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Understanding Trauma Exposure and Adjustment to University: The Role of Orientation and Transition Programs in Promoting Resilience Among Undergraduate Students

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Honours Psychology Thesis
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April 2019

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Abstract

This study investigated undergraduate students at Brescia University College and their degree of involvement in transition programs. Participation in the events during Orientation Week and My First Six Weeks was examined in order to determine whether the programs had an effect on the resilience of individuals who reported exposure to a potentially traumatic event (PTE). The sample consisted of 33 undergraduate psychology students. Participants completed the Life Events Checklist (LEC), which measured their PTE exposure, and the Scale of Protective Factors (SPF-24), which assessed their individual protective factors and overall resilience. 96.97% of the respondents reported a history of trauma. A Pearson correlation analysis revealed two positive relationships. The first correlation identified an association between trauma exposure and social skills. The second correlation was found between degree of involvement and social support. The results of this study are discussed in terms of the posttraumatic growth framework (Tedeschi & Calhoun, 1996).
Understanding Trauma Exposure and Adjustment to University: The Role of Orientation and Transition Programs in Promoting Resilience among Undergraduate Students

The transition and adjustment to university is a critical developmental task experienced by students who enter institutions of higher education (Credé & Niehorster, 2011). Individuals assume a number of new roles and responsibilities once they begin their undergraduate degree. For example, first year students are presented with increased academic demands all while experiencing a decrease in the levels of support that they had previously received during high school (Credé & Niehorster, 2011). These individuals also encounter challenges that extend beyond academic success. For instance, one must develop new relationships, assume responsibility for their finances, and maintain their physical and psychological health (Credé & Niehorster, 2011). Overall, the transition to university involves a period of stress and successful adjustment is essential for well-being (Denovan & Macaskill, 2017).

Although many undergraduate students adjust well to university, certain individuals tend to encounter challenges. Studies suggest that students with a history of trauma are at a greater risk for difficulties upon entrance into post-secondary school (e.g., Anders, Frazier, & Shallcross, 2012; Baker et al., 2016; Overstreet, Berenz, Kendler, Dick, & Amstadter, 2017). The *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* defines a traumatic stressor as “exposure to actual or threatened death, serious injury, or sexual violence” (American Psychiatric Association [APA], 2013, p. 271). The *DSM-5* also indicates that an individual can directly experience a traumatic event, witness the situation as it happens to another person, learn about the occurrence of trauma to a family member or close friend, and/or be presented with repeated exposure to the details of a traumatic scenario (APA, 2013). Moreover, the literature has identified an association between trauma exposure and emotional distress (Gray et al., 2004).
The term potentially traumatic event (PTE) represents the variability in how people respond to trauma (Bonanno & Mancini, 2012). Research conducted by Bonanno and Mancini (2012) has identified four different patterns of response to a traumatic event: chronic dysfunction, delayed reactions, recovery, and resilience. First, chronic dysfunction in response to trauma involves a diagnosis of post-traumatic stress disorder (PTSD), anxiety, or depression (Bonanno & Mancini, 2012). Next, delayed reactions result in the presentation of the early signs and symptoms of a diagnosable disorder that gradually decline over time (Bonanno & Mancini, 2012). Furthermore, recovery includes a brief disruption in daily functioning in which one slowly returns to their normal levels of performance (Bonanno & Mancini, 2012). Lastly, resilience occurs when someone experiences a stress reaction that does not have a negative influence on their ability to function (Bonanno & Mancini, 2012). Overall, the term PTE is used in order to emphasize that there is a wide range of potential responses to trauma (Jolley, 2017).

The Life Events Checklist (LEC; Gray et al., 2004) has been designed in order to measure PTE exposure. The LEC presents individuals with a list of 17 different stressful life events, which include exposure to natural disaster, sexual assault, captivity, and so on. The respondents are then asked to rate their experience of each PTE on a five-point nominal scale (i.e., 1 = happened to me, 2 = witnessed it, 3 = learned about it, 4 = not sure, and 5 = does not apply). Gray et al. (2004) suggest that the LEC allows researchers and clinicians to investigate different types of exposure to the same PTE. As was previously discussed, the DSM-5 indicates that a traumatic event can be directly experienced, witnessed, or learned about (APA, 2013). However, other PTE measures may not consider the indirect experience of trauma (Gray et al., 2004). For instance, Gray et al. (2014) provide the example of witnessing a violent assault that results in serious injury to another individual. An alternative assessment of trauma exposure may
fail to elicit information about witnessing the assault. The questionnaire may instead focus on whether or not the individual has been physically assaulted. Therefore, the LEC has been created in order to collect data on direct and indirect exposure to a PTE (Gray et al., 2004).

