

Cumulative Adversities and Mental Health of Employees in Workplace Settings in Gauteng Province, South Africa

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ABSTRACT The authors examined the relationship between cumulative adversities, exposure to violence and mental health of employees in workplace settings in Gauteng Province, South Africa. Five hundred participants were randomly selected from three hospitals. Age of participants ranged between 18-65 years. Males were 251 (50.2%) and females were 249 (49.8%). Mean age of employees was 33.8 years (SD= 11.03). Results of a multiple regression model showed that cumulative adversities (Family, childhood, personal) and exposure to violence (direct and indirect witnessing of violence in childhood) jointly and significantly predicted poor mental health of workers, $R^2 = 0.35$, $F(5, 440) = 47.49$, $p < .0001$. The variables (CA FAM, CA PerAdv, CA ChildAdv, indirect exposure (CEDV1) and direct exposure (CEDV 2) explained 59% of the total variance on poor mental health. Of the variables, the main significant predictors of mental health were: CA PerAdv ($b = .35$, $t(445) = 7.56$, $p < .01$), CEDV1 ($b = -.123$, $t(445) = -2.18$, $p < .05$) and CEDV2 ($b = .37$, $t(445) = 6.25$, $p < .01$). In addition, the Durbin-Watson result (1.58) is less than 2 and therefore shows that the assumption of independent error is met for this model. There were no significant results for Cumulative Childhood adversity (CA.ChildAdv), indirect exposure (CEDV1) and the four subscales of mental health-somatic complaints, anxiety, social dysfunctions and depression. Since 'prevention is better than cure', it is recommended among others that workplace programmes which promote positive health should be implemented, the establishment of on-site wellness programmes.

INTRODUCTION

According to Farell (2011), to be psychologically healthy is as important as the job itself and the working environment. The consequences of mental health problems in the workplace have serious implications for both the individual and the productivity of the enterprise (Baumann and Muijen 2010; WHO 2010). According to Baumann and Muijen (2010), employee performances, rates of illness, absenteeism, accidents and staff turnover are all affected by employees' mental health status. Therefore, it is safe to assume that healthy employees are more likely to come to work and perform well.

The workplace environment demands an overall wellness of an individual to enable the person to function to his or her fullest capacity.

Psychological problems may hinder productivity and affect optimal functioning. According to Statistics South Africa (2001), a high percentage of all disability is due to "emotional" and intellectual disability. Bradshaw (2003) described neuro-psychiatric disorders as the second highest proportion of burden of disease after HIV/AIDS in Western Cape alone. Unfortunately, understanding mental health in work settings is hardly investigated.

In addition, stressors causing poor mental health can be accumulated from childhood into adulthood. These cumulative adversities (CAs) may have implications for mental health in a workplace. Studying the temporal dimension of exposure to violence and cumulative adversity can bring social research closer to understanding the extent of these consequences on mental health which will no doubt benefit the organizations and employees.

Cumulative adversity (CA) is defined as exposure to potentially traumatic events along life (Shmotkin and Litwin 2009). These events have been linked with adult mental health problems in several studies such as that of Lamont (2010), who stated that childhood adversity, such as exposure to child abuse and neglect, can lead to a wide range of adverse

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consequences that can last a lifetime. Sometimes, the effects remain largely hidden only to emerge at key times in later life (McQueen et al. 2009).

It is important to note that cumulative adversity may occur directly to the individual and also through indirect witnessing of the adversities of a loved one. Both of these experiences are said to have both immediate and long-term consequences for health and general wellbeing (Olesen et al. 2010). A parent's physical illness, for instance, may be the cause of the mental anguish to a child. According to Saunders et al. (2007) and Hayes et al. (2008), this offers an explanation for the common co-occurrence of many of these adversities and children's mental health. Adverse life events or stressors that occur to a child's parent or within their familial context have been connected to health, behavioural and social difficulties during childhood and poorer outcomes later in life (Olesen et al. 2010).

The adverse consequences caused by parental adversities may stem from the fact that distressed parents may not have the strength to spend quality time with their children. This may lead to difficulties in engaging with the child and nurturing the child's psychological development, which in turn may render the child vulnerable to more adversity and later life mental challenges. These children are also more likely to experience depression and substance abuse as adults (Pirkola et al. 2005). Parental and familial stressors are consistently linked to poorer developmental, academic and health outcomes during childhood and later adulthood (Olesen et al. 2010).

