

The role of ISPCC Social Support on Perceived Stress, Test Anxiety and Self-Esteem among Post-Primary School Students

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The Irish Society for the Prevention of Cruelty to Children (ISPCC) is the oldest children's charity organisation in Ireland, and currently provides 24 hour support and assistance for children. Due to the importance of external social supports and the limited research to date in Ireland, the aim of the present study was to explore the role of the ISPCC as a source of support for teenage children, with regard to stress, self-esteem and test anxiety. One hundred and eighty eight children (99 females) between 13 and 18 years of age participated. Results suggest that children who reported a recent stressful life event and who used ISPCC services reported significantly lower levels of stress than those who reported a stressful event and didn't use the supports. The use of services did not affect self-esteem or test anxiety scores in service users compared to comparison groups.

External support agencies such as the Irish Society for the Prevention of Cruelty to Children (ISPCC) have been integral in assisting young people with mental health issues. In 2010 the ISPCC released incidence rates on how many children made contact with them for that year, with 837,551 calls received by Childline. Unfortunately due to issues of funding, only 540,924 calls could be answered. The ISPCC text service received 18,375 text messages, while 6,891 children made contact with One2One live chats (ISPCC, 2010).

While some research has specifically focussed on the form of help lines in child support (Butler, Potter, Danby, Emmison & Hepburn, 2010; Emmison & Danby, 2007) research exploring the services is still very limited (See Doyle, Timms, & Sheehan, 2010; Fukkink & Hermanns, 2009). Many studies focus on support from family and friends (e.g., Hoagwood, Cavaleri, Olin, Burns, Slaton, Gruttadaro, & Hughes, 2010; Kassam-Adams & Fein, 2003) rather than external support such as the ISPCC and Barnardos. Studies such as Butler et al., (2010) revealed that client-centred practice in children's helpline calls is especially valuable as a counselling practice and as a form of empowering children, while Emmison et al., (2007) also evaluated the importance of client-centred practice help lines for children.

More limited still is the relationship between such support and associated variables pertinent to adolescent mental health. Due to the importance of external social support and the limited research to date in Ireland, the aim of the present study is to explore the

use of external agencies as a source of support for teenage children, with a specific focus on the associated variables of stress, self-esteem and test anxiety.

Stress is one major concern for adolescents. While stress is a normal factor in everyday life (Peirceall & Keim, 2007) it can result in negative consequences such as low self-esteem (Youngs, Rathge, Mullis & Mullis, 1990) and poor mental health (Compas, 1987; Compas, Connor-Smith, Saltzman, 2001; & Fridrici & Lohaus, 2009). Physical and familial stressors also affect adolescents, such as the child's physical health and the socioeconomic status (SES) of the family (McLeod & Shanahan, 1993; McLoyd, 1998). Specifically, Skybo and Buck (2007) reported bad grades, sibling fights, missing family member, playing sports and tests as the top five causes of adolescent stress. Some of these stressors, such as sibling fights and SES are familial issues, which may make it difficult for children to approach family members for support. Social support agencies, external to the family, may be suitable options for such issues. Stressors such as bad grades and tests may link directly to test anxiety, which will be discussed further in the paper.

Within the context of education, studies have asserted that low self-esteem has a negative impact on children's behaviour in school (e.g. Burnett, 1984; Hwang, 1995; Lochman & Lampton, 1986, Wiggins & Wiggins, 1992). Birndorf, Ryan, Auinger, and Aten (2005) demonstrated that higher levels of self-esteem leads to better mental health, more efficient coping abilities and a lower chance of developing mental health problems in adulthood. Furthermore, Donnellan, Trzesniewski, Robins, Moffitt and Caspi (2005) found that adolescents with lower self-esteem are more likely to be involved in anti-social behaviour, suffer from eating disorders, depression and suicidal ideation. These studies demonstrate the impact of self-esteem has a significant importance on the outcomes of other domains in the child's life (Erol & Orth, 2011). Branden (1995) and Wiggins and Wiggins (1992) observed that children with high self-esteem tend to have favourable views of themselves, are successful in academia and demonstrate higher levels of responsibility. In contrast, children with low self-esteem view themselves more negatively and have poorer self-control (Larkin & Thyer, 1999). Therefore, a focal point of the current study was to explore the relationship between self-esteem and social support.

