Learner-to-teacher bullying as a potential factor influencing teachers' mental health

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Learner-to-teacher bullying is a focus area that has not been widely researched. The current research, underpinned by the ecosystemic paradigm, examined the proportion of teachers who reported exposure to bullying by learners. The study was carried out by using the Learner-to-teacher Bullying Questionnaire developed for this research. Additionally, the potential effect that learner-to-teacher bullying may have on teachers' experience of mental health was investigated using the Hospital Anxiety and Depression Questionnaire. In a convenience sample consisting of 153 public secondary school teachers in the Tshwane area, 62.1% of the teachers reported exposure to verbal bullying, 34.6% to physical bullying, 27% to indirect bullying, and 6.6% to cyber bullying. Mann-Whitney *U* Tests were performed and indicated significant differences in teachers' mean anxiety and depression scores across the four types of learner-to-teacher bullying. Learner-to-teacher bullying can result in negative emotions, disempowerment, low morale, and low motivation of various roleplayers in the school system. It is thus of vital importance to protect teachers, create adequate resources to eliminate learner-to-teacher bullying, and work towards improving teachers' mental health.

Keywords: anxiety; depression; high school teachers; learner-to-teacher bullying; quantitative research; workplace bullying

Introduction

Bullying is a worldwide phenomenon that has received considerable attention over the past five decades (De Wet, 2011; Yahn, 2012). Yahn (2012:25) states that bullying is "not a static, finite set of behaviors; it is an adaptive response to social influences and ecologies." Furthermore, bullying behaviour is seen as a recurring event, moving in a continuous cycle. The cycle starts with taunting, followed by testing, threatening, and intimidation, which can lead to violence (Rademeyer, 2008). Consequently, bullying is viewed as the interaction between the bully(s) and the victim(s), where reactions from each party play a role in the bullying cycle (Caravita, Di Blasio & Salmivalli, 2009; Hilton, Anngela-Cole & Wakita, 2010).

Research about bullying has primarily focused on children and adolescents as victims (e.g., Espelage & De la Rue, 2012; Smith, 2011), adults as victims (De Wet, 2010a; Keashly & Neuman, 2010), and workplace bullying (Einarsen, Hoel, Zapf & Cooper, 2011; Power, Brotheridge, Blenkinsopp, Bowes-Sperry, Bozionelos, Buzády, Chuang, Drnevich, Garzon-Vico, Leighton, Madero, Mak, Mathew, Monserrat, Mujtaba, Olivas-Lujan, Polycroniou, Sprigg, Axtell, Holman, Ruiz-Gutiérrez & Nnedumm, 2013; Samnani & Singh, 2014). Although learner-to-teacher bullying has been studied since the late nineties (Pervin & Turner, 1998; Terry, 1998), this type of bullying has received minimal research attention in the national and international arena (De Wet, 2012). Moreover, it has been "virtually absent from both public and political discourse in most countries, resulting in a chaotic piecemeal response from schools and governments" (Garrett, 2014:19). Learner-to-teacher bullying leaves the victimised teachers with a sense of isolation and shame (De Wet, 2010b). According to Garrett (2014), the first step in addressing the issue is to recognise learners bullying teachers as an international problem that requires global commitment, as opposed to a narrow focus on an individual teacher or school.

No definition for learner-to-teacher bullying has yet been agreed upon. However, as learner-to-teacher bullying occurs within the school context, the place of work for teachers, this type of bullying is regarded as a form of workplace bullying. Carbo and Hughes (2010:397) define workplace bullying as the "unwanted, unwelcome, abuse of any source of power that has the effect of or intent to intimidate, control or otherwise strip a target of their right to esteem, growth, dignity, voice or other human rights in the workplace." Despite the lack of a learner-to-teacher bullying definition, it has been specifically described as "malicious acts to disempower them [teachers] as professionals and human beings" (De Wet, 2010b:195). The definition and description above combine aspects of the undermining nature of bullying as well as the disempowerment and negative impact that learner-to-teacher bullying has on the mental health of teachers. These definitions were utilised in the current study.

The researcher decided to focus on the concept of bullying, rather than the related concerns of aggression, harassment, and violence directed toward teachers. These concepts do overlap in meaning (Van der Westhuizen & Maree, 2010). However, based on the two definitions quoted, and the different types of bullying utilised in this study, the matter of bullying was preferred.