A study conducted by McLaughlin et al. (2010), found that exposure to CAs involving maladaptive family functioning, for example, parental mental illness, substance use disorder, criminality, family violence, physical and sexual abuse and neglect were significantly associated with persistence of mood and anxiety disorders and that these associations remained statistically significant throughout the life course. According to Afifi et al. (2008) and McLaughlin et al. (2010), these associations render individuals with a history of CAs especially vulnerable to mental disorders triggered by adult stressors.

Other studies, such as that of Shmotkin and Litwin (2009), have reported that cumulative adverse events have an influence on physical

health. Scott et al. (2011) examined cross-sectional community data in adults from 10 countries. The history of childhood adverse experiences was shown to increase the risk for medical disorder groups and adults with the experience of three or more adverse childhood experiences were found to have the greatest risk of an adult medical disorder. Cumulative adversity creates a vulnerability to poor mental health which affects physical health. In Scott et al.'s (2011) study, an early-onset, before age 21, of an anxiety disorder or depression increased adult medical disorder risk.

Although cumulative adverse consequences are particularly apparent for mental health problems (Rodgers et al. 2010), in some instances, it might be the severity of adversity that may actually cause poor mental health. Respondents with higher cumulative adversity, in Schilling et al.'s (2008) research, had disproportionately poorer mental health because of the severity of the adversities they were exposed to, and not the cumulative number of different types of adversities experienced.

According to Seery et al. (2010), exposure to adverse life events typically predicts subsequent negative effects on mental health and well-being, such that more adversity predicts worse outcomes. These negative life events have been implicated in the development of alcohol dependence (Lloyd and Turner 2008). Findings from the study suggest that high levels of lifetime exposure to adversity are implicated causally in the onset of alcohol dependence.

Cumulative adversity is a complex subject to study as it involves many facets with vast differences: First, most studies use self reported cumulative adversity exposure which varies amongst individuals (Schilling et al. 2007). Second, accuracy is not certain as accuracy involves comparability of measures across countries and some of these studies do not comply (for example, not much research includes third world countries including Africa). Third, adverse experiences may also foster subsequent resilience, with resulting advantages for mental health and well-being instead of the opposite. Seery et al. (2010) have shown in their multiyear longitudinal study that people with a history of some lifetime adversity reported better mental health and well-being outcomes than those with lack of adversity history.

Exposure to violence is very prominent in South Africa (RSA). According to a national report by the South African Police Services (2009) during the years 2008/2009, a total of 2 098 229 (approximately 2, 1 million) cases of serious crimes were registered in RSA, with violent crimes being dominant. This is a serious public health concern that compromises the society by affecting people's behaviour and psychological well-being. Violence is a form of CA that can have negative implications for transitions to adulthood especially since trajectories established during early adulthood have profound implications for the quality of later life (Piquero et al. 2005). This exposure can have significant effects on child development and the formation of intimate relationships throughout childhood and adulthood (Muscarì 2010). Results in a study conducted by Foster and Brooks-Gunn (2011), showed a pervasive detrimental effects of violence exposure on internalizing (for example, depressive/anxiety symptoms), externalizing problems (for example, aggressive behaviours), and social and educational outcomes across childhood and adolescence. Recent research (Sterntal et al. 2010) also finds consistent links between community violence exposure and asthma in children, including wheezing among pre-schoolers, indicating that cumulative adversities have both mental and physical health consequences. Exposure in this study is conceptualized as including both direct (that is, experiencing physical victimization) and indirect exposure (that is, witnessing others' victimization).

The impact of exposure to violence on physical health is evidenced in the biomedical researches (for example, Lanius and Vermetten 2009) which, increasingly, recognize that childhood events, specifically abuse and emotional trauma, have profound and enduring effects on the neuroregulatory systems mediating medical illness as well as on behaviour from childhood into adult life. For an example, Buse (2011), states that fibromyalgia is one of the medical co-morbidities resulting from adverse childhood experiences. Other medical conditions are migraine, chronic pain disorders and an increased risk for cardiovascular events. Poor physical health will subsequently lead to distress causing further poor mental health.

