Development of a Scale to Measure Reverse Culture Shock in Fresh Foreign Degree Holders

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The study was carried out to develop a scale for the assessment of reverse culture shock among foreign degree holders in Pakistan. For this purpose the study was divided into two phases. In first phase, on the basis of existing literature of reverse culture shock, five semi-structured interviews and two focus group discussions were conducted with both men and women from different academic fields. As a result various themes were generated including work related problems, attachment with the host culture, social withdrawal, feelings of alienation, feelings of insecurity, attachment with home culture, positive regard and welcoming attitude of family and friends. Item pool was generated and sent for the experts’ review. After receiving their feedback 70 items were finalized. In second phase, psychometric properties were determined by applying the Reverse Culture Shock Scale (RCSS) on 194 fresh foreign degree holders. Factor analysis revealed a unifactor solution for this scale. Content and construct validity, as well as split-half reliability were established. In addition, demographic differences were also explored. Participants who were single scored significantly high on reverse culture shock than married participants, while non significant gender differences were found. Age inversely correlated with reverse culture shock.

Keywords. Reverse culture shock, fresh foreign degree holders, gender, age, marital status, time

Advancement in science and technology has facilitated in global communication as well as encouraged people to get benefit from the
knowledge and expertise of people belonging to the other parts of the world. Like other developing countries, people from Pakistan are also preferring to move overseas to avail better educational opportunities. In doing so people are not only utilizing personal resources to meet the demands of time, but government has also joined hands with capable individuals and numbers of scholarships are granted every year to meritorious students. This practice also includes prospective commitments to serve the homeland. So when these individuals come back to homeland their acquaintance with a foreign culture hinders their adjustment with home culture.

Little is known about such experiences in Pakistani culture. This phenomenon of feeling of not belonging to the native culture after spending substantial amount of time abroad has been labeled as reverse culture shock or re-entry shock. Coming home after spending few years abroad is often accompanied by reverse culture shock (Hertz, 2007). The roots of reverse culture shock can be found in the work on culture shock, since the underlying concept is quite similar. Culture shock being the parent construct of reverse culture shock is “precipitated by the anxiety that result from losing all our familiar signs and symbols of social intercourse” (Oberg, 2006, p. 142). More recently, culture shock is defined as the form of anxiety that arise by the substitution of familiar signs and values of social interactions from the newly learned values of individual’s interaction with the host culture (Brown & Holloway, 2008). Reverse culture shock came into light in early 1940s with the work of Scheutz (1945) about the difficulties faced by armed forces veterans on their return to homeland.

Reverse culture shock or re-entry shock is “the process of readjusting, re-acculturating, and re-assimilating into one’s own home culture after living in a different culture for a significant period of time” (Gaw, 2000, p. 1). It is an emotional and psychological stage of re-adjustment and re-entry into home culture after getting accustomed to the foreign culture. Feelings can be similar to the adjustment while living abroad, but the experience and intensity of shock is different for every individual, some have few concerns while others face many (Carlisle-Frank, 1992). Nevertheless, it is believed that the adjustment in host culture and readjustment in home culture work in opposition to each other. The more successful an individual is in foreign culture the more difficult it will be to adjust back to the home culture. Sussman (1986) identified that individuals who have not well adjusted and adapted in the host country experience less reverse culture shock than the individuals who have easily blended in the new culture.
Few researches (Carlisle-Frank, 1992; Raschio, 1987; Wielkiewicz & Turkowski, 2010) have done in the context of reverse culture shock experience of individuals who have lived abroad for the purpose of studying and earning an academic degree. They have mainly focused on the qualitative techniques to investigate this phenomenon (Gaw, 2000). Gullahorn and Gullahorn (1963) were the first to describe culture and reverse culture shock qualitatively in the form of intercultural adjustment. According to them, problems arise due to the expectations of individuals. Spradley and Phillips (1972) also supported this idea by claiming that family and friends expect an individual to remain the same predictable one who they have known for many years. They further suggested that another cause of re-adjustment problems arise because of the individual’s violation of norms and values of home culture at his/her stay in the host culture. On the other hand, sojourn also expects to return to unchanged home environment as an unchanged individual. So as a result conflict occurs between the cultural values and behaviors of home and host culture (Seiter & Waddell, 1989). According to Gaw (2000), the foreign returnee anticipate that his/her family, friends, and home culture have not changed in all these passing years. Kidder (1992) also concluded from his research on Japanese students that after their return, they faced the dilemma of whether to retain or let go the new aspects of their personalities. Therefore, such re-entry expectations negatively influence the reverse culture shock.

