

**THE ROLE OF PARENTAL EMPLOYMENT STATUS IN THE RELATIONSHIP
BETWEEN TRAUMATIC EXPOSURE AND SUICIDE-RISK AMONG
ADOLESCENTS**

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Declaration

I, Phindile Ellina Mbhele, declare that this thesis submitted by me for the Master of Science in Clinical Psychology degree in the Faculty of Humanities at the University of the Free State is my own, independent work and has not previously been submitted by me at another university/faculty. I furthermore cede copyright of this thesis in favour of the University of the Free State.

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Date

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Abstract

Worldwide, the number of adolescents who view suicide as the only solution to escape stressful life events is continuing to rise. It has been shown that parental employment status is a protective factor against suicide risk by providing emotional and physical resources support in such stressful environments. The aim of this study was to investigate the relationship between parental employment status, traumatic life exposure, and suicide risk in adolescents. A non-experimental, cross-sectional, and correlational design within the framework of quantitative study was employed. A group of 985 Grade 10 learners from 10 schools in the Free State Province were selected as participants by means of the non-probability random sampling method. A self-compiled biographical questionnaire, the Suicide Ideation Questionnaire for Adolescents, and the Stressful Life Events Questionnaire were used to gather information from the participants. A hierarchical multiple regression analysis was conducted to explore whether parental employment status has a moderating or mediating effect in the relationship between stressful life exposure and suicide risk. Results indicate a greater proportion of participants fall within the medium to high suicide-risk groups. Furthermore, the relationship between stressful life exposure and suicide risk was positive at the 1% level of significance ($r = 0.179$; $p = 0.000$), while parental employment status showed no moderating effect in the relationship between stressful life exposure and suicide risk. It is recommended that future studies explore how differences in parental employment may affect the above-mentioned variable, as career choices may create different contexts for support and development of adolescents.

Keywords: Suicide risk, stressful life, traumatic exposure, adolescents, parental employment status

Opsomming

Wêreldwyd is die getal adolessente wat selfmoord as die enigste oplossing beskou om aan stresvolle lewensgebeure te ontkom, aan die toeneem. Die indienseemingstatus van 'n ouer is aangetoon as 'n beskermingsfaktor teen selfmoordrisiko deur die voorsiening van emosionele en fisiese hulpbronne wat benodig word om omgewingstressors te hanteer. Die doel van hierdie studie was om die verwantskap tussen indienseemingstatus van ouers, traumatiese lewensblootstelling en selfmoordrisiko by adolessente te ondersoek. 'n Nie-eksperimentele, dwarsnit- en korrelasionele ontwerp binne die raamwerk van kwantitatiewe studie is toegepas. 'n Groep van 985 graad 10-leerders van 10 skole in die Vrystaat Provinsie is deur middel van die nie-waarskynlikheid-, ewekansige steekproefmetode geselekteer. 'n Biografiese vraelys, die “Suicide Ideation Questionnaire for Adolescents” en die “Stressful Life Events Questionnaire” is gebruik om inligting van die deelnemers in te samel. 'n Hiërargiese meervoudige regressie-analise is uitgevoer om te ondersoek of ouer-indienseemingstatus 'n modererende of mediërende effek in die verwantskap tussen stresvolle lewensblootstelling en selfmoordrisiko het. Resultate dui daarop dat 'n groter gedeelte van die deelnemers in die medium tot hoë selfmoordrisiko-groepe val. Verder was die verwantskap tussen stresvolle lewensblootstelling en selfmoordrisiko positief op die 1%-vlak van beduidendheid ($r = 0.179$; $p = 0.000$), terwyl ouer-indienseemingstatus geen modererende effek in die verwantskap tussen stresvolle lewensblootstelling en selfmoordrisiko getoon het nie. Dit word aanbeveel dat verdere studies ondersoek hoe verskille in ouer-indienseeming die bogenoemde veranderlike mag affekteer, omdat loopbaankeuses verskillende kontekste vir die ondersteuning en ontwikkeling van adolessente mag skep.

Slutelwoorde: Selfmoordrisiko, stresvolle lewe, traumatiese blootstelling, adolessente, ouer-indienseemingstatus

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Introduction and Literature Review

Adolescent suicide is a major public health problem (National Youth Development Agency, 2010; Schlebusch, 2005). For decades, it has been found that suicide is the leading global cause of death among young people between the ages of 15 and 24 years of age (George, 2005; Kerr, Owen, & Capaldi, 2008; Paulson & Overall, 2001; Rutter, 2004; Tomasula, Anderson, Littleton, & Riley-Tillman, 2012; Wolmarans, 2010; Yip & Chiu, 1998). The nationwide survey conducted in the United States by the Center for Disease Control and Prevention (2013) among grade 9–12 learners found that about 4600 young people lose their lives to suicide each year.