Mental health remains an invisible problem in Africa (Gordon 2011). The World Health

Organization (WHO 2010) defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". The implication of the above WHO definition is that being mentally healthy does not only mean the absence of mental illness but also the individual's ability to develop and maintain a balance of all aspects of life. According to the WHO (2010) report, mental health includes emotions, cognition, social functioning and coherence. Social functioning involves relations with others and the society which means that an individual's social setting is important to their mental health. Therefore, exposure to violence whether at home or in the community will undoubtedly have a negative effect on the mental health of an individual. These forms of stressors may accumulate into adulthood with consequences for poor mental health and therefore affect productivity in the work place.

The current study is focused on life course events to contextualize exposure to violence and CAs through the transition to adulthood to evaluate the strength of their long-term effects on mental health in adulthood. The aim is to empirically investigate whether cumulative adversities and exposure to violence will predict poor mental health. Understanding these factors will help recommend programmes if put in place will help prevent or manage workers well-being in a work place. These programmes will, in addition, help boost healthcare and therefore reduce government costs on medical expenses. Early diagnosis and treatment of these adversities in the early stages of life will substantially reduce economic and personal costs of these illnesses.

Chronic childhood adversity has long been theorized to be an etiological factor in the development of psychopathology (Benjet et al. 2010). According to Richards (2011), individuals from violent homes may likely exhibit attitudes and behaviours that reflect their childhood experiences such as witnessing domestic violence. These attitudes and behaviours (for example, sexual and physical abuse) from childhood may persist as stressors into adulthood. In a work place setting, these stressors may lead to other psychopathological problems that may in turn affect productivity and work-place wellness.

Social learning theory is one of the most common theories useful in providing an interpretive framework for understanding how exposure to life course events impact people's lives. The theory suggests that individuals learn behaviours in childhood through observation of parents or guardians, and replicate those behaviours in their own lives (Akers and Sellers 2009; Bandura 1973; Lewis and Fremouw 2001). The implication here is that adults who have been exposed to violence in childhood might themselves turn out to be perpetrators, breeding broader grounds for further mental health problems emanating from behaviours learned in childhood.

Social Stress theory best explains the direct links of CAs and poor mental health as it stipulates that multiple adverse exposures of perceived stressors arising from a constellation of contextual stressors, chronic strain, and acute stressors contribute to poor mental health outcomes (Rutter 2005; Thompson et al. 2005). For example, in their study of early exposure to violence, domestic violence, attachment representations, and marital adjustment, Godbout et al. (2009), found that previous psychological parental victimization was the strongest predictor of anxious attachment and witnessing psychological domestic violence during childhood was the strongest predictor of avoidant attachment in adulthood. McLaughlin et al. (2010) also showed that cumulative adversities are positively and significantly associated with impairment and that they greatly predict disorder-related impairment, highlighting the ongoing clinical significance of CAs throughout the life-course.

The Life Course perspective is another useful way of understanding the relationship between CAs, through looking at the environment and the subsequent mental health. This view looks at how chronological age, relationships, common life transitions, and social change shape people's lives from birth to death (Hutchison 2007). According to this theoretical model, to understand a person's life, we have to investigate the sequence of significant events, experiences and transitions in a person's life from childhood. As stipulated in the literature of the current study, significant occurrence that involves a relatively abrupt change may lead to the emergence of numerous problems later in life which may produce serious and long-lasting

effects on mental health. Hareven (2000) says that an impact on life can occur when a significant occurrence or transition occurs simultaneously with a crisis or is followed by a crisis, when the transition involves family conflict over the needs and wants of individuals and the greater good of the family unit, when the transition is followed by unforeseen negative consequences and, lastly, when it requires exceptional social adjustments.

While a vast amount of research has provided support for the association of individual childhood adversities with the development of psychopathology in later life, much of the research has focused on specific or a limited number of adversities and/or a specific or limited number of health outcomes. This is mostly due to the underlying theories of the different studies which have driven the types of childhood adversities studied (these generally fall into the categories of family pathology, abuse and neglect, interpersonal loss and socio-economic disadvantage). Complicating the interpretation of research findings is the fact that childhood adversities are highly co-morbid (Benjet et al. 2009) as are psychiatric disorders, thus it is likely that studies of individual adversities and individual disorders may indicate associations or fail to recognize alternative indirect pathways to psychopathology. From the above literature, the study hypothesized that cumulative adversities and being exposed to violence during childhood will significantly predict mental health of employees in workplace settings. Cumulative adversities are categorized as CAFam, CAPerAdv and CACHildAdv and exposure to violence categorized into direct and indirect exposures. Mental health is defined as scores obtained on the four sub-scales of the GHQ-28: somatic complaints, anxiety and insomnia, social dysfunction, and severe depression. All variables were measured continuously.

