

Stress Perceptions of Working Adult Pakistanis and Americans

Dr. Talat Afza

COMSATS Institute of Information Technology, Lahore, Pakistan

Email: talatafza@ciitlahore.edu.pk

Phone: (09242)-35321092

Dr. Bahaudin G. Mujtaba

The H. Wayne Huizenga School of Business and Entrepreneurship

Nova Southeastern University, 3301 College Avenue

Fort Lauderdale, Florida 33314. USA.

Phone: (954) 262-5045, Email: mujtaba@nova.edu,

Naseem Habib

COMSATS Institute of Information Technology, Lahore, Pakistan

Phone: (09242) 111-001-007 / 858, Email: naseemhabib@ciitlahore.edu.pk

Abstract

Workplace stress can impact personal stress and these are of concern for all adults in every economy. This practical paper compares the perceptions of 231 working adults in Pakistan with 288 Americans. While a moderate level of stress was found among these respondents and in the U.S., higher stress levels were discovered among Pakistanis. While older respondents and males did have higher stress scores, no statistically significant differences were linked to age or gender. However, statistically significant differences were found between those who had for government and those who did not work in the public sector. Pakistani respondents without a college degree had higher stress scores than those with higher degree. Suggestions and recommendation for stress reduction and stress management are provided.

Key words: Stress, stress management, age, Pakistan, United States, gender

1. Stress and Working Adults

Everyone experiences stress due to various pressures of modern life. Stress is how people respond to daily pressures in the workplace, home or the economy (Mujtaba, Lara, King, Johnson, & Mahanna, 2010). Stress can then be seen as responses or stimuli to any type of a pressure or stressor (Mujtaba & McCartney, 2010). Large scale studies conducted in Western and Eastern countries suggest that strain caused by job stress is universal (Liu et. al. 2007). People living and working in third-world and developing countries can even feel more financial pressures in a slowing economy. Stress is impossible to avoid as it is all around working adults; however, the good news is that the ways in which people can manage it are within their control. Stress is experienced in two forms: eustress and distress (Romas & Sharma, 2007; Huang & Mujtaba, 2009; Mujtaba & McCartney, 2010). *Eustress* can be motivating and short-term stress that produces energy. *Distress* is a negative stress that can place an individual in a downward spiral of decreasing productivity if it is not managed effectively and in a timely manner (Selye, 1974). According researchers, three kinds of stress are acute stress, episodic acute stress, and chronic stress (Miller, 2004). Symptoms of those who suffer from various stresses can include persistent tension headaches, migraines, hypertension, chest pain, and heart disease (Miller, 2004).

Chronic stress can stem from traumatic, early childhood experiences that become internalized and remain painful (Miller, 2004). These various forms of stress can come from work or personal situations. Personal concerns can also lead to stress. The struggles one faces within oneself can become an overwhelming and powerful thing (Hart, 2007). The emotional attachment and disappointments involved in personal relationships can cause a significant amount of stress. The emotional demands of personal relationships whether it is a divorce, a friendship or just being in the dating scene can be a source of ongoing stress because of the love one has for those causing the stress. Family, workplace and general socio-economic factors are considered main sources of stress. Personality is considered to play the mediating role in becoming the casualty of stress while gender, age, education and social class further complicate the relationship. Stress at work is being experienced in every culture but the causes or sources of stress, the wherewithal used to tackle with stress, the response and level to particular source of stress (stressor) may vary across cultures. Individual personalities are shaped up by the values endorsed by nation. Glazer's research shows that the personality is imperative in determining the stress level experienced at job. According to Hofstede (1984) culture appears to shape personalities. Upbringing in a specific culture does have its own role to play in developing the personality traits most endorsed by a society.

As every culture has introduced a different set of values that has produced unique combination of personality traits, so the sources of stress, level of stress and coping strategies are expected to be different in every culture. Likewise, causes of stress will be different in different cultures. For example, if a culture endorses uncertainty avoidance value, the people will get threatened by improbability of any change in the system, while in a more open culture this may not be the cause of stress and may introduce a very low level of stress. Bliese and Jex (2002) suggested the impact of social context on the aspects of occupational stress process. Some cultures introduce more resilient personalities so the differences might be expected in the level of stress in two different cultures if they are exposed to the same set of stressors. The cultural norms which accentuate the harmonious relationships with others, repression of anger and avoidance of interpersonal conflicts may turn up more tolerant personalities. Previous research has reported a negative association of stress with age, socio-economic status and educational background, as people get older, they experience less stress, and the lower the educational and socio-economic levels, the higher the levels of stress experienced (Finkelstein, Kubzansky, Capitman, & Goodman, 2007; Gallo & Matthews, 2003).

