host country cultures. Then the purpose and limitations of the OPI were explained and the student's profile interpreted.

Five questions were posed to the student to enrich the OPI profile results and to relate particular changes to specific experiences abroad: (a) Are the changes indicated by the OPI profile consistent with your perceptions of personal development? (b) Which changes took place or were underway before you went abroad? (c) Which changes would you attribute to the abroad experience? (d) What do you consider to be the most significant change? (e) What experience(s) contributed most to these changes? Finally closure was sought by the interviewer and each student was invited to take the OPI the following year to monitor the extent to which these aspects of personal development persisted.

Sample

The OPI was administered to 126 students from a small, midwestern Mennonite college ("Midmen") preparing to study abroad during the 1980-81 fall (n=58) and winter (n=68) trimesters. Almost 60% (n=74) were sophomores, only four first-year students went abroad during this period. Since virtually all students from this college study and live abroad sometime during the college program, 90 students, predominately sophomores,

from two comparable Mennonite colleges, "Eastmen" (n=45) and "Westmen" (n=45) were selected to comprise a comparison group. The OPI was administered to students in required general education classes at these colleges.

The ratio of women to men in the comparison groups and the study abroad group was similar, about 2 to 1. However, the mean SAT score of the study abroad sample was one standard deviation higher than that of their counterparts at Eastmen and almost two deviations higher than the mean score of Westmen students.

Procedures

Participating students from the three colleges were administered the OPI as a pre-test in the latter part of the summer (Time 1), as a post-test in mid December, 1980 (Time 2), and as a post post-test in October, 1981 (Time 3). The OPI was administered at Time 2 to the three groups just before the end of the fall trimester so that any significant change associated with the preceding period would be documented. For study abroad students, the OPI was administered at Time 2 just prior to returning from abroad to the U.S.

All (100%) of the study abroad group and 90% of the comparison group samples (n=81) completed the OPI at Time 2. To determine if changes in personality functioning between Time 1 and Time 2 persisted, the OPI was administered again in October, 1981 to the fall, 1980 study abroad group (67% participation) and comparison group (63% participation). Of the 20 study abroad students who did not complete the OPI at Time 3, 15 were no longer enrolled. Of the 24 comparison group students not participating at Time 3, 17 were no longer students at the respective colleges.

To determine if personal development could be attributed to maturation rather than study abroad, students participating in the winter trimester study abroad experience (n=68) completed the OPI as a pre-test in mid December, 1980 and as a post-test in early April, 1981 just prior to returning to the U.S.

In February, 1981, a two hour training session was conducted during which 22 faculty interviewers, selected for their interpersonal skills and interest in the study abroad experience, were briefed on the goals of the interview, the structure of the DIG, and the OPI. Thirty seven of the 42 fall study abroad students who returned to campus to study during the winter trimester agreed to be interviewed. Three students had schedule conflicts and two refused. The interviews were summarized in writing and discussions held with each interviewer to clarify unclear responses from students and to identify themes in the written summaries.

Data Analysis

Three sets of procedures were used to analyze the data: (1) visual and statistical comparisons of the means and standard deviations of study abroad and comparison group OPI scores; (2) content analysis of interviews; and (3) synthesis of OPI and DIG data.

The means and standard deviations of fall respondents' OPI scores at Time 1 (August, 1980) were compared with scores from Time 2 (December, 1980) and Time 3 (October, 1981), and scores at Time 2 were compared with scores at Time 3 to determine the average (X) change on the various scales. OPI scale means and standard deviations of winter study abroad respondents at Time 1 (December, 1980) were compared with scores at Time 2 (April, 1981) in an attempt to control for maturation effects.