METHODOLOGY

Design

This study is based on a cross-sectional research design within a quantitative research approach. The variables are cumulative adversities (CAFam, CAPerAdv, and CACHildAdv) and exposure to violence (Direct and Indirect). Mental health is the dependent variable.

It has four sub-scales. A hierarchical multiple regression analysis was used to test for statistical significance for the stated hypothesis. Multiple regressions shows us the cumulative effects of a set of explanatory variables on a dependent variable and also the separate effects of these explanatory variables and using more than one predictor makes the prediction of our criterion more accurate.

Sample and Characteristics

A total of 500 participants, randomly selected using a table of random numbers of “yes” and “No” from three hospital complexes in Gauteng Province, South Africa participated in the study. The methodological advantage of this study is that the sample consists of participants randomly selected from various workplace settings in Gauteng whose employees are from racially and economically diverse communities. All participants were 18 years or older. Age of employees ranged between 18-65 years. Males were 251 (50.2%) and females were 249 (49.8%). Mean age of employees was 33.8 years (SD=11.0).

Instruments and Psychometric Properties

The study utilized a questionnaire with 3 sections-A, B and C. Section A contained demographic attributes. Section B contained the Cumulative Adversity Scale (CA) and the Child Exposure to Domestic Violence (CEDV) scales and Section C contained the GHQ-28.

Cumulative Adversity Scale (CAS)

Cumulative adversities (CAs) were assessed using single questions to participants on adverse experiences with parents, during childhood and current adulthood. The childhood adversities were adapted from the Childhood Environmental Factors Questionnaire (Pirkola et al. 2005). Fifty- one (51) items were initially derived from the literature and from a pilot study of a sample of 20 employees in Gauteng. The questions were in short phrases. The scale was pretested on a sample of 20 employees in a workplace in Gauteng whose ages ranged from 20-49 years.

Responses to the items were coded on a 3-point Binary answers with “Yes”, “No” and “I

don't know’. ‘Yes’ was scored 2, ‘I don't know’ was scored 1 point and a “No” was scored 0. Items were selected in such a way that, adversities were measured in three subscales: Family adversities (CAFamadv), childhood adversities (CACHlAdv) and personal adult adversities (CAPerAdv). All responses were measured continuously and scored on the basis of the subscales.

Psychometric properties of this scale were determined. Item analysis using the item remainder correlation technique (with Kuder-Richardson formular, K.R.20) revealed 27 internally consistent items with coefficient alpha of 0.91. Split-half reliability of the scale was $r = 0.80$; content validity was used to determine validity of the scale since the 27 items selected were based on responses of piloted respondents and also factor analysed, using the principal component method with Varimax rotation. All 27 items with minimum factor loading of 0.40 were included in the scale. Face validity was also built into the scale as the items were made of simple, short phrases and very easy to understand. Some of the items were listed by the respondents themselves on areas of adversities.

To establish convergent validity for the CA, the CA scale scores were compared for 20 workers in Gauteng Province with the Life Experiences Survey, designed by Sarason et al. (1978). The Life Experiences Survey (LES) is a 57-item self-report measure and allows respondents to indicate events they have experienced during the past year. The scale has two parts: one and two. Only section one was used because it is designed for all respondents and contains a list of 47 specific events. The events listed in this section refer to life changes common to individuals in a wide variety of situations. Many of the items were based on existing life stress measures.

Validity Coefficient was $r = 0.39$ and 0.41 , $P < 0.01$, for CA scale and LES respectively. The correlation between the two scales was moderately low but suggests a convergent validity for both scales.

