AFS Long Term Impact Study

Report 1: *20 to 25 years after the exchange experience, AFS alumni are compared with their peers*

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with

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Introduction

What do we really know about our former participants and how they compare to others their age and situation in their own countries?

In 2005, following the completion of a major study of AFS program participants by Dr. Mitchell R. Hammer, AFS realized the need for a longer-term perspective in understanding the impact of our programs. The AFS students in the 2005 "Educational Results" study were shown to be different from their friends who did not go abroad, but might these friends later "catch up" and become just as interculturally sensitive and comfortable around other cultures? Or did the AFS participants have an advantage that would last over the course of their lives?

From these questions, a new research project was launched. We chose to return to a group we had studied before, where we had seen significant short-term impact. In 1981-82, a large-scale study of the impact of the AFS program was conducted with a group of US students who went abroad on both year-long and summer-long programs to any of 50 countries in the world. Now, 25 years after their return, these individuals are all more than 40 years old. Some are among our current host families and some could be parents of the next generation of exchange students. They are typically at mid-career and may be well-established leaders in their communities.

25 years later: Are they still different from their peers?

This question is not just interesting for the participants who were from the United States, so we undertook this project to survey the former AFS participants of this era from 15 countries. All together, we had a pool of almost 12,000 program alumni who were contacted by email or letter to request their participation in the survey. Of this group, 1920 submitted survey results. To compare with their peers, we asked each person responding to nominate two individuals who would have been peers of theirs in their high school years. This resulted in 511 responses from these nominated friends, who have become our control group.

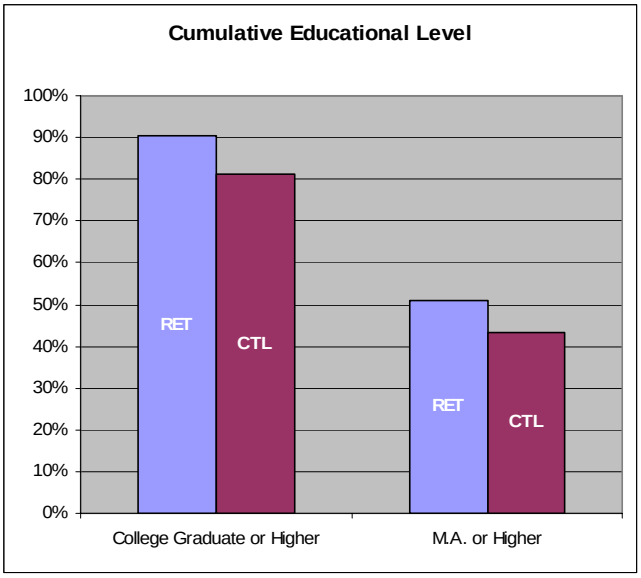
AFS Returnees are Different

Our research project began with focus group sessions in twelve countries that involved AFS returnees in some groups and people of a similar age and background without the high school abroad experience in others. Through these conversations, we identified several potential ways in which AFS participants might be different than their peers, both *before* they went abroad and long afterwards.

Interest in other cultures is passed from parents to children

As the returnees in our study looked back on their childhood, they were significantly more likely than their friends to report that their parents had encouraged them to meet people from other cultures and to study abroad. In addition, they were more likely to travel abroad as children than the peers who did not go on a high school exchange.

The interest is also passed down to the next generation. One of the strongest factors distinguishing returnees from their peers is found in how they plan or hope to influence their own children. Returnees who now have children are much more likely to strongly encourage their children to meet people from other cultures and to participate in a study abroad program than are their peers.



In terms of demographic information, the breakdown by sex and age is approximately the same for both returnees and controls, with 97% of the control group falling in the same age range as the former AFS participants. This basic similarity was requested for the peer nominations, and was found.

The educational levels achieved by returnees and controls are also similar, although returnees show a slightly higher level of educational achievement overall than the group of controls, and this difference was found to be statistically significant.

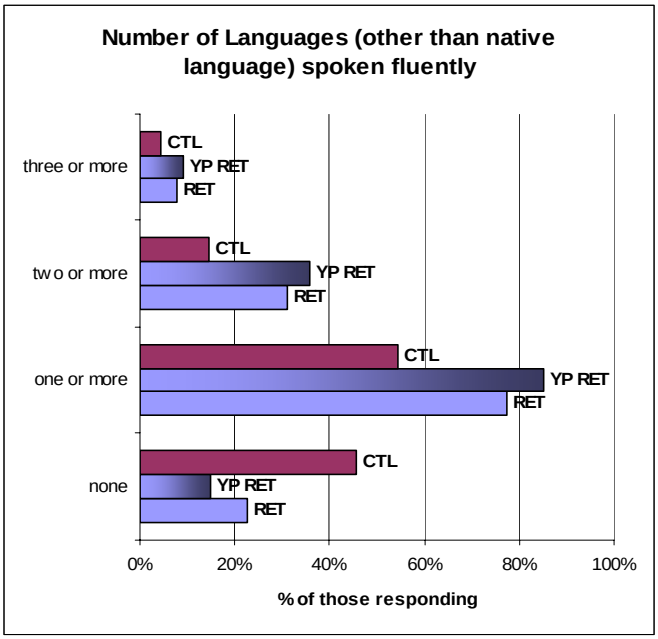
Ideally, a control group should match the group studied in all the basic demographic data. In our case, these differences found – the greater encouragement from their own parents and their slightly higher level of education – mean that we cannot always be sure that the other differences we find between returnees and their peers can be attributed to AFS, since they might also be related to the kind of parents they had, or the educational level they attained. We will need to take this into account as we further analyze the data concerning the long-term influence of the AFS program.

Studying Abroad Again

It is not uncommon to hear people ask whether it is better to study abroad at the high school level, as is typical of AFS programs, or later at the university level. For the AFS participants in the years 1980-81, and for their peers, university-level study abroad was not as common as it is in the early 21st century. Nevertheless, 34% of the AFS returnees *also* studied abroad as college or university students, compared with 22% of the control group who studied abroad at the tertiary level. We don't have national figures for study abroad for all the countries represented, but of all students enrolled in US universities and colleges in the 1986-97 academic year, only 1% studied abroad, and a similar figure for Germany in 1991 shows about 2% of enrolled university students studied abroad in that year. This suggests that our control sample over-represents study abroad compared to the general population, but even so, the AFS returnee group is clearly more likely than their control group peers to study abroad *again* at the university level.

AFS in the 1980s included a very large number of US students heading abroad for a two-month "Summer Program." Though no other country had a substantial volume on a short program, we included these students from the US in our overall study. In looking at the data for college or university-level study abroad, we found that approximately 40% of the AFS alumni from the USA studied abroad again in their college and university years. This figure did not vary whether we looked at Year Program or Summer Program students.

More Languages Spoken



The ability to speak and carry out conversations in other languages is important in every way to the AFS mission. The ILR[1] "Moderate Proficiency" rating is a reasonable high rate of fluency that, according to their host families' assessments, was achieved by over 70% of the AFS students during their year program in 2002-03. Fluency at this level is described as being able to …

…speak with sufficient grammatical accuracy and vocabulary to participate effectively in most formal and informal conversations;

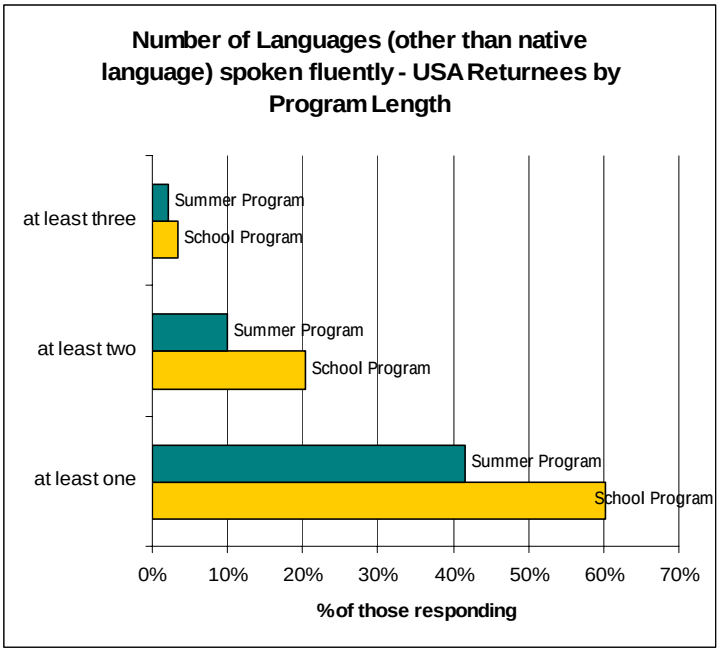
…discuss particular interests and special fields of competence with reasonable ease; and

…comprehend completely at a normal rate of speech.

Using these and other guidelines, 77% of all AFS alumni, and over 85% of all year program alumni, reported that they could speak at least one language in addition to their native language, and over 30% could speak at least two other languages.

Not all returnees considered themselves this fluent in another language. In particular, those who had participated in a two-month program were less likely to see themselves as really fluent in another language, although over 40% of them did say that they achieved fluency at this level in at least one other language. The relationship between length of program and language fluency achievement makes sense, and confirms AFS research from the 1980s that compared the Year and Summer programs.

[1] A rating scale developed by the Interagency Language Roundtable. See: http://www.utm.edu/staff/globeg/ilrhome.shtml and http://books.nap.edu/openbook.php?record_id=11841&page=360



How Cultural Differences are Experienced

Our understanding of the nature of the intercultural exchange experience has been enhanced with the use of Milton Bennett's Developmental Model of Intercultural Sensitivity, which indicates that our knowledge and understanding of other cultures is based on the way we experience cultural differences. The research of Mitchell Hammer with the AFS students from 2002-03 helped clarify the type of changes the AFS program is able to bring about.

More Comfortable Around Other Cultures

In general, we found that the 1980-86 AFS alumni feel more comfortable around other cultures than the control group of their peers. They are less anxious, irritated, or nervous when they encounter other cultures. We know from the 2002 Hammer study that the drop in anxiety around other cultures occurred for the year program students during the course of their exchange year.[2] Prior to their departure, they were very similar to their friends in their level of comfort around other cultures, but post-experience, they were much less anxious, irritated, defensive or embarrassed around other cultures, while their friends showed no change. We also found that the AFS alumni are less likely to report feeling very concerned about their personal safety when traveling abroad.

In looking at the longer term with the program alumni from 1980-86, we wondered if they would maintain the advantage they had over their peers at that time, and if they would show

[2] The older group of returnees in the present study is a bit more anxious or uncomfortable around other cultures than the recently returned group from the 2002-03 program, but the difference is small.