Research has shown that test anxiety is an important factor at primary, secondary and tertiary education. Specifically, Skybo and Buck (2007) identified both 'bad grades' and 'tests' as notable stressors for adolescents. During these school years, students undertake many tests and these results play an important role in making decisions about educational programs, curriculum knowledge and grade (Carter et al., 2005). Furthermore, it is a method of measuring students' learning progress (Salend, 2009). For such reasons, many students experience test anxiety (Salend, 2011), leading to high levels of stress and nervousness, subsequently impacting on performance, emotional wellbeing and general attitude in the school environment (Cizek & Burg, 2006). Bodas, Ollendick and Sovani (2008) suggest that 10% to 40% of children experience test anxiety with Cassady (2010) reporting test anxiety in the region of 25% to 40%. According to Akanbi (2013) some degree of anxiety is required to succeed academically, but as anxiety levels increase, it becomes disruptive and weakens academic

performance (Akanbi, 2013). As test anxiety is related to stress among adolescents, the current study explored the role of ISPCC support on reported levels of self-esteem.

In 2005, the Citizen Child Strategy (CCS) of the ISPCC recommended that the effect of its work should be evaluated (see Merriman, Robins, Canavan & Dolan, 2008). The present research study sets out to contribute towards the role of such support, in this case, with regard to the associated variables of stress, self-esteem and test anxiety. The hypotheses state that service users reporting a stressful life event in the last six months (hereafter referred to as the SU group) will indicate lower levels of stress and test anxiety compared to non-service users who reported a stressful life event in the last six months (hereafter referred to as NSUS) It is further hypothesised that the SU group will report higher levels of self-esteem compared to the NSUS group.

METHOD

Participants:

A non-probability sample of one hundred and eighty eight children, 99 females and 89 males, were recruited from two secondary schools in the greater Dublin area. The age range of students was between 13 to 18 years of age ($M = 14.03$). No compensation was offered for participation. Three groups were categorised for comparison, Service users (SU), Non service users who reported a stressful life event in the last 6 months (NSUS) and Non service users who did not report a stressful life event in the past 6 months (NSU). Fifty two respondents were identified as service-users (SU), 84 respondents were recorded as members of the NSUS group, with fifty two in the NSU group. The SU groups were students who used ISPCC services (e.g. ChildLine) within the last six months and also reported having experienced a stressful life event during that time. The NSUS group included those students who reported a stressful life event in the past six months but did not contact use the ISPCC services and the NSU group were students who didn't report a stressful life event in the past six months and who subsequently did not use the ISPCC support services.

Design:

A cross-sectional survey design was used, retrospective in nature. The independent variable was the user group 'Service users' (SU), 'Non service users with stress' (NSUS) and 'Non service users without stress' (NSU). The dependent variables were perceived stress, test anxiety and self-esteem scores.

Materials and Procedure:

A battery of questionnaires were distributed to students, including the 'Perceived Stress Scale' (PSS -10 Item, Cohen, Kamarck & Mermelstein, 1983), the 'Rosenberg's Self-esteem Scale' (10 Item, Rosenberg, 1965) and the 'Test Anxiety Questionnaire' (10 Item, Nist & Diehl, 1990).

The Perceived Stress scale is a 10-item self-report measure scored on a five point Likert scale. Such questions which appear on the scale include “In the last month, how often have you felt nervous and “stressed”?” The Perceived Stress Scale consists of a recoding system and to obtain the scores, four positive items from the scale have to be reversed. Cohen and Williamson (1988) reported a Cronbach's Alpha score of .78, indicating an acceptable internal consistency. In the current study, internal consistency values were also acceptable ($\alpha = .75$).