Research indicates that a significant number of first year students enter institutions of higher education with a history of PTE exposure. For instance, a study examined the prevalence of PTEs within a sample of college freshmen. The participants were asked to report on the occurrence of five stressful events within their lifetime: natural disasters, physical assaults, sexual assaults, unwanted or uncomfortable sexual experiences, and transportation accidents. The results revealed that 81.8% of the subjects had experienced at least one PTE prior to beginning college (Overstreet et al., 2017). Research conducted by Read, Ouimette, White, Colder, and Farrow (2011) yielded similar results. Newly matriculated college students completed a measure in which direct and indirect exposure to seven traumatic life events was assessed: natural disaster, warfare, sudden death, life-threatening illness, physical assault, sexual assault, and any other event that was life threatening, caused serious injury, or extreme distress. Overall, 66% of the participants reported that they had experienced at least one PTE (Read et al., 2011). Another study examined the prevalence of PTE exposure among college students in which approximately 50% of the respondents indicated that they had experienced one or more forms of trauma (Grasso et al., 2012). All together, these findings indicate that the majority of students entering post-secondary schools have experienced a PTE.

Research has been conducted on the negative effects of PTEs on post-secondary students. For example, Overstreet et al. (2017) investigated the relationship between PTE exposure and mental health outcomes among college freshmen. The findings indicate that PTE exposure was related to an increase in the use of alcohol, anxiety, and depressive symptoms (Overstreet et al.,
Another study compared undergraduate students who had experienced a PTE to those who had not. Individuals in the PTE group demonstrated a decrease in their functioning and reported feelings of distress (Anders, Frazier, & Shallcross, 2014). Moreover, research conducted on college students indicates that trauma exposure can be associated with the onset of depressive symptoms as well as feelings of shame and hopelessness (Lee, Anderson, & Klimes-Dougan, 2016). Overall, research has identified a correlation between trauma and a decrease in the functioning of students.

As was previously mentioned, studies suggest that there is a relationship between PTE exposure and difficulties adjusting to institutions of higher education. For example, individuals who have experienced a PTE report lower levels of academic success when compared to those who have not been exposed to trauma (Anders et al., 2012; Baker et al., 2016). A study examined the relationship between non-consensual sexual contact and academic performance. Individuals who reported a history of sexual violence had a lower grade point average (GPA) after one semester of college. The participants with a history of unwanted sexual experiences were also less likely to remain enrolled in subsequent semesters of study (Baker et al., 2016). Furthermore, research conducted by Anders et al. (2012) found that undergraduate and community college students who reported experiencing more traumatic life events had a lower GPA than the respondents who experienced less trauma. Thus, an association between the experience of traumatic events and difficulties adjusting to university has been recognized.

While research has identified a relationship between trauma and difficulties adjusting to post-secondary school, many students continue to function well despite past traumatic experiences. For instance, a study examined exposure to trauma and associated symptomology among undergraduates. Although 85% of the participants indicated that they had experienced a
traumatic event within their lifetime, the rate of probable PTSD for these individuals was 6% (Frazier et al., 2009). A similar study collected data in which 66% of incoming college students reported exposure to at least one PTE. However, only 9% of these freshmen met the criteria for a diagnosis of PTSD (Read et al., 2011). Furthermore, Grasso et al. (2012) found that 18% of PTE exposed college students met the standards for PTSD. Respondents with a history of trauma also reported a decrease in the use of avoidance focused coping strategies (Grasso et al., 2012).

Overall, these studies suggest that students with a history of trauma possess the ability to adapt positively to university, and moreover, that they may have developed better strategies for coping than their non PTE exposed peers.

Resilience involves the ability to “maintain normative, or positive, development in the presence of risk” (Madewell & Ponce-Garcia, 2016, p. 250). Those deemed to be resilient continue to maintain optimal levels of mental and physical health in response to threat (Masten, 2001). Furthermore, research indicates that transitional periods, such as the beginning of adolescence and entrance into university, are possible turning points in the development of people who have experienced trauma (Madewell & Ponce-Garcia, 2016). Therefore, this finding suggests that such transitional times may be ideal for the introduction of programs that foster the development of resilience.