However, scholars have agreed that the main cause of re-entry shock is the disorientation about the changed home culture and individual’s own self (Meintel, 1973: Wielkiewicz & Turkowski, 2010). While further elaborating these, the noted common difficulties include academic/work related problems, cultural identity conflict, social withdrawal, depression, anxiety, interpersonal difficulties, value confusion, disillusionment, anger, hostility, compulsive fears, helplessness, disenchantment, discrimination, and stress (Adler, 1981; Church, 1982; Hannigan, 1990; Raschio, 1987; Sahin, 1990; Wielkiewicz & Turkowski, 2010; Zapf, 1991).

There are several contributing factors to reverse culture shock which have been identified by few empirical studies as previous researchers have investigated the phenomenon of reverse culture shock in the context of their own cultures (Carlisle-Frank, 1992; Lin, 2006; Martin, 1984; Niesen, 2010; Stelling, 1991; Sussman, 2000). Gama and Pedersen (1977) identified value conflicts concerning social and interpersonal interactions, as well as with professional roles among the foreign returned students. Martin (1984) based on review of research investigating the two processes of adjustment to a foreign
culture and readjustment to the home culture, identified three dimensions as contributing factor in reverse culture shock that are: Background variables, sojourn variables, and re-entry variables. Background variables encompass previous knowledge related to the adjustment of migrants and cause of re-entry. Sojourn variables further covers location, identification with host country, transitional adjustment, and expectation from the host culture. Few other areas that appeared to be linked with reverse culture shock include length of time since arrived back home, family, and social support; and significant changes in the quality of re-entry shock of returnees with their family and friends (Martin, 1984). Sussman (2000) identified that sojourns from individualist cultures place more value on independent decision making, whereas, those belonging to collectivist culture believes in family input and what is best for all family members. Gaw (2000) identified that age is inversely related to reverse culture shock experience as with the increase of age individuals become more firm to their identity and less prone to change. Researchers also identified that reverse culture shock is a longitudinal process and re-adjustment to one’s own culture takes time (Storti, 2001).

Every culture has its own language and terminologies, even a slightest difference can pose threat to adjustment (Mumford, 2000; Niesen, 2010). Larger the cultural difference, severe is the reverse cultural shock that the sojourns will experience. The intensity of academic and psychosocial problems faced by individuals upon re-entry to their home country is unclear (Gaw, 2000). Previously the phenomenon of reverse-culture shock has been investigated through Personal Problems Inventory (PPI; Cash, Begley, McCown, & Weise, 1975) which was later on revised by Gim, Atkinson, and Whiteley (1990). PPI addresses problems faced by general college student population. It also provides an index of willingness to see a counselor. Other tools include Homecomer Culture Shock Scale (HCSS; Fray, 1988), Reverse Shock Scale (RSS; Seiter & Waddell, 1989), and Multifaceted Re-entry Shock Scale (MRSS; Niesen, 2010). HCSS was developed to measure re-entry adjustment of missionary children and it focused on four factors including cultural, moral, interpersonal distance, and grief. RSS was developed from the themes existed in the literature about reverse culture shock, whereas, MRSS measure reverse culture shock in the form of feelings of loss, appreciation for other cultures, and self-improvement and advancement. Since these tools were developed for people belonging to countries other than Pakistan, cultural differences in terms of social norms and values was a serious limitation.
In Pakistan, Aamir (2010) conducted a study on students of international high schools of Islamabad from age 13 to 18 years, who have spent 2 to 17 years abroad because of the occupational commitments of their parents. The researcher formed a fifteen item survey questionnaire responded on five point Likert scale ranging from 1 as strongly disagree to 5 as strongly agree. This questionnaire was typically constructed for school children with a limited number of participants that were 60 students. The nature of this study was different from the current study as children were under development phase of their life whereas current study focus on the adult individuals after most part of their personalities have been established during their time at home culture. Further, psychometric properties of this questionnaire were not established.

