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Pre-service Teachers: Knowledge, Attitudes and their Perceived Skills in Addressing Student Bullying Behaviours

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Abstract: Understanding pre-service teachers' capacity to prevent and manage student bullying behaviours is critical for ensuring a smooth transition into early career teaching and the success of schools' anti-bullying initiatives. This exploratory study investigated 234 pre-service teachers' knowledge, attitudes, perception of skills, personal experience of bullying and current undergraduate learnings in relation to bullying behaviours in schools.

Most undergraduate pre-service teachers could identify bullying behaviours, however many reported they felt their undergraduate degree had not prepared them well enough to deal with bullying behaviours. As a consequence they felt they lacked the skills to prevent and respond effectively to incidents of bullying, specifically in covert and cyberbullying behaviours. Pre-service teachers wanted to better understand the complexities of the behaviour and be exposed to curriculum learning resources.

The lack of skills in managing future bullying and particularly cyberbullying incidents reported by pre-service teachers within this current study is not surprising, but has social and emotional implications for young people who turn to their teachers for support.

Introduction

Bullying is recognised as a serious health issue, impacting not only on a student's physical, mental, social and emotional wellbeing (Lester, Cross, Dooley, & Shaw, 2013; Lester, Dooley, Cross, & Shaw, 2012; Tremblay et al., 2004) but on the school climate and the school community as a whole (Cohen & Freiberg, 2013). In Australia, approximately 25% of young people experience traditional forms of bullying and 7% cyberbullying (Cross et al., 2009). Further, around one in ten young people report perpetrating traditional bullying and 4% report cyberbullying others (Cross et al., 2009). Schools are dynamic environments which strive to implement innovations aimed at improving academic, social and wellbeing outcomes for students. School-based anti-bullying programs have been shown to be effective in reducing the frequency of bullying victimisation and perpetration (Jiménez-Barbero, Ruiz-

Hernández, Llor-Zaragoza, Pérez-García, & Llor-Esteban, 2016), which in turn, impacts on student wellbeing (Lester, Cross, Dooley, & Shaw, 2012).

Researchers acknowledge that teachers are required to be active participants in school-based anti-bullying programs with the success of many hinging on teachers' knowledge and concern (Kallestad & Olweus, 2003). Teachers' management of bullying and other misbehaviour is mediated by their beliefs in their ability to effectively intervene as well as their perceptions of the cause of the behaviour (Martin, Linfoot, & Stephenson, 1999). This association can be explained by Bandura's self-efficacy theory (Bandura, 1993) in which teachers' beliefs in their ability to affect change and confidence to do so, will influence the use of strategies to affect change (Giallo & Little, 2003). Self-efficacy beliefs change over the course of a teaching career, with confidence highest during pre-service training and falling after two years of an in-service career (Welch, 1995).

Early career teachers in Australia make the transition from pre-service student to in-service practitioner using a mix of theory and practice over a four-year undergraduate degree or a two year post-graduate degree. For most pre-service teachers the transition into a school as a commencing early career teacher can be rewarding and exciting, however for some, transition is plagued with professional and personal vulnerability (McConaghy & Bloomfield, 2004) where they have high expectations of self or are sometimes expected to possess the knowledge and experience of a more experienced teacher (Darling-Hammond, Chung, & Frelow, 2002). Such unrealistic assumptions leaves many early career teachers struggling to cope, especially when exemplified by concerns in managing student behaviour and the classroom environment (Ewing & Smith, 2003).

Many factors may influence pre-service teachers' attitudes and confidence in managing and responding to student behaviour which in turn predicts their actions and may impact on the effectiveness of a school's anti-bullying strategies (Boulton, Hardcastle, Down, Fowles, & Simmonds, 2014). Pre-service teachers have been found to be lacking in knowledge regarding antecedents to bullying, the ability to identify those who bully, and to also possess inaccurate beliefs concerning the role of aggression, and emotional states on bullying behaviours (Lopata & Nowicki, 2014). Self-efficacy also had a direct effect on likelihood of intervention (Bradshaw et al., 2007), with studies showing inconsistent results for teacher self-efficacy in coping with bullying (Beran, 2005; Bradshaw, Sawyer, & O'Brennan, 2007). A significant predictor of teacher stress is lack of self-efficacy in identifying, addressing, and dealing with student bullying (Barnes et al., 2012; Bauman & Del Rio, 2006).