Comparing aggregated mean scores may obscure regression, floor, and

ceiling effects and sometimes suggest fallacious conclusions (e.g., inferring development has occurred when the "findings" were a function of measurement error). Therefore, an estimated true gain score is preferred because such effects are taken into account (Cronbach & Furby, 1970). True gain scores were computed for each respondent at each data collection point (i.e., Time 1 by Time 2, Time 1 by Time 3, etc.) by: (a) determining the raw OPI scores for Times 1, 2, and 3; (b) computing Kuder-Richardson reliability estimates (Garrett, 1966) for each OPI scale score at Times 1, 2, and 3; (c) computing correlations (Pearson's r) between scores at Times 1, 2, and 3; (d) computing an estimated true gain score for each respondent on each OPI scale at Times 1, 2, and 3 using a formula provided by Lord and Novick (1968). This procedure actually produces a double residualized gain score; therefore, the results are likely to be conservative estimates of change. One way ANOVAs were used to determine if estimated true gain score differences were statistically significant. Because few of the assumptions of a normal distribution were met by the sample, the statistical comparisons were used primarily to identify dimensions of change deserving further scrutiny. Therefore, the OPI data be viewed as suggestive rather than conclusive.

Student responses to DIG questions were categorized and the number of responses in each category were tabulated for each question. The responses were then compared with the changes reflected on the OPI profile. OPI standard scores have a mean of 50 and a standard deviation of 10. A change of seven or more standard scale points seemed to indicate a substantial shift and was arbitrarily chosen to identify aspects of personal development to be discussed with study abroad students.

The information provided by the OPI and interviewers was collated and

discussed with interviewers, students, student life staff, and other faculty involved with the study abroad program familiar with the study abroad participants.

Limitations

Random selection procedures were not used to identify participants from the three colleges; therefore considerable caution must be exercised when generalizing from the results. While the OPI has been widely used, it is not known whether it is sensitive to changes set in motion as a result of a three month period of study abroad. A rich literature exists describing the thorny problems (e.g., measurement error) associated with measuring change (Bereiter, 1963; Cronbach & Furby, 1970; Feldman & Newcomb, 1969; Treanor, 1969) and the results of this study must be interpreted in light of such problems. The DIG was designed to increase understanding about the process of changes in personality functioning and to validate and supplement the OPI findings. However, like other locally developed instruments, its reliability is unknown.

Finally, the Mennonite influence on the participants in this study must be factored in when interpreting and attempting to generalize from the results. Whether students from other types of backgrounds and colleges would have responded similarly is not known.

Results

Omnibus Personality Inventory Data

The comparisons of OPI mean scale scores and true gain scores revealed few differences between the fall study abroad group and the respondent groups from the comparison colleges (Table 1). Between Time 1 and Time 2,

only two appreciable OPI mean scale score differences were noted. Compared with the comparison group, the study abroad group increased in their interest in reflective thought (TI scale) and in their feelings of well being (PI scale). The difference on the latter scale was not statistically significant, however. These changes seemed to have persisted one year later (Table 1). Between Time 2 and Time 3, the study abroad and Westmen College groups exhibited significant increases in impulse expression (IE--the capacity to actively imagine and attend to sensual reactions).

Insert Table 1 about here

Only one statistically significant difference was found when the pre-test OPI scale scores of fall study abroad and winter study abroad groups were compared (IO scale--Table 2).

The winter study abroad group exhibited statistically significant changes on more OPI scales. Like the fall group, winter study abroad participants increased on TI and in addition, they increased in their interest in esthetic matters (Es) and emotional sensitivity (MF) and decreased in nervousness and tension (AL scale, reverse scored).

According to the true gain estimates, winter study abroad students became more interested in the welfare of others (Am) and less anxious (AL) when compared with their counterparts who went abroad in the fall.

Insert Table 2 about here

Interview Data

In Table 3, students self-percieved changes obtained during the debriefing interviews are summarized and compared with OPI standard score

changes of seven or more points. Sixty two percent of the study abroad participants who were interviewed (n = 23) indicated that the changes reflected by the OPI accurately depicted the dimension and direction of personal development they had experienced. An additional quarter said that the OPI accurately reflected the dimension of change but they perceived a greater magnitude of change than the profile suggested on at least on OPI scale. A smaller number (14%) did not agree with the OPI and felt that the profile did not adequately represent self-perceived changes.