In South Africa, several studies documented a continuing increase in the prevalence of adolescent suicide (National Injury Mortality Surveillance System [NIMSS], 2007; Reddy et al., 2010; Schlebusch, 2005). South African statistics estimate that 11.5% of all teenage deaths are due to suicide (Stark et al., 2010). The South African Depression and Anxiety Group (SADAG) (2013) reported a daily rate of 230 attempts and 23 completed suicides. Therefore, suicide rates have shown an alarming increase with 20 suicide attempts for every completed suicide (Schlebusch, 2005). Evidence from various researchers (Blum, Sudhinaraset, & Emerson, 2012; George, 2009; Hanssens, 2012; Kaminer, du Plessis, Benjamin, & Hardy, 2013; Kernier, 2012; Loots, 2008; Moolman, 2013; Tomasula, Anderson, Littleton, & Riley-Tillman, 2012; Wolmarans, 2010) note that an increase in suicidal behaviour is also attributed to the fact that adolescence is a highly vulnerable phase of development .

Suicide risk is viewed as a probability that a person will attempt suicide, repeat, continue or increase suicidal behaviour and need careful monitoring to ensure well-being (George, 2009; Pienaar & Rothmann, 2005; Schlebusch, 2005). According to the World Health Organization (2010), suicide is a deliberate attack on oneself with the expectation of a fatal outcome, while suicide ideation is defined as cognitive processes in which a person imagines killing himself/herself without actively putting it into action (Palmer, 2008). Attempted suicide refers to intentionally inflicting injury to oneself with the intent to die but which does not result in death (Schlebusch, 2005).

Many young people engage in suicidal behaviour as a response to traumatic events in the family environment (Mhlongo & Peltzer, 1999). A family is a system within other systems (e.g. community, religion, the nation); yet, it is composed of individual subsystems (parental,

marital, and siblings) within which various relationships exist interactively (Bronfenbrenner, 1994; Bronfenbrenner & Morris, 2006). Change in one of these interactive subsystems affects the functioning of the subsystems (Johnson, 2008). For example, change in employment status may cause a decline in the well-being of the individual and the family (Sleskova, Salonna, Geckova, Nagyova, Stewart, Van Dijk, & Groothoff, 2006). Unemployment causes adverse emotional reactions in parents, such as anger and frustration, feelings of unhappiness, depression, hopelessness, and worthlessness, and has been associated with increased tendencies towards suicidal behaviour (Mpiana, Marincowitz, Ragavan, & Malete, 2004).

In addition to stressors such as parental unemployment, adolescents are frequently exposed to various traumatic situations such as living in unsafe neighbourhoods, physical and sexual assault, crime, domestic violence, etc. (Hunt, Martens, & Belcher, 2011; Nduna & Jewkes, 2012). These experiences may influence the well-being of individuals negatively and further reduce their capacity to cope (American Psychiatric Association, 2013; Kaplan, Sadock, & Grebb, 1994). Consequently, adolescents who are exposed to trauma may be more distressed and present with depressive symptoms and post-traumatic stress symptoms, which increase the risk of suicide (Hanssens, 2012).

A review of prevailing literature on EbscoHost and Google Scholar, December, 04, 2014, reveals a surprising lack of research information that explicitly explores the role of parental employment status in clarifying the relationship between traumatic life exposure and suicide risk among adolescents in South Africa, pointing out a need for research in this area. In this study, the role of parental employment status in explaining a relationship between traumatic exposure and suicide risk among adolescents is discussed.

Adolescence

Adolescence is a transitional period that begins with puberty at about the age of 12 or 13 and ends when an individual is ready to assume adult responsibilities between 18 and 25 years of age (Erikson, 1968; Louw & Louw, 2007). The goal of this period is to achieve physiological, emotional, and psychological maturity successfully (Whitmire, 2000). Therefore, this transition from childhood to adulthood is important to achieving one's own identity (Kroger, 2003; Louw, Louw, & Ferns, 2007).

Since this is a life stage of exploration, discovering, and experimenting, the economic hardship of families may cause adolescents to be overly anxious about their future (Conger &

Dogan, 2007; McLoyd, 1990). They may be concerned about their ability to have access to effective educational institutions, to have equal opportunities in exploring different careers, and to engage with suitable peers and romantic partners (Griggs & Walker, 2008). Furthermore, being exposed to social challenges such as poverty, family dysfunction, and high educational/academic expectations may compromise their ability to master developmental tasks successfully (Beekrum, Valjee, & Collings, 2011; Kruger, 2010; Loots, 2008; Nts'ekhe, 2008). Failure to achieve an integrated identity successfully may increase the possibility of engaging in risky behaviour, which increases the risk of suicide (King, 1997; Elkind, 1998).

Exposure to environmental stressors may be traumatic for some adolescents and can cause extreme emotional distress that predisposes them to experiencing depressive symptoms (Nduna & Jewkes, 2012; Nduna, Jewkes, Dunkle, Shai, & Colman, 2010; Wingo, Negar-Fani, Bradley, & Ressler, 2010). Therefore, they may experience a sense of helplessness and hopelessness, which increases their risk of indulging in alcohol abuse, risky sexual behaviour, sexual violence, HIV, and suicidal behaviour (Nduna et al., 2010). Thus, adolescence is a period with a high potential for suicide risk (George, 2009; Pienaar & Rothmann, 2005; Schlebusch, 2005).