According to international research on learners bullying teachers, verbal bullying is one of the main forms of learner-to-teacher bullying. Steffgen and Ewen (2007) reported that 23.9% of teachers in their study conducted in Luxembourg were victimised by learners' strong verbal attacks several times a year. Similarly, in Turkey, 38.9% of teachers reported verbal learner-to-teacher bullying (Özkılıç, 2012). Fifteen percent of

teachers in a study conducted in England (Pervin & Turner, 1998) reported exposure to physical bullying by learners. In a study conducted in the Middle East, researchers found that one in five learners (20%) perpetrated violence against teachers (Khoury-Kassabri, Astor & Benbenishty, 2009). Terry (1998) found that 41.6% of teachers reported being bullied once or more during the five days preceding their participation in the research. Kõiv (2011) found that teachers experienced indirect bullying in the form of devaluation (4.9%), intimidation (3.1%) and public humiliation (5.4%) from learners in Estonia.

South African research concurs that learner-to-teacher bullying is a considerable problem for teachers (De Wet 2010b; De Wet & Jacobs, 2006). A study undertaken in primary and secondary schools in the Free State reported that 33.4% of teachers reported being verbally attacked by learners and 24.8% assaulted, while 18.1% reported being sexually harassed (De Vries, 2005). The sample size of this study was not provided. In a further national qualitative study by De Wet (2010b), numerous learner-to-teacher bullying incidents were described. Teachers were mocked, ignored and disregarded (emotional bullying); sworn at by their learners (verbal bullying); shown indecent signs or laughed at (indirect bullying), and not only threatened with violence, but had objects thrown at them, and were slapped in the face (physical bullying). These acts of bullying are disempowering and dehumanising (De Wet, 2010b). In a further study, De Wet and Jacobs (2013) found that some form of workplace bullying was experienced by 90.8% of the teachers.

Although the definitions, types, and circumstances of learner-to-teacher bullying differ from study to study, and the findings are not strictly comparable, it is clear that learner-to-teacher bullying does occur, and can have serious consequences for teachers as victims.

As teachers are the focus of this study, the context in which they work should be considered. Teachers' working conditions are becoming more demanding and multifaceted (Jackson & Rothmann, 2006). Teaching in South African schools is regarded as highly stressful due to a lack of resources, fear of violence, overcrowding, and ever-increasing substance abuse among learners (Daniels & Strauss, 2010). In addition, South African public schools are troubled by a shortage of skilled personnel, high workload, limited promotion opportunities, insufficient colleague support, inadequate financial support, learner behaviour problems, and violence among learners and toward teachers (Jackson & Rothmann, 2006; Jackson, Rothmann & Van de Vijver, 2006). These factors in themselves can influence teachers' mental health (Prinsloo & Neser, 2007) and contribute towards low morale (Hendricks, 2009).

Research shows a significant relationship between workplace bullying, stress symptoms, and health risks (Oade, 2009; O'Donnell, MacIntosh & Wuest, 2010), thus threatening the psychological health of employees, who are the targets of victimisation (Hogh, Mikkelsen & Hansen, 2011; Reknes, Pallesen, Magerøy, Moen, Bjorvatn & Einarsen, 2014). Moreover, workplace bullying damages morale and motivation among employees (Nielsen, Matthiesen & Einarsen, 2010; O'Donnell et al., 2010). In the school context, bullying can result in teachers having poor mental health. Consequently, they are less productive, less dedicated toward the profession, or passive-aggressive towards learners (Daniels & Strauss, 2010). Thus, learner-to-teacher bullying could potentially affect the teachers themselves, as well as the school system and the profession as a whole. Additionally, mental health difficulties involve the suffering of the individual, and can affect family members, friends, neighbours, and the community as a whole (Hock, Or, Kolappa, Burkey, Surkan & Eaton, 2012). This widespread suffering calls attention to the vital importance of investigating the relationship between learners bullying teachers and mental health.