Insert Table 3 about here

Nearly half attributed increased interest in academic activities (TI) and increased tolerance for ambiguity (Co) to coping with the challenges posed by immersion in a different culture. About 53% felt that they had gained in self confidence and personal well being (Au, SE, PI, AL); 37% said they had become more self reliant and better able to make decisions on their own. All but one respondent reported "being more at peace" after than before studying abroad. A quarter attributed their increased consideration for the welfare of others (Am) and the corresponding decline in interest in material possessions (PO) to the experience abroad.

The most significant aspect of personal development reported by 30% was enhanced intellectualism and tolerance for ambiguity. A smaller proportion (22%) identified sensitivity to the needs of others (Am) as most significant. Almost two thirds (65%) thought the most significant aspect about the study abroad experience was the service assignment (i.e., performing some sort of volunteer work while in the host country). Living with a host family was considered by another 18% to have been important to

their personal development while abroad. Respondents whose OPI profiles exhibited an increased interest in reflective thought and tolerance for ambiguity most often attributed this change to being immersed in the host culture and to the service assignment.

Discussion

Based on the OPI and interview data, it appears that changes in three dimensions of personality functioning were associated with study abroad: (1) increased interest in reflective thought and in the arts, literature, and culture; (2) increased interest in the welfare of others, and (3) increased self confidence and sense of well being.

Although it was not possible to determine whether the gains exhibited by the winter respondents persisted, the fall respondents' demonstrated increases on two OPI scales (TI and PI) appear to have held firm one year later. The importance of attempting to estimate "true gain" through the use of residualized scores rather than relying on means and standard deviations to infer change is illustrated by what appears to be no change in the winter study abroad pre- and post-test mean scores on the Altrusim scale (Am--Table 2). However, the gain score suggests a marked increase for some winter abroad students on this scale.

It is interesting that students involved in a highly experiential learning activity would report and, to a certain extent, exhibit--as reflected by the TI scale--increased interest in reflective thought usually associated with academic activities. Some faculty at Midmen College have periodically expressed concern about the "academic" rigor of the study abroad program, and suggested the activity is intellectually "soft" and is perceived by students and others as a easy way to obtain academic credit. The data reported here suggest that study abroad was related to an increase

in some students' motivation for learning and appreciation for reflection, behaviors believed necessary for intellectual development and subsequent academic learning". As one respondent said:

I'm more interested in studying than I ever have been. I am more disciplined and more interested in learning about new places. I am now more interested in learning Spanish because my family spoke it. I have become more understanding and tolerant of persons with other views, organized religion and Catholics.

The findings that suggest an increased interest in the welfare of others associated with respondents' experience of living in squalor seem not only to reflect a change in ideals but also behavior.

"When I returned I could not purchase even some items designated as essential in the U.S. without feeling conflict within me. I would ask, 'Do I really need this?' Before my study abroad experience, my life was wrapped up in clothes and things. I worry that if I am back for awhile I will slip back into my old value system."

It is important to reiterate that a high proportion of the respondents from the three colleges have been raised in the Mennonite tradition which has, as a central tenet of faith, service to others. Many graduates of these colleges give two to five years to some form of voluntary service. Because the college milieu supports this type of behavior, it is possible that changes in this aspect of personal development were underway prior to studying abroad.

It seems that coping with novel situations in a foreign culture with the

support of a mentor (faculty leader) and a small peer group experiencing similar challenges is a suitable vehicle for encouraging certain aspects of personal growth. Living in a different culture required participants to deal with circumstances and ideas that were not easily assimilated into their present world view. In other words, previously learned responses were not often functional while living and studying abroad.