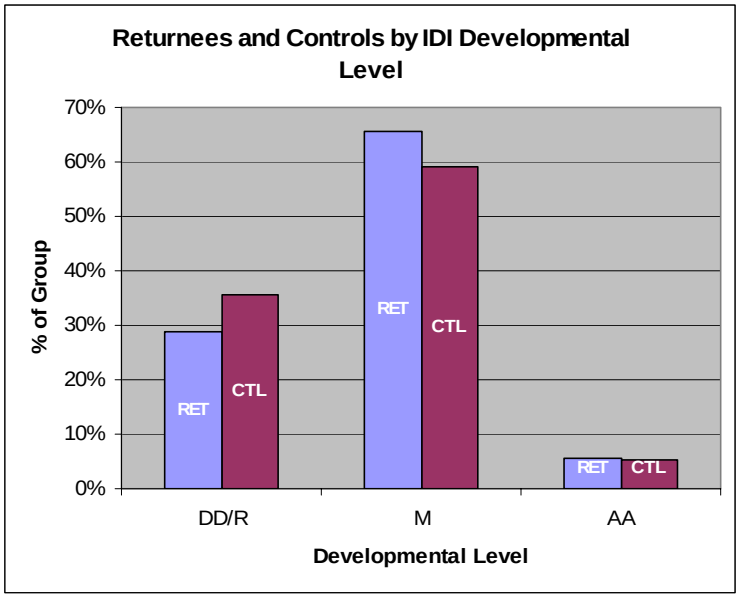
signs of greater sophistication with increasing intercultural experience over their lives. In our preliminary analysis, we do find a small but significant overall advantage that AFS alumni have over their peers in terms of their intercultural development as measured by the Intercultural Development Inventory.

To make this difference more meaningful, we used the IDI results to assign each person to a "Developmental Level" based on their dominant tendencies in how they experience other cultures.

- The DD/R group is characterized largely by a tendency to think of the world in terms of "us" and "them." However, for both returnees and controls, there is a larger tendency for them to view their own culture cynically and see other cultures or some other culture as superior to their own.

- The M group is the largest group, and is characterized by a tendency to minimize cultural difference because of an underlying assumption that the similarities among cultures are more important or deserve more attention than the differences.

- The AA group is the most advanced, and also the smallest. This group is characterized by a nuanced awareness and acceptance of the behaviors, values and thought patterns of another cultural group as well as by an understanding themselves in the context of their own culture.

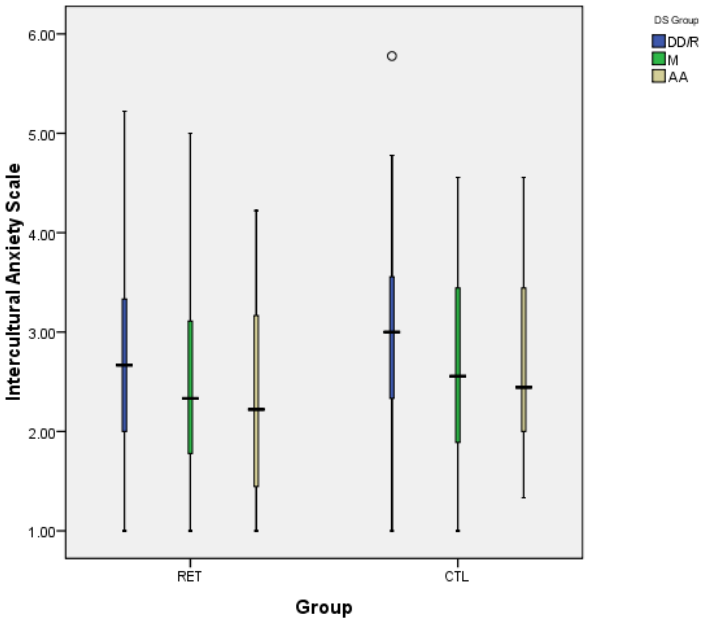


As we look at the numbers of AFS alumni and their peers in each of these groups, we find the major difference in distribution is that AFS returnees are somewhat more likely than the controls to be in the M group, while controls are somewhat more likely than returnees to be in the DD/R group. Since the AA group contains 5.6% of the AFS alumni and 5.2% of the controls, it contributes very little to the difference in variation between the returnees and their peers.

The intercultural anxiety scores in our study showed a consistent pattern with the developmental level identified through the IDI.

In the graph below we look at returnees in each developmental group, and controls in each developmental group, according to their IDI profiles. The vertical bars in the chart represent the range of anxiety scores for the members of each of these groups, with the "middle 50%" shown in the thicker, colored sections. The median is shown by the small line in that crosses the vertical bar. (The circle above the vertical line for Control group members in DD/R Group

shows one case of an individual who is an "outlier" case – someone unusually anxious or uncomfortable around other cultures.) There are two important things to observe in this chart:



(1) In general, the median anxiety level is highest for those at DD/R developmental level and lowest for those at AA level.

(2) At each developmental stage, returnees have a lower median level of anxiety and discomfort around other cultures.

The 2002 Educational Results study by Mitch Hammer showed that the AFS students decreased their anxiety on this same scale from the pre- to post-test stage, and stayed that way through the post-post test. The controls in that study did not shift position.

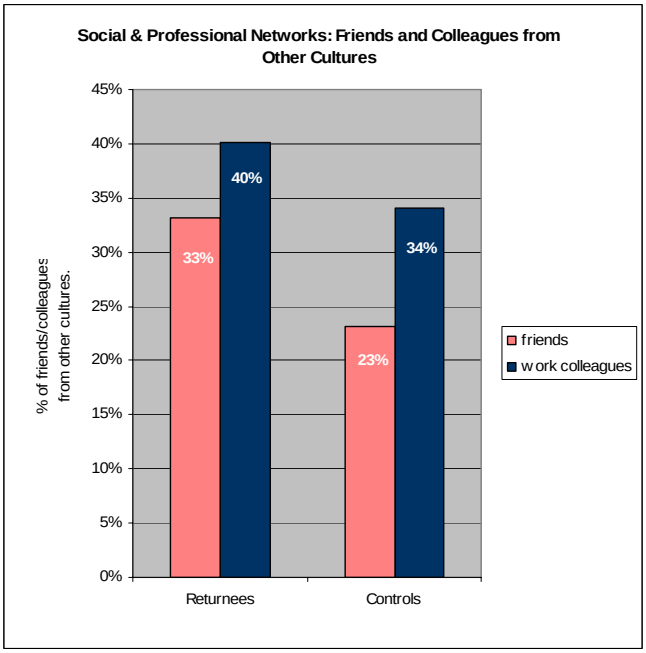
With this Long-Term Impact study, we now have evidence to show that the lower levels of anxiety (or higher levels of comfort) around other cultures that students gain during their experience abroad do in fact remain with them long after (approx 20-25 years!) their experience abroad. In our further analysis of the data, we will specifically be looking at how other variables in our study relate both to the developmental level of intercultural sensitivity and to the intercultural anxiety scale.

When we compared the results of the IDI with those of the Hammer study in 2002, we find that both the older alumni and their peers are significantly more advanced than the young adolescents from the 2002 group at post-test. This suggests that life experience such as that of our older group in general may be related to increased levels of intercultural sensitivity. We will be doing further analysis with these results.

Different Preferences and Life Choices as Adults

While some of the societies to which these individuals belong are traditionally more homogeneous than others, we found overall among both returnees and controls that about 70% of them live in fairly homogeneous communities with less than 25% of the people coming from a different cultural background than the survey respondent. Yet when asked about the desirability of a multi-cultural neighborhood, 39% of returnees said that it is "very desirable" to live in a diverse neighborhood, compared with 28% of controls who would agree.

An intercultural flavor is also more commonly found among returnees in their professional and work lives. Close to half (45%) of the returnees reported that they needed to work "very often" with people from other cultural backgrounds; among the control group, compared with 30% reported this. It is also clear that AFS alumni are more likely than their peers to seek jobs and professional opportunities involving other cultures. This was a very important consideration for 20% of the returnees, and for 7% of the controls. In addition, over one-third (35%) of the AFS alumni have at some point lived abroad for at least a year because of their own work or that of their spouse. This was true for 18% of the nominated peers.



Social and Professional Networks

In their professional and social networks, AFS alumni are much more likely to include people from other cultures. AFS returnees, compared with their peers, are also much more likely to marry someone from another culture: 26% of them had partners from other cultures, compared with 17% of the control group.

Giving Time and Opening their Homes

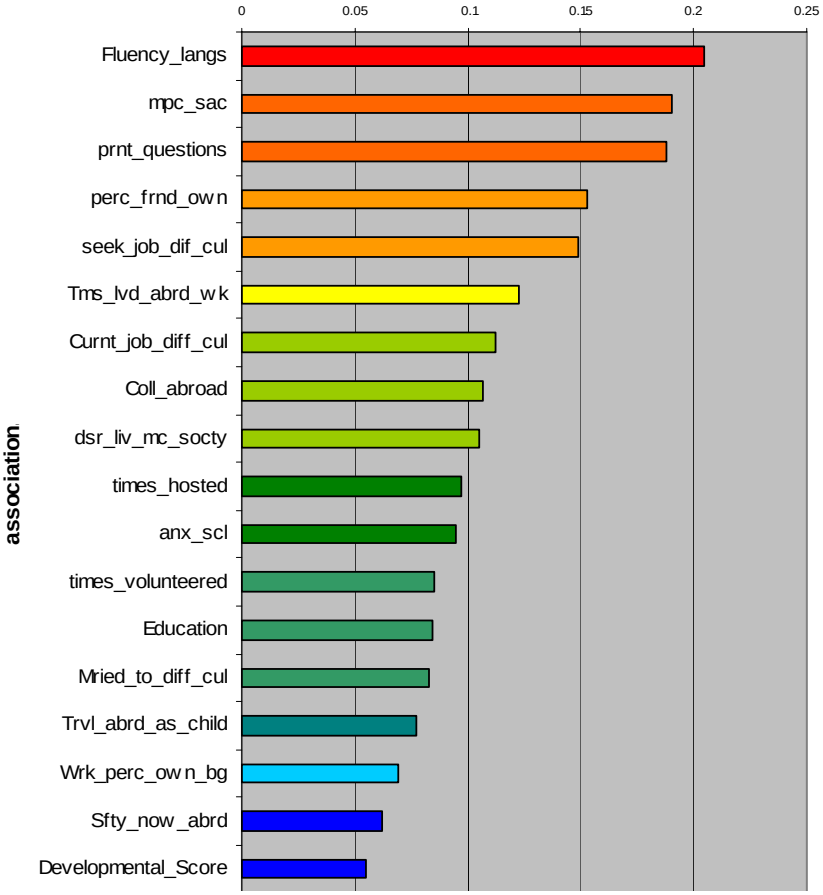
A quarter of all AFS alumni surveyed had hosted an exchange student at least once compared with 14% of the controls. Returnees are also somewhat more likely to volunteer time to organizations with an international or an intercultural focus, and to see this activity as increasing in the years to come.