Higher Education Commission (HEC) Pakistan, in the recent past, has invested lot of funds and efforts to send their students abroad for higher studies to upgrade education, research, and development in the university sector. The present study is intended to take the first step by formulating a psychometrically sound indigenous reverse culture shock scale that in turn will facilitate in documenting the severity of problems associated with reverse culture shock for sojourns returning to Pakistan. Moreover, the experiences of individuals when encountered with such problems have yet to be examined in detail.

Method

The main aim of this study was to develop an indigenous scale for the understanding of reverse culture shock faced by Pakistani students after their return from abroad to the homeland. So for this purpose below mentioned steps were followed in two phases.

Phase I: Generation of Items Pool

Step-1: Formulation of interview and focus group guides. In order to explore the cultural specific domains of reverse culture shock, existing literature was consulted in addition to the reverse culture shock tools developed in other cultures. Keeping in view the distinguished aspects of Pakistani collectivist culture where dependence and family support even from extended family and interest of relatives in foreign experiences hold much prominence, interview and focus group discussion (FGD) guides were formed. The FGD and interview guide were formulated considering participant’s experience during the stay abroad, the welcome back experience, different aspects of host and home culture, changes in home culture,
personal change, professional growth, emotional experience of coming back, and nature of re-entry problems.

Initially, prepared guides were given for the expert opinion. Three experts from the field of Psychology, Sociology, and Anthropology with PhD qualification and more than 10 years of experience in their field were contacted. Moreover, a psychometric expert from the field of psychology was also contacted. After their review necessary changes were made and finalized version was obtained. Few of the question statements were: How was the welcome back experience? Have you found some change in your home culture after return? What was the response of people (relatives, friends, and colleagues) on adoption of new habits from host culture? and so on.

Step-2: Conduction of interviews and focus group discussions. Following the established guides, five semi-structured interviews and two focus group discussions were conducted with both men and women, age ranging from 26 to 34 years, belonging from different academic and research fields and who have completed their major degrees from abroad in recent past. Only those participants were included who have spent more than one year and have completed an academic degree from abroad. All those individuals who have a short diploma/certificate course/training (less than one year duration) from abroad were not included in current study. Furthermore, the time since foreign degree holders have arrived back in Pakistan/home country was also specified (minimum 4 weeks, and not longer than 5 years). Participants were also informed about the confidentiality of the information provided, their right to withdraw from participation, and the incentive of having a chance to win a tablet PC by participation. In this regard, participants affiliated to different institutes and organizations were contacted. By doing so varied information was established on the basis of the variety of foreign countries they have visited.

Five interviews were conducted, four from men working in different universities and organizations and one from women working with a multinational company. Two focus group discussions (FGDs) were carried out. In first FGD, four men and three women participated from different educational and research institutes. In second FGD, four men participated who all had doctorate degree and belonged to an educational institute. Time consumed for FGDs ranged from 90 to 100 minutes, and for interviews ranged from 30 to 60 minutes. All the interviews and FGDs were audio recorded by the consent of participants. Further, gathered responses were transcribed for analysis. The themes that arose in responses included: Social support, change in home culture, personal change, work and social environment, regret
returning home, social withdrawal, feeling of alienation, lack of facilities, attachment to homeland, strain to adapt, feelings of helplessness, irritability, and positive regard from family and friends.

**Step-3: Item pool generation.** On the basis of enriched information obtained from interviews and FGDs, item pool consisted of 86 items was generated. Keeping in view the language proficiency of target population, the tool was developed in English language with a response alternative of 5-point Likert scale ranging from *Strongly Disagree* to *Strongly Agree* and labeled from 1 to 5 respectively. In item pool, items were worded in both the directions, although negatively worded items were few in number (9 items). For reverse scored items scoring was done from 5 to 1 for *Strongly Disagree* to *Strongly Agree*, respectively. The instructions on the scale were: “Following statements aims to know about your experiences when you returned to homeland after completion of your studies from abroad. There is no right or wrong answer, just provide the best suitable answer that is close to your observations, feelings, and experiences when you re-entered your home country. Please read carefully the statements given below. Indicate your level of agreement using the scale provided to you”. Few examples of the items included in item pool were: After having an exposure to the host culture, now I feel that relatives and other people in my social set up interfere too much in my personal life. I regret my decision of coming back home; I notice that people around me often reminds me that I am back to my home culture.

