

The capacity of South Australian primary school teachers and pre-service teachers to work with trans and gender diverse students

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Abstract

Growing numbers of young people are disclosing that they are trans or gender diverse, requiring affirming and informed responses from schools. This article reports on a survey examining attitudes towards inclusion, comfort, and confidence amongst 180 South Australian primary school teachers and pre-service teachers. The findings suggest that women held more positive attitudes and greater comfort in working with trans and gender diverse students, and that awareness of programs designed to increase understanding was related to more positive attitudes, greater comfort and confidence. The article discusses the need for further training alongside additional resourcing of initiatives aimed at facilitating inclusion.

Keywords

Elementary Education; Teacher Education; Multicultural Education; Beliefs; Transgender; Gender Issues

1 Introduction

1.1 Background

A growing number of children report a gender that differs from that normatively expected of their assigned sex at birth, a population group typically referred to as trans and gender diverse. Population studies suggest that between 0.5% and 1% of people are trans or gender diverse (Clark et al., 2014; Conron, Scott, Stowell, & Landers, 2012). These figures, however, are likely to be underestimated given ongoing discrimination, difficulties in measurement, and narrow definitions of gender diversity (e.g., Bauer et al., 2009; Singh & Burnes, 2009). In particular, given the risks associated with disclosing that one is trans or gender diverse (i.e., systematic discrimination, including violence), it is likely that those who are willing to disclose constitute a relatively small proportion of the wider population.

Brill and Pepper (2008) suggest that there are three main periods when people acknowledge their gender diversity: childhood, preteen/early adolescence, and late adolescence or adulthood. A US study, for example, found that the mean age for when participants became aware of being trans or gender diverse was 5.4 years (Beemyn & Rankin, 2011). For children who acknowledge, and then disclose, that they are trans or gender diverse, the likelihood of having their gender affirmed by others is shaped by societal understandings of, and attitudes towards, gender diversity. Schools constitute a key context in which children may disclose that they are trans or gender diverse, thus highlighting the importance of schools, and particularly educators, in providing affirming and informed responses. Educators have a duty of care to all students, and this means that they have a role to play in making school cultures more inclusive of gender diversity.

This article reports on a survey of educators in one Australian state – South Australia – which sought to assess the extent to which educators at the primary level hold inclusive attitudes towards trans and gender diverse students, and their comfort and confidence in their capacity to provide inclusive education. Before presenting the details and findings from this survey, the article first provides an overview of previous research on trans and gender diverse students, focusing on the primary/elementary years.

1.2 Trans and gender diverse students' and their parents' experiences of schools

Children who are trans or gender diverse often experience schools as places of marginalisation and exclusion. At the primary/elementary school level, research has documented high levels of bullying by other children (alongside a common lack of attention to trans and gender diverse children in school anti-bullying policies), lack of understanding and support from school staff, and exclusion in the form of rules relating to gender-segregated bathroom use, school uniforms, and sports participation (Johnson, Sikorski, Savage, & Woitaszewski, 2014; Kuvalanka, Weiner, & Mahan, 2014; Pullen Sansfaçon, Robichaud, & Dumais-Michaud, 2015). Several studies have, however, highlighted the important role that educators can play in facilitating supportive school cultures (Luecke, 2011; Slesaransky-Poe, Ruzzi, Dimedio, & Stanley, 2013). Jones (2015) further suggests that supportive policies can help teachers create school cultures which are affirming for trans and gender diverse students.

Research with parents of young trans and gender diverse children suggests that a key barrier to inclusion relates to school staff members' understandings of gender, and whether discussions of gender diversity are viewed as taboo or are positively included within school

policies and practices (Pullen Sansfaçon, et al., 2015). Studies show that a lack of knowledge amongst staff makes school experiences difficult for both parents and children (Riggs & Bartholomaeus, 2015; Pullen Sansfaçon, et al., 2015), and that parents may even experience hostility from staff (Riggs & Bartholomaeus, 2015; Kuvalanka, et al., 2014). Other studies have found that parents fear for their child's safety at school (Hill & Menvielle, 2009; Riley, Sitharthan, Clemson, & Diamond, 2013). The significance of negative school-related experiences has led to some parents removing their children from school (Johnson, et al., 2014; Kuvalanka, et al., 2014). The limited knowledge amongst many staff members and schools more broadly means that it is often left to parents to educate staff about gender diversity, to advocate for their child at school, and to play a role in coordinating training and drafting school policies (Hill & Menvielle, 2009; Johnson, et al., 2014; Pullen Sansfaçon, et al., 2015; Rahilly, 2015).