Scholars indicate that resilience occurs as a result of the use of protective factors that mitigate the negative effects of a traumatic event (Madewell & Ponce-Garcia, 2016). For example, Masten et al. (2004) conducted a longitudinal study that examined the adaptation and resilience of troubled youth as they transitioned into adulthood. The findings indicate that individuals who have experienced adversity may successfully manage the transition due to the use of factors such as that relate to planning and the use of social supports (Masten et al., 2004).
Goldstein et al. (2013) also suggest that adolescents overcome the negative effects of childhood sexual abuse as a result of religious and community involvement. Furthermore, a recent study investigated students who were receiving support from university and college counselling centers. The results indicate that living on campus and engagement in extracurricular activities appears to moderate the distress that has been associated with PTE exposure (Jolley, 2017). Therefore, there is a relationship between the use of protective factors and resilience.

The Scale of Protective Factors (SPF-24) was developed by Ponce-Garcia, Madewell, and Kennison (2015) as a measure of resilience. The SPF-24 includes four components that have been identified by past researchers as determinants of resilience; these factors include: social support, social skills, prioritizing and planning behaviour, as well as goal efficacy (Ponce-Garcia et al., 2015). Ponce-Garcia et al. (2015) had trauma exposed post-secondary students complete the SPF-24 in order to evaluate the diagnostic function of each of the subscales of resilience. The results indicate that those who scored low in resilience did not make sufficient use of social supports, social skills, prioritizing and planning behaviours, and goal efficacy when compared to those who scored high in resilience (Ponce-Garcia et al., 2015). Moreover, Madewell et al. (2016) examined a sample of PTE exposed college students who completed the SPF-24. They suggest that the SPF-24 can be used to determine an individual’s overall resilience as well as identify areas that are in need of assistance. Thus, results from the SPF-24 can be used in order to develop intervention strategies for students who have experienced a PTE (Madewell et al., 2016).

A number of institutions emphasize the importance of facilitating individuals as they begin university (Belch, 2011). For example, orientation programs are offered by various schools in order to support the transition of first year students (Credé & Niehorster, 2011). Many researchers suggest that institutional leaders must consider each of the factors that offset the
negative effects of trauma when they develop support programs for undergraduates who have experienced a PTE (Jolley, 2017). Studies have identified resilience as a pattern of response common to those who have been exposed to trauma. However, the literature tends to discuss the maladaptive reactions of PTE exposed university and college students (Bonanno & Mancini, 2012). Furthermore, several researchers have recently emphasized the importance of continuing to study the development of resilience in post-secondary students with a history of trauma (e.g., Bonanno & Mancini, 2012; Grasso et al., 2012; Madewell et al., 2016). To date, no research has been done on the orientation and transition programs offered at Brescia University College. Orientation Week and My First Six Weeks were created in order to provide the students at Brescia with the resources that are needed to develop their social skills, campus involvement, academic success, and well-being (Brescia University College, 2018). Overall, the current study attempted to add to the existing body of literature by examining the effect that the support programs at Brescia had on the resilience of trauma exposed students.

The present study investigated undergraduate students at Brescia University College and their participation in the events during Orientation Week and My First Six Weeks. The subjects were placed in either a high involvement or low involvement group, depending on the total number of events that they had reported going to. The participants’ degree of involvement was assessed in order to determine whether Orientation Week and My First Six Weeks had an effect on the resilience of the students who had experienced a PTE. The LEC (Gray et al., 2004) was used to measure PTE exposure. It was predicted that at least 50% of psychology 1000 students, in their first year at Brescia University College, would report past exposure to one or more PTEs.

The SPF-24 (Ponce-Garcia et al., 2015) was used to measure resilience in the present study. Each of the determinants of resilience were assessed (i.e., social support, social skills,
prioritizing and planning behaviour, and goal efficacy) and the respondents received an overall resilience score. It was predicted that the students with PTE exposure would have better resilience than those without PTE exposure, due to their past experience of overcoming challenges. It was also predicted that the individuals who had high involvement in Orientation Week and My First Six Weeks, would have better resilience than the students who had low involvement in the programs. The final prediction was that the students who reported PTE exposure and high involvement in Orientation Week and My First Six Weeks, would have better resilience than the students who had low involvement in the programs.

**Method**

**Participants**

The sample consisted of 33 undergraduate students (one male, 32 females) who were enrolled in an introductory psychology course at Brescia University College. Each subject provided information on their age ($M = 19.91, SD = 2.99$). One student was enrolled in the preliminary program, 28 were in first year, and four were in upper year. Fifteen of the individuals lived on campus and 18 resided off campus. Each participant was tested individually and received one credit for completing the study.