The instrument was named as ‘Reverse Culture Shock Scale (RCSS)’. Total score on the Scale is computed by taking sum of all scores. High score on the scale indicate shock experienced at greater levels and low score indicate shock experienced to a lower level.

**Step-4: Establishing the content validity.** To establish content validity, four experts from field of psychology, psychometrics, anthropology, and sociology were provided with the copy of the items pool and were requested to evaluate them. Experts were provided with the information and literature required to review the questionnaire. In the light of the feedback from reviewers, necessary changes were made and the items were reduced to 70 items. The items were deleted on the basis of their relevance to the construct being measured and repetition among different items.

**Phase II: Determining the Psychometric Properties of RCSS**

**Participants.** To establish the psychometric properties of scale, a sample of 194 fresh foreign degree holders was recruited from all over
the country. Purposive sampling technique was followed to target the fresh foreign degree holders. The inclusion criteria was the time they have spent in the foreign country (minimum 1 year) and the time since they have arrived back in Pakistan/home country (minimum 4 weeks and not longer than 5 years). To increase the potential respondents to take part in the study, participants were given reinforcement by giving them a chance to win a tablet PC through a lucky draw after the completion of the study. They were informed that they could participate in a lucky draw by providing a valid email address at the end of the survey.

Sample constituted men \( (n = 155; 79.9\%) \) and women \( (n = 39; 20.1\%) \) having degrees from abroad namely, Bachelors \( (n = 1; 0.5\%) \), Masters \( (n = 4; 2.1\%) \), MS \( (n = 5; 2.6\%) \), PhD \( (n = 171; 88.1\%) \), and Post-doctorate \( (n = 13; 6.7\%) \) from abroad. The majority of sample was married \( (n = 143; 73.7\%) \), in comparison to single \( (n = 48; 24.7\%) \), and separated/divorced/widowed \( (n = 3; 1.5\%) \) in small proportion. More than half of the sample reported to have prior experience of living in a hostel \( (n = 111; 57.2\%) \), and no experience of living in hostel at all \( (n = 82; 42.3\%) \). The age range of the sample was from 24 to 53 years \( (M = 33.93; SD = 4.99) \), who lived in host countries of four continents including Europe \( (n = 121; 62.4\%) \), North America \( (n = 22; 11.3\%) \), Asia \( (n = 29; 14.9\%) \), and Australia \( (n = 11; 5.7\%) \).

**Procedure.** Fresh foreign degree holders were contacted by identifying them through their university and organizational profiles. Their consent was taken by ensuring them that the provided information will remain confidential and will only be used for research and educational purpose. Further participants were contacted through snow ball technique. Final 70 items scale was then provided to the targeted sample. Almost 15 to 20 minutes were taken by participants to fill the scale.

**Results**

For measuring adjustment of participants in host and home culture, they were asked to rate adjustment/re-adjustment to host/home culture respectively on a 5-point scale. Frequencies were computed for these questions and results show that 35.6% participants considered their adjustment in host culture was somewhat difficult whereas 11.9 % reported it as very easy. For readjustment in home culture after their return from abroad, 28.4% individuals considered it as somewhat difficult whereas 13.4 % considered it very easy. Figure 1 presents the graphical representation of adjustment of participants in
host culture as well as readjustment in home culture after return from abroad.

![Figure 1. Adjustment of fresh foreign degree holders in host and home cultures.](image)

**Factor Structure of Reverse Culture Shock Scale**

Principal Component Analysis with Varimax Rotation and Scree Plot was used to explore the factor structure of RCSS. Varimax rotation maximizes the orthogonality, interpretability, by simplifying and maximizing the variance of factors. The numbers of factors were determined on the basis of Eigen values greater than 1 and Scree plot (Kim & Mueller, 1978). The value for Kaiser Myer Olkin (KMO) was found to be .92 which is an indicator of sampling adequacy. Bartlet Test of Sphericity value was 4117.74 and was significant at $p < .001$, so it indicates that correlations between items were sufficiently large.