1.3 Educators' capacities for supporting trans and gender diverse students

While there is research focused on educators' and pre-service educators' experiences of working with, and attitudes towards, lesbian, gay, bisexual, trans, and queer (LGBTQ) students collectively, these studies typically do not discuss trans or gender diverse students specifically (e.g. Greytak & Kosciw, 2014; Larrabee & Morehead, 2008; McCabe, Rubinson, Dragowski, & Elizalde-Utnick, 2013; Schneider & Dimito, 2008). In terms of studies that have focused specifically on educator attitudes towards trans and gender diverse students, teachers and school psychologists have been found to hold largely positive attitudes, although men's attitudes are typically less positive than are women's (e.g. Bowers et al., 2015; Silveira & Goff, 2016). Furthermore, Bowers and colleagues' (2015) US study with 246 school psychologists found that attitudes towards transgender students were more positive amongst

participants who had ‘encountered transgender issues’ at work, had higher confidence in their abilities to meet the needs of transgender students, and had undertaken training relating to transgender students. Similarly, a US study with 121 school psychologists found that those who were familiar with the National Association of School Psychologists’ (2014) position statement related to transgender and gender diverse students had significantly higher scores on the Knowledge of and Attitudes Toward Transgender Students Survey (KATTSS) than those who were not aware of the statement (Walzer, 2015).

There is, of course, a difference between attitudes towards a particular group, and comfort or capacity for working with a particular group. This is evident in research which suggests that while on average attitudes amongst educators might be positive, this does not necessarily mean that educators are comfortable or capable of working with trans and gender diverse students. For example, a US study with over 1,000 elementary school teachers found that less than half (41%) of respondents said they would feel ‘very comfortable’ or ‘somewhat comfortable’ responding to questions from their students about transgender people (GLSEN & Harris Interactive, 2012). Similarly, Payne and Smith (2014) found that educators in their US study were often fearful and anxious about the presence of transgender children, which the authors attribute to a lack of knowledge about gender diversity.

Studies with pre-service educators reflect similar findings. For example, Brant’s (2014) US study developed a scale to measure the self-efficacy of pre-service teachers with regard to working with LGBTQ people, drawing on the Multicultural Efficacy Scale and the Teachers Self-Efficacy Scale. Brant found that in terms of gender non-conforming, transgender, or queer students specifically, participants were less confident in being able to identify harmful school practices (45% ‘quite confident that [it] would be easy’), identify bias in teaching

materials (35%), plan activities for current/future classroom to reduce prejudice (34%), analyse materials for stereotypes and prejudice (33%), or develop materials that dispel myths (22%).

1.4 Schools and support for trans and gender diverse students

Moving beyond individual educators to focus on the broader institutional contexts in which educators work, research has found that schools are generally not well equipped to include trans and gender diverse students, and have difficulty challenging dominant gender discourses. Frohard-Dourlent's (2016) research with mainly secondary school staff in Canada found that when discussing trans and gender-nonconforming students, staff often framed themselves as open-minded, compared to what were depicted as external institutional barriers to inclusion. Certainly, some of the participants also acknowledged their complicity with institutional barriers, however this was often framed in terms of *previous* complicity.

Research with pre-service educators has found that some experience difficulty in challenging normative understandings of gender in schools, including that gender is a binary (Ingrey, 2014). Parsons (2016) argues that education students need to be given the tools to question and critique social norms rather than just being made aware that some people are trans or gender diverse. McEntarfer (2016) found with her pre-service teachers that while many said they would support trans young people in schools in their role as future teachers (i.e. as professionals), their views were more complicated when they spoke as readers of texts mentioning trans people, as education students, or as potential partners of trans people. McEntarfer (2016) suggests that public discourse means education students are more familiar

with diversity in terms of sexual orientation rather than gender (see also Kitchen & Bellini, 2012).