Owing to limited research, this exploratory study aims to investigate the relationship between exposure to learner-to-teacher bullying and mental health with a specific focus on anxiety and depression. These mental health challenges have been ascertained as the most common mental health difficulties worldwide (Razzouk, Sharan, Gallo, Gureje, Lamberte, De Jesus Mari, Mazzotti, Patel, Swartz, Olifson, Levav, De Francisco & Saxena, 2010; Tempier, Meadows, Vasiliadis, Mosier, Lesage, Stiller, Graham & Lepnurm, 2009). Furthermore, anxiety and depression are continuous burdens for the workforce (Herman, Stein, Seedat, Heeringa, Moomal & Williams, 2009; Kessler, Aguilar-Gaxiola, Alonso, Chatterji, Lee, Ormel, Üstün & Wang, 2009; Rothmann, 2008).

The aim of this research was twofold: 1) to determine the prevalence of teachers that report exposure to bullying by learners; and 2) to explore the relationship between exposure to learner-to-teacher bullying and teachers' mental health, specifically with regard to anxiety and depression.

Method

A quantitative research design was used to explore the aims of this study. A sample of secondary school teachers completed a survey.

Selection of Participants

The Gauteng Department of Basic Education recommended and provided permission for data collection in a specific district in Tshwane (South Africa). This is an urban area with six secondary schools. In total, these schools have approximately 390 teachers and 7,500 learners. Of the learners,

roughly 45% are black, 35% white and 20% coloured, Indian or other.

The researcher visited each school and explained the study to the principals or vice-principals of the schools in the district. Five of the six principals gave permission for the teachers at their schools to participate in the study. Two criteria were used to select teachers as participants. Firstly, the teachers needed to be employed in one of the public secondary schools in the identified school district. Secondly, the teachers were required to have a proper understanding of English.

The researcher provided all the teachers at these five schools with information outlining the study and related ethical considerations. Teachers who were willing to participate voluntarily were requested to complete the surveys. The questionnaires, an information sheet pertaining to the research, and a consent form were distributed to these teachers, who were encouraged to complete the forms in a location of their choice. A concealed box with an opening was placed in the staff room at each school. The teachers were asked to put the completed surveys in an envelope and "post" them in the box within a week. The researcher then collected the box with surveys. This was done to ensure confidentiality of the data.

The researcher distributed approximately 320 questionnaires to the five participating schools. Of these, 187 (62%) were returned, but only 153 (51%) could be utilised for statistical analysis. The other questionnaires were not fully completed. As this was a convenience sample, the results are valid in the specific context, but cannot be applied to the population in general (Neuman, 2014).

Data Collection Instruments

The Learner-to-Teacher Bullying Questionnaire was developed by the researcher for the purpose of this study. It seeks to investigate teachers' experiences of learner-to-teacher bullying during the 12 months preceding the completion of the questionnaire. Questions were adapted from two school bullying questionnaires, namely the California Bullying Victimization Scale (Felix, Sharkey, Green, Furlong & Tanigawa, 2011) and a modified version of a questionnaire used by Olweus (James, Lawlor, Courtney, Flynn, Henry & Murphy, 2008). Permission was obtained from these authors to adapt their questionnaires. Although both questionnaires were designed to assess bullying among learners, they were found appropriate for this study as the same types of bullying apply to learner-to-teacher bullying (verbal and physical bullying as an example) as well as the school context (classrooms and playground as an example).

The Learner-to-teacher Bullying Questionnaire comprises 15 questions. In addition to questions on biographical details, teachers were asked to indicate how often they were exposed to different types of bullying (never, at least once a year, at least once a month) and where the bullying occurred on the school premises during the past year. The course of action was similar to the process followed by Felix et al. (2011). Types of bullying were defined as verbal (gossiping, insulting, threatening); physical (kicking, punching, hitting); indirect (ostracising, excluding, rejecting, ignoring); and cyber bullying (bullying via telecommunication networks). Four items in the questionnaire were used to assess verbal bullying, two for physical bullying, and one each to assess indirect and cyber bullying. These items were also employed in the study by James et al. (2008). Teachers were additionally asked what anxiety and depression symptoms they experienced as a result of learner-to-teacher bullying.

It was not possible to calculate Cronbach's alpha for the Learner-to-teacher Bullying Questionnaire. A large number of responses were given on the nominal level ("yes" or "no" responses). A small number of questions (1 to 4) were used to assess each type of bullying on the ordinal scale. This would not result in valid calculations of reliability (Maree & Pietersen, 2011).