**Materials**

*Dedographic questionnaire*. This questionnaire included seven items that collected information on each student’s age, sex, year in university, their home campus, where they lived, and their ethnicity (see demographics questionnaire in Appendix A).

*Life Events Checklist (LEC)*. This checklist was taken from a study conducted by Gray et al. (2004) and was used to measure PTE exposure. Each participant was asked to rate their experience of 17 different PTEs on a five-point nominal scale (i.e., $1 = happened to me,
2 = witnessed it, 3 = learned about it, 4 = not sure, and 5 = does not apply). If the student rated the event as happened to me or witnessed it, it was considered to be a positive endorsement for PTE exposure. If the individual rated the event as learned about it, not sure, or does not apply, it was considered to be a negative endorsement for PTE exposure.

Orientation Week and My First Six Weeks questionnaire. This questionnaire was used to measure participation in the events during Orientation Week and My First Six Weeks at Brescia University College. Each student was asked to indicate whether or not they had participated in 20 different activities (see Orientation Week and My First Six Weeks questionnaire in Appendix B).

Scale of Protective Factors (SPF-24). This scale was created by Ponce-Garcia, Madewell, and Kennison (2015) and was used to measure each of the determinant resilience in the present study. Each subject was asked to indicate their level of agreement with each item on a seven-point Likert scale that ranged from 1 (disagree completely) to 7 (completely agree). First, items 1, 3, 12, 13, 16, and 17 were averaged to examine social skills. Next, items 2, 4, 7, 20, 21, and 23 were averaged to examine social support. The items 6, 9, 10, 11, 14, and 19 were also averaged to examine goal efficacy. Finally, items 5, 8, 15, 18, 22, and 24 were averaged to examine planning and prioritizing behaviour. The average scores from each of the subscales were then summed to determine an overall resilience score.

Procedure

Participants were recruited via the Brescia SONA research recruitment system. The study took place in the psychology undergraduate research laboratory (PURL) at Brescia University College. The participants were provided with a letter of information that described the nature of the study and they signed an informed consent form. The students were then given the four
questionnaires to complete. Testing took approximately 15-20 minutes. Once the participants had completed the questionnaires, the purpose and the hypotheses of the study were explained and the individuals were given a debriefing form. The debriefing form provided the students with mental health and wellness resources.

Results

The participants were assessed on each of the determinants of resilience (see Table 1 for the descriptive statistics) and they were given an overall resilience score ($M = 21.45$, $SD = 3.92$). On average, none of the students had a deficit in any of the protective factors or a poor overall resilience score (see Table 1 for an explanation).

Each student provided information on the number of traumatic events that they had either experienced or witnessed during their lifetime ($M = 4.91$, $SD = 2.80$), with 96.97% of the respondents indicating that they had been exposed to at least one PTE. It is important to note that the original design of this study involved creating a PTE exposure group and a no PTE exposure group. However, the data that was collected did not allow for the participants to be separated into equal groups because the majority of the respondents had reported trauma exposure. Therefore, a median split was used to divide the individuals into two groups depending on the number of traumatic events that they had either experienced or witnessed. The first group was called the low exposure group ($n = 15$) and their LEC scores ranged from 0-4 traumatic events. The second group was called the high exposure group ($n = 18$) and their LEC scores ranged from 5-12 traumatic events.

The subjects also provided information on the number of events that they had participated in during Orientation Week and My First Six Weeks ($M = 4.82$, $SD = 3.54$). Another median split was used to divide the individuals into two groups depending on their degree of
Table 1

*Means and Standard Deviations for the Determinants of Resilience as Found on the SPF-24*

<table>
<thead>
<tr>
<th>Determinant</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support</td>
<td>5.15</td>
<td>1.25</td>
</tr>
<tr>
<td>Social Skills</td>
<td>5.10</td>
<td>1.13</td>
</tr>
<tr>
<td>Prioritizing and Planning Behaviour</td>
<td>5.65</td>
<td>1.07</td>
</tr>
<tr>
<td>Goal Efficacy</td>
<td>5.24</td>
<td>0.86</td>
</tr>
</tbody>
</table>

*Note.* A mean score of less than five on any of the determinants indicates that there is a deficit in that protective factor.
involvement in the programs. The first group was called the low involvement group \((n = 16)\) and
their participation scores ranged from 0-4 events. The second group was called the high
involvement group \((n = 17)\) and their participation scores ranged from 5-13 events.