CEDV

The Child Exposure to Domestic Violence (CEDV) scale was systematically developed using both pre-existing and newly developed items and, subsequently, subjected to a review

and revision by an international panel of experts to establish face validity. The measure was administered concurrently with the Things I've Seen and Heard measure of violence exposure to establish convergent validity and again one week later to establish test reliability (Edleson et al. 2008). The CEDV consists of 42 questions in three sections. The first section includes a series of questions that specifically target the types of exposure to domestic violence experienced. There is a rating of 10 different items focused on types of adult domestic violence. Each question was answered using a three-point Likert-type scale with their choices being "Never", "Sometimes", and "A lot". A second part of this first section requires a child to indicate how he or she knew of the violence occurring at home. If a child responded "Never" to a particular question he or she moved onto the next question. However, if she or he indicated exposure to such violence, the child was led by an arrow to an additional set of options that asked how the child was exposed, including five choices: "I saw the outcome (like someone was hurt, something was broken, or the police came)", "I heard about it afterwards", "I heard it while it was happening", "I saw it from far away while it was happening" and "I saw it and was near while it was happening".

The second section of the CEDV asks a series of 23 questions using the same three-point Likert-type scale. These questions ask the rate of how often a child intervened in violent events and about other risk factors present in her or his life. The third and final section of the CEDV consists of nine questions asked to gather demographic information, including gender, age, race and ethnicity, current living situation, and family composition. According to Edleson et al. (2008), the CEDV is a valid and reliable measure of the level of exposure to domestic violence from a child's perspective. It has been shown in their study to be both a reliable measure and one that reflects face, content and convergent validity. It is very comprehensive, touching on everything from specific forms of community violence victimization and exposure, to the witness of war and other trauma. A test retest in two weeks for this study demonstrated good reliability of 0.90.

GHQ-28

The General Health Questionnaire is a psychological instrument used in measuring

psychological well-being or dysfunctions. It comes in three packs GHQ 60, 28 and 12. This study used the GHQ 28. The GHQ 28 is a scale developed by Goldberg and Hillier (1979). It was used as a self-administered screening instrument for current psychiatric disorder in mental health settings and non-psychiatric clinical setting such as primary care or general medical outpatients. In this scale, the respondents are asked to compare their recent psychological state with their usual state. It consists of 28 items comprising four sub-scales. Scale A (questions from 1-7) measures somatic complaints, scale B (questions from 8-14) measures anxiety and insomnia, scale C (questions from 15-21) measures social dysfunction, and scale D (questions from 22-28) measures severe depression. All items have a 4 point scoring system using Likert scoring (0-1-2-3) Less than usual, no more than usual, not at all, and much more than usual, respectively). Each question has four possible responses. Some of the items are also reversed and so is the scoring. In this study, scoring was done in such a way that the higher the score, the poorer the psychological report of the person (Nagyova et al. 2000).

The GHQ-28 is a widely used instrument and validated for African cultures. Gbolagunte (1991) carried out a pilot study with 20 normal people, to establish the reliability and validity of the GHQ. Test-retest (in weeks) technique was used. The Pearson product moment correlation was also used to test for consistency. The result showed a positive and relatively high reliability yielding 0.71. Several studies (for example, Gureje and Obikoya 1990; Aderibigbe and Gureje 1992) have been carried out in Ibadan, Oyo State of Nigeria to establish the validity of the GHQ. For instance, it has been validated against the psychiatric Assessment Schedule (P.A.S), the correlation of which was 10.88. It has also been used in South Africa (Idemudia and Matamela 2011; Straker et al. 1996).

Procedure

After an ethical approval from the university and all the workplace settings where data were collected, days of visits were communicated to the institutions concerned for data collection. On these dates, the researcher visited the workplaces in their offices and participants were asked to pick a squeezed paper from a basket. If

the picked paper was a “yes”, then he or she was given informed consent and then the questionnaire. If an employee picks a “no”, then he or she will not participate in the study. All the participants who picked yes and after an informed consent were then provided with information concerning the aim, objectives, and methods of the study in a grade 4 language. Participation in the study was voluntary. They were told they could stop filling the questionnaire if they felt they didn’t want to participate again without fear of being harassed. They were assured of the confidential nature of the study and as such were told not to write their names or provide any contact information such as residential addresses or place of work that would identify them therefore eliminating identification bias. Caring for data during and after analyses was discussed with participants. Only the authors have access to the data. All data were kept under lock and key with the second author of the study. Data is expected to be destroyed after one year commencing from the date of collection, that is, 2013. The study was not expected to produce harm but participants were informed that should the study bring back traumatic memories that they would be attended to by clinical psychologists at the hospital where one of the researchers worked. Only three persons reported having flash backs when they read through the questionnaire and were referred to psychologists and services were provided free of charge

RESULTS

The study hypothesized that CAs and exposure to violence will predict poor mental health report. The stated hypothesis was tested with a hierarchical multiple regression which examined the prospective associations between the dependent variables (GHQ) and the independent variables: CAs and CEDV. Cumulative adversities were measured in three subscales (CA Fam, CA ChildAdv and CAPerAdv) and exposure to violence was either direct (CEDV1) or indirect exposure (CEDV2).