Given that some previous research (as reported in the previous section) has identified a relationship between training and experience and comfort, confidence and capacity, it is surprising that there is currently a general lack of training and resources for primary school educators and pre-service educators to support trans and gender diverse students. This includes a lack of preparation and teaching at university (Brant, 2014; McEntarfer, 2016), and the neglect of topics related to gender diversity in student textbooks (Jennings & Macgillivray, 2011). Research has also found there is little provision of training and professional development for in-service teachers and school staff, alongside a lack of willingness to attend in some cases (de Jong, 2015; Malins, 2016) and a lack of teaching and support resources (Luecke, 2011).

Yet despite the general lack of training available to teachers, some initiatives do exist which aim to improve school cultures, including providing opportunities for teacher training with regard to gender diversity. In Australia, this is most evident in the work of the Safe Schools Coalition, though as explored in the discussion, such work is often a target of those who oppose the rights of trans and gender diverse people. The Safe Schools Coalition is a federally funded government initiative offering resources, training, and support for school staff and students to make their schools safer and more inclusive for same-sex attracted, intersex, and gender diverse students, staff, and families. Schools can voluntarily sign-up to be members. The Safe Schools Coalition originated in the state of Victoria in 2010 and is convened by the Foundation for Young Australians. It is currently run by partner organisations in every state and territory in Australia except for the Northern Territory, and

works with schools across the three sectors in Australia – government, Catholic, and independent. In South Australia, the location of the study, it is run by Sexual Health Information Networking and Education SA (Safe Schools Coalition Australia, n.d.). Safe Schools Coalitions also exist in the US in Washington (Safe Schools Coalition, n.d.) and Georgia (Georgia Safe Schools Coalition, 2016) with similar goals of improving support and safety in schools for gay, lesbian, bisexual, transgender, queer, and questioning young people.

1.5 Research aims

Taking into account the findings of previous research outlined above, which indicate that training and experience, along with demographic factors, are likely to impact upon attitudes, comfort and confidence, the aim of the present study was to examine these factors amongst teachers and pre-service teachers in South Australia. Given that none of the previous research cited above was undertaken in Australia, it was considered important to begin the task of mapping out the capacity of Australian schools to support trans and gender diverse students by adopting an exploratory approach guided by variables identified in previous research as likely predictors. However, it was important not to presume that the same patterns identified in previous research would hold true in an Australian sample, hence no specific predictions about the directionality of variables were made.

2 Methodology and methods

2.1 Participants

According to the Australian Bureau of Statistics (2016), in South Australia there are over 10,000 full-time equivalent primary school teachers working within the education system (encompassing government, Catholic, and independent schools). Despite the concerted recruitment strategies outlined below, only a small number of primary school teachers completed the survey ($n=75$). While not intended to be representative of all primary school teachers in South Australia, key demographics of the sample reflect the broader population. Specifically, of the sample of primary school teachers, 80% were women and 20% were men, reflecting the gender breakdown of teachers in South Australian primary schools (women make up 77.4% of teaching staff in South Australian primary schools, Australian Bureau of Statistics, 2016). Additional demographic details are reported in Table 1.

Turning to the pre-service teacher participants, according to the Department of Education and Training (n.d.), on average per year there are approximately 7,000 students enrolled in education degrees at any level in South Australia. While official data are not available, an examination of degrees at the two South Australian universities at which education degrees are taught indicates that approximately 40% of education students are enrolled in primary school-specific education degrees. Despite the direct approach involved in recruiting potential pre-service teacher participants as outlined below, only a relatively small number of students completed the survey ($n=105$). Table 1 provides demographic information about the pre-service teacher participants.

[INSERT TABLE 1 ABOUT HERE]

Table 2 provides further details about the two samples, focusing on specific educational experience-related demographic factors identified in previous research as likely to be related to attitudes, comfort, and confidence.