An independent-samples \(t\)-test was conducted to determine whether there was a
difference between the mean resilience scores of the students who had reported high trauma
exposure when compared those who had low trauma exposure. On average, the resilience scores
of the respondents in the high exposure group \((M = 21.42, SD = 3.25)\) were similar to those who
were in the low exposure group \((M = 21.49, SD = 4.72)\). Furthermore, the difference was not
significant, \(t(31) = 0.05, p = .96, d = 0.02\), indicating that trauma exposure did not have an effect
on resilience (see Figure 1).

A second independent samples \(t\)-test was performed to determine whether there was a
difference between the mean resilience scores of the students who had reported high involvement
in the events during Orientation Week and My First Six Weeks, when compared to those who
had low involvement. On average, the resilience scores of the participants who had high
involvement \((M = 21.56, SD = 3.67)\) were similar to those who had low involvement \((M = 21.33,
SD = 4.29)\) in the programs. Moreover, the difference between the groups was not significant,
\(t(31) = -0.16, p = .87, d = 0.06\), indicating that Orientation Week and My First Six Weeks did
not have an effect on resilience (see Figure 2).

A two-way independent-measures analysis of variance (ANOVA) was additionally
performed to determine whether there was a significant interaction between trauma exposure and
degree of involvement in Orientation Week and My First Six Weeks, on resilience. The
descriptive statistics for the trauma and involvement groups are presented in Table 2. The results
of the two-way independent-measures ANOVA revealed that there was a non-significant main
Figure 1. Higher resilience scores indicate better protective factors than lower scores. The bars represent the means of all of the participants’ resilience scores in the low trauma exposure group and the high trauma exposure group.
Figure 2. Higher resilience scores indicate better protective factors than lower scores. The bars represent the means of all of the participants’ resilience scores in the low involvement group and the high involvement group.
Table 2

*Descriptive Statistics for the Trauma Exposure and Involvement Groups*

<table>
<thead>
<tr>
<th>Trauma Exposure</th>
<th>Degree of Involvement</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Exposure</td>
<td>Low Involvement</td>
<td>7</td>
<td>23</td>
<td>5.23</td>
</tr>
<tr>
<td>Low Exposure</td>
<td>High Involvement</td>
<td>8</td>
<td>20.17</td>
<td>4.11</td>
</tr>
<tr>
<td>High Exposure</td>
<td>Low Involvement</td>
<td>9</td>
<td>20.04</td>
<td>3.12</td>
</tr>
<tr>
<td>High Exposure</td>
<td>High Involvement</td>
<td>9</td>
<td>22.80</td>
<td>2.91</td>
</tr>
</tbody>
</table>
effect of trauma on resilience, $F(1, 29) = 0.02, p = .90$, partial $\eta^2 = .00$. There was also a non-significant main effect of involvement on resilience, $F(1, 29) = 0.01, p = .99$, partial $\eta^2 = .00$. However, there was a significant interaction between trauma exposure and degree of involvement in Orientation Week and My First Six Weeks, on resilience, $F(1, 29) = 4.33, p = .046$, partial $\eta^2 = .13$. This interaction indicates that the students who had reported being exposed to a large amount of trauma, were affected differently by their participation in the events during Orientation Week and My First Six Weeks, when compared to the students who had reported a low amount of trauma (see Figure 3). Simple main effects analyses were completed to determine the effect that degree of involvement had at each level of trauma exposure. The simple main effect of involvement for the low trauma group was not significant, $F(1,29) = 2.03, p = .17$, partial $\eta^2 = .07$. Furthermore, the simple main effect of involvement for the high trauma group was not significant, $F(1, 29) = 2.32, p = .14$, partial $\eta^2 = .14$. Therefore, these findings indicate that increased participation in the events during Orientation Week and My First Six Weeks, did not have an effect on the resilience of the students in the low trauma group or the high trauma group.

A Pearson correlation analysis was also performed to determine whether there were any associations between trauma exposure, degree of involvement in the events during Orientation Week and My First Six Weeks, social support, social skills, prioritizing and planning behaviour, goal efficacy, as well as overall resilience. There was a significant moderate correlation between the number of traumatic events that an individual experienced and social skills, $r = .36, p = .038$, indicating that as trauma exposure increased, the protective factor of social skills also increased (see Figure 4). There was also a significant moderate correlation between degree of involvement and social support, $r = .47, p = .006$, demonstrating that as participation in the
Figure 3. Higher resilience scores indicate better protective factors than lower scores. The bars represent the division of the participants into groups depending on their degree of involvement in the events during Orientation Week and My First Six Weeks as well as the number of traumatic events that they had reported experiencing.
Figure 4. Scatterplot and line of best fit for the mean social skills scores (y-axis) and the number of traumatic events that each participant reported exposure to (x-axis).
events during Orientation Week and My First Six Weeks increased, the protective factor of social support also increased (see Figure 5). None of the other correlations were significant.

