The Effects of Social Integration on Stress and Risk of Depression in College Students

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ABSTRACT

This study looks at how college students' levels of social integration in the campus community affects their feelings of stress and depression. The sample of undergraduate students (N = 378) completed a survey designed to measure various social aspects of college life. Four questions which demonstrated a relationship between social integration and depression were specifically used to obtain data for this study. However, this study found no significance relating social integration and stress. Further research would benefit from a more focused research question as well as a stratified sampling method.

INTRODUCTION

College is a time of change, new experiences, and independence. Along with these more enjoyable aspects comes the pressures of academia, the reality of being away from home, and the responsibility of taking care of one’s self. Some students cope with this better than others, however, stress is still a fairly universal experience despite the different circumstances that create it. Stressful situations and prolonged exposure to stress can lead to an increased risk for depression, which is more common among college students than it was only a decade ago (U.S. National Library of Medicine 2011; Neighmond 2011). It has been reported that a common time for people to experience depression for the first time is between the ages of 18 to 24, the ages of most college students (Lifespan 2011). This is a cause for concern, particularly as depression can lead to suicide and suicide is the third leading cause of death in the college population of America (Suicide Prevention and Resource Center 2009). To help prevent stress and depression it has been recommended that students participate in extracurricular activities which can help develop support networks of friends (Center for Disease Control 2011; Mental Health America 2011). The current study aims to establish if being socially integrated with the campus community is beneficial to the mental health of students by helping to establish a reliable support network of friends, or if being too involved only increases stress.

LITERATURE REVIEW

Stress

Established in the literature as having negative effects on ones physical and psychological health, stress has been used in multiple studies, sometimes as an independent
variable and at other times a dependent variable (Herrero and Gracia 2004; Friedlander et. al 2007; Flynn, Kecmanovic, and Alloy 2009; Auerbach et al. 2011). Each study reviewed looks at stress as a variable and also includes social support as another factor, indicating that the two are connected in some way. One study looks at multiple variables’ effects on social integration; one of those variables is perceived stress (Herrero and Gracia 2004). While the independent and dependent variables are opposite from this research, Herrero and Gracia’s (2004) study found that among the undergraduates sampled, those who have higher levels of perceived stress are less likely to create and maintain friendships or activities within community organizations. This could have implications for the current study. If stress inhibits participation and a lack of participation reduces the opportunity for social integration, which may help decrease stress, a negative cycle could be created. This is similar to the concept considered in another study, where the researchers examine if dissatisfaction with social support causes people who are “depressive ruminators” to intentionally create stress in their social relationships. In this case the researchers find the relationship to positive, which creates negative consequences by also preventing people from being socially integrated (Flynn et. al 2009). Auerbach et. al (2011) study the relationship between social support, stress, and depressive symptoms in adolescents. They find that stress is a mechanism between total, parental, and classmate social support and depressive symptoms, but not with peer social support. Although stress is not researched in exactly the same fashion as the current study, its importance in relation to depression is highlighted through this literature.

**Depression**

Depression is much more widely researched as a dependent variable than stress is, particularly in relation to social support or connectedness. In the three studies reviewed that contained depression as a dependent variable, all found significant relationships between their independent variable, which often included some aspect of social integration and depression (Williams and Galliher 2006; Armstrong and Oomen-Early 2009; Auerbach et. al 2011). However, the study by Auerbach et. al only finds that low support by parents and classmates is correlated with higher depressive symptoms. When it comes to social support provided by peers they find no significant relationship with depressive symptoms for adolescents; it is acknowledged that findings may differ for college age students who tend to rely on peer social networks more than adolescents (2011). Depression is noted to be a “significant health concern on college campuses” by Armstrong and Oomen-Early (2009:523) who researched whether being part of a team as an athlete results in better social connectedness and less risk of depressive symptoms for students than those who are non-athletes. They find that athletes generally had higher levels of social connectedness which is correlated with lower levels of depression (Armstrong and Oomen-Early 2009). Part of what Williams and Galliher sought to examine is how social support and connectedness contributed to depression in college students (2006). Results of their study reveal that there are strong relationships between the two, though social support is found to have more indirect effects while social connectedness has a stronger direct relationship with experience of depressive feelings (Williams and Galliher 2006). The results of the literature maintain the idea of social functioning being essential to the
psychological and physical well-being (Williams and Galliher 2006), as well as supporting the relevance of the current study.

Each of these studies relates stress, depression or depressive symptoms, and some form of social support or connectedness. However, of those that use college students in their sample some still have a limited frame for the purpose of the current study, one to student athletes and one to first-year students (Friedlander et. al 2007; Armstrong and Oomen-Early 2009). Perhaps the most relatable study to the current research was conducted by Auberbach et. al, yet it is not done with college age students, leaving a gap in the literature (2011). This study makes an effort to fill a part of that gap by researching how social integration affects stress and depression levels. The three hypotheses that are used are:

HYPOTHESIS 1: The amount of social integration experienced by a college student could increase stress levels.