People with higher education are expected to be more optimistic and have more resources to cope with stressful situations than people coming from lower socio-economic status and with a lower level of education (Finkelstein et al., 2007). A study on distress and depression conducted by Mumford (1996) showed the positive correlation between levels of emotional distress and age. The level of distress was also found higher in women than man and lower level of education in youth was associated with higher risk of psychiatric disorders in his study. The relationship between stress and gender has mixed results. Some studies found significant gender differences while others reported no difference in the stress level across gender (Deaux, 1984; Martocchio & O'Leary, 1989; Osipow & Davis, 1988; Osipow, Doty, & Spokane, 1985; Roxburgh 1996; Thompson, Kirk-Brown, & Brown, 2001).

The studies suggesting an association between stress and gender, many found a higher stress level in women than man (Hall et al., 2006; Lengua & Stormshak, 2000; Matud, 2004; McDonough & Walters, 2001; Osorio, Cohen, Escobar, Salkowski-Bartlett, & Compton, 2003; Pines & Zaidman, 2003; Ritter, Hobfall, Lavin, Cameron, & Hulsizer, 2000; Roxburgh, 1996; Tytherleigh, Jacobs, Webb, Ricketts, & Cooper, 2007) while few others reported higher stress level in man than woman (Cooper, Rout, & Faragher, 1989; Rosen, Wright, Marlowe, Bartone, & Gifford, 1999). Public sector has certain constraints of limited flexibility and autonomy, vague and disputed goals, media scrutiny and political interference and unique set of demands that asks for responsiveness and efficiency in spite of all constraints. Bureaucratic structure tends to establish comfortable routines to accommodate familiar demands to bring in efficiency but it responds slowly to the unfamiliar demands. So any change in the set routines may be sighted as opportunity or threat depending on many other factors but commonly it creates stress in the public sector employees.

2. Working Adults in Pakistan: Daily Pressures

Pakistan is a medium income country with per capita GDP of over \$3000 (purchasing power parity, 2006) compared with \$ 2600 (purchasing power parity, 2005). The high population growth in the past few decades has ensured that a very large number of young people are now entering the labor market. In the past, excessive red tape made firing from jobs, and consequently hiring, difficult. The Population Reference Bureau reports that 35 % of Pakistanis live in urban areas. Pakistan has a growing upper and upper middle class, which was estimated at 6.8 million in 2002 and has now grown to 17 million people as of 2010, with relatively high per capita incomes. Pakistan has a family-income Gini index of 41, close to the world average of 39. Literacy rate in Pakistan is 57% (69% for male and 45% for female) as per Pakistan social and living standards measurement survey 2008-09. According to the OECD's 2009 Global Education Digest, 6.3% of Pakistanis (8.9% of males and 3.5% of females) were university graduates as of 2007.

The incidence of women labor force participation is very low in Pakistan. Female participation rate as reported by federal bureau of statistics is merely 14% of the total labor force. Even though average annual growth rate of female labor force participation has been increasing slightly in Pakistan; it was 4% in 1980-99 and has gone up to 5.1% during 1995-98, however, this rate is still very low as compared to the other South Asian countries -- 42 % in Bangladesh, 41% in Nepal, 32 % in India and Bhutan, 37% in Sri Lanka (World Bank, 2002). The factors determine the status of woman in Pakistan entails class, gender, rural/urban divide. The tribal and feudal backdrop undermines woman status too much. Education level of public sector employees is higher than their private sector counterparts. Moreover, smaller gender pay gap and a more compressed wage distribution are also important features of Pakistan public sector (Hyder & Reilly, 2005).

3. Stress and its Challenges in the Modern Workplace

In today's lean organizations, employers have much different set of expectations from the employees than they had in the past. Organizations no longer offer job security as they used to do in the past.