Strength of Measures

What are the variables most associated with the AFS exchange experience?

We have noted many differences between the results of the returnee group and their peers. The results we have reported are statistically significant, meaning that it is highly unlikely that these differences occurred just by chance. These differences are not all equally important, however, in distinguishing those who are AFS alumni and those who are not. The association of each variable or characteristic can be mapped on a chart according to the strength to which is can be associated with former participation in the AFS program.

Strength of Association with AFS Program Participation



The chart to the left illustrates the relative strength of the association of each variable with the AFS exchange experience in the length of the line and by the color spectrum, which highlights those variables most strongly associated with the exchange in red hues and those weakly associated in blue and indigo. All of these variables have been found to have some level of significant association with participation in the AFS program. The table below provides an explanation of each of the variables provided here.

Variable name		Explanation
Fluency_langs	◆	fluency in other languages
mpc_sac	◆	scale: related to encouragement of children
prnt_questions	◆	scale: related to encouragement from own parents
perc_frnd_own	◆	scale: % of friends who are from own/other culture
seek_job_dif_cul	◆	sought job involving contact with other cultures
Tms_lvd_abrd_wk	◆	lived abroad for work or spouse's work
Currnt_job_diff_cul	◆	current work involves contact with other cultures
Coll_abroad	◆	studied abroad in college or university
dsr_liv_mc_socty	◆	desirability of a multicultural community
times_hosted	◆	times hosted an exchange student
anx_scl	◆	scale: intercultural anxiety/comfort
times_volunteered	◆	days volunteered for international/intercultural organization

Variable name		Explanation
education	◆	educational level
mried_to_diff_cul	◆	marriage with someone from another culture
Trvl_abrd_as_child	◆	frequency of travel abroad as a child
wrk_perc_own_bg	◆	scale: % of work colleagues who are from own culture
sfty_now_abrd	◆	concern for safety in travel abroad now
Developmental_Score	◆	scale: IDI Developmental Score
Sfty_at_home	◆	concern for safety in own community as teenager

Fluency in more languages and family attitudes are strongest

We can see, then, that AFS program participation is most closely associated with having fluency more foreign languages. This measure looked at the number of languages spoken fluently, and is by far the strongest measure associated with the high school exchange experience. We know that this association is strong because over ¾ of the returnees speak at least one foreign language fluently, making fluency the strongest variable that characterizes returnees.

Closely behind language fluency are the general attitudes that the AFS program alumni try to instill in their children and those that they have received from their parents about meeting people from other cultures and encouragement to study abroad.

A social network with more people from other cultures is also strongly related to the AFS experience. In this case, the measure is an inverse one, with the AFS experience associated with having a *lower* percentage of their friends coming from the same background. Also somewhat strong is the association between participation in AFS and seeking a career or job that involves contact with other cultures.

While there were proportionally more returnees than controls who had lived abroad for work for accompanying a spouse, the broad majority of those responding had not has this experience, so the strength of our conclusion that this is a variable that characterizes returnees is a bit lower.

We also note in general that the workplace reality for many people in the world today probably involves some level of contact with other cultures, whether one seeks it out or not, so this is also slightly less likely to be seen as a characteristic associated with participation in AFS. And while significantly more returnees than controls studied abroad in their college and university years, the peers nominated for this study as controls are also much more often found to have studied abroad than would seem likely for the average population, so again, there is a relationship between participation in AFS and studying abroad at the college or university level, but we may feel less comfortable concluding that studying abroad at the college level is a characteristic of returnees in general (and not of controls) even as we see that this relationship exists.

Other variables that somewhat characterize the returnee group include the tendency to believe that it is desirable to live in a multicultural community, frequency of hosting exchange students, and frequency of volunteering for an organization with an international or intercultural focus.

The intercultural anxiety scale used in this study assesses the degree to which individuals feel more anxious, irritated, impatient, defensive, suspicious, nervous, awkward and feel less comfortable and accepted when interacting with people from other cultures. Lower results on this scale are more positive, and were also found to be somewhat strongly associated with AFS participation.

When we look at the association between AFS participant and higher levels of education or intercultural marriages, we see that the ability of these variables to be used as especially characteristic of AFSers is at a lower level than the other measures above. In the first instance, the difference in educational level between returnees and controls is fairly small, even though the data show that this is unlikely to be a difference just from chance factors. In the second instance, most returnees had never married outside their own culture, so the fact that the percentage of this group who had is significantly higher than for the control group.

The extent of travel abroad as a child is also somewhat less characteristic of returnees specifically; we note that for both returnees and their peers, a very large portion of each group answered that they "never" traveled abroad as children. Similarly, low levels of current concern about safety when traveling abroad are not strongly characteristic of AFS participation, probably because so few in this study population are very concerned about personal safety in travel abroad.

We also found less strength in the association of AFS participation with higher levels in the developmental score derived from the Intercultural Development Inventory (IDI), largely because only 5% of either group is found at the highest levels. As with the Educational Results findings with the 2002 AFS group and their peers, we can see the largest difference at the mid levels of the IDI scale, and in the greater portion of returnees who can be characterized as minimizing cultural differences rather than polarizing cultures in terms of "us" versus "them."

Discussion

After 20-25 years, AFS alumni are shown to be significantly different than their peers in a several important aspects. Some of these differences, including the influence and encouragement of their parents for study abroad, no doubt affected their motivation to apply for AFS in the first place.

The study results so far suggest that AFS alumni are more likely to speak at least one other language fluently, will be more likely to have friends from other cultures, to seek jobs that involve contact with other cultures. They are also more likely to encourage their children to meet people from other cultures and to study abroad, indicating that this type of interaction across cultures is a core part of what they value.

Of particular interest for our subsequent analysis are:

- the scale related to intercultural anxiety and its relationships to intercultural developmental levels
- a closer look at the particular developmental phases characterized by minimization, defense, and reversal as found by the IDI assessments in both groups.

Statistics and Technical Notes

Scale Reliability

A few scales were created or re-used with this survey. The items included in each scale were assessed for reliability as a scale, and all three passed the standard expectations.

1. The "Intercultural Anxiety Scale" was also used in the Educational Results Study by Mitchell Hammer. It is an adaptation of the Stephan & Stephan 1985 Intergroup Anxiety Scale by Gao & Gudykunst, which was used in the Educational Results Study. In that last study, one of the ten items – the extent to which the person reported feeling self-conscious – was found to be unreliable in translation, and was therefore dropped from the scale. This item was not used in the current version, which is confirmed to be a reliable scale of nine items, with Chronbach's Alpha = .882

2. Three questions formed a scale concerning Parents' influence or "Parent Questions." These questions related to the encouragement of parents for study abroad, to meet people from other cultures, and parental interest in other cultures. This scale was also confirmed to be reliable, with Chronbach's Alpha =.797

3. Two questions on the extent to which individuals intend to encourage their children to study abroad and meet people from other cultures also formed a reliable scale with Chronbach's Alpha = .796

Language Assessment Measure

In the 2002 study by Mitchell Hammer, we asked host families to assess the language ability of their students before and after the program. In that study we found that over 70% of the students ended the program with ratings from their host families that matched the ILR level of "Moderate Proficiency" or better, and 47% had "Advanced" or "Bi-lingual" Proficiency. Because these ratings include specific descriptions of language skills that the individual has, self-ratings are also possible. The use of self-ratings for culture knowledge scales in the 2002 study showed that these compared readily to the host parent ratings for the same scale, with much less over-estimation of skills than anticipated.

Tests Comparing Returnees and Controls

Throughout this report, any differences that are reported between AFS alumni and the control group have been submitted to statistical tests and the differences are considered significant. Those where we report "no difference" or "basically similar" have also been tested and the difference failed to achieve a significance level of <.05.

The most commonly used test was the Pearson's Chi Square test, which was used with all categoric and ordinal data. Independent Samples T-Test was used to compare means for all scale data. In all cases, equal variances were not assumed, and a 2-tailed significance level was found to be <.05. In most cases the significance level was .000. The exceptions were:

Difference in breakdown by DS group for Returnees and Controls. Chi Square test shows a difference significant at .029.

Difference in breakdown of frequency of volunteering for Returnees and Controls. Chi Square test shows a difference significant at .001.

Difference in average Overall DS Score between Returnees and Controls. Independent Samples T-Test and One-way Analysis of Variance show this difference to be significant, both at = .002

Strength of Association of Variables with AFS Participation

Kendall's Tau was used in these measures of association. All of the variables discussed in this section are significantly related to participation in AFS with significance levels < .05.

Acknowledgements

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AFS Long Term Impact Study

Report 2: *Looking at Intercultural Sensitivity, Anxiety, and Experience with Other Cultures*

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December 2008

AFS and Intercultural Learning

The AFS Experience 20-25 Years Ago

This is the second report in a series on the AFS Long Term Impact Study, which looks at the impact over 20-25 years of participation in the AFS secondary school exchange program. This study marks AFS's most recent effort to understand the nature and value of its secondary school exchange program, and it is fitting that we are surveying students beginning with 1980, a time when research at AFS was very active, with a new focus on "intercultural learning." A major policy document at that time placed intercultural learning at the core of the program.

> *AFS is committed to intercultural learning. Through AFS programs of all types, people are removed temporarily from their home environments and introduced to differing values, ways of life, and patterns of thought in completely new environments. This experience enables AFS participants to acquire skills, attitudes, and knowledge useful throughout their lives as they attempt to cope sensitively and intelligently with the urgent challenges of the world of tomorrow. Similar learning often is acquired by others who come into close contact with participants on AFS programs.*
>
> *Learning through an AFS experience involves growth and change in terms of personal values and skills, interpersonal relationship-building, intercultural knowledge and sensitivity, and global issues-awareness.*[1]

AFS moved very strongly in the 1980s from a program that promoted cultural exchanges for students to one that took on a more deliberate educational role and propelled the organization to undertake research. Studies were conducted on the impact of the program and on all aspects of the process of intercultural adjustment and adaptation including student selection and factors that led to successful placements with host families.