The Rosenberg's self-esteem scale (1965) is a widely used measure of self-esteem in adolescents. It is a 10-item self-report measure. The measure includes questions such as “I feel that I'm a person of worth, at least on an equal plane with others”. Similar to the Perceived Stress Scale, the scores of the Rosenberg's self-esteem scale also need to be recoded. Rosenberg (1965) and Blascovich and Tomaka (1991) have reported corresponding alpha values ranging between .77- .88. High internal reliability was found for this scale in the current study ($\alpha = .84$)

The Test Anxiety Questionnaire was developed by Nist & Diehl (1990). It is a self-report 10-item measure using a five-point Likert scale. It contains questions such as “I feel nauseated before a test”. A reported Cronbach's alpha value of .9 (Ogundokun, 2011) indicated good internal reliability for the measure. High levels of reliability were also found for the scale in the current study ($\alpha = .86$)

Parental consents and the children's verbal consents were gained before conducting the study. Questionnaires were administered by their teachers in a control classroom setting. The average time of completion was 10 to 15 minutes. No monetary incentives were given for participation. Once the questionnaires were completed, the participants were fully debriefed and thanked for their participation.

RESULTS

Descriptive statistics and a one-way MANCOVA were conducted to compare students in the SU, NSUS and NSU groups on Perceived stress, Test anxiety and Self-esteem. A standard alpha level of $p < .05$ was applied and post hoc comparisons were conducted with the Tukey HSD test method. Complete data was obtained for ‘Self-esteem’ and ‘Test anxiety’ variables. Five students from the sample did not complete all items on the ‘Perceived stress’ scale, and this resulted in slightly lower df values for the latter. In order to analyse the data through the one-way MANCOVA, self-esteem scores were reversed. In subsequent analysis higher self-esteem scores indicated lower levels of self-esteem among respondents.

Descriptives and Sex differences

Fifty three respondents (Male = 20, Female = 33) were part of the SU group, reporting that they used ISPC services, and who also reported a stressful life event within six months prior to the study. Eighty two respondents (Male = 44, Female = 38) were categorized in the NSUS group, reporting no previous use of ISPC services, but who did report a stressful life event in the past six months. Fifty one respondents (Male = 24,

Female = 27) had not used the services, nor reported a stressful life event in the six months prior.

With males, there were differences in the average age of the three groups; with the lowest being the males who used the ISPC support services ($M = 14.11$, $SD = 1.6$). This is compared to 14.74 years ($SD = 2.06$) with regard males who didn't use the services but did report a stressful life event in the past six months, and 15.54 ($SD = 2$) years for males who did not report a stressful event and did not therefore use the service. These differences were found to approach significance ($F(2, 83) = 2.95$, $p = .058$). From these results, a trend can be seen with males who used the services tending to be younger on average than males from the other two groups. Interestingly, a different trend was observed for females, with females who reported a stressful event and used the ISPC services having the highest average age of the three groups ($M = 13.61$, $SD = 1.14$). Females who reported a stressful event but did not use the services had a mean age of 13.16 years ($SD = .75$), and females who reported no stressful event and therefore did not use the services had an average age of 13.08 years ($SD = .85$).