Employment Status

South Africa has undergone major political, social, and economic changes following its democratization after the “Apartheid” dispensation in 1994 (Beekrum et al., 2011; Holtman, Shelmerdine, London, & Flisher, 2011; Schlebusch, Vawda, & Bosch, 2003). However, to some extent, two decades into our democratic dispensation social changes are being redefined by high crime rate, unequal access to health care, high rates of HIV/AIDS infections, and a high rate of unemployment (Statistics South Africa, 2013, SA Federation for Mental Health [SAFMH], 2012-2013).

According to the Quarterly Labour Force Survey of January to March 2013, the highest employment rate of the population group between the ages of 15 and 64 years of age was observed to be 44.7% before the recession in 2008 (Statistics South Africa, 2013). The unemployment rate in South Africa has increased to 25.50% in the second quarter of 2014, from 25.20% in the first quarter of 2014 (Statistics South Africa, 2014). According to SAFMH (2013), findings between 2002 and 2010 show that 32.8% of young people between the ages

of 15 and 24 were living in households where they were exposed to poverty because of parental unemployment.

There is evidence that adolescents' coping abilities are affected by parental employment status (Beekrum, Valjee, & Collings, 2011; Schlebusch, 2005). Parents serve as a major link between environmental settings and adolescent's functioning and well-being (Amoateng, & Kalule-Sabiti, 2013). Thus, employment status of a parent may either have a negative influence on an adolescent's well-being (Montemayor & Clayton, 2001; Nyanjaya & Masango, 2012) or alternatively serve as a protective factor in buffering against negative health outcomes such as depression or suicide (Beekrum et al., 2011; Nduna & Jewkes, 2012).

In conceptualising parental employment status, Rushing (1968) defines unemployment as an economic indicator that refers to the number or proportion of people in an economy who are willing and able to work, but are unable to get jobs. Research (Kalichman, Simbayi, & Jooste, 2006; Kerr et al., 2008; Wadsworth, & Achenbach, 2005) has shown that unemployed workers are twice as likely to experience psychological problems (depression, anxiety, psychosomatic symptoms, low-subjective well-being, and poor self-esteem) than employed workers are. Being unemployed contributes to a sense of failure, boredom, and feelings of rejection because the individual is unable to meet his or her financial and family commitments (Belle & Bullock, 2011).

McLoyd (1990) states that, when parents are employed, they adopt a parenting style that is more supportive and authoritative and permits the development of autonomy, motivation and better future aspirations among adolescents. In contrast, unemployed parents may increase the probability of a traumatic childhood due to exposure to family dynamics, marital conflict, and depression of parents due to financial stress (Conger & Dogan, 2007; McLoyd, 1990). Therefore, some parents tend to adopt an authoritarian parenting style that is restrictive, punitive, and inconsistent to the point of being abusive and neglectful (Baumrind, 1991, Turner, Chandler, & Heffer, 2009; Taylor et al., 2000; Seccombe, 2000). This may contribute to negative health outcomes such as low self-esteem (Xing et al., 2010). In depressed adolescents, low self-esteem increases the risk of suicide (Xing et al., 2010). Furthermore, Xing et al. (2010) found that adolescents who attempted suicide tended to perceive their parents as using inadequate parenting practices characterised by control, withdrawing love as a form of punishment, caring less and emotional distancing.

Social support is related to healthier adolescent functioning (Rutter, 2004). The family environment is the most important domain for adolescents, as it contributes to the healthy development of self-esteem, effective problem solving, and socio-emotional competence (Pfeffer, Plutchik, Mizruchi, & Lipkins, 1986). Findings by Bacikova-Sleskova, Geckova, Van Dijk, Groothoff, and Rijnveld (2011) reveal that, during economic hardship, parental support is low and may lead to increased emotional distress for adolescents. It has been found that employed parents are more engaging and emotionally supportive, while parental neglect increases adolescents' predisposition to risky behaviour (Bacikova-Sleskova et al., 2011; Beekrum et al., 2011; Nduna et al., 2010; Sleskova et al., 2006). Furthermore, the context of parental employment allows for the provision of resources such as a household structure; stability; adequate supervision, parental involvement, and parental monitoring that serve as protective factors against adolescent suicide (Holtman et al., 2011; Wadsworth & Achenbach, 2005; Schlegel et al., 2003).

In addition, financial security due to fixed employment contributes to an improved standard of living that enables parents to relocate to better neighbourhoods where children may have access to physiological and psychological resources (Wadsworth & Achenbach, 2005). Several studies confirm that family provides a safe refuge for children, specifically with regard to social support, emotional support and stability that are needed for healthy development and protect against the risk of suicide (George & Van den Berg, 2012; Hicks, Vaidyanathan, & Patrick, 2010). In addition, employment of a parent provides the adolescent with a sense of hopefulness as they find reasons for living when faced with life stressors (McLean, Maxwell, Platt, Harris, & Jepson, 2008).