As part of this effort, new orientation programs were designed that were intended to ease the adjustment of the student and prevent debilitating culture shock, while still ensuring that the student would encounter cultural differences challenging enough to promote meaningful intercultural learning. For the most part, the experience of being immersed in a new and unfamiliar culture was expected to lead naturally to personal growth and intercultural learning. The role of AFS was to provide the experience, support the students, and guide the process through a number of structured "orientation" activities run by skilled volunteers who sought to help students meet the challenges of the cultural differences they encountered. Roberto Ruffino, Secretary General of the AFS organization in Italy, described the vision of intercultural learning from perspective of the developing European AFS organization. In official documents from that time AFS is seen as providing *"a new learning situation where students coming from different cultural environments are helped to see their differences as resources to acquire a greater understanding of themselves rather than as deviations from the norm. That is, a situation where every culture is explained in the context of the others through*

[1] From the "Statement of AFS Educational Content and Learning Objectives," included in the *Reports from the Workshop on Intercultural Learning Content and Quality Standards*, the so-called "Montreal Workshop Reports" from March of 1984.

a process that stimulates doubts about self, curiosity about others and an understanding of reciprocal relations and…involves students both intellectually and emotionally."[2]

Assessing Intercultural Competence

How does one measure the outcome of such learning? We talk about the process but can we define the hoped-for results? What are the skills, attitudes and knowledge that we expect to see? Even after decades of study from a variety of academic disciplines, with many different approaches to assessing intercultural competence; none is fully satisfactory.

For AFS, the goals for sending students abroad have, since the 1980s, focused on four dimensions of learning: personal development, interpersonal development, intercultural learning, and global education. Outcomes are not measured by "success" or "failure" but by the participant's progress in learning. Personal goals -- developing self-awareness, critical thinking and self-confidence -- are seen as the foundation for interpersonal learning goals, such as empathy, communication skills, and commitment to others. These in turn enable participants to achieve intercultural learning goals such as the development of meaningful, long-lasting and deep friendships across cultures. These relationships are core to the program and are seen as instrumental to important peace-building goals such as the elimination of intolerance, discrimination, and prejudice based on cultural differences; and the development of empathy, respect, harmony, and a global understanding and appreciation of interdependence.

Early Research

Survey research on the impact of the program was conducted with the 1981-82 AFS applicants from the USA. Those applicants who did not eventually go abroad formed the comparison group who completed pre- and post-test questionnaires in which they self-rated their behavior according to scales that had been validated with over one thousand previous AFS students. These results showed that the AFS students showed considerably greater positive change on ten of the scales than did the group who did not go abroad. These were, in order of importance:

1. Awareness & Appreciation of Host Country & Culture
2. Foreign Language Appreciation and Ability
3. Understanding Other Cultures
4. International Awareness
5. Adaptability
6. Awareness of Opportunities
7. Critical Thinking
8. Non-Materialism
9. Independence/Responsibility for Self

[2] Ruffino recently re-published this definition in "The Traveller's Compass," his speech upon his acceptance of an Honorary Doctorate in Intercultural Learning from the University of Padua.

10. Awareness & Appreciation of Home Country & Culture

While AFS was pleased with these results, the 1981 survey was a paper and pencil instrument that depended on laborious hand coding of the data. Comprising ten pages, it was expensive to mail and not well suited for conversion to an on-line format. In addition, we realized in analyzing the data that the survey suffered from excessively high pre-test scores, suggesting that there was a strong tendency to select socially desirable answers on the scales. This could have the effect of underestimating the impact of the program, as was especially evident in the "open-mindedness" scale where AFS applicants saw themselves at the top levels of open-mindedness long before they started the exchange experience. In addition, while we now had a list of desirable goals in which our students had shown great improvement over the course of the program, we did not have information to help us improve our programs to achieve even greater educational value.

A new approach: The IDI

In 2002, a nine-country study of the impact of the AFS program was conducted with Dr. Mitchell R. Hammer. The Hammer study was based on intercultural competence as measured by his Intercultural Development Inventory, an increasingly well known survey instrument based on Milton Bennett's Developmental Model of Intercultural Sensitivity[3]. The model, which looks at an underlying mode of experiencing cultural differences, had several advantages over our previous Impact Study.

1. The IDI had no discernable bias toward socially desirable answers.

2. The Developmental Model of Intercultural Sensitivity gave us a better way to synthesize the results and characterize the students according to their developmental stage in understanding other cultures, and to suggest strategies we could implement in our program to improve the educational value for future participants.

3. The broad use of the IDI allowed us to look for comparisons of our results with data on other groups.

The "Educational Results" study also included on other measures to assess language fluency, knowledge about various aspects of the host culture, friendship and social networks across cultures, and the emotional reactions of the students around other cultures in terms of their relative anxiety or comfort in these situations. Data from parents and host parents supplemented the student's self-reported assessments.

The Long Term Impact Study

In looking now at the AFS alumni from 1980-86, and their peers, we are continuing the approach used by Hammer, looking at some of the same dimensions after 20 or more years of life experience. Our first report of the AFS Long Term Impact Study explored differences found between a worldwide sample of AFS alumni from 1980-86 and a group of their peers nominated by the alumni. The AFS group overall showed fluency in a greater number of languages and a different attitude concerning other cultures that was manifested in the way they encouraged their children to meet people from other cultures, in their friendship networks, and in their choice of careers. They were also more at ease and less anxious or

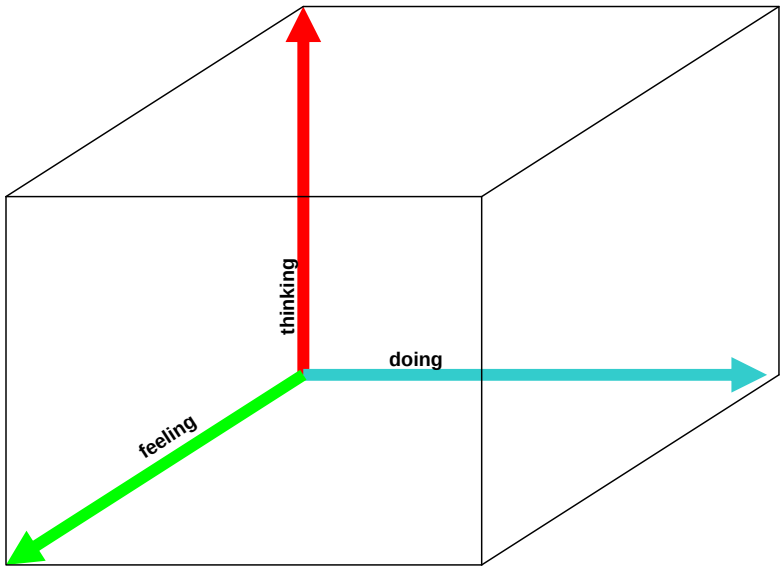
[3] Bennett, Milton J. "Towards Ethnorelativism: A Developmental Model of Intercultural Sensitivity," in Paige, R. Michael (ed) *Education for the Intercultural Experience.* Yamouth: ME, 1993, pp 21-71.

defensive around other cultures than their peers and they showed a higher average level of development in intercultural sensitivity. For details about the study and these findings, please refer to Report 1.

In this second report, we are looking more specifically at multiple and interrelated aspects of intercultural learning. The analysis presented here paves the way for a holistic interpretation of the nature of the long-term outcomes of the AFS experience and how these stand up against what we hope to achieve.

Experience, Emotion, and Education

How does a person gain intercultural competence? Bennett's Developmental Model of Intercultural Sensitivity describes stages of how one experiences cultural difference, makes sense of that experience, and reacts emotionally to that experience. All three domains – behavioral, affective, and cognitive – are usually present when learning takes place. We used the IDI to measure the level of intercultural sensitivity, and other variables that related to these three dimensions of learning.



Doing

The AFS Program is first and foremost a program of experiential learning. AFS provides the participant with a direct experience in another culture. Learning a culture – like learning a language, like learning music, like learning to dance – requires practice. Culture is first encountered through sensory experience, and being immersed in the culture allows for a much richer sensory experience that is both deep and broad. But culture is also encountered through the acquisition of language, and as we reported in the first report of this study, foreign language learning is strongly associated with participation in the AFS program.

Furthermore, culture learned from direct or "lived" experience never happens without other people, and intercultural learning depends on relationships across cultures. Because culture does not exist as an entity apart from the actions, behaviors, and beliefs of those who share the culture, then everyone is both a student and a teacher of his or her own culture.

Feeling

The AFS experience is processed through the emotions as well as via the information provided through orientation and formal learning programs. In the 1980s, AFS recognized the value of crisis in learning because of the mental and emotional challenge of cognitive dissonance. But this challenge can be processed in two ways. The emotional reactions to the new culture and how these are processed can create a "virtuous cycle" of increasing ease, confidence, and further experience, or a vicious cycle of anxiety and fear, avoidance and defensiveness. Research by Gudykunst and others show that feelings of anxiety around people from other cultures tend to inhibit effective communication and negatively affect adaptation.[4]

Thinking

> ***"Intercultural competence is not something you learn just once."*** *Remarks by Jörg Eschenauer at the colloquium, Les échanges internationaux de jeunes face aux défis de l'interculturel, April 25, 2008 Paris.*[5]

It is important also that any learning experience leads to further learning, since intercultural learning is not a destination but a journey. It is not by instincts alone or by just being in another culture that we come to understand that culture, or to recognize that our own culture is one of many possible ways for groups of people to organize their lives together. Rather, this is intercultural learning: the recognition of cultural patterns, of grammar and syntax; the development of a greater awareness or mindfulness when interacting with people from other cultures; and a greater knowledge of the world and its people. These are mental processes, or more simply, thinking. The IDI measure includes this cognitive aspect of intercultural learning as well as experiential and emotional aspects.

We characterize these as separate aspects – thinking, doing, and feeling – but they are tightly connected and interrelated.

Poised, Self-assured, and Comfortable

If a person is unsure how to behave in the context of a new culture, this uncertainty may create feelings of anxiety which interfere with the ability of the person to communicate effectively with people in the other cultures. It is possible to reduce the uncertainty with information, but this is only effective when the information is accurate. It is also possible to manage the anxiety and to build a higher tolerance for ambiguity.

As stated on page 5 of the first report of this study, our research demonstrated that the AFS alumni are significantly less anxious around other cultures than the peers that they nominated,

[4] Gudykunst, W.B. & Nishida, T. "Anxiety, uncertainty, and perceived effectiveness of communication across relationships and cultures," in *International Journal of Intercultural Relations (IJIR)* 25 (2001) 55-71.

[5] Jörg Eschenauer is President of the Linguistic Training Department at the Ecole Nationale des Ponts et Chaussées

who had not had a high school exchange experience. We had been particularly interested in the intercultural anxiety scale because it was also a major marker of the AFS experience in the "Educational Results" study by Hammer. In that study, AFS participants experienced a dramatic drop in anxiety between their pre-departure assessment and the same assessment following their experience. This did not happen among their peers, who started at about the same mid-level of the scale in the pre-test and did not change over the next 18-20 months.

The connection found in the first report between the developmental level of Intercultural Sensitivity and the Anxiety Scale was also intriguing, and led us to tease out the variables that related specifically to anxiety around cultures and those that related to higher levels of development as measured by the IDI. Results are reported below.