Now the employability of the employees is contingent on how adaptable they are in the changing world of work, how much varied and critical skill set they possess, and how quickly they can learn the new skills required to meet the new demands of the job successfully. Stress is part and parcel of our lives, and stress prevails universally, but we are living in modern society must learn to de-stress ourselves. As the modern life offers us pearls of all the amenities of life, so there are few perils and stress is one among of those. Though the tension discharge rate is different for different individuals but everyone can learn the ways to discharge their tensions and stress immediately after confronting challenging situations either at work or home to make them relaxed. The reported causes of stress are many. Studies that examined work environments report that variables such as bad lighting (Hoyos, 1995; Melamed, Luz, Najenson, Jucha, & Green, 1989), unstable working schedule, night shifts (Barton, 1994; Cervinka, 1993), work overload (Barnett & Brennan, 1995; Perrewé & Ganster, 1989), monotony (Melamed, Ben-Avi, Luz, & Green, 1995), role conflict, role ambiguity (Bedeian & Armenakis, 1981; Cosway, Endler, Sadler, & Deary, 2000) and lack of support from colleagues (Karasek & Theorell, 1990; Mirowsky & Ross, 2003; Thompson, Kirk, & Brown, 2005) are associated with increased stress.

The reported stress factors among men and women have been found to be different. Women reported inadequate salary, insufficient personal time and performing duties of other employees, tight competition for advancement (Vagg & Spielberger, 1998) as stress-generating variables at work. On the contrary, men experience stress more severely and frequently when they have less chance to participate in policy decisions, have got negative feelings toward organization, have to work overtime, have to deal with crises, and have less supply of personnel to perform their duties (Vagg & Spielberger, 1998). Factors causing stress are many and they persist universally, the reported causes of stress may vary across culture, gender, sector, profession, managerial level and other demographic variables. In the same way strain reactions may differ across culture and other demographic variables. But when universal stressors do exist transcending cultural and national boundaries, then the level of stress across cultures and nations need to be determined in today's work environment where organizations work surpassing all boundaries of geography, culture and nation. Pakistan is high context, collectivistic society which scores high on uncertainty avoidance contrary to their American counterparts who are more open to change.

The people from such culture which endorses openness, gives social security and from more fast paced and strong economy are likely to have different stress perceptions than those who are from conservative cultures and socially insecure with a fragile economy. Though a fast paced economy offers a more cut throat competition at workplace, it is more likely to offer a culture of openness that will develop personalities that are not threatened by change or speed. Based on the social and economic structure of the country, the Pakistanis might have more chances of being exposed to higher level of stress. Previous cross national studies show the difference in the sources of stress, strain reactions, coping strategies (Liu et al. 2007) but this study is focused to explore the level of stress in two nations if the employees report similar levels of stress in two countries that constitute very different socio-economic and cultural environments. Pakistan and USA encompass very different cultures and the personalities shaped up in these two different cultures may be expected to show different perceptions of stress. Economic and social differences exist between the two countries. Unemployment rate in Pakistan is very high while literacy rate and female representation in the workforce are very low. Pakistan embodies a different socio-economic environment than that of US, so in a different social and economic context, how people report stress level has its own implications.

4. Study Methodology and Analysis

This study uses the Overload Stress Inventory, adapted from Hyde and Allen's conceptual analysis of overload (1996, pp. 29-30), which can be used to assess the stress perception of respondents. This inventory has 10 statements, and, for each statement, the respondent indicates the degree to which he or she engages in the stated behavior. A rating of 1 means "Never" and a rating of 5 means "Always" with the person demonstrating the specific behavior. The responses are assessed according to the following general criteria:

- Scores in the range of 40 – 50 tend to mean *severe* stress from overload.
- Scores in the range of 30 – 39 tend to mean *high* stress from overload.
- Scores in the range of 20 – 29 tend to mean *moderate* stress from overload.
- Scores in the range of 19 and below tend to mean *low* stress from overload.

Researchers, managers and human resource personnel can use such surveys or assessment tests as tools for understanding employees or to screen potential candidates. While they should be used responsibly and objectively, these tests can assist in providing insight with respect to the factors which persons in leadership positions should be aware of when it concerns employees. Managers and employees alike can use the Overload Stress Inventory to assess their stress perceptions.