The Theory of Planned Behaviour (Ajzen, 1991) suggests a tendency to intervene in bullying behaviour is dependent on a pre-service teachers' perception of how serious the bullying is. Prior research found teachers differ in how they respond to different types of bullying (Boulton et al., 2014), they tend to underestimate the incidence rates of bullying, and are less likely to detect covert forms of bullying (Yoon, 2004). As a consequence, teachers' perceive physical as more serious than covert forms of bullying; and therefore are more likely to intervene (Yoon, 2004). In a recent comparison of teachers and pre-service teachers, the perceived seriousness of bullying, irrespective of the type of bullying, was associated with greater empathy for victims, and likelihood of intervention (Begotti, Tirassa, & Acquadro Maran, 2016). Research also indicates that teachers who had been bullied in the past were more likely to feel empathy toward the individual being bullied (Kokko & Porhola, 2009). Therefore, an early career teachers' response to misbehaviour, including bullying, depends not only on their on their perception of bullying, but also the pre- and post- service training they receive and their life experiences (Yoon, 2004).

Evidence suggests teacher attitudes towards bullying differ by sex (Boulton, 1997; Craig, Bell & Leschied, 2011; Craig, Pepler & Atlas, 2000; Rigby & Slee, 1999). Previous

studies have shown female teachers report being more concerned and feeling more responsible about bullying, but less confident than males about dealing with bullying (Boulton, 1997). In a Canadian studies of 750 pre-service teachers, females perceived homophobic and cyber bullying as more serious than males (Craig et al., 2011), whereas another Canadian study involving over 500 students, found neither males nor females felt prepared in their pre-service training to manage bullying incidents (Beran, 2005). The year of study is also important with pre-service teacher confidence in dealing with bullying increasing in their second year of study (Beran, 2005).

Given the importance of teachers' capacity to prevent and manage bullying behaviours, this exploratory research sought to investigate pre-service teachers' a) ability to identify different types of bullying behaviours and their perception of harm, b) attitudes towards student bullying behaviours and bullying prevention education, c) perceptions of their skills to prevent and manage incidents of student bullying, and, d) current pre-service learning about ways to prevent and manage bullying behaviours in schools. This research also aimed to explore demographic (age, sex) and other factors (year level in course, type of school attended, university attending, personal experiences of bullying at school and university) which may impact on a pre-service teachers' knowledge, attitudes and self-efficacy.

Methods

Participants

Undergraduate students studying a Bachelor of Education (Teaching) were recruited from two Australian universities, one in Western Australia and one in South Australia. Both universities have large student numbers enrolled in their undergraduate teaching degree and both offer a range of study areas including Early Childhood, Kindergarten/Reception through Primary, Primary, Primary to Middle Years and Secondary.

Following ethical approval granted from both Universities Ethics Committees, all Undergraduate Education students (first through to last year of study) were invited to participate in the study via an email sent to them by course coordinators. A total of 2,356 pre-service teachers (1256 from University A and 1100 students from University B) were sent an email invitation to complete the online survey. The email provided students with a link to an online self-report survey and were advised that completion of the survey was anonymous and implied informed consent. The online survey, accessed and managed via Survey Monkey was available to all Education students for a period of six weeks during October and November 2011.

Even though all students were sent an email, it was not possible to identify how many students actually received and/or read the email. Further, course coordinators from both Universities reported many students were not on campus at the time of the survey period due to practicum placement therefore may not have read or responded to the email invitation. Hence it is not possible to calculate accurate response rates A total of 248 students completed the online survey (62 from University A and 170 students from University B).

Design

A cross-sectional study was employed using both closed and open ended survey responses to collect information on pre-service teachers' thoughts regarding the prevention and management of bullying behaviours in schools. Open-ended responses provided contextualised understandings of phenomena and were analysed qualitatively, using an Interpretative Phenomenological (Eatough & Smith, 2017), through constant comparison of *a priori* themes derived from the literature, and emergent themes from the participants.

Measures

Demographic characteristics such as age, gender, university attending, current year level in degree, learning areas taught, and type of secondary school attended (Government, independent or Catholic) were collected.

Personal experiences of bullying (at school and university): Pre-service teachers' past experiences of bullying (at school and university) were measured using previously validated measures of bullying (Shaw, Dooley, Cross, Zubrick, & Waters, 2013). Respondents were asked to indicate how often they were bullied by another student or group of students from their university and during their time at secondary school with responses ranging from "I was not bullied" to "I was bullied several times a week or more".

Knowledge of bullying behaviours and perception of harm: Respondents were presented with a list of fourteen scenarios (10 bullying; 4 misbehaviours) and asked to determine which of the described behaviours constituted bullying, by selecting either 'yes' or 'no', and the level of harm associated with each behaviour on a three-point Likert scale (not at all, somewhat or very harmful). The scenarios were developed based on the 10 distinct and most commonly occurring bullying behaviours, including cyberbullying examples, sourced from the Child Health Promotion Research Centres (CHPRC) previously validated measures of students' experiences of bullying (Cross et al., 2009; Shaw et al., 2013) as well as validated vignettes (Spears, Campbell, Tangen, Slee, & Cross, 2015). Four scenarios were included of misbehaviours not considered bullying (i.e. not repeated, intentional or with a power imbalance). A knowledge score was created by calculating the number of correct responses to the fourteen scenarios described above with a higher score reflecting greater knowledge of bullying behaviour. Perception of harm was determined individually for traditional and cyberbullying behaviour.

