Perceived Social Support, Perceived Stress as Correlates of Stress Symptomatology among University Students

*Agoha B.C.E¹, Ogwa F², Evbuoma K³, Igbokwe D. O⁴. & Idoko J. O⁵

¹¹²³⁴Department of Psychology, Covenant University Ota, Ogun State
⁵Covenant University Counseling Centre, Ota

*Corresponding Author: Department of Psychology, Covenant University, Ota, Ogun State, Nigeria
E-mail: ben.agoha@covenantuniversity.edu.ng.

Abstract: The study sought to correlate Perceived Social Support and Perceived Stress with Stress symptomatology. 160 undergraduate students of drawn from a privately owned Nigerian university participated in the study. The participants ranged between 14 and 19 years in age (=16.26, SD = 1.68). The hypotheses were that significant correlations would be found between perceived stress and stress symptomatology, and between perceived social support and stress symptomatology. Perceived social support was measured using the Multidimensional Perceived Social Support Scale (Zimet, Dahlem, Zimet & Farley, 1988), perceived stress with Cohen Perceived Stress Scale, and stress symptomology with the SCL-90. Significant correlations (r = -.13, p< .05) was found between Perceived Social Support (PSS) and Stress symptomatology, and between Perceived Stress and Stress symptomatology (r = .39, p<.000). Males evinced a significantly higher mean stress compared to females. The findings are consistent with those of earlier studies that found negative associations between perceived social support and stress, as well as with the cognitive theory that perception of threat is actually related to the experience of threat.

Key Words: stress symptomatology, perceived social support, perceived stress, cognitive, University students.

Introduction
Adolescents face a lot of challenges as a normal part of their lives (Swanson, 2007). Still in the process of maturation, as the adolescent struggles to adjust and adhere to their new, ill-defined, roles, they may encounter difficulties. While making effort to comply and align, the adolescent’s needs and desire for freedom, experimentation, intimacy with others, recognition, and exploration, may contradict the social expectation of parents, schools, peers, and other social agents. Reconciling these seemingly opposing views to life pose great challenge to the much desired chances of liberty and independence of the adolescent. As biological and psychological
needs, as well as external demands and pressures are continually changing, conditions and events that challenge adjustment and adaptation often produce conflict, frustration, and stress (Silverman, 1987). Any given day requires people to make constant adjustments due to environmental dynamism. When the pressure, tension, demands, and conflicts associated with these changes is perceived by the individual to exceed his or her coping ability some unpleasant physiological, psychological, and behavioural may result (Lahey, 2004) and overtime have pathological consequences (Lazarus, 1991). The process of acquiring a Degree can be quite challenging for a person, depending on their individual competencies, experiences, and expectations, all of which may influence their perception of the situation and impact on their experience of stress.

According to buffer theory, social support attenuates stress reaction by mediating between the stressor and the individual. One way this may be achieved is by helping the individual re-interpret the condition as not too threatening i.e. reduce the tendency to catastrophize through believing that people in one’s social network would help deal with the threatening condition. On the other hand, social support may be misinterpreted as an attempt to intrude or control others thereby increasing the tendency towards stress. Blain, Thompson and Whiffen (1993) demonstrated the effect of self-esteem on perceived social support; they found that individuals’ reporting positive models of both self and others (secure attachment) also reported the highest levels of perceived social support from parents and friends and attachment to friends; while a negative model of self or other (insecure attachment) had a negative impact on perceived social support and attachment to friends. Studies like this highlight the role of cognition as a link between social support and stress. Social support roles may be instrumental (tangible aids and services), emotional (empathy, love, trust and caring), informational (advice and suggestions), or appraisal support (affirmation and feedback) (House, 1981), any of which may be actually present or perceived to be present (Demaray & Malecki, 2002). How a person perceives social support and the resulting belief is crucial to what benefit may be derived from it (Antonucci, Lansford and Ajorouch, 2007, Cohen, Gootlieb, & Underwood, 2001). Appraisals involving negative concept e.g. unpleasant, difficult, frustration, threatening and distressful to mention a few, are thought to yield measurable stress reactions (Lazarus & Folkman, 1984., Beck 1976;
Zamble & Gekoski, 2004). Thus, perception underscores differences in stress symptoms between individuals; the extent to which an individual appraises a situation as distressful and the perceived availability of a social network that is ready to support whenever are critical to experiencing stress symptoms (Antonucci, Ajrouch, & Birditt, 2013).

There have been studies linking social support to stress and well-being. In one such study (Shahar, Cohen, Grogan, Barile, & Henrich, 2009), bombing-related perceived stress was associated with an increase in continuous levels of depression from before to after the bombing, an effect that was buffered by pre-bombing social support from friends. Adolescence who reported high bombing-related perceived stress and low levels of friends also reported more depression. The findings agree with earlier studies like Licitra-Kleckler and Waas (1993) that investigated the roles of peers and family in stress among adolescents and reported that adolescents with high perceived family support reported less depression and delinquency outcomes. In the same vein, Norris & Kaniasty (1996) also showed from their study the buffering effect of perceived social support on post natural disaster distress. In a random survey of 2000 university students, Bovier, Chamot and Pernege (2004) found negative association of perceived stress with mental health, which was buffered by perceived social support. The process of acquiring university education requires great amount of adjustment that may tax the coping ability of a number of students. This underscores the need for investigation into the stress conditions of students and the factors that influence them.

This research sought to answer the questions of how perceived stress and social support relate to stress symptomatology among university students. It was hypothesized that significant relationships would be found between perceived stress and perceived social support and stress symptomatology.