This study used Hyde and Allen's conceptual analysis of overload (1996, pp. 29-30), the Overload Stress Inventory, to examine respondents in Pakistan as well as in South Florida of the United States to assess their level of perceived stress. The self-administered questionnaires used in this study offer anonymity which is important when conducting research. The English version of the survey was translated by the first author, who is a native speaker, into Urdu and then it was given to three university professors who spoke both languages fluently for checking the accuracy of the translated survey. Then a fifth professor back-translated the Urdu survey into English to see if the meaning had stated the same. The authors and their colleagues agreed that the meaning of the survey has not changed in the Urdu translated version. On a personal level, these surveys can be a kind of warning system to alert people to curb their daily habits as they have potential to adversely affect their health (Mujtaba et al, 2010). Personal knowledge of stressors can help with the development of healthy professional, personal and family relationships. Using the Stress Inventory Survey, this study surveyed Pakistani working adults to determine if they have low, high or severe levels of stress overload perception. This study also tried to identify if the stress perceptions of the individuals were influenced by factors such as age, gender, education, managerial experience and the work with public or private sector.

Hypothesis 1: Pakistani respondents will report *high to severe* stress overload perceptions.

Hypothesis 2: Pakistanis who are 25 years of age and younger will report similar stress overload perceptions as those who are 36 years of age and older.

Hypothesis 3: Male Pakistani respondents will report similar stress overload perceptions as female colleagues.

Hypothesis 4: Pakistani respondents working in private sector will report similar stress overload perceptions as their public sector colleagues.

Hypothesis 5: Pakistani respondents with a high school education will report similar stress overload perceptions as respondents with a masters degree or higher.

Hypothesis 6: Pakistanis who have no management experience will report similar stress overload perceptions as respondents with several years of management experience.

Hypothesis 7: Pakistanis will report similar stress overload perceptions as respondents from the United States.

This study targeted Pakistani citizens, workers and managers. The surveys were sent to Pakistanis in the cities of Lahore, Sargodha, Sahiwal, Faisalabad, and Multan. The focus was placed on Punjab, the largest province of Pakistan in terms of population. The questionnaires were distributed to the residents of the provincial capital, Lahore largest city of Punjab and second largest city of the country, in terms of population and GDP, the commercial and Industrial cities of Faisalabad and Multan as well as the agriculture based cities of Sargodha and Sahiwal. The responses of citizens, managers, employees and businesspeople were collected and recorded.

For this study, 500 questionnaires were sent to the candidates in Pakistan. The convenience sample was obtained through educational organizations, businesses and entrepreneurs, as well as private and public sector institutions. A paragraph explaining the purpose of this research and guaranteeing total confidentiality was included with each survey. At the end of the questionnaire some blank space was provided for the respondents' comments. The respondents were asked to voluntarily complete the questionnaire and return it to the specified researcher by company mail. Since some people do not like to complete surveys in Pakistan, two faculty members were assigned to personally interview candidates and record their answers. As such, about 50% of the surveys come from workers and managers who agreed to be personally interviewed by the assigned interviewers. During the same two month period, 500 American respondents in the South Florida region (Fort Lauderdale, Miami, Boca Raton, West Palm Beach, Davie, Weston) were given an online link to complete the survey and 288 useable completed surveys were used for analysis in this study.

5. Analysis and Results

Out of total surveys distributed, a total of 231 usable surveys, comprising a response rate of 46%, were used for analysis in this study. Of the subjects, 70 (30%) are female respondents and 161 (70%) are males. While only 27 (13%) respondents reported having a high school level of education or less, 202 (87%) had a Bachelors of Science degree or higher. In terms of management experience, 90 (52%) respondents reported having been managers and 111 (48%) had never been in management. Of the subjects, 77 (33%) are 25 years of age or younger and 154 (67%) are 26 years of age or older. The average stress perception score of Pakistanis is 28.75, which falls in the *moderate* range of stress from overload scale. Therefore, the first hypothesis stating that "*Pakistani respondents will report high to severe stress overload perceptions*" cannot be accepted. The stress perceptions score of American respondents (which has a mean of 25.819) also falls in the moderate range, which happens to be significantly lower than respondents in Pakistan.

Insert Table (1) about here

As can be seen from Table 1 and using the t-test for differences in two means, at a 0.05 level of significance, the hypothesis stating that (“*Pakistanis who are 25 years of age and younger will report similar stress overload perceptions as those who are 36 years of age and older*”) cannot be rejected because the calculated t value falls within the critical value of t for statistical significance. Furthermore, since the p-value is greater than alpha (α) = 0.05, there is sufficient evidence to accept the hypothesis. Despite the higher scores for younger population, it can be concluded that Pakistani respondents who are 25 years of age and younger do report similar stress overload perceptions as those who are 36 years of age and older. With regards to gender-related stress perceptions, as can be seen from Table 2, the hypothesis (“*Male Pakistani respondents will report similar stress overload perceptions as their female colleagues*”) cannot be rejected since the p-value (0.65) is greater than alpha (α) = 0.05. Therefore, it can be said that male Pakistani respondents seem to have similar stress overload perceptions as their female colleagues.