"Being able to cope with new situations never faced before; i.e., getting around the city on my own, living successfully with a new family, and pleasing my supervisor on my service assignment, greatly assisted me in gaining my independence. I would be remiss, however, not to mention the faculty leaders and my peers. They provided much needed support during these challenging experiences. I needed their nudging and caring presence."

The increased tolerance for ambiguity and interest in reflective thought combined with greater sensitivity and emotionality, and an increased interest in the esthetic suggest that study abroad can be an important general education component of the liberal arts curriculum.

Speculations

The OPI data alone suggested that the students who remained on campus increased their interest in the welfare of others as much as those who studied abroad. However, the interview data indicated that, because students reported the experience abroad encouraged them to move from self to other-centered, the OPI Altruism scale may not be sensitive to the kinds of challenges likely to be experienced by students studying abroad. For example, it seems plausible that living in the presence of stark poverty or

a radically different political system may have somewhat of a dampening effect on idealism, a component of altruism measured on the Am scale. Perhaps the responses of study abroad participants to the OPI items are more realistic than those for whom learning experiences have been primarily vicarious. Illustrative of this point are the following items. "What is lost in life seems more vivid than what is gained." "I often wonder what hidden reason another person may have for doing something nice for me." "I would rather not have responsibility for other people."

Students who have lived for several months in conditions of squalor may have difficulty arguing that what is lost in this life is more "vivid" than what is gained. These students may have second thoughts about taking responsibility for other people and develop more of a complex understanding about the sources of motivation for helping others. It is possible that for some students, socialization into an affluent North American culture may reduce the act of serving others in need to an abstract concept without concrete implications for one's immediate life. For others, however, a personal experience with stark poverty seemed not only to reflect a change in ideals but also behavior.

In this study, the debriefing activity seemed to help students more clearly focus on personally meaningful aspects of the study abroad experience and to identify theretofore unnoticed personal development issues. According to interviewers and Midmen student development staff, students seemed to appreciate the structured opportunity provided by the debriefing interview to integrate the understandings and attitudes acquired while abroad and to think about unresolved issues related to that experience.

For the most part, the study abroad program participants in this study agreed with the changes in personality functioning reflected by the

standardized instrument employed to empirically estimate these changes. The major source of disagreement was that the extent to which the OPI indicated change was usually considerably less than the student's self-perceived development. It is possible, as Sanford (1962) suggested more than two decades ago, that the debriefing interview experience itself used to estimate development also encouraged further development. The extent to which this may have happened to the participants in this study is not known. But this phenomenon may account for some of the disparity between the magnitude of change recorded by the the OPI and students' self-perceived changes. That is, the reflection process required to prepare for and participate in the interview may have encouraged students to think differently about some aspects of their own development.

Conclusion

In general, the findings from this study are consistent with what has been reported in the literature concerning the relationship between study abroad and personal development. Participants increased in self confidence, in appreciation for cultural differences, and in tolerance for ambiguity. While their interest in helping others was relatively high before going abroad, this developed further while abroad.

Psychometrically validated tools such as the OPI can be used in concert with interviews to help students systematically reflect on their experiences abroad. In addition to providing different, perhaps richer perspectives on students' development, these opportunities may also encourage continued development.

While changes reflected by OPI scale scores persisted at least one year, the real value of the study abroad experience may be more adequately

assessed after the participants have had a chance to reflect on the college experience as a whole and after initial experiences with the world of work. Certainly a post-college discussion with participants would add valuable insight into the impact of study abroad.

In a world often characterized by misunderstanding and mistrust, learning to understand and appreciate other peoples and cultures has never been more important as a goal of general education. The results of this study suggest that immersion into another culture, not just superficial contact, can challenge students to acquire a more sophisticated, complex view of themselves and the world.