Discussion

A number of post-secondary schools offer transition programs in order to help individuals adjust to university (Credé & Niehorster, 2012). The present study investigated undergraduate students at Brescia University College and their degree of involvement in the events during Orientation Week and My First Six Weeks. Participation in the events was examined in order to determine whether the programs had an effect on the resilience of the people who reported past exposure to a PTE. Overall, the results of this research did not provide support for three of the four hypotheses.

First, it was hypothesized that at least 50% of the participants, who were in their first year of university, would report past exposure to at least one PTE. It is important to note that the original design of this study involved eliminating the subjects who were not in first year. However, all of the information that was collected was analyzed because of the small sample size. Therefore, the original hypothesis was revised in order to include all of the undergraduates who completed the study. The results supported the new hypothesis and it was found that 96.97% of the students had been exposed to at least one PTE.

The second hypothesis was that the individuals with PTE exposure would have better resilience than those who did not have PTE exposure. Since 96.97% of the subjects reported a history of trauma, the participants were divided into high and low trauma exposure groups. The hypothesis was modified. The new prediction was that the students who had experienced an increased amount of trauma, would have better resilience than those who had been exposed to less trauma. The overall resilience scores of each trauma group were compared. The results
Figure 5. Scatterplot and line of best fit for the mean social support scores (y-axis) and the number of events that each participant was involved in during Orientation Week and My First Six Weeks (x-axis).
demonstrated that the undergraduate students who were in the high trauma group did not significantly differ from the individuals in the low trauma group in terms of their overall resilience.

It was also hypothesized that the students who reported a high degree of involvement in the events during Orientation Week and My First Six Weeks, would have better resilience than those who had a low degree of involvement in the programs. The participants were split into high and low involvement groups and their overall resilience scores were compared in order to test this assumption. A significant difference was not found between the resilience of the subjects in the high involvement group and the low involvement group.

The final hypothesis was that the students with PTE exposure and a high degree of involvement in the events during Orientation Week and My First Six Weeks, would have better resilience than the individuals who had PTE exposure and low involvement in the programs. This hypothesis was also revised in order to accommodate for the creation of the high and low trauma groups. The new prediction was that the subjects with a large amount trauma exposure and a high degree of involvement in the events, would have better resilience scores, when compared to the individuals who had high trauma exposure and low involvement in the programs. An interaction indicated that the undergraduates who had been exposed to a large amount of trauma, were affected differently by their participation in the programs, when compared to the students who had low trauma exposure. However, simple main effect analyses revealed that increased participation in the events during Orientation Week and My First Six Weeks, did not cause a significant difference between the resilience scores of the students who were in the high and low trauma groups.
Although three of the initial hypotheses were not confirmed, further analysis of the data revealed two significant relationships. Both of these correlations can be used in order to explain the importance of campus engagement and the development of resilience among trauma exposed students.

First, the data identified an association between trauma exposure and social skills. It was found that as the students reported an increase in the number of traumatic events that they had experienced, their social skills also increased. This finding supports the posttraumatic growth framework (Tedeschi & Calhoun, 1996). Posttraumatic growth refers to the positive psychological changes that an individual may undergo after experiencing a stressful life event (Tedeschi & Calhoun, 1996). Moreover, trauma exposure has been identified as a situation that can elicit more meaningful relationships amongst individuals (Tedeschi & Calhoun, 2004). A study conducted by Pietrzak and Cook (2013) examined the determinants of psychological resilience among a sample of trauma exposed veterans. It was found that the resilient people scored higher on measures of social connectedness and psychosocial characteristics (Pietrzak & Cook, 2013). Overall, these findings support the notion that resilient individuals mitigate the negative effects of an adverse life experience via the use of protective factors (Ponce-Garcia et al., 2015).