Before distributing the questionnaire, it was piloted among a group of 10 teachers. Their comments regarding the layout of the questionnaire were used to finalise its content. They considered the face validity of the questionnaire appropriate.

The Hospital Anxiety and Depression Scale (HADS) is a standardised questionnaire designed to screen clinically significant anxiety and depression among people attending out-patient settings (Zigmond & Snaith, 1983). It also measures the severity of these mood disorders. The questionnaire consists of 14 questions, including seven items assessing anxiety and seven items assessing depression. Participants are required to indicate how often in the past month they have experienced specific symptoms of anxiety and depression. Responses were given on a 4-point Likert-scale ranging from "not at all" to "most of the time". Both subscales have a score range of 0–21. High scores suggest high levels of distress (Spinhoven, Ormel, Sloekers, Kempen, Speckens & Van Hemert, 1997). Cut-off points on the scales are as follows: 0–7 is considered normal, 8–10 as borderline abnormal, and 11–21 is regarded as clinically significant (Zigmond & Snaith, 1983).

The internal consistency of the questionnaire (Cronbach's alpha) was satisfactory, with values of 0.80 and 0.76 for anxiety and depression, respectively (Mykletun, Stordal & Dahl, 2001). A Cronbach alpha of at least .70 is considered reliable for a self-report scale (Howell, 2013). Additionally, the concurrent validity of the HADS was reported as "good to very good" (Bjelland, Dahl, Haug & Neckelmann, 2002:75). This instrument has been

utilised in various South African studies as a measure of anxiety and depression (Stein, Ahokas & De Bodinat, 2008; Wouters, Le Roux Booysen, Ponnet & Van Loon, 2012). In the current study, the Cronbach's alpha for the anxiety score was 0.87 and for the depression score 0.84. Both of these alphas indicate good internal reliability.

Data Analysis

The data was analysed using the IBM SPSS Statistics 22. Data were cleaned and questions with missing data were not utilised in the analysis. Descriptive statistics, specifically frequencies, were used to describe the prevalence of teachers that reported exposure to bullying by learners. Data analysis to explore the second aim included calculation of reliability of scales used, descriptive statistics such as means and standard deviations and inferential statistics by use of non-parametric statistics. The data did not meet the assumption of normality that is required for parametric statistical tests. Since non-parametric statistical tests do not depend on such strict assumptions, the non-parametric Spearman's rho and Mann-Whitney's U tests were performed to calculate correlations and compare medians between groups, respectively. The level of significance for all statistical tests was set at $\alpha = 0.05$.

Ethical Approval

Ethical approval for the study was obtained from the Ethics Committee residing at the Faculty of Humanities at the University of Pretoria, South Africa. The ethical principles of informed consent, confidentiality, and the protection of the participants' identities were adhered to. Since the topic of bullying is highly sensitive, each teacher was provided with an information sheet listing mental health resources to assist those who may have experienced bullying by learners.

Results

Characteristics of Participants

The 153 participants varied with regard to gender, age, and ethnicity. Most participants were female teachers (82.4%). Their ages ranged from 21 to 75 years, with the largest groups in the age categories between 21 and 25 years (23.5%), and 26 to 30 years (21.6%). Most of the participants were white teachers (93.3%), with smaller numbers of Indian and black teachers. More than a third of the teachers (38.1%) had one to five years teaching experience, while 44.7% had more than 10 years of teaching experience.

Prevalence of Bullying

The number of teachers that reported exposure to various types of bullying the past 12 months is provided in Table 1. The response categories of exposure to bullying by learners were integrated into exposure and non-exposure. The responses on

each type of bullying were integrated into a scale score for verbal, physical, indirect, and cyber bullying.

Table 1 Number of teachers that reported learner-teacher bullying ($n = 153$)

	N (%)
Verbal bullying*	95 (62.1%)
Hurtful name calling	68 (44.4%)
Being threatened	52 (34.2%)
Teased	43 (28.7%)
Sexual comments/jokes	40 (30.9%)
Physical bullying*	53 (34.6%)
Physically hurt, hit, pushed	14 (9.2%)
Belongings stolen, damaged	47 (30.7%)
Indirect bullying	41 (27.0%)
Rumours/gossip spread	41 (27.0%)
Cyber bullying	10 (6.6%)
Teased, rumours, threats via electronic devices	10 (6.6%)

Note. * Teachers that reported any of the items of verbal and physical bullying.