On the other hand, some authors (Han, Miller, & Waldfogel, 2010; Montemayor & Clayton, 2001; Nyanjaya & Masango, 2012) found that employment of a parent may sometimes have a negative effect on adolescents' well-being. A study that examined the effects of parental work schedules on risky behaviour of adolescents at the age of 13 or 14 and the mechanisms that might explain them (Han et al., 2010) found that mothers who work more often at night spend significantly less time with their children and have lower-quality home environments. These mediators were significantly linked to risky behaviour of adolescents (Han et al., 2010). In another study, Nyanjaya and Masango (2012) (see: the plight of absent fathers caused by migrant work-its traumatic effect on male adolescent children in Zimbabwe) established that migration of fathers for employment may result in the lack of sufficient male role models, some

male children may feel emotionally abandoned and betrayed, thereby robbing them of developing coherent male identity.

Traumatic Exposure

South Africa is known for not only its high prevalence of unemployment but also its high levels of crime and interpersonal violence. Research reports a lifetime prevalence of traumatic experiences of more than 80% (Atwoli et al., 2013; Makhubela, 2012). Trauma is defined as direct or indirect inescapable experiences of stressful life events that threaten an individual's physical or psychological well-being (American Psychiatric Association, 2013; Kaplan et al., 1994). More specifically, Krenke (2004) demarcates trauma exposure as someone being exposed to either direct or indirect experiences that are life threatening. A study investigating the effects of trauma exposure among Mexican adolescents (Borges et al., 2008) and a study by Kaminer et al. (2013) report trauma exposure as a significant influence in increasing suicide risk.

Donson et al. (2008) and Kalichman et al. (2006) found that the experience of trauma is intensified when parents are unemployed because it contributes to increased tension, arguments, violence, and disengagement in the family system. Adolescents can be exposed to domestic violence in which they can either witness violence toward their loved ones or become victims themselves (Makhubela, 2012). Various researchers (Loots, 2008; Read, Ouimette, White, Colder, & Farrow, 2011) conclude that children who live in fear of triggering violence in their family present with poor problem-solving skills, uncertainty, loneliness, and sadness and do not develop normal abilities to express themselves. Consequently, they become estranged from their parents because the relationship is characterised by conflict, emotional isolation, and fear of provoking a violent response from them (Holtman et al., 2011). Further, they do not seek help and tend to use drugs and alcohol to mask anger and frustration (Shilubane et al., 2012). Often, these adolescents experience feelings of extreme inadequacy, hopelessness, and shame that exacerbate depressive symptoms and increase the risk of suicidal behaviour (Mpiana et al., 2004; Reddy et al., 2010; Visser & Moleko, 2012).

Some adolescents are traumatised due to changes in family structures. South African researchers Nduna and Jewkes (2012) report that, owing to parental unemployment, it is common for children to relocate and live with maternal relatives who often take over parental duties of material support. That contributes to a lack of emotional support, ill-treatment,

physical abuse, and incest sexual abuse (Nduna & Jewkes, 2012; Nduna et al., 2010). These experiences are traumatic and may contribute to suicidal behaviour. Furthermore, relocation may have a negative effect on an adolescent who has to form new friendships, endure the disappointment of being in a lower-class school and learn to live on limited resources (Craig & Dunn, 2010; Nduna & Jewkes, 2012). Therefore, a lack of supportive networks may contribute to the development of depressive symptoms, including an increased risk for suicide (Rutter, 2004).

Living in South Africa, adolescents are likely to be affected by high rates of crime and violence (Flannery, Singer, Van Dulmen, Kretschmar, & Belliston, 2007; Kaminer et al., 2013). Involvement in gang-related activities, negative peer influence, limited access to mental health care, witnessing someone being either beaten, harassed or killed, being a victim or forced to participate in school-related violence are quite likely to occur (Craig & Dunn, 2010; Kaminer et al., 2013; Sigelman & Rider, 2012; Wadsworth & Achenbach, 2005). Such exposures predispose adolescents to develop behavioural problems and have a negative effect on their psychological well-being (Wadsworth & Achenbach, 2005).

From the literature, one can deduce that adolescents who are exposed to various forms of stressors may show an increased risk for suicidal behaviour. However, a few South African studies (Du Plessis, 2012; George, 2009; Kruger, 2010; Schlebusch, 2005; Tancred, 2010) have explored this relationship. Yet, there is less research that has focused on how parental employment status affects the risk of adolescent suicide. In the light of the limited South African research related to this theme, this study aims to contribute to the existing knowledge on adolescent suicide.

The aim of the present study is to investigate the relationship between parental employment status, traumatic life exposure, and suicide risk. The research objectives are as follows:

To determine the incidence of suicide risk among adolescents in the Free State Province;

To investigate if there is a difference in the level of suicide risk and trauma exposure when compared to employment status;

To establish if a significant relationship exists between traumatic life exposure and suicide risk for adolescents in the Free State Province; and

If such a relationship does exist, to investigate the role parental employment status plays in the relationship between traumatic life exposure and suicide risk.