[INSERT TABLE 2 ABOUT HERE]

2.2 Design and procedure

Teachers and pre-service teachers at the primary level in South Australia completed an online survey. The survey was non-experimental, between-subjects, intended as a scoping study given the relative dearth of research on the topic of teachers' and pre-service teachers' capacity for working with trans and gender diverse students. Potential predictor variables were the demographic questions outlined above. The three key dependent variables were a measure of attitudes towards the inclusion of trans and gender diverse students, a measure of confidence, and a measure of comfort in working with trans and gender diverse students. More information about these measures is provided in the next section.

Following ethics approval from both the authors' institution and the South Australian Department for Education and Child Development (DECD), teachers and pre-service teachers were recruited through selected outlets. Teachers were recruited via key education bodies sharing the survey via email, twitter, and/or facebook and a twitter account set up in relation to the project. Potential pre-service teacher participants were recruited from the two universities in South Australia with primary level teaching degrees. Emails were sent to teaching staff asking that they post information about the survey to student portals, and to draw attention to the project during classes as appropriate. A total of seven educators across

the two universities agreed to do this, with information about the survey likely to have reached the majority of primary education students at both universities. Potential pre-service teacher participants were not offered any incentives to participate, and participation was not a requirement of course enrolment nor was it related in any way to course assessment. The survey for teachers and pre-service teachers was also promoted via the University's research studies page.

The pre-service teacher survey was open from July 2015 until January 2016 and the teacher survey from September 2016 until January 2016. The survey was administered via SurveyMonkey. All respondents gave their informed consent to complete the survey by reading an information screen and selecting 'yes' to consent to proceed.

2.3 Survey instruments

The survey, designed by the authors, utilised an adapted version of a scale designed by Goff (2014, see also Silveira & Goff, 2016), which in its original use was intended to assess music teachers' attitudes about supportive school practices for transgender students. The original scale showed high divergent validity when compared to Hill and Willoughby's (2005) *Genderism and Transphobia Scale*. Changes were made to the original scale in terms of language (i.e., 'transgendered people' and 'transgendered students'¹ were changed to 'trans and gender diverse' in line with the survey focus), the inclusion of reference to sexuality was removed (which was considered as potentially confounding the focus on gender), and three questions were changed entirely, one because the meaning was unclear, one because it treated as positive trans or gender diverse students using 'private' bathrooms, and one because it was factually incorrect (suggesting that students in music lessons are divided on the basis of

gender, rather than their singing range). The final 19 items included in the revised scale are listed in Table 3. Items were rated on a five point Likert scale, from strongly agree to strongly disagree. As indicated on the table, ten items were negatively scored in order to reduce response bias, meaning that for these items the most ‘positive’ response would be 1, whereas for all other items the most ‘positive’ response would be 5.

[INSERT TABLE 3 ABOUT HERE]

As indicated in Table 3, all items in the revised scale were moderately to strongly correlated with one another, indicating the unidimensionality of the scale. A factor analysis confirmed this in indicating a one factor solution, which explained 56.38% of the variance.

In addition to the adapted scale measuring attitudes towards inclusion, measures of comfort and confidence in working with trans and gender diverse students were included, adapted from the authors’ previous research (Riggs & Bartholomaeus, 2016). The measure of comfort included six items, such as ‘I would feel comfortable working with a trans or gender diverse student’ and ‘I would feel comfortable if I was asked to teach a program about trans and gender diverse issues in the classroom’. Each item was rated on a five point Likert scale, from strongly disagree to strongly agree. The measure of confidence included four items, such as ‘I feel confident teaching trans and gender diverse students’ and ‘I feel confident talking about trans and gender diverse issues in class’. Again, each item was rated on a five point Likert scale, from strongly disagree to strongly agree.

2.4 Analytic approach

Data were exported from SurveyMonkey into SPSS 21.0. A total of 91 teachers started the survey, however 16 of these could not complete the survey due to an error in one of the survey questions which was subsequently corrected. The data from these 16 participants were not usable as they were unable to complete the dependent measures. All of the pre-service teacher participants who commenced the survey completed it. Once entered into SPSS the negatively scored items on the measure of attitudes towards inclusion were reversed. Item means were calculated for each of the three measures.