A high percentage of teachers reported various forms of verbal and physical bullying. Being called hurtful names, experiencing threats, being on the receiving end of sexual comments and having belongings stolen or damaged were the most prominent forms of bullying. Approximately 10% of the teachers experienced physical bullying and a smaller number were aware of threats and rumours via electronic media.

Most of the teachers indicated that they were bullied by learners in the classroom (49.3%) and during class time (39.9%). When bullying was experienced, most teachers talked to a colleague at school (29.3%), a family member (24.5%) or a friend or friends (23.8%) about the situation, while 3.1% of the teachers did not speak to anyone. In teachers' responses it was clear that they experienced anxiety (24.3%) and depression (15.4%) as a result of being bullied by a learner(s).

Teachers' Mental Health Scores

Table 2 offers descriptive statistics for the participants' scores on the HADS questionnaire.

Teachers experienced high levels of anxiety, with more than half reporting borderline (20.5%) or abnormal (31.1%) levels of anxiety. A third of the teachers reported elevated levels of depression in the borderline (21.9%) and abnormal (9.9%) categories.

Relationship Between Bullying and Anxiety and Depression Scores

The correlation coefficients between the two mental health scores and the bullying scores were computed using the non-parametric Spearman's rho (Table 3).

Positive correlations were found with each type of bullying and anxiety and depression scores. Three pairs of the correlation coefficients were

significant at the 1% level of significance, while the correlation coefficients between cyber bulling and the two HADS scores were significant at the 5% level. These results confirm the relationship between exposure to learner-to-teacher bullying and teachers' poor mental health, specifically with regard to anxiety and depression.

In order to investigate whether teachers who reported exposure to bullying differed in terms of level of anxiety and depression from teachers that did not report exposure to bullying, Mann-Whitney *U* Tests were performed (Table 4).

Table 2 Anxiety and depression scores of teachers

	Average SD	Normal (0–7)	Borderline (8–10)	Abnormal (11–21)	Cronbach's Alpha
Anxiety	7.95 (SD = 4.478)	73 (48.35%)	31 (20.5%)	47 (31.1%)	.87
Depression	5.08 (SD = 4.018)	103 (68.2%)	33 (21.9%)	15 (9.9%)	.84

Table 3 Correlations between exposure to bullying, anxiety and depression

	Anxiety score	Depression score
Verbal Bullying	.347*	.371*
Sig. (2-tailed)	< 0.0001	< 0.0001
N	151	151
Physical Bullying	.352*	.410*
Sig. (2-tailed)	< 0.0001	< 0.0001
N	151	151
Indirect Bullying	260*	.304*
Sig. (2-tailed)	.001	< 0.0001
N	150	150
Cyber Bullying	.180**	.182**
Sig. (2-tailed)	.028	.026
N	150	150

Note. * Correlation is significant at the 0.01 level (2-tailed). ** Correlation is significant at the 0.05 level (2-tailed).

Table 4 Difference in anxiety and depression between teachers who reported bullying in the past year or not

		N	M	Mdn	SD	Mann Whitney *U* Test
Verbal bullying						
Anxiety score	Not been bullied	58	1.51	1.00	.710	< 0.0001
	Reported being bullied the past 12 months	95	2.02	2.00	.921	
Depression score	Not been bullied	58	1.19	1.00	.398	< 0.001
	Reported being bullied the past 12 months	95	1.55	1.00	.759	
Physical bullying						
Anxiety score	Never been bullied	100	1.59	1.00	.783	< 0.0001
	Reported being bullied the past 12 months	53	2.29	3.00	.879	
Depression score	Never been bullied	100	1.23	1.00	.512	< 0.0001
	Reported being bullied the past 12 months	53	1.76	2.00	.790	
Indirect bullying						
Anxiety score	Never been bullied	111	1.68	1.00	.834	< 0.01
	Reported being bullied the past 12 months	41	2.23	3.00	.902	
Depression score	Never been bullied	111	1.28	1.00	.561	< 0.0001
	Reported being bullied the past 12 months	41	1.79	2.00	.801	
Cyber bullying						
Anxiety score	Never been bullied	142	1.79	1.50	.863	< 0.05
	Reported being bullied the past 12 months	10	2.40	3.00	.966	
Depression score	Never been bullied	142	1.40	1.00	.655	< 0.05
	Reported being bullied the past 12 months	10	1.60	1.00	.843	

For all types of bullying, the mean anxiety and depression scores of teachers who reported exposure to that type of bullying were higher than those of teachers who did not report bullying. Although causality cannot be assumed, there is a statistically significant relationship between exposure to bullying and teachers experiencing depressed or anxious feelings.