Attitudes towards student bullying behaviours and bullying prevention education: Pre-service teachers' attitudes to bullying were measured using 16 items adapted from the Australian Covert Bullying Prevalence Study (Cross et al., 2009) including statements such as 'bullying toughens students up' and 'students who are bullied deserve what they get'. Respondents were asked to what extent they agreed or disagreed with each statement on a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither, 4=agree, and 5=strongly agree). Three subscales were created and considered to have good reliability: a positive attitude towards teachers helping those who are bullied ($\alpha=0.93$); a negative attitude towards teachers helping those who are bullied ($\alpha=0.96$); and attitudes towards the harmful nature of covert bullying ($\alpha=0.83$). An average score was created for each subscale with higher scores reflecting greater positive attitudes towards teachers helping those who are bullied, greater negative attitudes towards teachers helping those who are bullied, and greater agreement of the harmful nature of covert bullying.

Pre-service teachers' attitudes towards bullying prevention education in the classroom was measured with five items measured on a five-point Likert scale (strongly agree, agree,

neither, disagree, and strongly disagree) (Pearce, Monks, & Cross, 2010). Items included statements such as “*It is important to teach bullying prevention education to students*” and “*the percentage of students who are bullied is related to whether bullying prevention is addressed in the classroom*”. An average score was created for teaching bullying prevention ($\alpha=0.89$) and the outcomes of teaching bullying prevention ($\alpha=0.90$) with higher scores reflecting greater positive attitudes towards bullying prevention education.

Perceptions of skills to prevent and manage incidents of student bullying: A measurement of pre-service teachers’ perceptions of their skills to prevent and manage incidents of bullying was adapted from previously validated measures (Cross et al., 2009) including statements such as “*I feel I have the skills to: identify students who are being bullied; deal with cyber (online) bullying incidents; discuss bullying with parents*”. Respondents were asked to what extent they agreed or disagreed with eleven key skills, each statement on a five-point Likert scale (strongly agree, agree, neither, disagree, and strongly disagree). An average score was created for perception of skills relating to discussing ($\alpha=0.78$), identifying ($\alpha=0.87$), managing ($\alpha=0.86$) and preventing bullying behaviours ($\alpha=0.63$).

Pre-service teachers’ learnings of ways to prevent and manage bullying behaviours: To assess pre-service teachers’ learnings of ways to prevent and manage student bullying behaviours, respondents were invited to indicate how much discussion they had so far in their teaching degree about ways to prevent and manage bullying behaviours in schools. Responses were measured on a five point scale (a lot, a moderate amount, very little, none at all, unsure). Respondents were then given the opportunity to qualitatively explore what else they would like to learn regarding ways to prevent and manage bullying in schools. Responses were analysed qualitatively, through application of *a priori* themes derived from the literature, and emergent themes from the participants.

Data Analyses

SPSS v 23 was used to analyse pre-service teachers’ knowledge, attitudes and perceived skills to prevent and manage bullying and cyberbullying and compare pre-service teacher students across gender, age, year of study, University attending, type of secondary school attended and personal experience of bullying at secondary school and university. Cronbach alpha was used to determine the reliability of subscales. Due to the non-parametric nature of the data, Mann-Whitney and Kruskal-Wallis tests were used to determine if differences existed between demographic variables and knowledge scores, attitudes, and perceptions. Linear regressions were used to determine the significant demographic and other predictors of pre-service teachers’ knowledge, perception of harm, attitudes and perceived skills to prevent and manage student bullying.

Results

Survey results have been presented in two sections: quantitative results followed by the qualitative results.

The majority of respondents were female (92%), aged under 25 (51%), attended University B (73%), and attended a government school in the last year of secondary school (56%) (Table 1). Thirty percent of respondents were in their first year of their degree, 17% were in their second year, 27% in their third year and 27% in their fourth year. Over one-third of respondents (36%) indicated they had been bullied frequently during secondary

school, a further 42% were bullied once or twice, and 22% were never bullied. Eighty-five percent of respondents had not been bullied in the last semester at university, with a further 13% bullied once or twice and 2% bullied frequently.