Intercultural Isolation and Anxiety

The Intercultural Anxiety scale we used is based on an adaptation of the Stephan & Stephan 1985 Intergroup Anxiety Scale by Gao & Gudykunst[6]; it is the same scale used in the 2002 study by Hammer, subtracting items that did not pass validity in translation. In addition to understanding the significant difference between the AFS alumni and their peers, we wanted to know how other variables that were part of our study might relate to different levels of intercultural anxiety. By looking at the correlations of other variables in our research with the intercultural anxiety scale, a model of "Intercultural Isolation" was found, which explains about 13% of the variation in scores on the Intercultural Anxiety Scale.[7]

The building blocks of the isolation model are variables found to predict shifts in anxiety during intercultural encounters. The model characterizes the relative cultural isolation of individual respondents. Our analysis found that AFS participants are on average less isolated and experience greater comfort and self-assurance when dealing with other cultures.

In this model, variables that are related to **higher** levels of anxiety around other cultures were all items that could be characterized as intercultural isolation. The following qualities were found to predict **lower** anxiety (and therefore greater comfort and self-assurance) around other cultures among respondents:

1. A lower level of concern about safety when traveling abroad. Overall concerns about personal safety abroad are a good predictor of higher anxiety on the intercultural anxiety scale, and AFS returnees are less anxious than the control group. However, in general neither the AFS returnees nor their peers showed a high level of concern about personal safety when considering travel abroad.

2. Finding it desirable to live in a multi-cultural neighborhood or community. AFS returnees are much more likely than their peers to want to live in a multi-cultural neighborhood and this also predicts having a lower level of anxiety around other cultures.

3. A childhood characterized by frequent travel abroad and parents who encouraged interaction with other cultures. When we look at the frequency of travel abroad combined with the parental influence to meet people from other cultures, we find a

[6] Gao, G. and Gudykunst, W.B. "Uncertainty, anxiety, and adaptation," in *IJIR* 14 (1990), 301-317.
[7] Based on a stepwise linear regression model that identified connections between other variables in the study and these two related scales.

predictive relationship to lower anxiety around other cultures. AFS returnees are more likely to have had this parental encouragement and frequent childhood experiences abroad than their peers who did not participate in AFS.

4. A network of friendships with people from other cultures. Measured by the percentage of friends from one's own culture, a higher proportion of same-culture friends is a significant predictor of greater anxiety around other cultures. AFS returnees are much less likely to have mostly or only friends from their own culture than the peers they nominated.

5. Living in a neighborhood or community with a high proportion of people from a different cultural background. While AFS student are more likely to want to live in a multicultural neighborhood than their peers, where they actually live is only slightly more likely to be with a large number of people from other cultures, and less than 20% of either the returnee or peer group lives in neighborhoods where they are a cultural minority.

6. Speaking at least one foreign language with a moderate level of fluency or better. AFS returnees are more likely than their peers to be fluent in at least one non-native language. Foreign language fluency is a significant predictor of lower intercultural anxiety.

Looking at the population of AFS returnees, we find one that is characterized by life experiences, attitudes, choices and skills that lead them away from isolation and anxiety around other cultures. In the earlier "Educational Results" study, the AFS experience was found to reduce sharply the level of anxiety felt around other cultures. From the long-term impact research we understand how this lower anxiety relates to many other aspects of their lives. AFS returnees are engaged in other cultures through their choices of where to live, the language they speak, and particularly their friendships.

Developing Intercultural Sensitivity

AFS's mission is still very true to its origins as envisioned by the ambulance drivers of the American Field Service, using the secondary school exchange experience as a basis for developing understanding between peoples of different cultures. Bennett's conception of intercultural sensitivity resonates with our educational mission that seeks to build bridges between cultures and to promote respect for and sensitivity to cultural differences and harmony among peoples.

The developmental stages in Bennett's model move from ethnocentric to "ethnorelative" approaches to cultural differences and are laid out in six major phases:

1. "Denial" in which people are unaware of other cultures.

2. "Defense" in which one culture is seen as better than or threatening to another culture.

3. "Minimization" in which people minimize differences between cultures and focus on their common characteristics as more important.

4. "Acceptance" in which people expect and recognize the importance of cultural differences as well as similarities.

5. "Adaptation" in which people have learned to adapt their patterns of behavior quite naturally to another cultural context.

6. "Integration" which involves a fully bi-cultural approach.

The first three of these stages are considered by Bennett to be "ethnocentric" while he has called the last three "ethnorelative." With its roots in the two World Wars of the last century, AFS has been particularly concerned with moving people beyond a "Defense" orientation to one that builds peace and understanding between cultures.

Minimization of Cultural Differences

The "Minimization" of cultural differences is explicitly a peace-building approach relative to other cultures. In minimizing cultural differences, people relate to each other on the basis of their common assumptions, values, beliefs, or patterns of behavior.

> *"The fact that I traveled with AFS to the United States and met adolescents from every continent, shared with them, and created these bonds of friendship, made me realize that we might have different skin color, religious and political beliefs, yet across all these differences, we all are still human beings with very similar feelings and interests and it is just by chance that we are born in this or that culture and family." AFS Returnee from Chile.*

As the quotation from this returnee shows, many of our former participants tend to view other cultures through a lens that minimizes cultural differences and focuses largely on the common humanity that exists among all people. However, the returnee who believes that we all have "similar feelings and interests" most likely assumes that his or her own feelings and interests are common to everyone. This may not be the case, and it is certainly not the case that different cultures give the same priorities even to those values they hold in common. Yet this view has very strong emotional appeal for AFS generally, and minimization is a necessary step in moving beyond the polarizing defensive reactions that lead to conflict between cultures. The 2002 Hammer study showed that AFS was effective in moving young people beyond a defensive approach to one that minimizes cultural differences, but it was more difficult to find significant progress in moving people from minimization into a more ethnorelative stage.

In the long-term impact study, we also find that the majority of our returnees tend to have Minimization as their dominant approach to cultural differences.

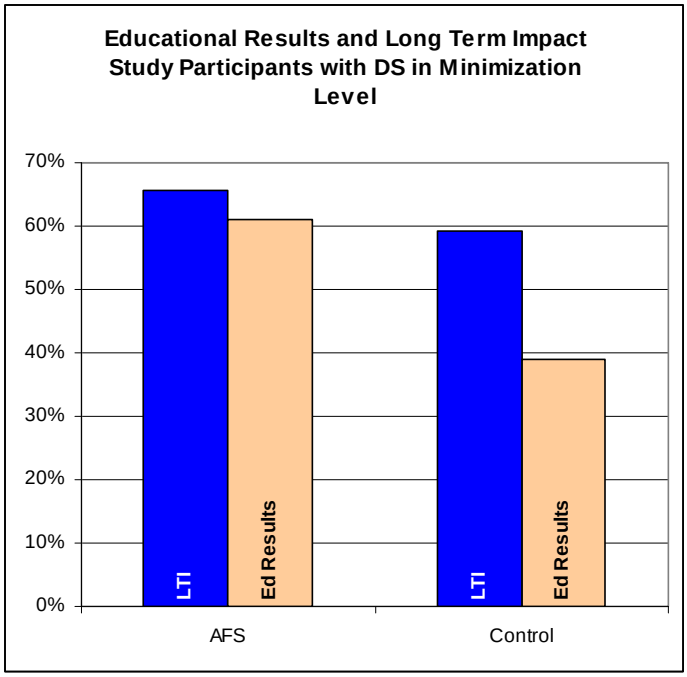


Figure 1. In this chart the % of people scoring in the "minimization" range is shown for the AFS and Control groups of each study.

Comparing the IDI results for our returnee group from the 1980s with the post-posttest results found among our 2002 Year Program students who were part of the Educational Results Hammer study by Hammer, we find a 4-point higher average development score among the older returnees,[8] and 65% (as opposed to 61%) with developmental scores showing a predominant tendency to minimize cultural differences.

For the younger group of returnees, the gap between them and their peers is substantially larger, with more of the control group tending toward defensive and polarized worldviews characterized by "us" and "them." Among the adult group in the present study, there is still a significant difference in developmental level between the AFS returnees and their peers, though the peers are closer to them. Whether this is an effect of maturity or of different generations is not clear.

Reversal

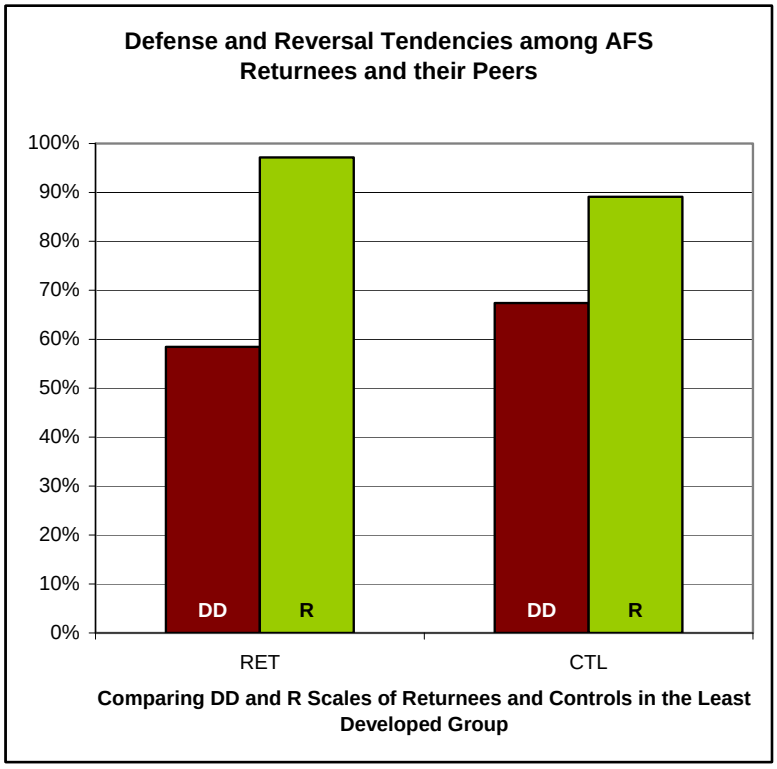
With the 2002 group in the Educational Results study, we also found a substantial number of students – particularly in the pre-test survey prior to their experience abroad – who had a predominant tendency to focus on the negative aspects of their own culture and to idealize another culture or other cultures generally. Many young people may be attracted to exchange programs because of their attraction to another culture, and this frequently takes the form of an enthusiastic interest and positive attitude about everything the host culture has to offer, while complaining in some way about the deficits of their own culture.

Those with "Reversal" tendencies are often very successful in adopting host-culture behavior that appeals to them, and they are very willing to be self-critical. Many AFS students move beyond this idealization of their host country during the course of their experience abroad, and it is common for returnees to speak of how much they came to appreciate their home countries after their AFS experience. But others continue long after their experience abroad to view their own culture cynically in comparison to their host culture or to other cultures generally.

[8] A t-test comparing the post post-return development scores for 2002 returnees from the Hammer data and the Long-term Impact study development showed significantly higher scores for the long-term returnees at $p<0.001$.