Discussion
The research findings indicate that a large proportion of teachers who participated in this study reported that they had experienced verbal (62.1%) and physical (34.6%) bullying by learners during the past year, while indirect bullying (27%) and cyber bullying (6.6%) were less common. This research confirms that learner-to-teacher bullying is

prevalent in some South African schools. Furthermore, these conclusions are comparable to findings reached in both international and local studies (De Wet, 2010b; De Wet & Jacobs, 2006; Khoury-Kassabri et al., 2009; Özkılıç, 2012).

Similar to previous research, verbal bullying is identified as the predominant type of learner-to-teacher bullying (e.g. De Wet, 2007; De Wet & Jacobs, 2006). Teachers experienced verbal bullying through hurtful name calling (44.4%), being threatened (34.2%), being teased in a hurtful way (28.7%), and having sexual comments made about them (30.9%).

Moreover, 34% of participants experienced some form of physical bullying. Almost a third had their property stolen or damaged, and nearly 10% were physically assaulted or hurt by a learner. These percentages are clearly higher than those reported by Steffgen and Ewen (2007). In De Wet's (2010b) qualitative study, teachers described their experiences of physical bullying as threats of violence, objects being thrown at them, and being slapped in the face. Learners threatened to take the lives of teachers' children, vandalised classrooms by spraying water, spray painting teachers' cars, and lacerating their tyres. This qualitative data reveals the severity of physical bullying of teachers.

The finding that 27% of teachers reported rumours or gossip spread about them, or cyber bullying threats via electronic devices (6.6%), corresponds with the findings of De Wet and Jacobs (2006) and Steffgen and Ewen (2007). Teachers are, it ought to be noted, not likely to be aware of the full extent of messages spread by learners via electronic media.

In accordance with previous research (e.g. Özkılıç, 2012; Pervin & Turner, 1998; Terry, 1998), this study found that 39.9% of participants reported that learner-to-teacher bullying mostly occurs during class time, in the confined space of the classroom. A classroom setting provides an audience of bystanders, instigators or supporters of the bully, which may make it more compelling for the learner to engage in intimidating behaviour. Being a victim in front of an audience may increase teachers' adverse experiences. However, it appears that teachers have some form of support system, because they related discussing these experiences with colleagues (29.3%), family members (24.5%), or friends (23.8%).

The reported learner-to-teacher bullying correlated significantly with anxiety and depression symptomology recounted by participants. This finding was confirmed by the Mann-Whitney U tests that revealed that teachers who reported any form of bullying experienced more anxiety and depression than those who did not report bullying. No causal relationships can be assumed, as many other conditions in the educational setting or on a personal level can contribute to teachers' experience of anxiety and depression (Daniels & Strauss, 2010; Jackson & Rothmann, 2006). It is also possible that teachers' experience of anxiety and depression may adversely affect their social skills and self-esteem, and thereby affected their interaction with learners to predispose them to bullying (Kaltiala-Heino, Fröjd & Marttunen, 2010). When asked specifically what effect the bullying had on them, 24.3% of teachers reported the experience of anxiety and 15.4% reported depression as a direct result of the bullying.

However, this research highlights learner-to-teacher bullying as an additional stressor that can contribute to the distressing work environment of teachers. The disempowerment of teachers as professionals by learners (De Wet, 2010b) was reported to result in teachers leaving one school for another, or changing careers (De Wet & Jacobs, 2006). Moreover, bullying not only occurs between the bully and the victim, but evolves in "the social context of the peer group, the classroom, the school, the family and the larger community" (Mishna, Scarcello, Pepler & Wiener, 2005:719).