On the basis of previous research (Gaw, 2000), initially principle component analysis was performed using four factors. Results revealed over extraction and cross-loadings. On the basis of this initial factor solution, subsequent principle component factor analysis were performed using three, two, and one factor solution, and ended up in selection of one factor.
Table 1

*Items, Factor Loadings, Eigen values, and Variance Explained by Single Factor of Reverse Culture Shock Scale (RCSS) with Varimax Rotation*

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Items</th>
<th>F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>55/25*</td>
<td>In my home country, I often experience the confusion about what to do and how to do.</td>
<td>.69</td>
</tr>
<tr>
<td>47/19*</td>
<td>In my home country, the prevailing trend of dependence on supervisor/seniors serves to generate dissatisfaction in me.</td>
<td>.69</td>
</tr>
<tr>
<td>75/36*</td>
<td>In my country, there is a lack of equality based self-respect offered to everyone which is a disappointing for me.</td>
<td>.68</td>
</tr>
<tr>
<td>74/35*</td>
<td>In the name of being polite, exercising diplomacy and avoidance of straightforward stance in my culture tends to annoy me.</td>
<td>.67</td>
</tr>
<tr>
<td>63/29*</td>
<td>Among people of my own culture, commonly found self-centered thinking is a source of dissatisfaction for me.</td>
<td>.67</td>
</tr>
<tr>
<td>76/38*</td>
<td>I feel people in home country are jealous from progress in professional and personal life of others.</td>
<td>.66</td>
</tr>
<tr>
<td>48/20*</td>
<td>Becoming a part of the exploitative work environment within my home country is a source of dissatisfaction for me.</td>
<td>.66</td>
</tr>
<tr>
<td>53/24*</td>
<td>In my home country, the prevailing sense of hopelessness is a source of dissatisfaction for me.</td>
<td>.66</td>
</tr>
<tr>
<td>44/17*</td>
<td>I feel I am wasting a lot of time after my return to my home country</td>
<td>.65</td>
</tr>
<tr>
<td>39/13*</td>
<td>In my home culture, it tends to irritate me when supervisors exercise bossiness rather than being facilitators.</td>
<td>.65</td>
</tr>
<tr>
<td>66/30*</td>
<td>I feel that people of my home culture do not respect the opinion of others.</td>
<td>.65</td>
</tr>
<tr>
<td>41/15*</td>
<td>Unsupportive work environment in my home country (unavailability of quality labs/funds or resources) is a source of dissatisfaction for me.</td>
<td>.65</td>
</tr>
<tr>
<td>33/10*</td>
<td>In my home country, lack of professional cooperation among colleagues is a source of dissatisfaction for me.</td>
<td>.64</td>
</tr>
<tr>
<td>57/26*</td>
<td>In my home country, the formalities exercised in socialization are a source of discomfort for me.</td>
<td>.64</td>
</tr>
<tr>
<td>29/7*</td>
<td>In my home country, I have faced difficulty in practicing the skills and knowledge I have learned abroad</td>
<td>.64</td>
</tr>
<tr>
<td>67/31*</td>
<td>Non-serious attitude of others to solve a problem pushes hard at me</td>
<td>.63</td>
</tr>
<tr>
<td>81/42*</td>
<td>The growing intolerance and abrupt display of anger in people of my culture is a source of dissatisfaction for me</td>
<td>.63</td>
</tr>
<tr>
<td>61/28*</td>
<td>I feel that there is a lack of patience among people of my culture.</td>
<td>.63</td>
</tr>
<tr>
<td>79/38*</td>
<td>I have become more critical of my home culture after having an exposure to a foreign culture, infrastructure and system of work</td>
<td>.62</td>
</tr>
</tbody>
</table>