Research Methodology

Research design

To realise the objectives of the study, a quantitative, non-experimental design was employed (Maree & Pieterse, 2007). To investigate the second research objective, a criterion group design, which allows group differences to be identified, was used. To reach the remaining objectives, a correlational design method was utilised. Correlational research states the relationships between one or more independent and dependent variables (Johnson & Christensen, 2012). The benefit of this design is that it yields the quantitative data that enable the researcher to determine the statistical relationships between the different variables being studied. The criterion variable is *suicidal ideation*, while *traumatic life exposure* is a predictor variable. *Parental employment status* is viewed as the moderating variable (Bless & Higson-Smith, 1995).

Data gathering and sampling

This study utilised an existing data set collected by the Department of Psychology as part of a broader study on adolescent risk and resilience in the Free State Province during 2012. A group of 985 Grade 10 learners were selected by means of random sampling (Maree & Pieterse, 2007). The participants were selected from urban and rural areas and were distributed across race, gender, and socio-economic groups. Data were collected by using standardised questionnaires, which were administered during school time at the respective schools. Questionnaires were bound in booklet form and were completed by participants in smaller groups of 20 to 30 participants under the supervision of registered psychologists and registered counsellors. Testing time was approximately three to four hours with a 30-minute break given halfway through testing. The method of back translation was used to translate all the tests from English into Afrikaans and Sesotho (Brislin, 1986; Foxcroft & Roodt, 2005).

The defining characteristics of the participants were as follows: The mean age of the group was 16.3. With regard to gender, males accounted for 57.6%, and females for 41.7% of the total participant group. Seven participants did not report their gender. Relating to race

distribution, the majority of participants were black (71.1%), and the remaining proportion was white (17.1%), coloured (8.6%) and Asian (2.4 %). The language of first choice for participants included Sesotho (44.1%) and Afrikaans (23.6%), which indicate the languages spoken by the majority of the population in the Free State (Statistics South Africa, 2012), Setswana (13.1%), IsiXhosa (10.2%), English (4.6%), IsiZulu (3.1%), and IsiPedi (0.3%). With regard to employment status, 68.8% of the participants' parents were employed, while 17% were not.

Ethical considerations

The study was submitted to and accepted by the Committee of Title Registrations (CTR), Faculty of Humanities of the University of the Free State. Permission was also obtained from the Department of Education in the Free State and from the principals of the participating schools. According to Allan (2011), research participants have the right to autonomy and to choose wherever they want to participate in research or not. Therefore, prior to commencement of the study, informed consent was obtained from the participants and their parents. The purpose of the study was explained to participants and their parents. In addition, field workers were available to debrief participants if necessary. The participants' right to privacy and confidentiality was secured by protecting the participant's identities at all times (Health Professions Council of South Africa [HPCSA], 2004). No identifying details were made public or disclosed in the research results.

Measuring instruments

The following measuring instruments were used:

A self-compiled biographical questionnaire was used to obtain specific information pertaining to the demographic nature of the participants. This self-compiled questionnaire was based on the information extracted from previous research on the South African youth risk behaviour survey (Reddy et al., 2002). One question of particular importance to this study (Question 10) related to participant's parental employment status. Employment status was determined by the employment of one or both of the participants' parents. Employed status implied being employed in the formal or informal sector as opposed to being unemployed. However, no question on the period of unemployment was included in the questionnaire.

The Suicide Ideation Questionnaire for Adolescents (SIQ-A) (Reynolds, 1988), measures the frequency and intensity of suicidal thoughts. The instrument consists of 30 items that are measured along a seven-point Likert scale, and the total score ranges from 0 to 180 (Du Plessis, 2012; Reynolds, 1988). In line with the recommendation of Reynolds (1988), a SIQ total score of greater than 31 is considered high. Pienaar and Rothmann (2005) adapted the instrument as a predictor for suicide risk by introducing the criteria of low risk (0-16), moderate to higher risk (17-31), and high risk (32 and above) as a means of categorising suicide risk. For the purpose of this study, the total score will be utilised as representative of suicide risk. This original measuring instrument was found to be reliable with Cronbach's alpha coefficients ranging from 0.93 to 0.97 (Reynolds, 1988). In a South African study by George (2005), an alpha coefficient of 0.97 was obtained.

A shortened version of the Stressful Life Events Questionnaire (SLEQ) (Goodman, Corcoran, Turner, Yaun, & Green, 1998) identifies the type and frequency of stressful/traumatic life events to which one has been exposed. The questionnaire includes 12 identified traumatic life themes to which participants may have been exposed either directly or indirectly. The questionnaire consists of a nominal scale to which participants must answer 'yes' or 'no'. All 'yes' responses are explored further in terms of the context of the traumatic event. As a clinical screening measure, Goodman et al. (1998) found a gamma alpha coefficient of 0.76 for men and 0.85 for woman with posttraumatic stress disorder. One should take cognisance that the terms 'stressful life event' and 'traumatic exposure' are used interchangeably in this study.