	N=248	%
Gender		
Male	19	8
Female	215	87
Not Stated	14	5
Age		
Under 25	118	48
25-29	23	9
30-34	17	7
35-39	31	13
40-44	28	11
45+	16	6
Not stated	15	6
University		
A	62	25
B	170	69
Not stated	16	6
Learning Areas*		
The Arts	85	13
English	109	17
Health and Physical Education	86	13
Languages Other Than English	10	2
Mathematics	93	14
Science	89	14
Society and Environment	98	15
Technology and Enterprise	62	10
Religious Education	15	2
Year level in degree		
First	66	27
Second	37	15
Third	61	25
Fourth	60	24
Not stated	24	10
Type of secondary school attended		
Government	130	52
Independent	51	21
Catholic	53	21
Not stated	14	6
Bullied at secondary school		
Never	52	21
Once or twice	98	40
Every few weeks or more often	85	34
Not stated	13	5
Bullied at university		
Never	200	81
Once or twice	30	12
Every few weeks or more often	5	2
Not stated	13	5

*Multiple responses allowed

Table 1. Summary of pre-service teacher demographic information

Knowledge of Bullying Behaviours and Perception of Harm

Knowledge of bullying behaviours was relatively high with an average knowledge score of 12.4 out of 14: 15% of respondents correctly identifying all fourteen bullying behaviour scenarios; a further 40% correctly identified thirteen scenarios; and 31% identified twelve scenarios correct. There was no significant difference in the knowledge score between gender, age, year of study, university attending, type of secondary school attended, or whether the respondent had been bullied in secondary school or at university (Table 2).

Of the fourteen scenarios presented, seven represented traditional bullying behaviours, three cyberbullying behaviours and four non-bullying misbehaviours. Respondents ranked cyberbullying (mean 2.7 out of 3) and traditional bullying (mean 2.6 out of 3) behaviours as similarly harmful. There were no significant differences in ratings of severity of harm of bullying behaviours with respect to gender, year of study, university attending, type of secondary school attended, or whether the respondent had been bullied in secondary school or at university. However, respondents under the age of 25 rated the severity of cyberbullying significantly higher than respondents over the age of 25 ($U = 5473.00$, $p = 0.008$, $r = -0.17$).

	Knowledge of bullying (range 0-14)	Perception of harm of types of bullying (range 1-3)		Attitudes towards bullying behaviours (range 1-5)			Attitudes towards bullying prevention (range 1-5)		Perception of skills to prevent and manage bullying (range 1-5)			
		Traditional bullying	Cyber bullying ^a	Positive ^a	Negative ^a	Covert Harmful	Teaching ^a	Outcomes ^{ac}	Discussing ^b	Identifying ^a	Managing	Prevention
Gender												
Male	11.9(3.1)	2.6(0.3)	2.6(0.4)	4.3(0.6)	1.4(0.5)	3.8(0.6)	4.3(0.7)	3.5(0.6)	3.8(0.9)	4.0(0.7)	3.6(0.8)	3.9(0.8)
Female	12.5(1.2)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.4(0.5)	4.0(0.8)	4.4(0.7)	3.2(0.8)	3.7(0.7)	3.7(0.7)	3.4(0.7)	3.9(0.7)
Age												
Under 25	12.3(1.5)	2.6(0.3)	2.8(0.3)	4.3(0.5)	1.4(0.5)	3.9(0.7)	4.4(0.7)	3.1(0.7)	3.7(0.7)	3.8(0.6)	3.4(0.7)	3.9(0.7)
Over 25	12.5(1.3)	2.6(0.3)	2.7(0.3)	4.5(0.5)	1.3(0.5)	4.0(0.8)	4.5(0.7)	3.4(0.8)	3.7(0.7)	3.7(0.7)	3.5(0.7)	3.9(0.7)
University												
A	12.6(1.1)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.4(0.4)	4.1(0.7)	4.3(0.8)	3.1(0.8)	3.7(0.5)	3.7(0.7)	3.4(0.7)	3.8(0.7)
B	12.3(1.5)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.4(0.5)	4.0(0.8)	4.5(0.7)	3.3(0.8)	3.7(0.8)	3.8(0.6)	3.4(0.7)	3.9(0.7)
Year level in degree												
First	12.4(1.0)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.3(0.4)	4.0(0.7)	4.5(0.6)	3.3(0.7)	3.6(0.7)	3.8(0.6)	3.3(0.8)	3.8(0.7)
Second	11.8(2.5)	2.5(0.4)	2.7(0.3)	4.4(0.4)	1.3(0.5)	3.8(0.7)	4.6(0.5)	3.3(0.8)	3.7(0.8)	3.6(0.6)	3.4(0.6)	3.9(0.7)
Third	12.5(1.0)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.5(0.5)	4.1(0.8)	4.3(0.9)	3.1(0.8)	3.7(0.7)	3.7(0.7)	3.3(0.8)	3.8(0.7)
Fourth	12.7(1.2)	2.6(0.3)	2.7(0.2)	4.4(0.6)	1.3(0.4)	4.1(0.9)	4.5(0.7)	3.3(0.9)	3.9(0.6)	3.8(0.7)	3.6(0.6)	4.1(0.7)
Type of school attended												
Government	12.4(1.3)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.4(0.5)	4.0(0.8)	4.4(0.7)	3.3(0.8)	3.8(0.7)	3.7(0.7)	3.4(0.7)	3.8(0.7)
Independent	12.2(2.0)	2.5(0.4)	2.7(0.3)	4.4(0.4)	1.4(0.4)	3.8(0.7)	4.5(0.5)	3.0(0.7)	3.7(0.7)	3.8(0.6)	3.4(0.7)	3.9(0.7)
Catholic	12.7(1.0)	2.7(0.2)	2.8(0.2)	4.3(0.6)	1.3(0.4)	4.1(0.8)	4.4(0.8)	3.3(0.9)	3.8(0.6)	3.8(0.7)	3.5(0.8)	4.1(0.6)
Bullied in secondary school												
Never	12.4(1.5)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.3(0.4)	4.0(0.8)	4.5(0.7)	3.2(0.8)	3.7(0.7)	3.7(0.7)	3.4(0.7)	3.9(0.7)
Once or twice	12.4(0.8)	2.6(0.3)	2.7(0.3)	4.2(0.8)	1.5(0.6)	4.1(0.8)	4.4(0.8)	3.2(0.8)	3.8(0.7)	3.9(0.6)	3.4(0.9)	4.0(0.7)
Frequently	12.6(0.5)	2.7(0.2)	2.9(0.2)	4.4(0.4)	1.5(0.4)	4.6(0.7)	4.3(0.7)	3.3(0.8)	4.1(1.1)	4.0(1.0)	3.9(0.8)	4.2(0.9)
Bullied at university												
Never	12.4(1.2)	2.6(0.3)	2.7(0.3)	4.4(0.6)	1.3(0.4)	4.0(0.8)	4.5(0.7)	3.2(0.9)	3.8(0.6)	3.7(0.7)	3.5(0.7)	4.0(0.6)
Once or twice	12.3(1.7)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.4(0.5)	3.9(0.8)	4.4(0.7)	3.2(0.8)	3.7(0.8)	3.8(0.6)	3.4(0.7)	3.9(0.7)
Frequently	12.6(1.1)	2.6(0.3)	2.7(0.3)	4.4(0.5)	1.4(0.4)	4.1(0.8)	4.4(0.7)	3.3(0.7)	3.8(0.7)	3.8(0.7)	3.4(0.7)	3.9(0.7)