In the Bennett DMIS model, this polarization is still a type of defensive reaction, but a reverse one in which other cultures are considered superior to one's own culture. Bennett labeled this tendency "Reversal" and though it may be developmentally similar to a "Defense" reaction to other cultures, it looks very different in practice. In the IDI, "Reversal" is identified by its own scale, not related to "Defense."

Among the Long Term Impact study AFS and control group populations studied, "Reversal" polarization of cultures is more common than the "Defense" approach to cultural differences.



The bar chart at the left breaks down the profile of those whose developmental scores on the IDI put them in the least developed group. Included are 29% of all returnees with complete IDIs, and 36% of the controls.

While the vast majority of both groups show Reversal tendency, more than half *also* show Denial and Defense tendencies. (Reversal and Denial/Defense are not mutually exclusive.) On average, AFS returnees at this developmental level show less tendency than their peers to use a "Denial/Defense" approach toward other cultures.[9]

Figure 2. Chart showing the proportions of people with Denial/Defense and Reversal tendencies among the Returnee and control groups with DS scores showing polarization.

The idealization of another culture is perhaps well expressed by these returnees from the 1980s:

> *"My love of all things British has led me to study British history, watch British news, drama and comedy shows, and eventually to live there." AFS Returnee from the United States*

[9] Among the respondents at this developmental level, T-test comparisons of returnee and control group responses on the "Denial/Defense" scale confirm this conclusion as statistically significant at $p < 0.001$.

> *"I realize that until the 1980s other cultures knew more about real food and health than Americans do." AFS Returnee from the United States*

Even among the larger group that with a predominant "Minimization" outlook, it is somewhat more common among AFS students than among their peers to have unresolved "Reversal" tendencies as part of their IDI profile.

Predicting Intercultural Sensitivity

Any complex study of human subjects such as this one can only hope to shed some light on the predictive relationships of one variable to another. Each AFS experience is unique, and the outcome of this experience for any individual cannot be foreseen.

The AFS experience seems to have some impact on the developmental level measured by the IDI, but we wanted to identify other variables from this study that might predict intercultural sensitivity. The regression model we created found several variables that, taken together, help predict variations in intercultural sensitivity. [10] We selected variables related to experience, education, and emotional factors that we could expect might have a relation to IDI levels. The following features in our study population were found to predict higher intercultural sensitivity among respondents:

1. Stronger feeling that it is desirable to live in a multicultural area or neighborhood.
2. Lower levels of concern about the safety of traveling abroad
3. Lower anxiety in general around other cultures
4. Having studied abroad at the university level
5. Having a job that requires frequent interaction with people from other cultures
6. Lower levels of concern about safety at home
7. Being a female
8. Having a Masters or Doctorate level degree

Each one of these items is correlated positively and significantly with the overall IDI intercultural development score, but individually, the strongest of these (the desire to live in a multicultural neighborhood) explains only slightly more than 2% of the variation in the IDI development scores. Taken together as a model, these eight items are able to explain about 10% of the variation in the development scores. Other models are possible since there are many relationships among the variables studied; and other variables, such as fluency in multiple foreign languages and the proportion of friends from other cultures that, also relate strongly to intercultural sensitivity as measured in the IDI. But these eight characteristics were

[10] This model is based on a stepwise linear regression model that identified connections between other variables in the study and the IDI developmental score.

found to work together well within our study group of both AFS returnees and their nominated peers.

The inverse relationship of intercultural anxiety and intercultural development were highlighted in the first report. Concerns about personal safety are also highly correlated with the anxiety scale and reflect the emotional component that interferes with effective communication across cultures, according to the Gudykunst study.[11]

Here we also want to look at some of the perhaps more surprising relationships: the relationship of gender and advanced education to the IDI scores in this model.

Gender

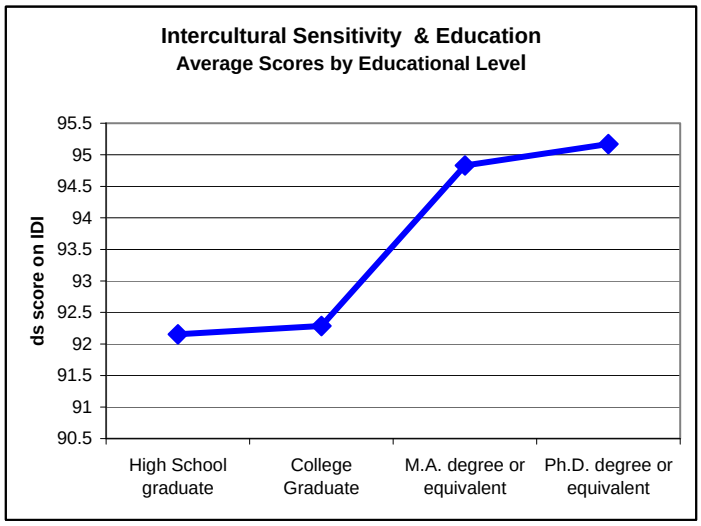
AFS and university study abroad programs alike have frequently noted the fact that the majority – sometime the vast majority – of program participants are female, and this study also counts a disproportionate number of females: nearly 65%, including the controls, who, as nominated peers, were also more likely to be female. In this study there were approximately 4% more females in the AFS group than in the university abroad group, and with some significant differences found in the intercultural anxiety scale, where females showed significantly less anxiety around other cultures than males and in the developmental scale of the IDI, where females on average scored two points higher than the males, we wondered if the slightly higher percentage of males in the university study-abroad group would have a disproportionate influence on the outcome of the university abroad group as a whole.

With only a tiny group of 24 males in the control group who participated in university study abroad, we realized we could not draw any useful conclusions by gender when looking just at control group experiences, and in fact, this group did seem to skew the results in a couple of areas: they had both higher developmental scores on the IDI as well as higher numbers of professional contacts from other cultures than the general pattern found with the remaining groups.

Previous research with the IDI and gender has had mixed results. The Long Term Impact study results here are more in agreement with the findings of Alshuler, Sussman, and Kachur, in which females showed a tendency to for higher average scores in intercultural sensitivity.[12] A small sample size in that study did not allow for a clear statistically significant outcome, but in the Long Term Impact study reported here, the volume is amply sufficient to show the average two-point higher developmental score found for females compared with males.

[11] Gudykunst and Nishida, op. cit.
[12] L. Altshuler, N. Sussman, E. Kachur, "Assessing Changes in Intercultural Sensitivity among Physician Trainees Using the Intercultural Development Inventory, in *IJIR* 27 (2003) pp. 387-401.

Advanced Educational Degrees



In this study, those with higher levels of education showed a significant tendency to have higher development levels in intercultural sensitivity.[13] In particular, as the chart here shows, the jump seems to come with advanced educational degrees.

This runs counter to Hammer's earlier findings from his own research on the IDI, in which no significant differences were found by education for any of the IDI scales, and gender differences were only found in one sub-scale (the DD scale) in which males scored *higher* than females.[14]

Lifelong Learning

In 2004 and 2005 when the results of the project with Mitch Hammer were being assessed we realized once again that intercultural learning is about more than just the year abroad. The young people who would be going on AFS in 2002-03 were already more attuned to other cultures than their friends who had no plans to go abroad. As reported in the first report of this long-term impact study, we learned that our exchange program alumni received more encouragement from their parents to meet people from other cultures and to go abroad. Since this study looks at individuals who are now around 40 years old, we know that the AFS program in high school is part of a chain of experiences in the biography of our alumni. Our alumni are more likely than their peers to seek additional experiences: university-level study abroad, careers that involve interaction with other cultures, opportunities to work abroad, cross-cultural marriages. As they rear their children, they are also more likely to encourage their children toward involvement with other cultures and study abroad. Each of these life experiences has the possibility to alter one's perceptions and increase competence across cultures, or to reinforce stereotypes and existing attitudes about cultural differences.

The "Educated Intercultural Traveler"

As we looked at the biography that was emerging in this study as an indicator of intercultural experience, we considered how we might make a composite variable that measured this biography of lifelong learning. The result was a measure we have called "The Educated Intercultural Traveler." This scale begins with the childhood experiences and includes four elements. It measures the extent to which an individual:

[13] One-way Anova tests showed significant effects for Intercultural Sensitivity (DS score on the IDI) by educational level. A similar test for Intercultural Anxiety showed no significant effects by educational level.

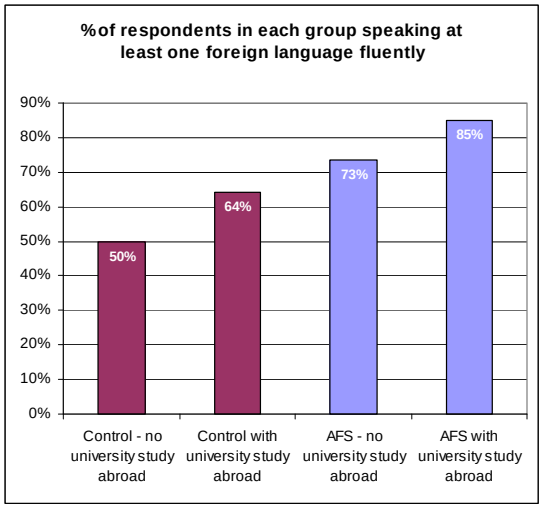
[14] Hammer, M.R., et al. "Measuring Intercultural Sensitivity: The Intercultural Development Inventory," in *IJIR* 27 (2003) 421-43.

1. had parents who encouraged them to meet people from other cultures and who took them frequently on travels abroad;
2. studied abroad at the university level;
3. received post graduate degrees; and
4. lived abroad for more than a year because of their work or their spouse's work.

AFS alumni are more likely to be among these educated intercultural travelers than their peers, just as they are more likely to be more confident and poised around other cultures. A high score on the Educated Intercultural Traveler scale is also significantly related to higher levels of development in intercultural sensitivity.[15]

Multiple Study Abroad Experiences

AFS alumni who also study abroad in their university years do show greater intercultural competence in several areas. Nowhere is this more evident than in the area of foreign languages. All respondents were asked to assess themselves in terms of the number of languages that they could speak at least as well as a carefully described set of competencies as set out in the ILR[16] "Moderate Proficiency" rating, as described previously in Report 1 of this study.



To understand the differences between different levels of international exposure, we divided our research sample into four groups:

1. Control group respondents who had no study abroad experience whatsoever in their high school and university years
2. Control group respondents who studied abroad at the university level
3. AFS alumni who did not later study abroad in university
4. AFS students who also later studied abroad at the university level

Figure 3. Comparison of language fluency across the four experience subgroups in this study, based on self-reported number of languages spoken with "Moderate Proficiency" description. Chi square test showed significant differences at each level.

[15] While a significant correlation is found for the entire group ($p<0.01$), the effect is stronger among the control group respondents.