Statistical Analysis

Descriptive statistics were calculated for all the scales and subscales. The Statistical Product and Service Solutions (SPSS) program was used to analyse the data (SPSS incorporated, 2011). The chi-square test for independent groups was used to determine the difference in suicide risk between adolescents whose parents were employed and adolescents whose parents were unemployed. The levels of suicide risk were then identified. Furthermore, a product-term regression analysis was utilised to determine whether parental employment status moderated the relationship between trauma exposure and suicide risk. The reliability coefficient of the scales was calculated for the current group of participants. The alpha coefficient of 0.98 for the SIQ-A was found to be above the acceptable level (≥ 0.70) according to the guidelines for a non-cognitive construct provided by Nunnally and Bernstein (1994). An

alpha reliability coefficient for the Stressful Life Events Questionnaire could not be calculated, as each of the traumatic events in the scale is considered independent from the others. This inter-item independence constitutes poor inter-item reliability. Therefore, the researcher did not expect the learners' responses to show any inter-item consistency.

Results

Table 1 provides an overview of the descriptive statistics obtained for each scale

Table 1

Means and Standard Deviations for the Entire Research Group

	Mean	SD	Minimum	Maximum
Suicidal Ideation Questionnaire	38.91	42.93	0.00	180.00
Stressful Life Events Questionnaire	2.83	1.95	0.00	12.00

The mean score obtained for suicide ideation ($M = 38.91$) is significantly higher than that of the original American participant group ($M = 17.76$) of Reynolds (1988). However, it is slightly lower than the mean score obtained for a sample of secondary school learners ($M = 39.51$) from the Northern Cape (George, 2005). The mean number of traumatic events reported by the current participant group is 2.83. This implies that this group of learners as a whole were exposed to almost three different traumatic events in their lifetime. Electronic search of EBSCOhost, Google Scholar, Nipad, September, 22, 2014 revealed no South African comparison could be found for this scale.

Using the criteria to delineate suicide-risk (Pienaar & Rothmann, 2005), Table 2 shows adolescents being compared with regard to their low, medium and high suicide risk predisposition.

Table 2

Categories of Risk for Suicide as Measured by the SIQ-A

Frequency	%
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Low risk (≤ 16)	450	45.7
Medium risk (17-31)	150	15.2
High risk (≥ 32)	385	39.1
Total	985	100.0

The results indicate that 54.3% of the participants were identified as having a medium to high suicide risk.

Table 3 reflects a further analysis of the frequency at which traumatic events in the participants' lives were reported.

From Table 3, personal loss appears to have affected participants more frequently, followed by exposure to corpses or dead persons as well as having your loved ones suffering from a life-threatening illness and being robbed by the use of force. For this group of adolescents, natural disasters and being sexually assaulted were reported less frequently.

Table 3

Frequency of Traumatic Themes as Measured by the SLEQ (N = 985)

Traumatic themes	Frequency	%
Lost loved one due to trauma	421	43.0%

Traumatic themes	Frequency	%
Exposure corpses	346	35.3%
Loved one having a Life threatening illness	328	33.6%
Robbery by force	313	31.9%
Been seriously injured	288	29.8%
Feared serious injury or death	279	28.5%
Involuntary separation form loved one	182	18.5%
Physical assault	174	17.8%
Witnessed violence	168	17.2%
Domestic violence	111	11.4%
Natural disasters	95	9.7%
Sexual assault	84	8.7%

Table 4

Correlation coefficients between Suicide Ideation and Traumatic Life Events for the total group and employment status

	Suicide Ideation		
	Total	Employed	Unemployed
Stressful Life Events Questionnaire	0.179*	0.191*	0.202*

* $p \leq 0.01$

Table 4 indicates that the level of suicide ideation correlates significantly on the 1% level with the frequency of being exposed to traumatic life events. For both groups, the results indicate a positive correlation between the frequency of exposure to traumatic life events ($r = 0.191, p = 0.000$) and levels of suicide risk $r = 0.202, p = 0.000$) respectively. The effect sizes of above interactions were of small effect (0.1- 0.3) and indicate little practical significance.

Hierarchical regression analysis

In this study, a hierarchical regression analysis (Cook & Weisberg, 1982) was conducted to explore the role of parental employment status in the relationship between traumatic life exposure and suicide risk. A moderator variable affects the direction and/or strength of the relationship between the predictor variables. The moderator variable (parental employment status) was categorised into two groups (i.e., employed and unemployed parents) with employed parents coded as 1 and unemployed parents coded as 0. A hierarchical regression analysis entails the following: First, the unique contribution of each dependent and independent variable is explored. Second, the dependent variable (suicide risk) and the independent variable (traumatic life exposure) are included in the equation to determine its contribution to the regression analysis.

This method involves omitting one variable each time to determine its contribution. The percentage variance that is explained by specific variables is indicated by R^2 (squared multiple correlation coefficient) (Cohen, Cohen, West, & Aiken, 2003). A preliminary analysis was conducted to ensure that the assumptions of normality, linearity, multicollinearity, and homoscedasticity were not violated (Cohen et al., 2003; Kutner, Nachtsheim, Neter, & Li, 2005).