n ranges from 224 to 234

^a *p*<0.05 for age, ^b *p*<0.05 for year level in degree, ^c *p*<0.05 for type of school attended

Table 2 Pre-Service Teacher Knowledge of Bullying Behaviours, Perception of Harm, Attitudes towards Bullying Behaviour and Prevention, and Perception of Skills

Attitudes towards Student Bullying Behaviours

The majority of pre-service teachers had high positive attitudes (mean 4.4 out of 5) and low negative attitudes (mean 1.4 out of 5) towards teachers helping those who are bullied. On average, pre-service teachers aged greater than 25 had less positive attitudes ($U = 5485.5, p = 0.011, r = -0.17$) and greater negative attitudes ($U = 5666.5, p = 0.022, r = 0.15$) towards teachers helping those who are bullied than pre-service teachers aged under 25. When examining individual items, respondents aged under 25 were significantly more likely to agree students who bully are unlikely to change their behaviour ($\chi^2(2, N = 233) = 7.965, p = 0.019$), punishment is the best way to respond to a student who is bullying others ($\chi^2(2, N = 232) = 10.803, p = 0.005$) and significantly more likely to disagree that covert bullying (not easily seen by adults) is usually more hurtful than overt (face-to-face) bullying ($\chi^2(2, N = 230) = 8.131, p = 0.007$) than students aged over 25. Respondents were in agreement of the harmful nature of covert bullying (mean 4.0 out of 5).

Attitudes towards Bullying Prevention Education

The majority of pre-service teachers had positive attitudes towards the importance of teaching bullying education (mean 4.5 out of 5) and lower positive attitudes towards teaching outcomes (mean 3.2 out of 5). On average, pre-service teachers older than 25 had greater positive attitudes towards the importance of teaching bullying education ($U = 5544.0, p = 0.014, r = 0.16$) and greater positive attitudes towards teaching outcomes ($U = 5728.5, p = 0.038, r = 0.14$) than pre-service teachers younger than 25, while pre-service teachers who attended an independent secondary school had lower positive attitudes towards teaching outcomes than pre-service teachers who attended Government or Catholic schools ($H(2) = 6.808, p = 0.033$). When examining individual items, respondents who attended Government or Catholic secondary schools were significantly more likely to agree the percentage of students who engage in bullying ($\chi^2(4, N = 233) = 11.628, p = 0.020$) and are bullied ($\chi^2(4, N = 233) = 10.312, p = 0.035$) is related to whether bullying prevention is addressed in the classroom than students who attended independent schools.