Insert Table (2) about here

In terms of private and public sector stress perceptions, as can be seen from Table 3, the hypothesis (“*Pakistani respondents working in private sector will report similar stress overload perceptions as their public sector colleagues*”) is rejected since the p-value (0.024) is smaller than alpha (α) = 0.05. Therefore, it can be said that Pakistani respondents working in the public sector seem to have higher levels of stress.

Insert Table (3) about here

With regards to education levels and stress perceptions, as can be seen from Table 4 and using the t-test for differences in two means, at a 0.05 level of significance, the hypothesis (“*Pakistani respondents with a high school education will report similar stress overload perceptions as respondents with a masters degree or higher*”) cannot be rejected. Despite the fact that those without a college education seem to have lower stress scores, the difference is not statistically significant. However, it might be possible that well educated Pakistanis seem to perceive that they are carrying more responsibility on their shoulders.

Insert Table (4) about here

In terms of management experience and stress perceptions, as can be seen from Table 5, the hypothesis (“*Pakistanis who have no management experience will report similar stress overload perceptions as respondents with at least several years of management experience*”) cannot be rejected. Despite the fact that those without management experience seem to have lower stress scores, the difference is not statistically significant. Perhaps it can be concluded that management experience might help in better stress management.

Insert Table (5) about here

In regard to cross-cultural comparison with stress perceptions of Americans, as can be seen from Table 6, the hypothesis (“*Pakistanis will report similar stress overload perceptions as respondents from the United States*”) is rejected since there are statistically significant differences in their scores. Respondents from Pakistan seem to report higher levels of stress compared to their American counterparts.

Insert Table (6) about here

It was hypothesized that Pakistani respondents will report high to severe levels of stress, and the current study did not support this prediction since their stress scores fall in the moderate range. Compared to Americans, Pakistani respondents do have a significantly higher level of stress. Furthermore, Pakistanis who are working for the government sector report a significantly higher stress perception than those who have never worked in the public sector.

6. Discussion and Analysis

Pakistanis have reported slightly higher stress level than their American counterparts. Though they did not report high or severe stress level as was expected but this slight difference in the stress level may partially be explained by economic differences that exist in two different economies. Pakistan's unemployment rate is higher than U.S., i.e. 14% unemployment rate in comparison to 9.3% in 2011. Therefore, Pakistani employees are exposed to the threat of being unemployed more than their American counterparts, they are forced to stay at their jobs in spite of facing troubles and constraints at their workplace because of the limited opportunities offered by the economy (Steers & Mowday; 1981, Michaels & Spector; 1982). Another possible cause may be the differences in resources provided to employees to accomplish tasks, since the lack of resources at workplace is also one of the job stressors (Narayanan et al. 1999) Furthermore, Pakistanis working in the government sector report a significantly higher stress perception than those in the private sector. This may partly be because of the fact that employees working in public sector bureaucratic structure are more resistant to change than the employees working in private sector who keep adapting themselves according to environmental challenges to keep their employability. Moreover, in bureaucratic structure, routines are established to meet the familiar demands to bring in efficiency.

However, the drawback of this is that employees develop a routine behavior and can not effectively respond to any unfamiliar demands (or are very unwilling to any change) and any unfamiliar demand put much strain on them. Our study has found no significant differences in stress level across gender. These results are contrary to the findings of Matud (2004), McDonough and Walters (2001), Osorio et al. (2003), and Pines and Zaidman (2003), who in their studies reported women scoring higher levels of stress. A study by G. Michael et al. (2009) suggests that one of the possible causes of women's higher stress levels is the burden of multiple roles which make them carry a heavier load of responsibilities and tasks (Hochschild, 1989). Women spend more time in child care and household activities than men, even when they practice high-status professions or hold high-income managerial positions (Apostal & Helland, 1993; Demo & Acock, 1993; Jamieson, 1998). This gender based contrary results may partly be explained by the fact that Pakistani women entering in workplace have got higher education and belong to the class of the society which is more liberal and educated and let women control their lives and make major decisions for themselves. Therefore, these women are reveling in their freedom and independence while having a good support from family to manage their work and family.