*Continued ...*
<table>
<thead>
<tr>
<th>Item no.</th>
<th>Items</th>
<th>F1</th>
</tr>
</thead>
<tbody>
<tr>
<td>70/33*</td>
<td>Lack of punctuality in my home country is a source of dissatisfaction for me</td>
<td>.60</td>
</tr>
<tr>
<td>52/23*</td>
<td>I feel I was more lively and energetic in host culture</td>
<td>.60</td>
</tr>
<tr>
<td>4/2*</td>
<td>Leg-pulling, fraudulent behaviors and lying is quite prevalent in my culture which tends to disturb me.</td>
<td>.60</td>
</tr>
<tr>
<td>37/12*</td>
<td>In my home country, the practice of keeping juniors away from decision process tends to irritate me</td>
<td>.59</td>
</tr>
<tr>
<td>50/22*</td>
<td>Hassles of going through long processes for doing even minor tasks bring in unnecessary complications for me</td>
<td>.59</td>
</tr>
<tr>
<td>28/6*</td>
<td>I feel that people in my culture do not appreciate/accept new/different ideas</td>
<td>.58</td>
</tr>
<tr>
<td>83/40*</td>
<td>The general uncertainty in my home land tends to disturbs me.</td>
<td>.58</td>
</tr>
<tr>
<td>30/8*</td>
<td>Uncivilized habits of people in my home country (throwing garbage at an inappropriate places, not making queue, taking more food than one can eat) tends to irritate me</td>
<td>.57</td>
</tr>
<tr>
<td>46/18*</td>
<td>Lack of practical approach in the prevailing education system in my home country is a source of dissatisfaction for me.</td>
<td>.57</td>
</tr>
<tr>
<td>32/9*</td>
<td>My life was more comfortable in host culture.</td>
<td>.57</td>
</tr>
<tr>
<td>59/27*</td>
<td>In my home country, huge amount of traffic on roads is mentally disturbing (soon might be hit by a car) for me</td>
<td>.57</td>
</tr>
<tr>
<td>49/21*</td>
<td>I feel that people in my home culture focus more on quantity rather than quality of work which brings dissatisfaction to me.</td>
<td>.56</td>
</tr>
<tr>
<td>40/14*</td>
<td>Burdens of daily routine life in my home country (worry about paying bills, money transferring and health care) hinder my work efficiency/ work productivity.</td>
<td>.56</td>
</tr>
<tr>
<td>81/39*</td>
<td>I have faced adjustment problems in home country as I was unprepared for them</td>
<td>.55</td>
</tr>
<tr>
<td>68/32*</td>
<td>After my return from abroad I feel that people in my home culture are generally tense.</td>
<td>.55</td>
</tr>
<tr>
<td>1/1*</td>
<td>I miss the time I have spent abroad.</td>
<td>.54</td>
</tr>
<tr>
<td>71/34*</td>
<td>Dishonest and insincere practices in personal and professional dealings in my home country press hard at me.</td>
<td>.54</td>
</tr>
<tr>
<td>36/11*</td>
<td>Violation of other people’s rights is quite prevalent in my culture which is a source of dissatisfaction for me.</td>
<td>.53</td>
</tr>
<tr>
<td>42/16*</td>
<td>I find myself mostly comparing different aspects of host culture and home culture.</td>
<td>.52</td>
</tr>
<tr>
<td>12/4*</td>
<td>I regretted my decision of coming back home.</td>
<td>.51</td>
</tr>
<tr>
<td>19/5*</td>
<td>Contrary to abroad, involving everybody to make personal decisions tend to irritate me.</td>
<td>.51</td>
</tr>
</tbody>
</table>

Continued ...
Table 1 indicates the factorial structure of RCSS. The uni-factor solution was clearly corresponding to the simple structure and yielding of interpretable results. All items with factor loadings > .50 were retained for the current 42 items final version of RCSS. All the items in the final version of RCSS were positively worded.

Figure 2. Scree plot for matrix of 70 items of RCSS through principal component factor analysis.

Scree plot revealed uni-factor solution as the best fit (see Figure 2). This uni-factor solution explained 34.64% variance. Items of RCSS were selected on the basis of factor loadings equal to .50 or greater.
Psychometric Properties of RCSS

To establish the psychometric properties, reliability, validity estimates, and correlations were computed.

Content validity. Content validity of RCSS was developed by contacting the subject matters experts from field of psychology, psychometrics, anthropology, and sociology, before factor analysis. They were provided with the copy of RCSS along with comprehensive and precise content related to reverse culture shock, and asked for their evaluation. Necessary changes were made by incorporating the suggestions of the reviewers. When almost no further changes were required then item pool was finalized. Feedback from subject experts was taken once more after having the result of factor analysis to ensure the content validity since some items were dropped.

Construct validity. Convergent validity was established using contrasted group method. Discrepancy scores were calculated by making comparison between adjustment in host culture and adjustment in home culture after return from abroad. Frequencies were calculated along discrepancy for those who have difficult adjustment at home and the ones having easy adjustment at home. RCSS score for those who had difficult adjustment at home was higher ($M = 160.69, SD = 22.46, n = 70$) than for those who have easy adjustment at home ($M = 151.37, SD = 25.75, n = 67$), $t(135) = 2.26, p < .02$ after return from abroad. Further, Cohen’s effect size value for this difference was .38.