Perceptions of Skills to Prevent and Manage Incidents of Student Bullying

Pre-service teachers perceived they had high skill levels in the areas of discussing (mean 3.7 out of 5), identifying (mean 3.7 out of 5), managing (mean 3.4 out of 5) and preventing bullying behaviours (mean 3.9 out of 5). Pre-service teachers in their first year of university perceived lower skills in the area of discussing bullying than pre-service teachers who had been at university longer ($H(3) = 8.873, p = 0.031$), while pre-service teachers younger than 25 perceived higher skills in identifying bullying than pre-service teachers older than 25 ($U = 5843.5, p = 0.043, r = 0.13$). There were no significant differences in demographics with respect to managing and preventing bullying behaviours.

While the majority of respondents agree they have the skills to discuss, identify, and prevent bullying, the majority of respondents are unsure as to how to deal with covert (64%) or cyber (70%) bullying. Respondents aged under 25 were significantly more confident ($\chi^2(2, N = 233) = 10.640, p = 0.005$) they have the skills to encourage students to help someone who is being bullied than respondents aged over 25.

Demographic Predictors of Knowledge of Bullying Behaviours, Perception of Harm, Attitudes towards Bullying Behaviour and Prevention, and Perception of Skills

Linear regression models were used to determine significant demographic predictors of pre-service teacher knowledge of bullying behaviours, perception of harm of the different types of bullying, attitudes towards bullying behaviour and prevention, and perception of skills to prevent and manage bullying. All demographic predictors (gender, age, university, year level in degree, type of secondary school attended, frequency of being bullied at school, frequency of being bullied at university) were entered into each model to determine the relative significance of each predictor.

After taking into account all other demographic predictors, pre-service year level in degree was a significant predictor of bullying knowledge and perception of skills to prevent and manage bullying. The results of the regression indicated the demographic predictors only explained 8% of the variance in knowledge ($R^2=.08$, $F(10,209)=1.89$, $p=.048$), 8% of the variance in attitudes towards bullying prevention ($R^2=.08$, $F(10,208)=1.72$, $p=.078$), 6% of the variance in discussing bullying ($R^2=.06$, $F(10,209)=1.31$, $p=.225$), 4% managing bullying ($R^2=.04$, $F(10,209)=.83$, $p=.596$), and 6% in preventing bullying ($R^2=.06$, $F(10,209)=1.34$, $p=.212$).

Pre-service teachers in the second year of their degree reported significantly less knowledge than those in the fourth year of their degree ($\beta=-0.85$, $p=0.006$), whereas those in the first year of their degree reported significantly less skills in discussing ($\beta=-0.42$, $p=0.002$), managing ($\beta=-0.32$, $p=0.022$) and preventing ($\beta=-0.34$, $p=0.010$) bullying behaviour than those in the fourth year of their degree. Pre-service teachers in the third year of their degree also reported significantly less skills in preventing bullying behaviour than those in the fourth year of their degree ($\beta=-0.33$, $p=0.015$).

Pre-service teachers who had attended an independent school reported significantly less favourable attitudes towards bullying prevention outcomes than those who attended a government school ($\beta=-0.32$, $p=0.030$).

There were no significant demographic predictors of the perception of harm of different types of bullying, attitudes towards bullying prevention teaching or attitudes towards bullying behaviours.

Knowledge of ways to Prevent and Manage Bullying Behaviours

Over half of the respondents (56%) had very little discussions within their teaching degree regarding ways to prevent and manage bullying, 22% had no discussions at all, 17% reported a moderate amount of discussion, and 2% a lot of discussion. There were no significant differences in demographics with respect to discussions within teaching degree regarding ways to prevent and manage bullying.

Qualitative Insights: Ongoing Challenges

All respondents were invited to document their thoughts via the open-ended questions, regarding what else they would like to learn about ways to prevent and manage bullying behaviours in schools. Using an interpretive phenomenological analysis (IPA) several close and detailed readings of the data were undertaken to obtain an holistic perspective of the participants' needs going forwards in relation to the prevention and management of bullying behaviour in schools. Common words, phrases and sentiments were initially coded, then clustered, condensed and refined to form macro coding and key themes

(Eatough & Smith, 2017). The quotes presented are representative of the emergent themes from the participants (Table 3).

“I don't feel we have been equipped to be able to educate our students how to deal with bullying in the school. We have a lot of responsibility to be able to protect our students; however we are not learning the tools to best advise our students on how to cope and best deal with bullying problems”.

Many pre-service teachers reflected on their current skills and acknowledged their pre-service teacher training has not readied them with all the skills they may need in order to prevent and manage bullying situations in schools and indicated they required further knowledge on strategies, techniques and tools to manage the ongoing challenges of bullying situations. Specifically, the need for pre-service teachers to learn about responding techniques was acknowledged.

“I would like the chance to discuss techniques to be used in a school environment in lectures or tutorials. The issue of bullying IS addressed, but techniques to deal with it are not”

Overall, pre-service teachers surveyed indicated a need for greater understanding of how to prevent, identify and manage bullying situations, including how to help both the student bullying and the student being bullied. Many indicated they would appreciate learning about the complexities and difficulties of identifying bullying behaviour; specifically, how to tell if someone is being bullied, what are the warning signs and symptoms, and why children bully others.