Table 5

Moderated Hierarchical Regression with Suicide Risk and Traumatic Life Events Exposure as independent variable and Parental Employment Status as a moderator variable

Model	R	R^2	Adjusted R^2	Change Statistics				
				R^2 change	F change	df ¹	df ²	Sig. F change
1	0,209	0,044	0,042	0,044	21,954	2	962	0,000
2	0,209	0,044	0,041	0,000	0,079	1	961	0,779

Model 1: Employment status, traumatic life events exposure_total

Model 2: Traumatic life events exposure_X_Employment status

Traumatic life exposure is significantly related with suicide ideation for this group of adolescents [$R^2 = 0,044$; $F(2; 962) = 21,954$; $p = 0,000$]. It is apparent that the addition of an interaction term of [$R^2 = 0,0078\%$] did not increase the percentage variance in suicide risk explained for this group of adolescents. Furthermore, the results in Table 5 indicate that there was not a statistically significant moderator effect of parental employment status [$F(1,961) =$

0,079, $p = 0,779$), $p < .0005$]. Thus, the employment status of a parent does not moderate the relationship between traumatic life exposure and the level of suicide risk.

Further, Figure 1 indicates the regression lines for the group of adolescents with employed parents and those with unemployed parents.

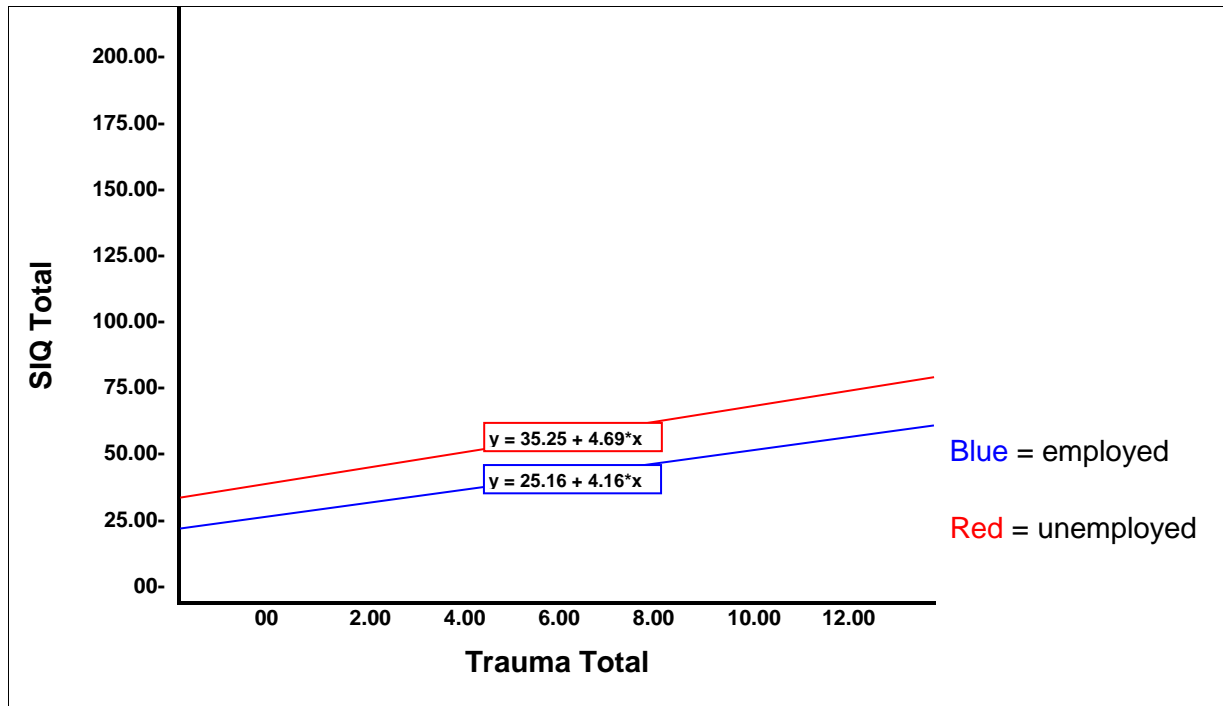


Figure 1. Regression lines of employed and unemployed group.

An increase with one unit exposed to traumatic events resulted in an increase of 4.162 units in suicide ideation in the group whose parents were employed, and 4.688 units in the group whose parents were unemployed. This implies that, for both groups of adolescents in the study (employed and unemployed parents), an increase in traumatic life exposure leads to an increase in the level of suicide risk.

In addition, the results confirm that the moderator variable (employment status of parents) does not have a moderating effect in the relationship between traumatic life exposure (independent variable) and suicide risk (dependent variable).