Reliability estimates. The alpha reliability coefficient of 42 items of RCSS was found to be .92. The high value of alpha coefficient indicates that RCSS is internally consistent and highly reliable scale. For split-half reliability with odd and even item method was used. Results showed that split half reliability coefficient was .82, and alpha-coefficient for two equal halves of RCSS were found to be .91 and .77, respectively.

Item-to-total correlation. Item-total correlation of RCSS was computed to analyze each item in order to check its significance in measuring the reverse culture shock. For this purpose all items were individually correlated with the total score of RCSS. Item-total correlation values ranged from .68 ($p < .01$) for item no 25 to .39 ($p < .01$) for item no 39. All the items have significant positive correlation with the total score and have significantly contributed to the total score of the scale.

Differences on RCSS along demographic variables. The analysis on demographic differences was done with same sample as for factor analysis and there were no changes done to the scale after
factor analysis except item reduction. In order to find out the demographic differences on gender, marital status, and age of the participants, t-test, and correlation were computed respectively. *Cohen’s d* was also calculated to see the effect size of significant mean differences.

Table 2

*Mean, Standard deviation, and t-values on Reverse Culture Shock Scale (RCSS) Concerning Demographic Variables (N =183)*

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Groups</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t(181)</th>
<th>p</th>
<th>95% CI</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>147</td>
<td>153.9</td>
<td>25.35</td>
<td>0.67</td>
<td>.50</td>
<td>-12.90</td>
<td>6.34</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>36</td>
<td>157.3</td>
<td>29.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>47</td>
<td>108.6</td>
<td>16.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>136</td>
<td>98.44</td>
<td>17.41</td>
<td>3.47</td>
<td>.001</td>
<td>4.39</td>
<td>15.94</td>
</tr>
</tbody>
</table>

*Note.* CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

Table 2 shows the result of *t*-test on demographic variables. Although the mean score of female participants was higher on reverse culture shock scale as compared to the men participants but the difference does not account for statistical significance.

Concerning marital status, there are significant differences among single and married participants. Reverse culture shock scores of single participants are significantly higher than married participants.

For investigating the role of age in RCS, Pearson correlation was performed and results showed significant relationship between reverse culture shock and age (*r = -.23***), reverse culture shock decreases with the increase of age.

**Discussion**

Reverse culture shock is an important aspect to be studied and investigated as the overseas returned students face value conflicts (Gama & Pederson, 1977), stress (Ward, Bochner, & Furnham, 2001), phobias, anxiety (Sahin, 1990), and clinical depression (Rogers & Ward, 1993), when they are unable to adjust to the culture where they have spent almost their entire life. In Pakistan during the last one and a half decade, HEC has given numerous scholarships to students to pursue higher studies abroad. Many of these students come back to Pakistan after successfully completing their degrees as they had signed an agreement with the government to serve their home country for at least 5 years after completing their studies. In this context, it is
important to study their re-entry experience and adjustment related concerns. There is no suitable tool available to measure reverse culture shock experience of fresh foreign degree holders in Pakistan. The aim of present study was to identify the relevant problems faced by Pakistani fresh foreign degree holders on their return to native culture and develop an indigenized instrument for understanding and quantification of those problems.

The scale was found to have reasonably good psychometric properties. The underlying factor structure of RCSS revealed that it is a unidimensional scale as all the concepts related to readjustment of individuals were intertwined (Gaw, 2000) and cannot be categorized independently in separate domains (Seiter & Waddell, 1989). Participants of the present study were well educated individuals who were pursuing professional career in their relevant fields and they have reported that they cannot fully separate their work from personal life as many of their colleagues are now close family friends and vice versa. Therefore, social and work related interactions, problems, and support cannot be separated into distinct domains (FGDs finding). For example, one participant reported that “approach towards work is different here, nobody wants to work…at all levels, it’s the same”. Another participant mentioned that “I cannot even enjoy the privacy I had in the host country, here when I am sitting in a separate room for hour and a half someone comes in and say come outside what you are doing”. Yet another participant voiced that “even traffic at roads pose so much of tension that one becomes frustrated. Moreover lack of systematic procedures to get a task done poses much of problem”.