“How to deal with the bullying - we know we need to educate students about it, and encourage it to not happen and create environments to limit it - but when it does happen, or we think it might be- how do we know, how do we stop it when it is happening or after etc...”.

A key theme was the desire to learn about cyberbullying, technology and the law and the specific types of anti-bullying programs available to schools and differences in anti-bullying resources and programs between government and non-government schools. There was also a need to be informed of how bullying prevention is incorporated into the curriculum (and the outcome expectations of this).

Teachers' past experiences of bullying may influence their confidence in dealing with and managing bullying behaviour with some pre-service teachers acknowledging personal difficulties in knowing how to manage bullying incidents (in a fair and unbiased manner) if they had been bullied in the past. Also identified as a need, was support to manage the parent-student-teacher dynamic whilst ensuring parents were aware of their responsibilities in managing their child's behaviour. Many were interested in learning about the availability and effectiveness of practical resources for teachers to educate students and parents regarding bullying and appropriate behaviour.

Coding	Theme
Understanding of the complexities of: bullying behaviour; how to tell if someone is being bullied, what are the warning signs and symptoms and why children bully; identifying covert and cyberbullying Understanding of the complexities and difficulties of identifying covert bullying (including cyber bullying)	Knowledge of Bullying
Further knowledge on strategies, techniques and tools to manage bullying situations	Knowledge of Existing Strategies
How to manage the parent-student-teacher dynamic whilst ensuring parents were aware of their responsibilities in managing their child's behaviour.	Managing the Community Dynamic

<p>Pre-service teacher’s past experiences of bullying may influence their confidence in dealing with and managing bullying behaviour in a fair and unbiased manner; dealing with bullying when on placement/practicum; training within their degree</p> <p>Concerns regarding how to deal with being bullied while out on practicum placement in schools as a pre-service teacher</p> <p>A specific course (or course content) on behaviour management and bullying needed in pre-service teacher education</p>	<p>Pre-service Teachers Concerns (Confidence; Placement; Training)</p>
<p>A need to learn about cyber bullying, technology and the law</p>	<p>Legal Obligations and Cyberbullying</p>
<p>How to encourage active supportive bystanders and how to be an approachable teacher (so students feel confident in trusting you)</p>	<p>Becoming A Trusted Adult</p>
<p>How bullying prevention is incorporated into the curriculum (and the outcome expectations of this)</p>	<p>Curriculum/ Personal Capabilities</p>

Table 3: Summary of coding and themes from qualitative reflections and responses to “what pre-service teachers’ would like to know in order to prevent bullying in schools”

Discussion

Effectively responding to student bullying behaviours can be a significant source of stress for many teachers (Barnes et al., 2012). This paper provides an insight into what pre-service teachers, know, think and are prepared for when graduating from their studies and moving into the classroom, to help empower both pre-service teachers and the schools they will work in to most effectively prevent, identify and respond to student bullying behaviours.

This exploratory study of pre-service teachers at two Australian Universities found that early career teachers are entering their new school context with a good understanding of bullying behaviours with many having personally experienced bullying, particularly cyberbullying. Pre-service teachers reported they found traditional forms of bullying (such as teasing, physically hurting others and exclusion) and cyberbullying, similarly harmful to students and felt it was important to teach students about bullying.

While knowledge of bullying was high, few pre-service teachers reported they were very skilled to discuss and manage bullying, with skills relating to cyberbullying the lowest. These skills are reflected in pre-service teachers’ reports that very little discussion occurs in their teaching degree about preventing and managing bullying. While only a few mostly small exploratory studies have looked at pre-service teachers’ knowledge and perceived skills for managing bullying, most have reported similar findings to this study. In particular, Li’s study mirrored these findings where most pre-service teachers felt underprepared to manage bullying, particularly cyberbullying but felt that explicit teaching about bullying in the classroom, supported by good school policy were important (Li, 2010). As in this study, Li’s findings indicated that most pre-service teachers felt their undergraduate teaching degrees did not prepare them properly to manage bullying in schools (Li, 2010). In contrast, a recent Australian study of 700 students in three different universities found pre-service teachers demonstrated high levels of self-efficacy with regard to addressing bullying and cyberbullying and were well prepared to manage bullying in schools (Spears et al., 2015). These conflicting results highlight the need for consistency in the promotion and prevention of bullying and cyberbullying across universities in pre-teacher training. The implications for

a workforce which reports limited confidence in managing bullying behaviour are significant, with the role of a teacher's response to students' reports of being bullied found to be one of the most significant predictors of successful anti-bullying strategies (Nicolaidis, Toda, & Smith, 2002).