[16] A rating scale developed by the Interagency Language Roundtable. See: http://www.utm.edu/staff/globeg/ilrhome.shtml and http://books.nap.edu/openbook.php?record_id=11841&page=360

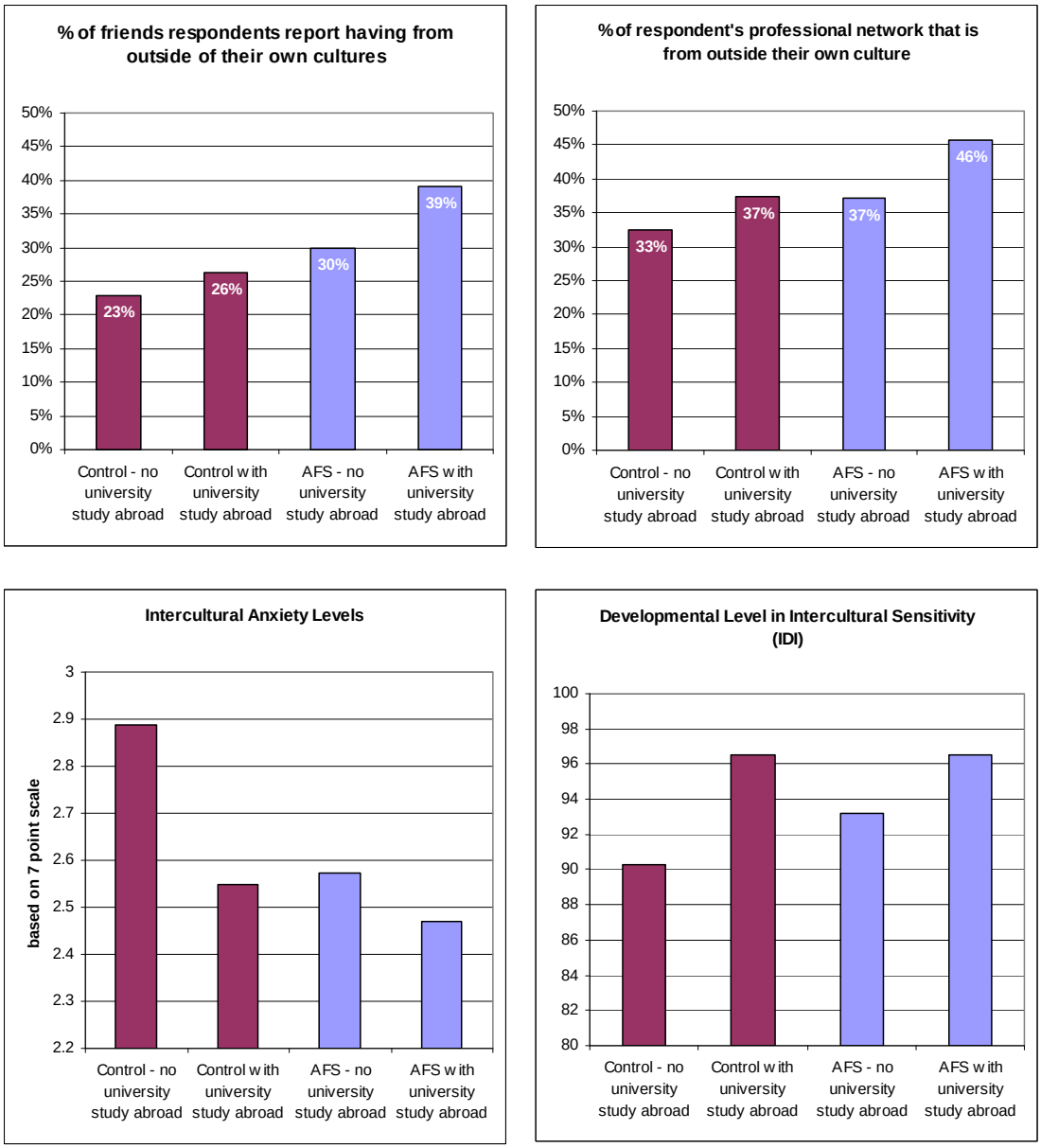


Figure 4. For each of the same four experience subgroups, we compared intercultural social and professional networks, intercultural anxiety levels, and the intercultural sensitivity development measured by the IDI. One-way Anova tests showed significant differences by group for all variables shown.

While the combined experience of AFS and university study abroad is consistently the strongest in these variables, the university study abroad also has a significant impact. In the case of the IDI assessment, this impact is particularly strong.

The AFS Experience and University-level Study Abroad

Over one-third of the AFS alumni who responded to our survey also chose to study abroad during their tertiary education. Among their peers, 22% studied abroad in a university-level program. Both figures are much larger than the proportion of the general population who study abroad at this level among the nations involved.

The small size of the group of nominated controls who studied abroad in their university makes it difficult to draw statistically significant conclusions; however, we can confirm that university study abroad experience also has a strong impact on the IDI developmental score, perhaps more than the secondary school experience alone.[17] In comparing the results of other studies of the impact of study abroad programs at the university level, however, we find that Jackson's[18] research with 14 university students from Hong Kong traveling to the U.K. achieved a similar profile at the end of their experience to that found by both the present study's AFS and control group participants who studied abroad during their university years, while the findings from Cohen, Paige, et.al., with 86 students from the U.S. going to Spain, France, and 11 other countries, showed averages higher than those found among any group within the present study.[19] These studies both involve students studying abroad more recently with specific focus on language learning.

The AFS experience studied in this research is primarily the year-long school program, around 10 months long, though 324 of the students from the USA (17% of all returnees) were involved in a shorter "summer program" experience of about 2 months. The university abroad programs were more diverse, and included more of the shorter programs than the AFS experiences studied, but over 60% of the programs involved more than 5 months. Just over ¼ of the study respondents lived with a host family in their university study abroad program, though several included in the "other" category described living for at least part of the time or boarding with a local family. Of those who lived with roommates while studying abroad, over 60% shared their residence with at least one person from the host culture, but about the same proportion counted home country roommates as well and slightly fewer had roommates from other countries. Specific details can be seen in Figure 5.

[17] T-tests of the difference between the developmental scores of those with AFS experience only and those with university-level study abroad experience only did not prove significant at the standard of $p<0.05$.

[18] Jackson, J. "The Impact of Globalization on Stays Abroad," p. 11. Paper presented at the Fellows' Day conference of the International Academy of Intercultural Research. Grongingen, Netherlands. July 2009.

[19] Cohen, A.D., Paige, R.M., *et al*, "Maximizing Study Abroad through Language and Culture Strategies: Research on Students, Study Abroad Program Professionals, and Language Instructors. Published by Center for Advanced Research on Language Acquisition, University of Minnesota, September 2005.

Number of times person participated in study abroad		Length of Program (of most useful program if more than one)		Living Arrangements	
1	72%	< 1 month	3%	Host Family	26%
2	19%	1-2 months	16%	Student Dormitory	32%
3	5%	3-4 months	18%	Apartment	18%
4	4%	5-7 months	15%	Hotel/hostel	2%
		8 months-1 year	32%	Other	22%
		> 1 year	15%		

Figure 5. Characteristics of Participation in University Study Abroad Programs

While the university-level experience may be shorter and is less likely to involve living in a host family, there seems to still be a substantial level of exposure to the host culture for many of the students on these programs.

Our research found that in many ways the AFS experience and a university-level study abroad program show parallel outcomes, though perhaps with different priority as shown in Figure 6.

Related to the AFS Experience	**Related to the University Study Abroad Experience**
1. Greater language fluency	1. Higher education level
2. Encourage children to meet people from other cultures	2. Living abroad for work
3. Influence of own parents	3. Greater language fluency
4. Intercultural friendships	4. Desire for intercultural career
5. Desire for intercultural career	5. Intercultural friendships

Figure 6. Top five most associated variables characterizing the AFS experience and a university study abroad experience.

Intercultural Friendships

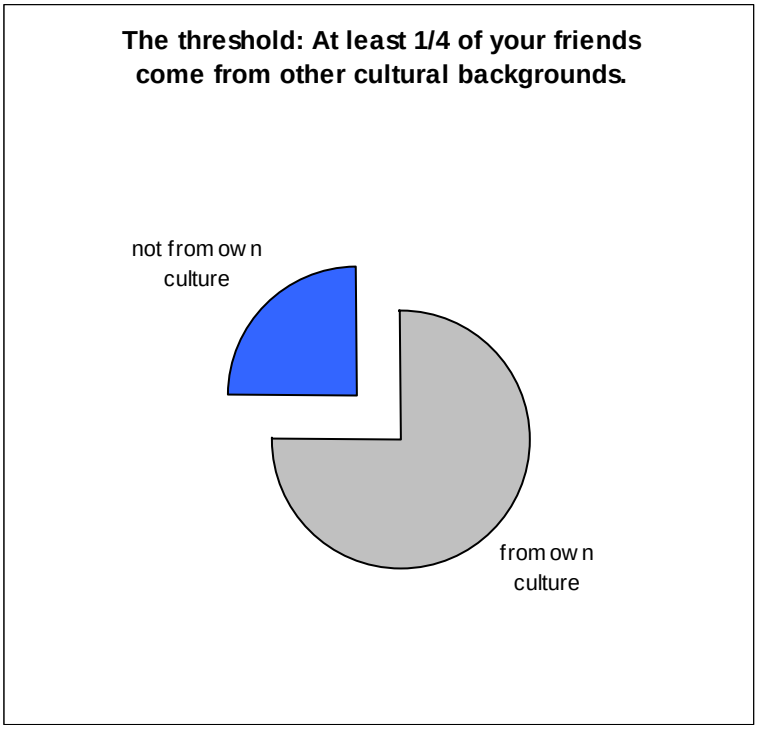


Figure 7. Having at least 1/4 of your friends come from other cultures is indicative of also having a significantly higher developmental score on the IDI and a lower level of anxiety around other cultures.

Those who participate in AFS programs and those who participate in university-level study abroad tend to have a larger portion of their social circle coming from other cultures. Having more friends from other cultures is an important factor on its own.

In the entire group of people responding to the web survey in this study, about half of them have more than ¼ of their friends from other cultures, while the other half has at least ¾ of their friends from their own culture. This breaking point also distinguished the two groups in terms of anxiety around other cultures and intercultural sensitivity measured by the IDI developmental scores. Those who count at least ¼ of their friends as coming from other cultures are less anxious around other cultures and more sensitive to cultural differences.[20]

Language Fluency

No variable is as closely associated with the AFS experience as the one that reports the number of foreign languages spoken fluently. Everyone who has observed an AFS exchange student living with a host family over the course of a year has noted the great strides the student usually makes in being able to speak and understand the host country language. This research has shown that AFS returnees even 20 to 25 years later are able to speak more languages fluently than their peers, even among those who studied abroad at the university level, as reported above. Among the population in the control group who studied abroad in

[20] T-test comparing the averages of those with more than ¼ of friends from other cultures and those with more than ¾ of friends from their own culture showed significant differences in favor of those with more friends from other cultures.

their university years for *at least five months*, 68% speak at least one foreign language fluently. Without the benefit of university study abroad, 70% the AFS returnees from the *two-month* summer program and fully 82% of the AFS returnees from the school "year" program were fluent in at least one foreign language.