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Table 1

Comparison of the Means, Standard Deviation, and True Gain Scores of Study
Abroad and Comparison Group Respondents OPI Scores at Times 1, 2 and 3

OPI Scale	MIDWEST COLLEGE (Study Abroad Group, n=40)						LANSING COLLEGE (Comparison Group, n=22)						NESIMEN COLLEGE (Comparison Group, n=35)						F-Ratios True Gain Scores								
	\bar{X} T1	SD	\bar{X} T2	SD	Change Score T1-T2	\bar{X} T3	SD	Change Score T2-T3	\bar{X} T1	SD	\bar{X} T2	SD	Change Score T1-T2	\bar{X} T3	SD	Change Score T2-T3	\bar{X} T1	SD	\bar{X} T2	SD	Change Score T1-T2	\bar{X} T3	SD	Change Score T2-T3	Time 1 x Time 2	Time 2 x Time 3	Time 1 x Time 3
IT	22.1	6.8	23.4	7.0	0.91	24.3	7.6	1.38	19.4	6.1	20.7	7.0	0.61	20.7	5.7	0.91	22.4	6.7	22.5	7.5	0.91	22.7	7.7	1.29	3.25*	2.04	0.35
IO	14.0	4.7	15.0	5.4	0.05	15.1	4.9	0.04	14.7	5.7	15.1	6.0	-0.25	14.3	5.2	-0.01	16.3	5.4	16.2	5.7	0.66	16.0	6.4	-0.02	1.16	0.07	2.94
IS	12.3	5.2	13.0	5.4	0.93	13.5	5.0	-0.11	10.8	4.2	11.4	4.7	0.92	10.8	4.3	0.23	11.0	4.6	12.1	4.5	0.51	11.5	4.9	0.51	0.48	0.96	0.14
IO	15.4	6.1	16.4	6.0	1.07	15.9	6.0	-0.05	12.7	4.4	13.4	5.3	0.95	11.8	4.9	0.22	13.5	5.2	14.7	5.8	0.73	14.4	6.0	-0.33	0.29	0.69	1.24
VO	25.5	6.2	25.9	5.9	0.39	27.4	6.0	1.51	22.6	7.1	22.8	7.4	0.37	24.2	5.3	1.67	25.8	7.7	26.4	8.0	0.38	27.4	8.0	1.47	0.03	0.17	0.92
IO	8.7	4.4	8.7	4.6	-0.45	9.4	5.9	0.68	7.0	3.2	6.8	3.0	-0.30	6.1	2.6	0.30	9.3	4.4	8.7	4.8	0.03	9.4	5.5	0.50	0.67	0.18	4.25*
SL	22.7	6.6	22.7	6.2	-0.18	22.6	7.1	-0.10	21.7	6.5	21.5	7.2	-0.16	19.7	7.5	-0.36	21.3	6.4	20.9	6.5	-0.09	21.0	7.4	-0.33	0.08	1.03	1.08
IL	23.4	9.7	23.4	10.0	0.55	24.0	10.9	0.77	22.3	8.3	24.5	9.3	0.44	19.9	7.3	-0.12	24.4	10.0	24.0	11.0	0.63	24.6	10.4	1.00	0.74	4.17*	2.69
PI	37.9	8.6	40.3	7.8	2.02	39.6	9.4	-0.58	33.0	9.9	33.1	10.9	0.89	36.2	9.5	-0.04	34.5	10.2	36.6	10.7	1.79	34.7	11.5	-1.31	2.68	2.72	3.45*
AL	14.3	3.5	15.5	3.0	0.75	14.5	3.7	-0.62	12.9	4.2	13.5	4.2	0.75	13.1	3.4	-0.69	12.5	4.0	12.7	4.4	0.75	13.0	4.6	-0.61	0.01	2.19	1.10
AO	24.1	4.4	25.5	4.6	0.73	25.5	4.3	0.14	23.3	4.4	23.7	3.9	0.91	24.3	3.7	0.09	23.3	5.1	23.7	5.2	0.93	23.4	5.3	0.11	1.00	0.03	1.69
IO	12.6	5.0	11.5	5.4	-0.73	11.7	4.8	-0.11	15.3	5.0	14.8	5.4	0.57	14.8	3.9	-0.43	13.4	5.8	13.1	6.0	-0.80	13.3	6.1	-0.30	0.64	1.60	1.86
IO	25.7	6.3	24.7	6.2	-0.34	24.5	4.9	-0.22	25.2	5.6	24.8	5.2	-0.87	24.6	6.8	-0.38	25.4	6.1	25.0	6.4	-0.86	25.2	6.5	-0.26	0.40	0.02	1.01
RB	13.3	4.4	13.3	4.6	0.61	13.2	3.8	-0.01	11.9	4.4	13.0	4.5	0.32	13.1	3.0	-0.12	13.4	4.4	13.9	4.4	0.49	13.5	5.1	0.06	1.74	0.24	3.41*