HYPOTHESIS 2: The amount of social integration experienced by a college student could decrease stress levels.

HYPOTHESIS 3: The amount of social integration experienced by a college student has a corresponding effect on the chance of becoming depressed.

In opposition to these three hypotheses, the null hypotheses of this study are that (1) there is no relationship between the amount of social integration experienced by a college student and stress levels and (2) there is no relationship between the amount of social integration experienced by a college student and the risk of becoming depressed.

METHODS

Procedure

A convenience sample of students in four introductory sociology classes at the University of New Hampshire is used as the sampling frame for this research study. The professors were contacted at the beginning of the semester and each agreed to allow that a survey be fielded to their class. A member of the Social Research Methods (SOC601) read a verbal recruitment statement to the participants, with those under eighteen being asked not to participate. Participation was completely voluntary and anonymous. Students who chose to take part were given a 117 question survey that had been compiled by the students in SOC601. No compensation was given and participants risked experiencing some discomfort when answering certain questions due to the slightly personal nature of them. However, participants may have directly benefited from the experience of completing a sociological survey and observing what sociology majors study. Participants may have also indirectly benefited by helping student researchers have a greater understanding of undergraduate perspectives and experiences. The benefits of using this convenience sample are that it had no cost, limited time...
demands, and allows for a larger amount of responses from which to generate results. Conversely, it creates the limitation of only surveying students in sociology classes, who may not be representative of the entire undergraduate population.

Participants

Of the four classes surveyed, 378 surveys were handed out and returned, though not every question was answered by all participants, resulting in varying response rates. The sample is composed mostly of women, of those who identified their gender (n=332) there are 71.7% who identified themselves as female. Only 27.1% identified themselves as male, no participant identified as transgender, .3% identified as intersex, and .3% identified as queer. Of those who responded to the question about class standing (n=339) the majority are freshmen (41.9%). Sophomores composed 34% of the sample, juniors 16.9%, seniors 6.6%, and .6% classified themselves as other.

Conceptualization and Operationalization

Social support and social connectedness are the variables most commonly used in research. Social support generally refers to an individual’s perception on the availability of interpersonal resources for emotional support and social connectedness refers to a general “sense of self in relation to the world” (Friedlander et. al 2007; Williams and Galliher 2006). According to Herrero and Gracia (2004) social integration within a community can be defined as a combination of actual participation in the community and a sense of connectedness with the community (710). In this study, social integration is conceptualized very similarly to the definition given by Herrero and Gracia. Furthermore a “sense of connectedness” is understood to include social support and connectedness as aspects referring to a strong social network.

Measurement

Social Integration. Social integration is measured using two questions. One measured the actual number of clubs, sports teams, or other group activities students participated in on a weekly basis. The second question measures whether or not students develop strong friendships, meaning they talk to people and spend time with them outside of the organized activity, through clubs, sports teams, or other groups. Stress. Stress is measured by having students respond to the statement “during the school year I feel stressed” with response categories ranging from “strongly agree” to “strongly disagree”. Depression. To measure depression, which is defined on the survey as “severe despondency and dejection, accompanied by feelings of hopelessness and inadequacy”, students are asked how often in the last month they had experienced feelings of depression.

RESULTS
All collected data is analyzed using the SPSS statistics program and results are generated using descriptive frequency charts and cross-tabulations, including a Pearson chi-square test. As can be seen in Figure 1 below, an overwhelming majority of respondents state that they have never been diagnosed with depression by a health professional. Only 14% said they have been officially diagnosed with it, but 83.5% have never been diagnosed. A smaller percentage (1.4%) did not know, and 1.1% declined to answer. As so few people have actually been diagnosed with depression in this sample, it may be more difficult to discern if the effect of social integration on depression levels is representative, however these numbers do not account for those who experience depressive symptoms but do not get diagnosed.

<table>
<thead>
<tr>
<th>Been Diagnosed with Depression</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>49</td>
<td>14%</td>
</tr>
<tr>
<td>No</td>
<td>293</td>
<td>83.5%</td>
</tr>
<tr>
<td>Prefer Not to Answer</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>5</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>351</td>
<td>100%</td>
</tr>
</tbody>
</table>

Four cross-tabulations and Pearson chi\(^2\) tests are calculated for comparison: (1) number of clubs participated in on a weekly basis and feelings of depression in the last month (2) number of clubs participated in on a weekly basis and feeling stressed during the school year (3) developing strong friendships through clubs and feelings of depression and (4) developing strong friendships through clubs and feeling stressed during the school year. Significance is measured at an alpha level of .05 for all comparisons. For the questions on developing strong friendships through clubs and feeling stressed during the school year, response categories are collapsed. “Strongly agree” and “agree” are combined into one category and “strongly disagree” and “disagree” into one category, to make analysis slightly easier. Additionally the category “does not know/does not apply” is eliminated. The two categories on the question about feelings of depression are also collapsed and due to the small number of responses, “always” and “often” are combined.