However, a thorough analysis considering social class, education level of the family and specially of the family head, rural/urban background, marital status, and the number of roles that a woman has to perform may draw a different picture. Findings regarding the education level and age of Pakistani respondents also present a contrasting picture than the previous studies. Education level has no significant influence on the perception of stress. But there is a possibility that those with high school or lower may belong to the age group that is expected to report lower level of stress, as the reported stress level of older people is lower than the younger ones. Moreover, this study has found no significant difference in stress level between different age groups. A possible explanation could be that we have compared the category of 25 years and younger with that of 36 years and older. Respondents who are 36 years and above entail all those who are at very different career stages and may experience different levels of stress, but because we have put them in one group, the effects may have been counterbalanced, therefore, the results do not reflect any significant difference.

7. Implications for Working Adults

Need to understand the fact that change is unavoidable; organizations do not have only local rivals to compete with, rather they are competing in a global economy, survival of the fittest in such a large economy brings in much competition and stress. Stress is inevitable in today's work environment; the doable thing is to learn coping strategies and the development of stress resistant behavior or psychological resiliency. Employees' adaptability and flexibility have direct influence on their ability to hack at the stress levels. Managers must play an effective role to eliminate all the factors that cause high level of stress at the workplace. They must discuss the work, deadlines and any issues regarding work which are concerning employees. Managers must make sure that employees are not regularly overloaded by excessive work, unrealistic deadlines and any other hurdles or unavailability of resources that make the deadlines unachievable. They must discuss the prioritization of tasks and how work is progressing from time to time with employees. They need to manage poor performance and attendance effectively in order to prevent overburden on other employees. Any organizational change – either procedural or operational- must be communicated effectively to employees. Managers can discourage uncertainty avoidance behavior at work and promote more open and innovative behavior in that individuals may not get threatened by small challenges. Development of stress resistant behavior or a behavior that can induce more positive stress (Eu-stress) in employees is an adaptable strategy.

8. Conclusion

This study concluded that Pakistani respondents have a moderate level of stress based on their reported stress perceptions. However, compared to Americans, Pakistani respondents do have a significantly higher level of stress which may be because of the economic and cultural differences of both the economies. Understanding the realities of stress and stress management for employees in the modern and competitive workplace are critical issues for staying healthy and successful. Stress itself is difficult to avoid and therefore must be managed effectively. When people are equipped with important stress management skills, then they will be able to cope with the daily challenges in today's competitive workplace.

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Table 1 - Stress Scores of Pakistanis by Age

	Respondents	No.	Overload Scores	St. Deviation
Age	25 yrs of age and younger	77	27.83	8.17
	36 yrs of age and older	48	29.33	7.38
	<i>Total</i>	125		

$t = -0.85; p > 0.396; do not reject.$

Table 2 - Stress Scores of Pakistanis by Gender

	Respondents	No.	Overload Scores	St. Deviation
Gender	Females	161	28.91	7.83
	Males	70	28.4	8.01
	<i>Total</i>	231		

$t = 0.45; p = 0.6518; do not reject.$

Table 3 - Stress Scores of Pakistanis by Private and Public Sector Work

	Respondents	No.	Overload Scores	St. Deviation
Private / Public	Private Sector Work	124	27.75	7.77
	Public Sector Work (2-5 Years Experience)	73	30.42	8.26
	<i>Total</i>	197		

$t = -2.278; p = 0.024; reject.$

Table 4 - Stress Scores of Pakistanis by Education

	Respondents	No.	Overload Scores	St. Deviation
Education	High School or Less	27	30.71	7.37
	Masters Degree	147	28.02	7.9
	<i>Total</i>	174		

$t = 1.64; p = 0.1023; do not reject.$

Table 5 - Stress Scores of Pakistanis by Management Experience

	Respondents	No.	Overload Scores	St. Deviation
Management Experience	No Mgmt Exp.	111	28.83	8.65
	Some Mgmt Exp.	90	28.05	6.94
	<i>Total</i>	201		

$t = 0.69; p = 0.489; do not reject.$

Table 6 - Stress Scores of Pakistanis and Americans

	Respondents	No.	Overload Scores	St. Deviation
Cross-Cultural	Pakistanis	231	28.75	7.87
	Americans	288	25.819	8.127
	<i>Total</i>	519		

$t = 4.141; p = 0.00004; reject.$