Content validity of the tool was established by taking the subject matter experts’ view before exploratory factor analysis. Contrasted group method was used to determine convergent validity of RCSS to establish construct validity. Alpha reliability coefficient and split-half reliability of RCSS was found satisfactory and highly significant. Item-total correlations were also calculated which showed that each item is significantly contributing to the measure. As there were all positive items, all show positive relation with the total score of the instrument. It shows that the instrument is internally consistent with good reliability and validity estimates.

Among the demographic differences, non-significant mean differences were found in male and female fresh foreign degree holders. The underlying reason could be the uneven distribution of sample that is male participants were five times more in number than the female participants in the present study. However, the previous research findings show that men and women experience reverse culture shock differently (Rohrlich & Martin, 1991). Women tend to
face more difficulties because of family and gender role expectations (Linehan & Scullion, 2002).

As far as the marital status differences were concerned, significant results were found among the two groups of single and married participants. Results show that participants who are single faced more reverse culture shock than the married participants. One may speculate that the individuals who are single perceived less social support than the married individuals. Sarason, Sarason, and Pierce (1994) identified that family has the most crucial part in social support. So for married individuals even though other people might not have welcomed them more positively but their family support and love was more helpful in readjustment in home culture, which was somewhat absent for the individuals who were not married. Previous research has identified that social support is more important than any other variable in determining the reverse culture shock (Stelling, 1991; Stringham, 1993). Another important factor could be the value of keeping family intact with children, which is more important for married participants and there have been witnessed an inverse relationship between relationship satisfaction and reverse culture shock (Seiter & Waddell, 1989).

As far as role of age is concerned, present study results show that reverse culture shock decreases with the increase of age. The results of present study are consistent with the previous literature (Cox, 2004; Gullahorn & Gullahorn, 1963; Huff, 2001; Stelling, 1991) as with the increase of age individuals become more firm to their identity and less prone to change, so they experience more difficulties in their adjustment to foreign culture (Gaw, 2000). This is facilitative with reference to their readjustment in home culture since they have not adopted much aspects of the foreign culture and on their return they experience fewer problems in adjusting to their home culture. However, the same argument can be elaborated for contrasted group findings. This relationship may exist in both directions, but it is difficult to infer it in the cross-sectional studies.

Limitations and Suggestions

Despite the usefulness of present study in Pakistan, few limitations have also been observed. Present study only included participants who are currently stationed in Pakistan. It has not focused on the individuals who after completion of their degrees returned to their homeland but due to unbearable reverse culture shock they have again returned to abroad/host country. Future, researches can focus on
The inclusion criteria of sample was strict that is the time since foreign degree holders have arrived back in Pakistan/home country (minimum 4 weeks, and not longer than 5 years). According to Storti (2001), reverse culture shock is a longitudinal process and readjustment to one’s own culture takes time. So future researches should relax this criterion and plan a longitudinal research.

Subsequent studies may further validate this tool by providing evidence for convergent and discriminant validity. A strong correlation between RCSS and other tools measuring the similar construct is necessary. Also a lack of correlation between RCSS and unrelated constructs is valuable in this regard.

**Conclusion and Implications**

Present study has provided fruitful basis for future researches in this area as it has highlighted the problems faced by fresh foreign degree holders on their return to homeland in the form of reverse culture shock. The findings can be helpful for foreign degree holders and those who are about to complete their degrees and planning to return back home to make them aware of the feelings and behaviors that are commonly associated with reverse culture shock. The preparedness of the returnees and the host families in terms of what to expect can make the experience less stressful as identified by Martin, Bradford, and Rohrlich (1995). Student service organizations and the concerned authorities may also benefit from the findings to identify problem areas and devise a program through which foreign degree pursuers can understand and learn the ways of dealing with reverse culture shock without facing it as the unknown and reaching to as severe traumatic state.

Results of the current study may be useful for HEC to gauge the re-entry experience of their foreign returnees. In order to identify scholars who experience a high level of reverse culture shock, HEC could require all study abroad returnees to answer a short questionnaire about their readjustment experience. Identifying the problems experienced by fresh foreign degree holders is the first step towards finding the successful solution for the problem. This may also be helpful to avoid the brain drain crisis in Pakistan, which could be a consequence of reverse culture shock and associated distress. Since the intellectuals are considered one of the most important and expansive resources of any country every effort should be made to retain them.
References


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