The comparison for number of clubs and feelings of depression yields a probability of .410 which is not significant at the .05 level. The number of clubs and feeling stressed during the school year, is also not significant, with a probability of .703.

Overall students who agree that they make strong friendships through the clubs, sports teams, or groups they were involved in, report a lower rate of experiencing depressive feelings in the past month. Observing the results in Figure 2, it can be seen that of those who agreed they make strong friendships 35.1% have never experienced depressive feelings in the past month and almost 39% have rarely experienced depressive feelings. About 16% of participants agreeing say that they sometimes have felt depressed in the last month, and only 10% of those with strong friendships say they often have depressed feelings. Comparatively, 25.7% of
respondents who disagree that they make strong friendships through club participation often feel depressed, whereas only 20% say they never have experienced feelings of depression in the past month. While 40% of those who disagree about making strong friendships say they rarely experience depressive feelings, these findings are significant with a probability level of .007.

Figure 2

<table>
<thead>
<tr>
<th>Depressive Feelings</th>
<th>Strong Friendships</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>count (n)</td>
<td>74</td>
<td>14</td>
<td>7</td>
<td>95</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>35.1%</td>
<td>19.4%</td>
<td>20.0%</td>
<td>29.9%</td>
</tr>
<tr>
<td>Rarely</td>
<td>count (n)</td>
<td>82</td>
<td>24</td>
<td>14</td>
<td>120</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>38.9%</td>
<td>33.3%</td>
<td>40.0%</td>
<td>37.7%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>count (n)</td>
<td>34</td>
<td>19</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>16.1%</td>
<td>26.4%</td>
<td>14.3%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Often</td>
<td>count (n)</td>
<td>21</td>
<td>15</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>10.0%</td>
<td>20.8%</td>
<td>25.7%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Total</td>
<td>count (n)</td>
<td>211</td>
<td>72</td>
<td>35</td>
<td>318</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Pearson chi²: 17.812     Probability: .007

The results of comparing strong friendships through clubs and feeling stressed during the school year have a probability of .307 and therefore are not significant.

DISCUSSION

The lack of significance concerning participation of clubs on a weekly basis in both comparisons is somewhat surprising, though less than ten percent of respondents participate in three or more clubs, sports teams, or other group activities. It is reasonable that participation in no groups or participation in only one or two groups would not cause high stress or depression levels. That feeling stressed during the school year is not significant in either comparison is also surprising, particularly as it leads to the failure to reject the first null hypothesis, showing that for this study there is no relationship between social integration and stress levels. For those to whom it applied, developing strong friendships as a result of participation in clubs, sports teams or other group activities did display significance in decreasing feelings of depression in the last month. This result follows with the expectations of this study and allows for the rejection of the second null hypothesis, proving that there is a relationship between social integration and risk of depressive feelings. However, as the definition of social integration used for this study was two-fold, it must be noted that the first part of the definition, that of actual participation in the community did not display a relationship to the risk of depressive feelings. It is only the second part, that of a sense of connectedness, or having a
network of social support, that shows a relationship. This relationship between strong social support and a decreased risk of depression is consistent with current research.

CONCLUSION

The main finding of this research study is that there is a significant relationship between social integration, as measured by strong friendships made as a result of participation in clubs, sports teams, or other group activities, and risk of depressive feelings, measured by the frequency of depressive feelings within the past month. Results pertaining to level of participation in clubs, sports teams, or group activities and stress levels are not significant. These results show that the research question prompting this study is significant and has sociological value. The relationship between the variables of social integration and depression as shown by this study, demonstrates the need for further research in this area. This could potentially help college health centers develop stronger programs for catering to the needs of students.

LIMITATIONS AND FUTURE RESEARCH

This study contains many limitations, one of which is the initial clarity and intent of the research question and hypothesis; future research would benefit from narrowing the topic and perhaps conducting several smaller, more specific studies. Some of the initial research questions included on the survey could not be successfully used in data analysis as they ended up being double-barreled questions. Simpler, more direct questions would be useful in future research. Additionally, no specific definition for stress was given which left the interpretation of the feeling up to participants. Another minor limitation of this study is that less than one-fifth of participants responded that they had been diagnosed with depression, which makes it slightly more difficult to see if there is a true relationship between depression and social integration. Future studies conducted on this topic or similar topics, may benefit more from using either a stratified sample or contingency questions on the survey.

REFERENCES