Results are presented below. First, a correlation of all variables was carried out (Table 1). The essence of this step was to help us know which variables were significant for the next step of hierarchical regression. Second, the method used in this analysis was that cumulative

adversities were expected to significantly predict poor mental health. These variables were entered as demanded by the rules of multiple regressions. Subsequently, all other variables were hierarchically entered by step wise procedure. The results generated five models (Table 2).

According to Table 1, there was a strong correlation between CAs, exposure to violence and mental health.

Table 1: Correlation of study variables (N=475)

Variables	1	2	3	4	5	6	7	8
1. CA	-							
2. CEDV 1		-						
3. CEDV 2		.72**	-					
4. GHQ SS		.25**	.41**	-				
5. GHQ Anx		.28**	.44**	.73	-			
6. GHQ SD		.28**	.34**	-.56**	.63*	-7.8.		
7. GHQ Dep		.26**	.40**	.58**	.64**	.62**		
8. GHQ total		.31**	.47**	.85**	.89**	.81**	.84**	-

NB: CA=Cumulative adversity; CEDV1=child exposure to domestic violence (indirect exposure); CEDV2=child exposure to domestic violence (Direct exposure); GHQ SS= Mental health: Somatic symptoms; GHQ Anx= Mental health: Anxiety or Insomnia; GHQ SD= Mental health: Social Dysfunction; GHQ Dep= Mental health: Severe Depression; GHQ Total= Mental health total.
 Note: * = p < 0.05; ** = p < .01

The results of the analyses from the sample showed significant positive correlations between CEDV 1, $r(500) = .31, p < .01$ and CEDV2, $r(500) = .47, p < .01$ with GHQ total. The results of the analyses also showed a strong positive correlation between CEDV1, CEDV2 and subscales of GHQ (somatic symptoms, anxiety, social dysfunction and depression) with r ranging from .25 to .44. The high correlations were further used to input data in the multiple regressions. Cumulative adversities were first entered in the model and CEDV scales were hierarchically entered by step wise procedure. The results generated five models (Table 2).

The hypotheses expected that CAs and exposure to violence will predict poor mental health report. According to Table 2, the results showed that the overall model significantly predict poor mental health of workers, $R^2 = 0.35, F(5, 440) = 47.49, p < .0001$. The variables (CAFAM, CAPerAdv, CA ChildAdv, indirect exposure (CEDV1) and direct exposure (CEDV 2) explained 59% of the total variance on poor mental health. Of the variables, the main significant predictors

Table 2: Regression analyses with GHQ total as dependent variable and CA total and CEDV as independent variable

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE B	B	SE B	B	SE B	B	SE B	B	SE B
CA FAM	1.550	.190	.649	.200	.151	.208	.445	.214	.104	.207
CA PerAdv			2.343	.257	.426	.260	2.166	.261	.394	.252
CA ChilAdv					.624	.188	.624	.191	.132	.186
CEDV2to10Total							.382	.178	.098	.219
CEDV11to34Total									.660	.106
Constant	19,098		1.018	-	14.182	-14.254	1.221	1.450	1.217	1.450
R		1.063								
R2		.361								
		.131								
		66.729		.517		.534		.541		.592
				.268		.268		.293		.351
				80.996		58.878		45.668		47.496

Note: * = $p < 0.05$; ** = $p < .01$

of mental health were: CA PerAdv ($b = .35$, $t(445) = 7.56$, $p < .01$), CEDV1 ($b = -.123$, $t(445) = -2.18$, $p < .05$) and CEDV2 ($b = .37$, $t(445) = 6.25$, $p < .01$). In addition, the Durbin-Watson result (1.58) is less than 2 and therefore shows that the assumptions of independent error are met for this model.