Discussion

The primary aim of this study was to investigate the role of parental employment status in the relationship between traumatic life exposure and suicide risk. Descriptively, results in this study indicate that the measuring instrument had acceptable levels of internal consistency. The alpha coefficient obtained for the current study is similar to that of a study on adolescents

in the Northern Cape Province (George & Van den Berg, 2012) and falls within the expected range provided by the author of the scale (Reynolds, 1988).

Furthermore, the results of this study are consistent with the expected outcome portrayed by the literature that South African adolescents are at high risk for suicidal behaviour (Du Plessis, 2012; George, 2009; Kruger, 2010; Mashego & Madu, 2009; Schlebusch, 2005; Tancred, 2010). In the current study, 54.3% of all participants were identified as having a medium to high risk for suicidal behaviour. These results are in line with the results from George's (2009) study, which indicates that 60.5% of the participants reported high risk for suicide. These findings support the idea that South African adolescents may be at risk for suicidal behaviour given the many socio-economic and political disparities and their consequential negative effect on the psychological well-being of adolescents (Schlebusch, 2003).

In reflecting on the type of traumatic events most often experienced, the study has identified unexpected death of a loved one, exposure to dead persons (corpses), loss of loved ones to threatening illness, and being robbed with force as the most prevalent traumatic experiences for adolescents. However, it is unfortunate that these results are representative of the context of South Africa's social dynamics at this age and time. According to Atwoli et al. (2013) and Kaminer et al. (2013), South Africa is tarnished with high levels of crime and violence, and high morbidity rates due to illness, including citizens being exposed to multiple deaths. The secondary effects of these exposures predispose adolescents to increased risk for the development of emotional illnesses such as depression, posttraumatic stress disorder (PTSD) and suicidal behaviour (Atwoli et al., 2013; Hunt et al., 2011; Read et al., 2011).

The second objective of this study was to investigate the relationship between traumatic exposure and suicide risk for both employed and unemployed groups. The results show a significant positive relationship between traumatic exposure and suicide risk behaviour. Furthermore, this relationship is significant for employed and unemployed groups on the 1% level of significance. The positive correlation between exposure to traumatic life events and suicide risk corresponds with similar findings reported in the literature and implies that exposure to traumatic events increases the risk of suicidal behaviour (Borges et al., 2008; Kaminer, et al., 2013; Read et al., 2011; Yen et al., 2005).

The third objective investigated the role of parental employment status in the relationship between traumatic exposure and suicide risk. Findings conclude that parental employment status does not have a statistically significant moderator effect in the relationship between traumatic exposure and suicide risk for the adolescents with employed and unemployed parents. The finding seems to suggest that being employed as parents does not appear to have any influence on whether adolescents will be protected against the risk for suicidal behaviour when exposed to traumatic life events. These findings are supported by research by George (2009), which indicates that parental employment does not have any significant influence on participants' level of suicide-risk. However, contrary findings by Simons and Murphy (1985), Skegg (2005), and Xing et al. (2010) seem to indicate the presence of a strong relationship between unemployment and suicidal behaviour. According to Holtman et al. (2011), unemployed parents contribute toward creating an environment that is emotionally and socially more destabilised, thereby placing their children at an increased risk for suicidal behaviour.

However, Holtman et al. (2011) significantly refer to their and other similar findings by highlighting the fact that not all forms of employment seem to offer a buffering effect against suicidal behaviour. A number of researchers seem to agree and place emphasis on the need for certain parental requirements such as providing emotional resources, ensuring adequate supervision and monitoring and provision of access to needed resources if employment is to be a factor in buffering against suicide risk (Griggs & Walker, 2008; Han et al., 2010; Montemayer & Clayton, 2001; Nyanjaya & Masango, 2012).

Limitations and Recommendations

The findings of the study should be interpreted in the context of the limitations discussed below. This study made use of a correlational design. This design does not accommodate changes over a period and does not predict possible direction or causal effects of other variables. An ideal study should be based on a longitudinal approach. Longitudinal studies may allow for valuable data collection in terms of change in employment status of parents (job losses or gains) and how these changes interact in exposure to traumatic life events and suicide ideation scores of low-risk or high-risk groups over an extended period. Furthermore, longitudinal studies allow observation of change with regard to the effect of different variables as the participants in the sample progress to a different stage of development.

In hindsight, the construct *parental unemployment status* could have been explored differently and with greater depth of variety, e.g. types of careers, as this may have offered more differentiation. A similar argument could be made in terms of the American-based Stressful Life Events Questionnaire, which was unable to provide an indication of high or low traumatic life exposure or not. Using a more appropriate instrument contextualised for South Africa may offer richer sources of data if the above-mentioned concerns are to be considered.

Nonetheless, the study yielded valuable information indicating that parental employment status does not affect the relationship between traumatic exposure and suicide risk. However, This finding contradicts earlier research reports and raises a question regarding the extent and nature of the measurement used to assess the unemployment status of parents. One such question could explore if differences in employment careers affect or moderate the relationship between traumatic exposure and suicide risk better than others, as compared to merely being employed. Such findings could assist career guidance therapists and practitioners in adjusting their approaches to parental counselling.

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