Stressful life events can have a significant impact on our lives. For example, stress can negatively affect self-esteem, which in turn may contribute to internalizing problems such as depression and anxiety. The purpose of the present study was to examine the relationship between stressful life events and internalizing problems, as well as the possible mediating role of self-esteem. Social support also was examined as a possible moderator of the relationship between stress and internalizing problems. Two hundred and fifty undergraduate psychology students completed a battery of assessments measuring current feelings, stressful life events, and self-perceptions. Results identified self-esteem as a mediator of the relationship between stressful life events and internalizing symptoms. Moreover, social support was found to moderate this relationship. Stressful life events and depression confirm the role of self-esteem as a partial mediator of the relationship between stress and symptoms of depression (B = .07, p<.003), such that among those experiencing the highest levels of stress, the effects of social support in reducing depressed symptomatology were more gradual. Social support also moderated the relationship between self-esteem and anxiety. Implications of these results for understanding the effect of life stress on internalizing symptomatology are discussed.

Introduction
Although all major life events can have a significant impact on our lives, Vinokur and Selzer (1975) were among the first researchers to focus on the distress resulting from the aggregation of undesirable life events. Much research continues to be conducted concerning the relationship between stressful life events and internalizing problems such as depression and anxiety (Osborne & Rhodes, 2001). Kendler, Karkowski, and Prescott (1999) suggest a causal relationship between stressful life events and the onset of depression, but recognize that other factors play an important role. In addition to internalizing symptomatology, these life stressors can affect several other domains. For example, numerous researchers, including Young, Rathge, Mullis, and Mullis, (1990) analyzed the impact of life events on self-esteem. Positive life events did not significantly impact the participant's self-esteem. However, as the number of negative events increased, one's levels of self-esteem decreased (Young et al., 1990). In turn, low levels of self-esteem have been repeatedly linked with the presence of internalizing problems. Results indicate that those with poor self-esteem are more likely to exhibit symptoms of depression (Stoever, Ranchar, & Sanderson, 2003; Tarlow & Haaga, 1996). Perlin, Menaghan, Liberman, and Mullan (1981) replicated all of the aforementioned results. In addition, they found that self-esteem was a mediator between life stress and internalizing symptoms. Given the life stress of economic strain, self-concept (self-esteem and mastery) suffered, resulting in heightened levels of depression.

Social support has been shown to moderate these “stress-distress relationships” (Swift & Wright, 2000). Swift and Wright (2000) found that specific domains of social support buffered the effects of certain life stresses on internalizing symptoms. Youngstrom, West, and Albus (2005) replicated this result; the effects of cumulative life events were moderated by family support.

Based on these findings, we propose the following model (see Figure 1). Specifically, we will test the following hypotheses:
1) Increased exposure to stressful life events will be related to an increase in internalizing problems, particularly anxiety and depression.
2) Individuals that have experienced a greater number of stressful life events during the past year had lower self-esteem. Given these correlations, gender and age were statistically controlled for in subsequent analyses.

Results
Participants reported having experienced an average of 7.14 stressful life events in the past year (SD = 3.87). See Table 1 for a summary of other key variables. Table 2 summarizes correlations among primary variables. It should be noted that participants’ age was weakly correlated with anxiety and self-esteem. Gender was also found to be weakly correlated with depression and anxiety such that women reported higher levels of depression and anxiety. Women also reported higher levels of stress and lower levels of self-esteem. Given these correlations, gender and age were statistically controlled for in subsequent analyses.

In order to determine if self-esteem mediated the effect of stressful life events on internalizing symptomatology, the following set of regression analyses were conducted. The first set of analyses revealed a significant relationship between stressful life events in the past year and depression (B = .65, p<.001). Specifically, participants reporting a greater number of stressful life events also reported higher levels of depression. As shown in Table 1, regression analyses also indicated that stress in the past year predicted self-esteem (B = .39, p<.001), such that individuals reporting more stressful life events during the past year had lower self-esteem. Finally, depression was predicted on both self-esteem and stressful life events, self-esteem predicted depression (B = .65, p<.001). Moreover, the effect of stress was reduced when the effect of self-esteem was accounted for (B = .65 compared to B = .40). Therefore, these data suggest that self-esteem partially mediates the effect of stress on depression.

Regression analyses also revealed a significant relationship between stressful life events and anxiety (B = .45, p<.001) such that participants reporting a greater number of stressful life events reported higher levels of anxiety (see Figure 2). Before, stress in the past year predicted self-esteem (B = .39, p<.003). Finally, when anxiety was regressed on both self-esteem and stressful life events, self-esteem predicted anxiety (B = .53, p<.001). Moreover, the effect of stress was reduced when the effect of self-esteem was accounted for (B = .45 compared to B = .24). Taken together, analyses predicting both anxiety and depression confirm the role of self-esteem as a partial mediator of the relationship between stressful life events and internalizing symptoms.

We also examined whether social support moderated the relationship among these variables. Results indicated a significant interaction between stressful life events and social support (B = .06, p<.01) in predicting self-esteem (see Figure 3). Additionally, there was a significant interaction between self-esteem and social support in predicting anxiety (B = .03, p<.001) such that participants who reported the highest levels of self-esteem and social support reported the lowest levels of anxiety symptoms (see Figure 4). The interaction between self-esteem and social support was not significant in predicting depression.

Finally, social support moderated the relationship between stress and symptomatology of depression (B = .07, p<.003) such that among those experiencing the highest levels of stress, the effects of social support in reducing depressive symptomatology are more gradual (see Figure 5). The interaction of stress and social support in predicting anxiety symptomatology was not significant.

Discussion
Results from this study confirmed most of the hypothesis generated from our model (see Figure 1).

Stress was associated with increased levels of internalizing symptomatology:
• The data showed both direct effects of stress on symptomatology as well as indirect effects.

Self-esteem acted as a mediator of the effects of stress:
• Mediation between stress and anxiety suggests that self-esteem can reduce the indirect effects of stress on both depression and anxiety.

Social support acted as a moderator of these effects:
• Social support had two different roles in this sample. Social support played a role in the direct pathway linking stress and depression.
• Conversely, social support played a role in the mediated pathway linking stress and anxiety.

Table 1 Descriptive Statistics

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<td>Depression</td>
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<td>7.00</td>
<td>1.00</td>
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Table 2 Correlations

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</table>

Figure 1. Proposed Model

Figure 2. The Impact of Stress on Internalizing Symptomatology: An Examination of the Role of Self-Esteem and Social Support

Figure 3. The first set of analyses revealed a significant relationship between stressful life events and depression (B = .65, p<.001). Specifically, participants reporting a greater number of stressful life events also reported higher levels of depression and anxiety (B = .45, p<.001). The interaction between stress and self-esteem was not significant in predicting depression (B = .07, p<.003) such that among those experiencing the highest levels of stress, the effects of social support in reducing depressive symptomatology are more gradual (see Figure 5). The interaction of stress and social support in predicting anxiety symptomatology was not significant.

Figure 4. Two hundred and fifty undergraduate psychology students (73 male, 177 female) from the State University of New York at Geneseo participated in the present study. Students signed up through an online human-subjects pool and received course credit. The mean age of participants was 19.9 years (range 17 to 22). Most were freshman (n = 134; 53.6%). A validity of the sample self-identified as Caucasian (n = 211; 84.4%).

Figure 5. Stress was associated with increased levels of internalizing symptomatology:
• The data showed both direct effects of stress on symptomatology as well as indirect effects.


The Impact of Stress on Internalizing Symptomatology:
An Examination of the Role of Self-Esteem and Social Support

Results (continued)