**Materials and Methods**

The participants were 160 undergraduate students of a privately owned Nigerian University who were selected using the stratified sampling method. They consisted of equal numbers of male and female and ranged between 14 and 19 years in age (X = 16.26, and SD = 1.68). The perceived social support was measured using the Multidimensional Perceived Social Support Scale (Zimet, Dahlem, Zimet & Farley, 1988) The MPSS is a 12-items scale, with three subscales of 4 questions each inquiring about and individual’s perception of the adequacy of support from family, friends, and significant others family. The MSPSS has been proved to be
psychometrically sound, with good test-retest reliability ($r=.85$) and internal reliability (Cronbach alpha $=.88$), factorial validity, and adequate construct validity (Zimet, et al., 1988). Each item is rated on 7-point Likert-type response format ranging from 1 “very strongly Agree” to 7- “Very Strongly Disagree”. A high total score obtained by adding up the scores corresponds to a high level of perceived social support, while low scores are associated with perceived unavailability or lack of social support.

The perceived stress scale-10 (Cohen, 1983) was used to measure perceived stress. The scale is a 10-item 5-point Likert-type questionnaire with both reversed and directly scored items. Test-retest reliability has been found for the PSS using a 7-day interval, $r=.86$ (Reis, Hino, & Anez, 2010), a two-week interval, $r=.77$ (Remor, 2006.), and a 12-month interval, $r=.53$ to .61 (Golden-Kreutz, Browne, Frierson, & Andersen, 2004). Wu and Amtmann (2010) obtained a Cronbach alpha of .88 for the PSS-10, while Andreou, et al. (2011) found an acceptable Cronbach Alpha reliability of .82. The scale has been found to intercorrelate with other stress measures (Andreou, et al., 2011.), providing the validity of the scale. Stress symptomatology was measured using the Psychophysiological symptoms checklist which has been validated for use in Nigeria. It is a 50-item scale that assesses the abnormal psychological sensations or functioning associated with the characteristic symptoms of stress. With a possible range of scores from 0 to 250, this psychological test measures the severity of the impact of stressors evident in manifesting symptoms of stress on a continuum of six levels including “No Complaints”, “Slight Mild, Moderate, Severe, and “Very Serve”

The design was cross sectional and data obtained were treated as composite scores. And the Pearson product-moment correlation was performed using the SPSS-17. The results are presented below.

### Results

#### Table 1: Gender difference in Stress Symptomatology

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>80</td>
<td>95.70</td>
<td>51.50480</td>
<td>158</td>
<td>1.58</td>
<td>0.03</td>
</tr>
<tr>
<td>Female</td>
<td>80</td>
<td>81.20</td>
<td>47.35575</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that there were equal numbers of males and females in the study and that the male participants reported greater amount of stress symptoms ($X = 95.70$) than the female ($X=81.20$), a difference that tested significant at $\rho<.05$. 


Table 2: Correlation of Perceived social support with Stress Symptoms

<table>
<thead>
<tr>
<th></th>
<th>PSS</th>
<th>Stress symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSS</td>
<td>Pearson Correlation 1</td>
<td>-.13</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>160</td>
<td>.048</td>
</tr>
<tr>
<td>N</td>
<td>160</td>
<td>160</td>
</tr>
</tbody>
</table>

Table 2 is a display of the Pearson correlation coefficients. It can be seen that a small inverse correlation (r = -.13, ρ< .05) was obtained between perceived social support and stress symptomatology. Thus, the first hypothesis of the study that a significant correlation would be found between perceived social support and stress symptomatology is accepted.

Table 3: Correlations between Perceived Stress and stress Symptomatology

<table>
<thead>
<tr>
<th>Perceived Stress</th>
<th>Perceived Stress</th>
<th>Stress Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Corr.</td>
<td>1</td>
<td>.39**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>160</td>
<td>160</td>
</tr>
</tbody>
</table>

Table 3 shows the correlation of perceived stress and stress symptomatology. Unlike perceived social support, a moderate, positive correlation was found between perceived stress and stress symptomatology (r=.39, ρ<.000). The second hypothesis of the study is also supported.

Discussion
The result of the study showed that the male participants reported more stress than their female counterparts. This difference is expected considering the biological socio-cultural differences between both genders. A negative relationship was found between perceived social support and stress symptomatology in line with buffers theory. The correlation was however small perhaps due to the fact that other aspect of social support was not included in the study. The study also found a moderate, positive relationship between perceived stress and stress symptomatology in accordance with the cognitive theories of stress, which hold that the feeling that events in one’s life are uncontrollable, are related to actual physiological and psychological changes that are labeled stress. Stress inoculation administered to the at-risk may be serving some protective effects if they are identified early.

Conclusion
We conclude on the basis of the findings of this study that perception is critical in the experience of stress by university students. Perceiving one’s situations as overwhelming or
threatening would lead to increased tendency to manifest more stress symptoms, and this condition may be buffered by perceived social support.

**Summary of Research**
1. Adolescence represents a period of rapid change for the adolescent who may pose great challenge to adaptation that may portend serious consequences for health and overall well-being.
2. Gender characteristics are important factor in the manifestation of stress symptomatology in University students.
3. The impact of stress on students may be buffered by perceived social support as both factors are inversely related.
4. A direct relationship exists between perceived stress and stress symptomatology.

**Future Issues**
Social support assumes different forms and size. In developing countries support in form of financial assistance may go a long way to help the student meet some pressing need. But the amounts given may differ from one person to another. It will therefore be necessary in future to determine what influence actual amounts of social support may have on stress.

**References**