Language fluency is also related to some of the other variables in the study. As we have seen with the Isolation model, speaking even one other language fluently is related to significantly lower levels of anxiety around other cultures. Speaking at least two languages fluently is also related to significantly higher developmental levels in intercultural sensitivity.[21] In addition, a small but significant correlation was found between language fluency and the proportion of friends that a person has who come from other cultures.[22]

Perceived Important Influences

In an open-ended question asking them to explain what had been most influential to them over the years in terms of their attitudes toward other cultures, over half of the AFS returnees surveyed reported that the AFS experience was in this category. Since by definition this group did not have a high school exchange experience, only a few control members identified another exchange experience as being the most influential in terms of their attitude towards other cultures. AFS returnees often mentioned several influences: multiple experiences abroad, for instance, or the AFS experience and influences from parents.

> *"My experiences in Jordan with AFS and our exchange student who lived with us for a year from Mexico." AFS Returnee from the USA.*

Control respondents were often more focused on work experiences, travel abroad in general, and external influences such as the internet or globalization, as shown in the remark from a Turkish control respondent who said, *"It's a global world."*

> *"Travel, reading and experiencing the culture of other communities. Plus of course meeting the people from other cultures." Control group respondent from Australia.*

In each country, AFS staff associated with the research project reviewed the results provided by respondents for this open-ended question, and summarized the results according to categories developed from the focus groups that were part of the survey development process in 2006. The results are shown in Figure 8.

[21] T-test comparisons of those speaking at least one language and those who speak no other languages fluently by average scores of anxiety on the intercultural anxiety scale showed significantly lower anxiety among the group speaking at least one other language, at a confidence level of $p < 0.001$. Speaking at least two other languages compared with those speaking just one or no other foreign language is related to significantly higher developmental scores on the IDI, at $p<0.01$.

[22] Pearson's correlation is significant at the $p<0.01$ level, accounting for about 4% of the variation. This finding was measured as an inverse correlation with the % of friends from one's on culture, R=-0.199.

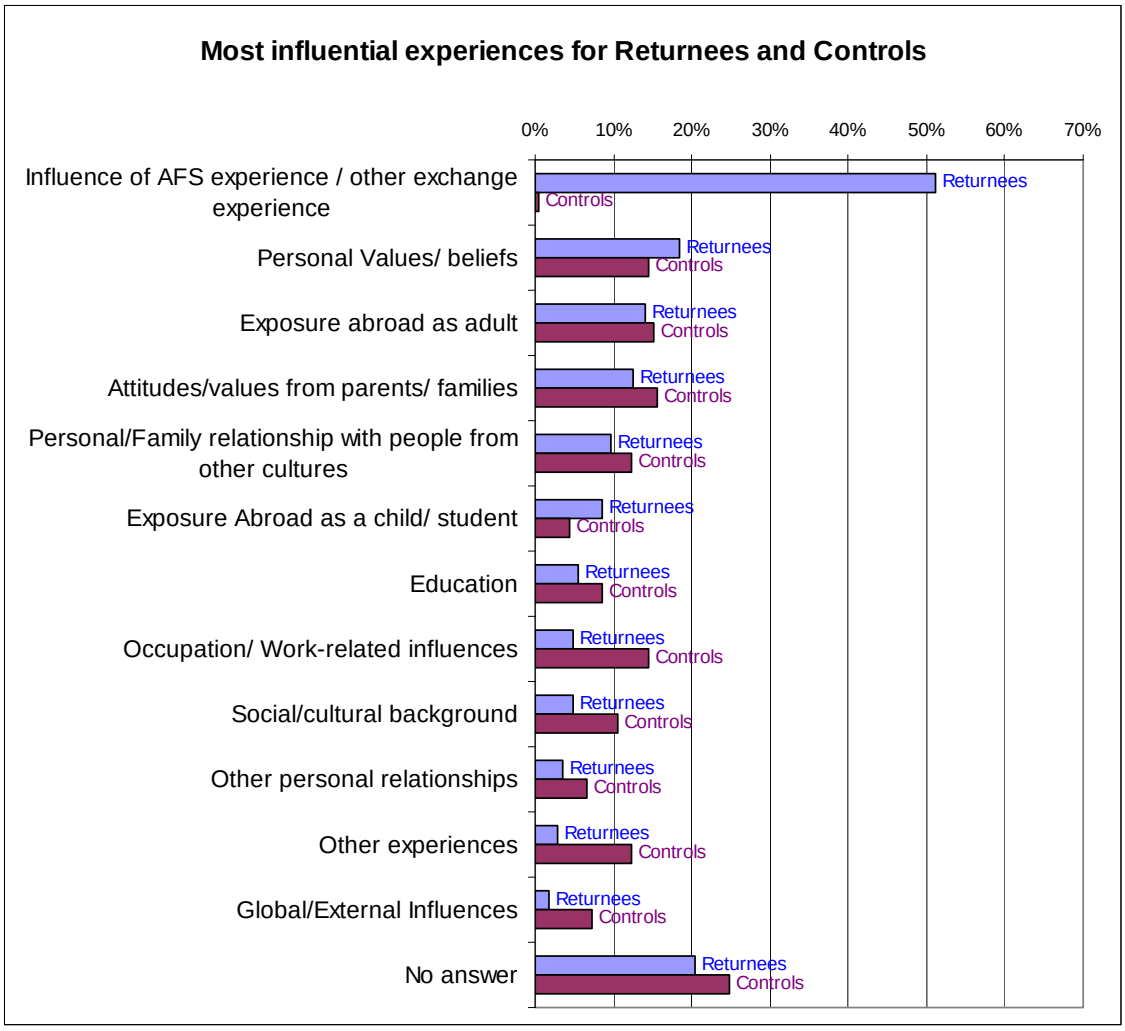


Figure 8. Summary of all responses to the web survey's open-ended question about the most important factor influencing the person's attitudes toward other cultures.

Discussion

In this second report, we have examined many of the complex relationships among a number of factors that contribute to intercultural development in adults. It became clear as we reviewed the data that the AFS alumni led a different life than did most of their peers, with more exposure to other cultures from an early age, and more interaction with people from other cultures generally. The relationships among language skills, intercultural friendships, comfort and confidence, and intercultural sensitivity contribute to a very rich sphere of learning.

Recommendations for Research and Practice

It was beyond the scope of this research to try to measure directly the level of cognitive awareness or knowledge of the AFS alumni in terms of their understanding of other cultures. Nor were we able to directly assess the effectiveness of their communication across cultures or the appropriateness of their behavior in another culture. The AFS exchange program seems to successfully lead to a greater sense of ease, comfort, poise and confidence around other cultures, to a greater openness and to more friendships across cultures. Greater comfort may have encouraged the returnees to self-report higher spoken language fluency to a greater extent than their less comfortable peers, though lower anxiety also relates to greater use of language and more effective communication in any case, in spite of possible or probable grammar and syntax errors in actual language fluency.

Intercultural experiences including the AFS exchange do have a relationship to higher levels of development in terms of intercultural learning and sensitivity and many of the traits common to AFS alumni also predict higher levels of DMIS development. Yet we find that, like the younger AFS students assessed by Mitchell R. Hammer in 2002-04, our more mature alumni are also most likely to be found in the stage of minimizing cultural differences rather than the more advanced levels of acceptance and adaptation. While the control group does somewhat less well than the AFS group in this respect, our own educational goals encourage us to strive for a greater level of competence.

For AFS, the results lead us to believe that we would do well to further develop and assess the cognitive area of intercultural learning to help our program alumni create greater meaning from their experience. The high level of success of our former program participants in reducing their intercultural anxiety, forming intercultural relationships, using the language, and in seeking more intercultural experiences suggests that these areas of the program have had the desired impact. It is therefore recommended that AFS seek ways to enhance the opportunities for reflection and to provide structures that help participants and alumni gain new insights into their experience with another culture. While these opportunities need to be better integrated with the exchange program, the alumni may also appreciate and benefit from educational opportunities because the richly and emotionally remembered AFS experience is still very present in their memories.

Statistics and Technical Notes

Variable and Scale Reliability

A few scales were created or re-used with this survey. The items included in each scale were assessed for reliability as a scale, and all three passed the standard expectations.

1. The “Intercultural Anxiety Scale” was also used in the Educational Results Study by Mitchell Hammer. It is an adaptation of the Stephan & Stephan 1985 Intergroup Anxiety Scale by Gao & Gudykunst, which was used in the Educational Results Study. In that last study, one of the ten items – the extent to which the person reported feeling self-conscious – was found to be unreliable in translation, and was therefore dropped from the scale. This item was not used in the current version, which is confirmed to be a reliable scale of nine items, with Chronbach’s Alpha = .882

2. Three questions formed a scale concerning Parents’ influence or “Parent Questions.” These questions related to the encouragement of parents for

study abroad, to meet people from other cultures, and parental interest in other cultures. This scale was also confirmed to be reliable, with Chronbach's Alpha =.797

3. Two questions on the extent to which individuals intend to encourage their children to study abroad and meet people from other cultures also formed a reliable scale with Chronbach's Alpha = .796

4. Four items contributed to the Educated Intercultural Traveler composite variable. The first item is childhood experience and combines the times traveled abroad during childhood and the scale of "Parent Questions" comprising three questions involving positive parental encouragement about other cultures and study abroad. The second item was the question about university-level study abroad. Third was the educational level, and fourth was the number of times the person had worked abroad for one year or more. The Eigen value for this variable=1.429, explaining 36% of the variance.

Language Assessment Measure

In the 2002 study by Mitchell Hammer, we asked host families to assess the language ability of their students before and after the program. In that study we found that over 70% of the students ended the program with ratings from their host families that matched the ILR level of "Moderate Proficiency" or better, and 47% had "Advanced" or "Bi-lingual" Proficiency. Because these ratings include specific descriptions of language skills that the individual has, self-ratings are also possible. The use of self-ratings for culture knowledge scales in the 2002 study showed that these compared readily to the host parent ratings for the same scale, with much less over-estimation of skills than anticipated.

Regression Models

Stepwise linear regression modeling was used to predict changes in both the intercultural anxiety scale and the IDI measure while controlling for multiple independent variables. Chi-square tests were used to assess goodness-of-fit for each model. Statistical significance levels were at or below $p<.05$ for both models and all independent variables with in the models.

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