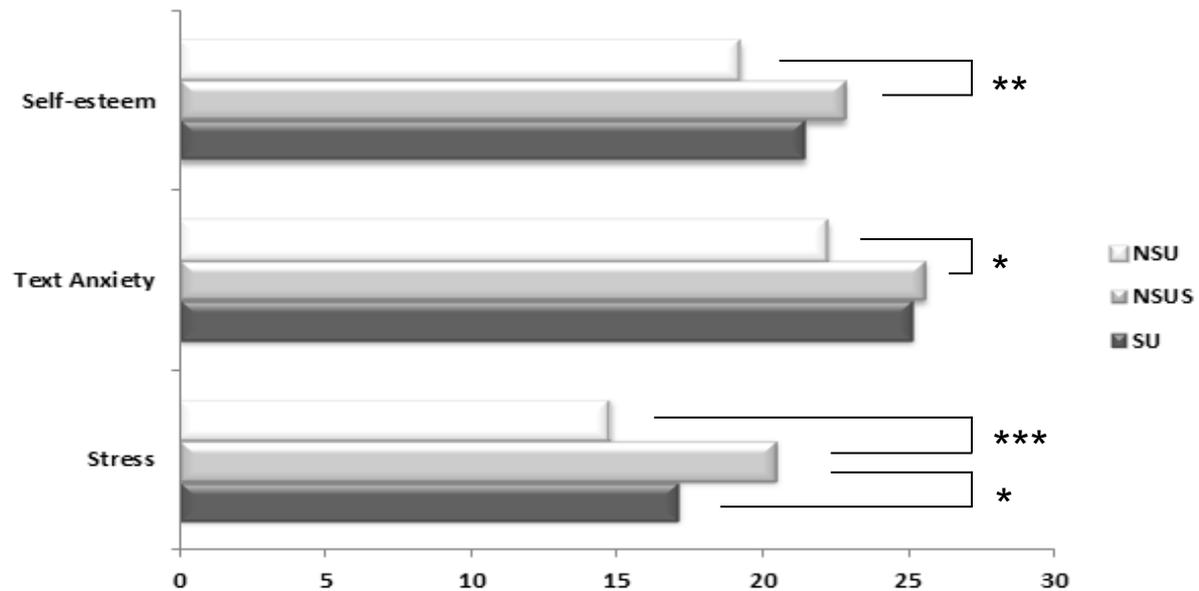
Females ($M = 27.88$, $SD = 7.06$) had notably higher levels of perceived stress than males ($M = 16.84$, $SD = 6.59$) and females ($M = 25.93$, $SD = 8.52$) were also found to have higher levels of test anxiety than males ($M = 16.84$, $SD = 8.33$). For self-esteem, females scored higher on the self-esteem scale ($M = 22.12$, $SD = 6.27$) than Males ($M = 20.77$, $SD = 4.7$), thus indicating lower levels of self-esteem on average. However, it is important to note however that the average age of male respondents in the study were higher than for females, with the average age of 14.85 years for males and 13.28 years for females. This may account for the sex differences across both variables. For this reason, subsequent analysis controlled for age as a covariate in the model, and gender was explored in terms of main effect.

Analysis of Variance

A Pearson's correlation was conducted to determine the relationship between the three dependent variables 'Stress', 'Self-esteem' and 'Text Anxiety'. All three variables were found to significantly correlate, and were therefore treated as a combined DV in a two (sex) by three (group) multivariate analysis of covariance. The covariate of 'Age' was found not to adjust the outcome of the analysis ($p = .785$). The MANCOVA revealed a statistically significant main effect of Group ($F(6, 276) = 3.2$, $p = .005$, partial $\eta^2 = .07$), but there was no main effect of Gender ($F(3, 137) = 1.65$, $p = .181$) and no significant interaction ($F(6, 276) = .66$, $p = .685$).

Between-subjects effects were interpreted for the main effect of Group. Statistically significant differences were found for each of the three individual DVs of Stress ($F(2, 139) = 9.72$, $p < .001$, partial $\eta^2 = .123$), Text Anxiety ($F(2, 139) = 3.17$, $p = .045$, partial $\eta^2 = .04$) and Self-esteem ($F(2, 139) = 4.78$, $p < .01$, partial $\eta^2 = .06$). For Stress, post hoc analysis using the Tukey HSD method indicated that the differences were significant between the NSUS group ($M = 20.38$, $SD = 7.34$) with the SU group ($M = 17.39$, $SD = 6.06$) and between the NSUS and NSU groups ($M = 14.9$, $SD = 5.01$). With regard to Test anxiety, differences were significant between the NSUS group ($M = 25.67$, $SD = 8.46$) and the NSU group ($M = 21.76$, $SD = 7.61$). Differences for Self-esteem were also found

between the NSUS group (M = 23.02, SD = 6.02) and the NSU group (M = 19.55, SD = 4.31), thus indicating lower average self-esteem among the NSUS group compared to the NSU group. Figure one below illustrates the mean scores for each of the three individual DVs across each the three groups.



* p is significant at .05
 ** p is significant at .01
 *** p is significant at .001

Figure 1. An illustration of NSU, NSUS and SU group differences across each of the three dependent variables of Self-esteem, Test anxiety and Stress. Note that for the purpose of running the MANCOVA, the self-esteem variable was reversed, so higher scores indicated lower levels of self-esteem. Higher scores on Test anxiety and Stress indicated higher levels respectively on both those variables.