This study has highlighted five critical points for initial teacher education providers and programs, and for school leadership teams when newly trained teachers are appointed to their school.

The Importance of a Good Understanding of Bullying Behaviours

Most pre-service teachers have an accurate understanding of what behaviours constitute bullying. This concurs with a national teacher survey of bullying which found although almost all teachers could correctly identify the more overt bullying behaviours, covert and cyber-related behaviours were less commonly identified as bullying (Cross et al., 2009). While it is important to have a good understanding of bullying behaviours, this alone is not sufficient to generate teacher confidence to effectively prevent and manage student bullying behaviours. It is imperative that a teacher's self-efficacy is also developed along with a belief that preventing bullying is important and can be done effectively.

Teachers Need Support to Prevent and Manage Bullying Effectively

This study indicates many pre-service teachers are supportive of bullying prevention in schools, however are unsure about its actual effect on behaviour. In line with many health behaviour theories, in order for teachers to gain the confidence to prevent and manage bullying behaviour effectively, they need time in the classroom to see the effectiveness of positive discussions about bullying prevention and social skill development (Nutbeam, 1998). The Australian Covert Bullying Prevalence Study also found that teachers under the age of 30 are more accepting of bullying than older teachers, further indicating that pre-service and early career teachers need to be afforded time and support to develop the skills, attitudes and confidence to prevent and manage bullying effectively (Cross et al., 2009). Universities need to ensure consistent and explicit teaching with respect to bullying and cyberbullying to enable pre-teachers to enter a school community informed and confident to be involved in the promotion and prevention of bullying and cyberbullying (Spears et al., 2015).

Provision of Specific Mentoring for Younger Pre-Service Teachers

This study found distinct differences between pre-service teachers under and over 25 years of age. Specifically, pre-service teachers over the age of 25 have more favourable attitudes to preventing bullying in schools, using proactive and less punitive incident management strategies and are more likely to believe students can change their behaviour. This has important implications for school leadership teams in ensuring all school staff have similar attitudes toward the school's policy and practice. It may be that younger students who are more closely aligned to the school system through their recent secondary school studies, have more 'hardened' views on students who bully others and are less likely to have the life experience to realise that learned behaviour can be 'unlearned'. While pre-service teachers under the age of 25 have less favourable attitudes to preventing bullying in schools and prefer more punitive approaches to managing bullying incidents, they are also more likely to think they have sufficient skills to manage bullying than pre-service teachers over

the age of 25. This presents an interesting dilemma for school leadership teams. There is a need to provide specific mentoring for younger pre-service teachers' to develop positive and less punitive attitudes toward the prevention and management of bullying and providing strategic opportunities for professional learning (Nicolaidis et al., 2002).

Provision of Training to Understand, Prevent and Manage Cyberbullying

Preventing and managing cyberbullying is a key concern for all pre-service teachers. This was supported by Li's pre-service teacher study where almost all teachers felt their undergraduate degree had not prepared them well to deal with cyberbullying. Further, literature relating to cyberbullying highlights most teachers feel underprepared for managing cyberbullying, not just those new to the profession (Li, 2010). While this may be due in part to cyberbullying being a relatively new phenomenon, it presents a challenge for schools to provide in-service training for staff to understand, prevent and manage this type of behaviour.

Upskilling of Pre-Service Teachers

Finally, the findings of this study emphasises pre-service teachers' desire to learn more about appropriate responding to bullying behaviour techniques. Pre-service teachers also expressed a need to better understand the complexities of the behaviour as well as to be introduced to practical resources for use in the classroom. Within an ever increasing crowded curriculum in the undergraduate teaching program, school leadership teams are facing new pressures to offer professional learning opportunities for all new teachers relating to behaviour management and strategies for preventing bullying in concordance with the school's behaviour management policy and practices. With recent research suggesting the importance of teachers' initial response to a student's report of being bullied (Nicolaidis et al., 2002), it is critical for school leadership teams to upskill these new staff as soon as they enter the school environment to prepare them for the appropriate responses to being bullied.

While this study examines the needs of pre-service teachers relating to the prevention and management of bullying in schools, the study's findings are limited to the sample from which they were drawn. A generalisation beyond the two cohorts of students within the two Universities is not possible. Further, not all students responded to the survey and therefore, the final sample may represent only students with particularly strong views about their pre-service education relating to bullying than other non-respondents.

Notwithstanding these limitations, this exploratory study has generated many considerations for school leadership teams in recruiting new teachers to their school. These new teachers may bring with them a good understanding to identify bullying behaviours, yet lack the confidence to actively prevent bullying through explicit teaching in the curriculum as well as in managing incidents should they occur. While finding additional time in the crowded undergraduate teaching degrees to address bullying prevention would be desirable, there are many opportunities for school leadership teams to mentor new teachers through their early career years to ensure they build sufficient capacity to prevent and manage student bullying behaviours.

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