DISCUSSION

This study examined whether cumulative adversities and exposure to violence will predict poor mental health among employees in Gauteng Province, South Africa and results for the stated hypothesis showed that Cumulative adversities and exposure to violence predicted poor mental health. This result is supported in the predicted direction. The findings are in line with Lamont (2010), McQueen et al. (2009), and Olesen et al. (2010) found that childhood adversity, such as exposure to child abuse and neglect can lead to a wide range of adverse consequences that can last a lifetime with ramifications for mental health and general wellbeing. A study conducted by McLaughlin et al. (2010), found that exposure to CAs involving maladaptive family functioning, for example, parental mental illness, substance use disorder, criminality, family violence, physical and sexual abuse, and neglect were significantly associated with persistence of mood and anxiety disorders and that these associations remained statistically significant throughout the life course. According to Afifi et al. (2008) and McLaughlin et al. (2010), these associations render individuals with a history of cumulative adversities vulnerable to mental disorders triggered by adult stressors. Although cumulative adverse consequences are particularly apparent for mental health problems, Rodgers et al. (2010) claimed that in some instances it might be the severity of adversity that may actually cause poor mental health.

The study also supports the view points of Piquero et al. (2005) that exposure to violence is a form of cumulative adversity that can have negative implications for transitions to adulthood especially since trajectories established during early adulthood have profound implications for the quality of later life. This exposure can have significant effects on child development and the formation of intimate relationships throughout childhood and adulthood (Muscari 2010). Exposure to violence (direct or indirect) has

detrimental effects (Foster and Brooks-Gunn 2009; Sternthal et al.2010).

Theoretically, the findings also support the social learning theory (Akers and Sellers 2009; Bandura 1973; Lewis and Fremouw 2001), Social Stress theory (Rutter 2005; Thompson et al. 2005) and the Life Course perspective (Hutchinson 2007). In general, these theories stipulate that multiple adverse exposures to perceived stressors arising from a constellation of contextual stressors, chronic strain, and acute stressors contribute to poor mental health outcomes. Researchers have also shown that chronic childhood adversity is a known etiological factor in the development of psychopathology (Benjet et al. 2010). According to Richards (2011), witnessing violent behaviours make individuals exhibit attitudes and behaviours that reflect their childhood experiences which persist as stressors into adulthood. In a work place setting, these externalized behavioural problems may lead to other psychopathological problems that may in turn affect productivity and workplace wellness. Vulnerability to current and future stresses may be heightened by these past traumas.

CONCLUSION

This study contributes to the body of prior research by showing that CAs and exposure to violence can predict mental health. The study has contributed to the existing body of literature in several significant ways and particularly that of South Africa. To our knowledge, this is the first study to research on the aforementioned variables in workplace settings in South Africa. In this study, the following conclusions are made:

- Adversities in family, personal, childhood, direct and indirect exposure to violence jointly predict poor mental health.
- Of these variables only personal adversity, direct and indirect exposure to violence significantly predicted poor mental health outcomes
- Direct and Indirect exposure to violence significantly and jointly predicted poor mental health outcome.

RECOMMENDATIONS

In summary, this study has shown through the literature and theories that cumulative adversities have negative implications for poor

mental health among workers. These negative consequences need to be known through regular evaluations of workers. Poor mental health may appear in the form of lateness, absenteeism, fatigue, stress, undiagnosed depression, anxiety, insomnia etc which may cause an individual to be dysfunctional in a workplace with serious psychological and economic costs. It is recommended that employees should regularly undertake wellness exercise and, in addition, be psychologically evaluated on regular basis. This would help management detect early symptoms for early prevention and intervention. Prevention, it is said, is better than cure. The costs involved in absenteeism and other preventable health-related problems and the implications on productivity can be avoided if early detections are made and necessary preventive interventions put in place. Workplace programmes which promote positive health can improve the mental wellness of employees. This will no doubt bring awareness to the problem and provide affected employees with knowledge and create conducive environment to seek assistance. On site health promotions will also help in the reduction of stigma and subsequently encourage affected employees to seek treatment.

In South Africa, all government departments are required to have the Integrated Employee Health and Wellness Programme, an in-house based programme which addresses workplace wellness. The coordinator or practitioner of this programme should educate managers and staff about mental health. With better understanding and a positive culture, managers can feel comfortable talking with employees about their condition. Proactive trainings in stress management should be conducted.

LIMITATIONS OF THE STUDY

Limitations of the study include the fact that the study used only one province out of the nine provinces in South Africa and in addition to this, only hospital settings were used. Further studies should utilize broader settings which will include private and public workplaces and include more provinces.

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