When considering the relationship that was identified between trauma exposure and social skills, it is important to note that a significant number of undergraduate students have already entered university with increased levels of resilience (Masten et al., 2004). Findings suggest that a large proportion of the population tends to experience exposure to trauma during their childhood (Brogden & Gregory, 2019). This means that by the time these people have entered post-secondary school, they have already developed the skills necessary to maintain
normal levels of functioning (Masten et al., 2004). Overall, the correlation that was found between trauma exposure and social skills supports this finding. It indicates that undergraduate students represent a resilient population who have already developed their protective factors to a high degree. This may also explain why a significant difference was not found between the resilience scores of any of the conditions. Since the majority of trauma exposed students have already developed their resilience upon entrance into post-secondary school, they are less likely to demonstrate an overall increase in their resiliency because they are already utilizing their protective factors to the best of their abilities.

A second correlation was also found between degree of involvement and social support. The results demonstrated that as the students reported an increase in their participation in the events during Orientation Week and My First Six Weeks, their social support also increased. This relationship demonstrates the importance of offering transition programs to those who are in post-secondary school. It suggests that it is worthwhile to continue to develop and promote participation in orientation programs because they do have a positive effect on students. A study revealed an association between increased engagement in campus activities and fewer adjustment difficulties among university students (Jolley, 2017). Together, these findings suggest that increased participation in undergraduate transition programs is associated with positive adjustment to university.

Given the high prevalence of trauma that was reported in this study, as well as the effect that campus engagement appeared to have on social support, it is imperative that university personnel continue to design programs that are tailored to the needs of undergraduates. The results of this study indicate that an extremely large proportion of the student population has a history of trauma. Past studies have revealed that PTE exposure is related to difficulties adjusting
to post-secondary school (Anders et al., 2012; Baker et al., 2016). While it is not possible to control the number of traumatic events that an individual may encounter, it is possible to create intervention programs that promote their ability to cope with the situation (Edwards, Catling, & Parry, 2016). Moreover, increased levels of social support have been associated with lower levels of distress following trauma exposure (Maples, Park, Nolen, & Rosén, 2014). Overall, this finding demonstrates that the orientation and transition programs, that have been developed by Brescia University College, have been successful at providing their students with social support. Moreover, it suggests that increased participation in orientation and transition programs may serve to moderate the negative effects that trauma exposure has on undergraduates.

It is important to note that a large percentage of the participants in this study reported a history of trauma when compared to previous findings. Studies have suggested that the prevalence of PTE exposure among university students tends to range between 50% to 85% of the population (Boyraz et al., 2015; Grasso et al., 2012). Moreover, the reported rates of traumatic experiences have been found to be the greatest between the ages of 16 and 20 years, which also corresponds with the average age of those who are in post-secondary school (Banyard & Cantor, 2004). Although it is not uncommon to find that a significant number of undergraduates have been exposed trauma, the findings of this research differ from the literature, and showed a substantial increase in the number of students who have experienced a PTE.

The increase in the prevalence of PTE exposure may be explained by how trauma was measured in this study. Participants in the present study completed the LEC and they were asked to indicate whether or not they had been exposed 17 different stressful life events. If the respondent reported that they had either experienced or witnessed the event, it was considered a positive endorsement for PTE exposure. While this research was able to assess multiple types of
exposure to a wide range of events, previous studies have used a more restricted definition of trauma. For instance, a study conducted by Read et al. (2011) had college students indicate whether or not they had been exposed to a total of seven different traumatic life events. The results indicated that 66% of the students had experienced trauma. Furthermore, research conducted by Cusack et al. (2019) examined the prevalence of trauma among a sample of freshman entering college. An abbreviated version of the LEC was used and the subjects were asked to specify whether they had experienced five stressful events (Cusack et al., 2019). It was found that 70% of the freshman had PTE exposure (Cusack et al., 2019). Overall, these results suggest that an extremely broad definition of PTE exposure was applied in the present study. Future research should investigate the effect that exposure to a smaller number of events has. The results of such studies may allow for the subjects to be divided into PTE exposed and non PTE exposed groups. Furthermore, the comparison of these groups may reveal a significant difference in their resilience scores.

Given the nature of the study, there were additional limitations that are worth identifying. For example, the participants could have answered the questionnaires in a socially desirable manner. The subjects could have feared that they would have been judged for indicating that they had deficits in their social skills and social supports. Moreover, the students may have been too embarrassed to report that they were struggling to accomplish their goals. The participants could have also exaggerated the extent to which they were involved in the transition programs in order to be viewed more favorably by the researcher. Therefore, the social desirability bias may explain why the resilience of the individuals in both of the trauma groups and the participation groups did not differ. Future research should use an anonymous online measure. An online
questionnaire could reduce the effects of social desirability bias and reveal a significant difference in the resilience scores of each group.