*P < .05

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Table 2

Comparison of the Means, Standard Deviations and True Gain Scores of
Midmen Fall and Winter Trimester Study Abroad Groups OPI Scores

OPI Scale	Fall (n = 58)						Winter (n = 68)						F-ratio Fall T1 x Winter T1	F-ratio True Gain Score T1 x T2
	M T1	SD	M T2	SD	Change Score	T1-T2 F-Ratio	M T1	SD	M T2	SD	Change Score	T1-T2 F-Ratio		
T1	21.4	6.8	23.4	7.0	0.91	3.25*	22.3	6.9	23.2	7.3	-0.21	7.12**	0.35	.39
T2	14.9	4.7	15.0	5.4	0.05	1.16	16.8	5.3	16.3	5.8	0.07	1.98	4.12*	.33
ES	12.3	5.2	13.0	5.4	0.93	0.48	11.2	4.9	11.9	4.6	0.77	7.23**	0.22	.21
CS	15.4	6.1	16.4	6.0	1.07	0.29	14.0	4.8	14.0	4.5	0.88	0.13	2.16	.20
AL	25.5	6.2	25.9	5.9	0.39	0.03	26.3	6.1	26.2	6.9	0.38	1.05	0.51	.56
PO	8.7	4.4	8.7	4.6	-0.45	0.67	7.9	2.9	7.5	3.0	-0.41	0.34	1.26	.45
SE	22.7	6.6	22.7	6.2	-0.18	0.08	22.1	7.0	22.5	6.5	0.16	0.70	0.20	.15
IE	22.4	9.7	23.4	10.0	0.55	0.74	23.0	8.3	23.6	8.6	0.41	4.14*	0.26	.56
PI	37.9	8.6	40.3	7.8	2.02	2.68	38.0	9.1	39.9	8.8	1.71	2.03	0.17	.51
AL	14.3	3.5	15.5	3.0	0.75	0.01	13.7	4.0	15.1	3.5	0.93	3.94*	0.98	20.79**
Am.	24.1	4.4	25.5	4.6	0.7	1.0	23.8	4.4	23.6	4.9	0.24	0.69	0.11	11.30**
PO	12.6	5.0	11.5	5.4	-0.73	0.64	13.3	4.9	12.9	5.1	-0.35	0.45	0.72	2.17
ME	25.7	6.3	24.7	6.2	-0.34	0.40	27.6	6.9	26.6	6.2	-0.54	3.08*	0.59	.93
RE	13.3	4.4	13.3	4.6	0.61	1.74	14.3	4.4	14.6	4.2	0.77	0.68	1.67	.33

*p < .05

**p < .01

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27

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26

Table 3
Summary of Interviews with Study Abroad Participants
(n = 37)