The value of this study lies in its exposure of the high level of learner-to-teacher bullying, and the experience of anxiety and depression among teachers, as well as the fact that the existence of a relationship between these factors is cause for concern. Although one ought to be careful to conclude that there exists direct causality between exposure to bullying and teachers experiencing depressed and anxious feelings, this study has demonstrated that this area of focus requires further investigation.

Limitations
The following limitations should be considered in the interpretation of the results and can serve as recommendations for further studies. To begin with, the data is based on teachers' self-report, where recall bias may result in over- or under-reporting. In order to confirm that responses are reliable, future studies ought to consider a multi-informant approach. This study did not include research about the bully (based on the input from learners), and did not explore the interaction between the teachers and learners that could result in bullying behaviour. For instance, it was not researched as to whether there is a relationship between the ethnicity or the socio-economic context of the learners and learner-to-teacher bullying (Khoury-Kassabri et al., 2009). Additionally, factors such as the interpersonal style of the teachers and their classroom management skills (Allen, 2010) that could contribute to this type of bullying interaction, were not included in this study. The focus was only on the self-reported experiences of the teachers. As an exploratory study, this research could not indicate whether

teachers may have been experiencing feelings of depression or anxiety due to other circumstances prior to the bullying experience. Also, this study was not able to show whether possible feelings of depression or anxiety affected teachers' interactions with learners, or their perception of learner behaviour. Where the input of learners is concerned, a study by James et al. (2008:160) examined the "nature of other [bullying] relationships" with learners as participants. However, De Wet (2012) states that research utilising South African learner input proves a difficult task, as learners who knowingly bully their teachers may not volunteer to partake in a study on the subject.

Secondly, participants were recruited from five schools in one district of Tshwane (South Africa), which limits the generalisability of the results. As differences might be found between areas (rural vs. urban), or different cultural compositions of the school in terms of teachers and learners, future studies ought to attempt to replicate the study in a variety of settings.

Thirdly, the use of the self-developed Learner-to-teacher Bullying Questionnaire displayed difficulties in terms of the formulation of questions about bullying. The questionnaire reflects exposure to bullying, but not the intensity, frequency, or impact the bullying had on the teacher's teaching or life. The use of nominal and ordinal scales further limits the level of statistical analysis that was possible, such as measuring the internal reliability.

Fourth, the study focused only on feelings of teachers' anxiety and depression. Additional mental health variables such as stress should be included. Finally, the study was cross-sectional, which prevents the possibility of examining issues of causality. Employing a mixed method design where qualitative data can enrich the results through in-depth interviews may be more conducive to this type of study (De Wet, 2012).

Conclusion
The bulk of research and attention on bullying has been on bullying, where children are the victims (Sylvester, 2011), with limited research investigating teachers as the victims of bullying by learners in schools. Learner-to-teacher bullying is an area of international concern (Garrett, 2014). Effective education cannot take place in a school context "where those who are supposed to lead, supervise and act as role models (educators) are targeted by those whom they are supposed to lead, supervise and protect (learners)" (De Wet, 2010b:190). The findings of this study reported a high prevalence of learner-to-teacher bullying in schools, and significant levels of anxiety and depression experienced among teachers. It is clear that there were significant relationships between these concepts, although causality cannot be assumed. This study advocates the importance of addressing learner-to-teacher bullying, anxiety and depression among teachers, and the relationship between the different roleplayers. The implications of the study are that interventions need to occur in two areas and on two levels. Firstly, interventions should aim at addressing learner-to-teacher bullying. A starting point could be the development of anti-bullying policies that focus on bullying among children, and include teachers being bullied by their learners (e.g. Espelage, Anderman, Brown, Jones, Lane, McMahon, Reddy & Reynolds, 2013; Munn, Johnstone, Sharp & Brown, 2007). Further to this, teachers could be made aware of how to identify such interactions early on and how to improve their relationship and classroom management skills to prevent the development of bullying relationships. Secondly, mental health services need to be made available to teachers who experience high levels of mental health difficulties. However, in order to make a significant difference, the implementation and maintenance of interventions needs to occur on a local level at individual schools, as well as on a national and even international level. In combination these interventions can offer individuals who suffer at the hands of a bully the opportunity to shape their future and rebuild themselves from what they have suffered in the past (Scott-Lennon & Considine, 2008).

Note
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