Another limitation to the study was that the sample was small and consisted of predominantly female participants. Previous research has revealed that women are more likely to communicate their feelings and discuss personal aspects of their lives when compared to men (Fox, Bukatko, Hallahan, & Crawford, 2007). This sex difference may explain why participation did not have a significant effect on resilience. It suggests that the female students at Brescia may have already been more likely to utilize their social skills and seek out social support via participation in the transition programs. It also may explain why most of the subjects in the present study had reported taking part in the events during Orientation Week and My First Six Weeks. Future research should investigate the difference between the degree of involvement of males and females in orientation programs because it may reveal a significant difference in their overall resilience scores.

In conclusion, the results of this research have confirmed that a large proportion of the university population has been exposed to trauma. This study was valuable because previous research has not examined the effect that the transition programs have on students with a history of trauma. The relationship that was identified between degree of involvement and social support does suggest that Brescia has successfully designed undergraduate programs that promote positive adjustment to university. The association between trauma and social skills supports the finding that trauma exposed students are more likely to utilize their social skills in order to offset the negative effects of a PTE. Future research still needs to be conducted on trauma exposure and engagement in campus activities in order to gain a stronger understanding of the exact effect that transition programs can have on the development of resilience.
References


doi:10.1007/BF02103658


doi:10.1207/s15327965pli1501_01
Appendix A

Demographic Questionnaire

Please answer the following questions, leaving blank any which you would prefer not to answer.

1. Age: _____

2. Sex:
   Male _____   Female _____   Other _____

3. Which best describes you? (Check all that apply)
   Year 1 Undergraduate Student _____
   Upper-Year Student _____
   Mature Student _____
   Preliminary Year Student _____
   International Student _____

4. Are you a main campus (i.e., Western) or an affiliate student (i.e., Brescia, Huron, or Kings) student?
   Main Campus _____
   Affiliate _____

5. If you are an affiliate student, which campus do you attend?
   Brescia _____
   Huron _____
   Kings _____

6. Where do you currently live?
   On-campus (main campus residence, or affiliated residence) _____
   Off-campus _____

7. With which racial/ethnic category do you most closely identify with?
   Asian _____
   Black/African-Canadian/Caribbean _____
   Latino(a)/Hispanic _____
   Middle Eastern _____
   Indigenous/First-Nations _____
   Caucasian _____
   Multiracial _____
Not listed above (please self-identify) ______

*You have completed the first questionnaire. Please let the researcher know you are finished.*
Appendix B

Orientation Week and My First Six Weeks Questionnaire

Please circle yes or no to indicate whether you attended the event during Brescia’s Orientation Week or My First Six Weeks.

<table>
<thead>
<tr>
<th>Event</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Campus Student Dinner</td>
<td>Yes</td>
</tr>
<tr>
<td>Welcome BBQ</td>
<td>Yes</td>
</tr>
<tr>
<td>Brescia Bonfire</td>
<td>Yes</td>
</tr>
<tr>
<td>Can I Kiss You?</td>
<td>Yes</td>
</tr>
<tr>
<td>Foundress Day Ceremony</td>
<td>Yes</td>
</tr>
<tr>
<td>Brescia 101</td>
<td>Yes</td>
</tr>
<tr>
<td>Faculty Lunch</td>
<td>Yes</td>
</tr>
<tr>
<td>Soph Group Tie-Die</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus Wide Amazing Race</td>
<td>Yes</td>
</tr>
<tr>
<td>Therapy Dogs</td>
<td>Yes</td>
</tr>
<tr>
<td>Pecha Kucha</td>
<td>Yes</td>
</tr>
<tr>
<td>One Love</td>
<td>Yes</td>
</tr>
<tr>
<td>O Serves Day</td>
<td>Yes</td>
</tr>
<tr>
<td>“Get Your Hands Up!” with Andy Thibodeau</td>
<td>Yes</td>
</tr>
<tr>
<td>Upstander Training</td>
<td>Yes</td>
</tr>
<tr>
<td>Living Life to the Full Program</td>
<td>Yes</td>
</tr>
<tr>
<td>Mental Health First Aid Training</td>
<td>Yes</td>
</tr>
<tr>
<td>Smiling Minds Meditation</td>
<td>Yes</td>
</tr>
<tr>
<td>Self-Defense Class with Jamie Seabrook</td>
<td>Yes</td>
</tr>
<tr>
<td>SafeTalk Training</td>
<td>Yes</td>
</tr>
</tbody>
</table>

You have completed the third questionnaire. Please let the researcher know you are finished.