ID No.	Plus or Minus Changes of 7 or More Standard Score Points on OPI													** Changes in Personality Functioning Associated with SST	** Most Significant Changes in Personality Functioning	** SST Settings or Experiences Associated with Change		
	TI	TO	Ev	Co	Au	RO	SE	IE	PI	AL	Am	PÓ	MF				RB	
081	+														A	TI and Co		
020															A	TI, IE		
019															A	PI and Am	Had difficulty identifying any because of having	Challenge of new culture to change perceptions and behavior
093	+	+													A	SE and TI	PI and Am	Lived abroad before
092	-														A	PO	SE	Total cultural milieu
															A		Search for valid identity and life style	The double cultural mechanism
066	No significant changes—very positive experience													A		Total cultural immersion		
067	+														A	TI, Co, AL		
086	+	-	+												A	TI, IE	Co—changed perception of the world	Total cultural milieu—couldn't identify one or two experiences
014															A	Am, Au	TI	Friends made in host culture and service assignment in teaching
004															A	Am	Am, Au	Total cultural immersion
011															B	PI, AL	Am	Getting to know actual people and not just statistics
012															B	PI, AL	AL - less scared of meeting people	Living with two national families
013															C	Co, PI, Au, RO, PO	Au	
059															A	PI	PI	Total cultural milieu
060															B	RO, Co	RO	Increased comfort with self without family and other cultural props
065															A	PI, AL, Am	Couldn't identify most significant experience	Being placed on own resources more than ever before
054	+	+													B	RO	RO	Service experience because of deeper involvement in host culture
055															A	TI, Co, RO	Co - Acceptance of different races and religions	Balance between group life and being alone—Heightened sensitivity to need
082	+	+													B	PI, PO, Am	Am - sensitive to the needs of others	Faced with people of another perspective and faculty leaders supportive responses to journal entries
080	+														B	Au, TI	TI - tied to identity search	Living with family and service assignment
002															B	PI, Au	Co - increased self confidence	Service assignment—teaching English
															B	PI, Au	Co - self confidence	Acceptance and affirmation from family and work supervisor
																	Au	Being more on own resources—the need to make decisions by self

Table 3 (continued)
 Summary of Interviews with Study Abroad Participants
 (n = 37)

ID No.	Plus or Minus Changes of 7 or More Standard Score Points on OPI													** Changes in Personality Functioning Associated with SST	** Most Significant Changes in Personality Functioning	** SST Settings or Experiences Associated with Change		
	TI	TO	Es	Co	Au	RO	SE	IE	PI	AL	Am	PD	MF				RB	
085	+	-													-	A TI, Co, Am	Am	Service assignment
010																C Au, SE, PI	PI - self confidence	Confidence gained while living with another family and life style
091							+	+		+						A TI, PI, Am	Am	Total cultural milieu
089			+	+												A ES, Co self confidence	Co - self confidence	Service and teaching of English
088										+						B SE, AL increased self confidence	AL - increased self confidence	Total experience
017																A None	Knowledge of host culture	Living with host family
018										+	+					A PI, IE	PI - increased self confidence	Service assignment
084				+			+		+	+						A RO, IE, Am, PI	Am - significantly more concerned about others and less about self	Encountering "good people" who were not Christian and service-teaching of English and SST support group
009	-			+	+					+						A Au, Co	Au - more self reliant	Total cultural milieu
015	No significant change--lived in Latin culture most of life														A None	None	None	
008																B SE, Au, Am, grew more independent and in appreciation of the needs of others	Am - concern for the welfare of others	Service assignment
058				+			+								+	A Co, SE	Co	CO-increased as the result of less structure which increased tolerance for ambiguity and uncertainty.
021							+		+	+	+					A AL, SE, PI	SE, PI Being more open with others and confident of self	SE-increased opportunity to meet and relate to new people
053																C Au, RO	Au - more confident and independent	Total cultural immersion but especially service assignment
097	No significant														C PI, Au, Am	RO - a firmer base in religion	Service assignment and the support of the SST group	
094	No significant change														C PI, RO, Au	Am - more others oriented	Total milieu	
																	Au - more independent and self reliant	Total milieu

- A.) Changes reflected on OPI are congruent with self perception
- B.) Changes reflected on OPI are mostly congruent with self perception
- C.) Changes reflected on OPI not congruent with self perception

** Changes reported by Students