DISCUSSION

The aim of the current study was to explore the role of ISPCC support services with adolescent children regarding stress, test anxiety and self-esteem. The study was conducted to extend the currently limited literature discussing such external social supports with children (e.g., Fukkink & Hermanns, 2009). Due to factors such as sibling fights and missing family members (Skybo & Buck, 2007), children may not feel comfortable talking to someone within their immediate social network. Indeed, the CCS of the ISPCC in 2005 suggested that future research should look into the effectiveness of these services (see Merriman et al., 2008). While this current study is still exploratory, and cannot fully confirm effectiveness of these services, data suggests a possible role for these supports in reducing stress among adolescent users.

Controlling for age related differences, respondents who reported a stressful life event within the six months prior and who used the ISPC services (SU group) reported lower levels of stress than respondents who reported a stressful event but didn't use such services (NSUS group). Encouragement can be taken from this as such reduction in perceived stress may have positive effects on mental health. As previously discussed, theorists such as Compas (1987), Compas et al., (2001) and Fridrici and Lohaus (2009) have reported links between stress and poor mental health.

While tentative, the general trend from the analysis was that the social support services offered by the ISPC may be a factor in reducing stress levels among service users. This is in line with reports by Butler et al., (2010) and Emmison and Danby (2007) about the role of phone support networks. Previous research investigating such services is limited and therefore the current study offers an initial exploratory view of social support. Doyle et al., (2010) evaluated children's helplines as a source of support but did not investigate the specific outcomes of social support usage. Similarly research by Emmison and Danby was focused on the specific call, not the outcomes. However, Butler et al. did indicate that client-centered practice in child helpline services is very valuable as a counseling practice and as a form of empowering children. This study, while pertinent to the current findings, does not explicitly consider issues such as stress and self-esteem which have been found as important predictors of child well-being. Neither did it explore the possible role of social support networks such as Childline in offering important aid to those young children in our society who require help. In this time of financial uncertainty within the ISPC, it is hoped that such research offers some tentative support for these services.

The current study employed a cross sectional design in order to explore the role of support services and therefore interpretation of the effectiveness of such services cannot be fully accounted for in this paper. It is a possibility that students who availed of the support services were distinct from those who did not to begin with. This could be a result of factors such as differences in coping repertoires, levels of autonomy or indeed familial support. Such causal inferences were beyond the scope of the current study, and therefore results must be treated as tentative. Furthermore, to control for possible stress when completing the battery of measures, the current study focused on relatively brief quantitative measures, and did not include a qualitative component. For this particular subject, a mixed method approach may have been better suited. As the current study is relatively novel and quite exploratory, a qualitative component would add a richness to the findings not accounted for here. Another factor includes the delay between the last exam taken and the administration of the questionnaire. The data was collected in the middle of February and the most recent exam was the previous December. If the questionnaire was administered to the children right after the exam, this could have had a different impact on the results, specifically with regard to test anxiety.

Future research is required to evaluate outcomes of other support services and their impact on child mental health. Employment of longitudinal designs may offer a more holistic view of the profiles of students which use these services. Furthermore, different psychological variables could be incorporated, including bully/victim incidence rates, general coping repertoire and autonomy. As previously discussed, a qualitative

methodology could be used. Moreover, using such methodology could benefit understanding of the effectiveness of other one-to-one services such as 'Leanbh' and 'Teen Mentoring'. Measuring the magnitude of the stressful event is one issue that needs to be addressed in subsequent research. While the current study explored differences between groups on the basis of service use and stressful recent life events, it did not consider the magnitude of the event itself. It may be a possibility that the life events reported by service users were of a greater level of severity than those who reported a stressful event but did not avail of social supports.

In conclusion, this study has provided an exploratory snapshot of ISPCC services and their relationship to stress, test anxiety and self-esteem levels among adolescent children. The findings suggest that, while tentative due to the cross-sectional nature of the study, ISPCC services may help those children who are subject to stressful events. The current study aims to inform future research and practice in the area of child support and begin exploration of the effectiveness of such social support organisations.

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