In terms of analyses, the data were first examined to determine whether or not to treat the teachers and the pre-service teachers as two separate samples, or whether to combine them as one sample. T-tests using teacher or pre-service teacher as the predictor variable found no significant differences with regard to any of the dependent variables other than for age, with teachers being older ($M=41.79$, $SD=11.23$) than pre-service teacher ($M=26.0$, $SD=7.96$), $t = 10.94$, $p = .001$, $d = 1.62$. In order to determine if these identified age differences between the samples prohibited combining the two samples into one, the predictor variable of whether or not participants were teachers or pre-service teachers was again tested against the dependent variables, this time controlling for age. Again, no significant differences were found (and further, age was not found to be a significant predictor of any of the dependent variables on its own). It was thus considered appropriate to treat the two groups as one sample, given the survey was education focused and both samples work or study in the context of education.

When applied to the sample, each of the measures displayed high reliability: attitudes towards inclusion, $\alpha = 0.86$, comfort, $\alpha = 0.90$, and confidence, $\alpha = 0.79$. In terms of the measure of attitudes towards inclusion, higher scores indicate more positive attitudes. The mean for attitudes was 4.17 ($SD=0.57$). In general the sample displayed positive attitudes towards the

inclusion of trans and gender diverse students. For the measure of comfort, higher scores indicate greater comfort. The mean comfort score was 3.29 ($SD=0.76$). Overall, the sample was only somewhat comfortable in working with trans and gender diverse students. Finally, for the measure of confidence, higher scores again indicate greater confidence. The mean confidence score was 3.15 ($SD=0.83$). Again, the sample was only somewhat confident in working with trans and gender diverse students.

3 Results

Given the aim of the study was to identify potential demographic and experiential predictors of attitudes, comfort, and confidence, the results are presented under these three headings, focusing specifically on demographic variables for which there was a statistically significant relationship with the three measures where $p > .05$. As reported below, there were statistically significant relationships between the measures, however there were no statistically significant relationships between any of the demographic variables, hence inferential statistics on these are not reported.

3.1 Attitudes towards the inclusion of trans and gender diverse students

In terms of statistically significant predictors of the measure of attitudes towards the inclusion of trans and gender diverse students, gender of participant was a key determinant. Due to the small number of gender diverse participants, it was not possible to include this cohort in tests for significant differences, hence the following and below focus solely on participants who identified as either women or men. In terms of gender differences, men reported less positive

attitudes towards inclusion ($M=3.43$, $SD=0.45$) than did women ($M=4.27$, $SD=0.78$), $t = 4.942$, $p = .001$, $d = 1.31$.

Two other demographic variables were statistically significant predictors of attitudes towards the inclusion of trans and gender diverse students. First, participants who had heard about the Safe Schools Coalition reported more positive attitudes towards inclusion ($M=4.45$, $SD=0.28$) than those who had not ($M=3.87$, $SD=0.61$), $t = 2.388$, $p = .01$, $d = 1.22$. Second, participants who had previously taught at least one trans or gender diverse student reported more positive attitudes towards inclusion ($M=4.47$, $SD=0.27$) than did those who had not ($M=3.95$, $SD=0.47$), $t = 2.768$, $p = .044$, $d = 1.35$.

In addition to these relationships between some of the predictor variables and attitudes towards the inclusion of trans and gender diverse students, there were also relationships between both comfort and confidence and attitudes towards inclusion. There was a strong positive correlation between attitudes towards inclusion and comfort, $r = .809$, $p = .001$. Those with more positive attitudes towards inclusion reported higher levels of comfort. There was also a moderate positive correlation between attitudes towards inclusion and confidence, $r = .426$, $p = .001$. Those with more positive attitudes towards inclusion reported higher levels of confidence.

3.2 Comfort in working with trans and gender diverse students

The findings with regard to comfort in working with trans and gender diverse students largely mirrored those reported above in relation to attitudes towards inclusion. Again, men reported lower levels of comfort ($M=2.70$, $SD=0.69$) than did women ($M=3.30$, $SD=0.86$), $t = 4.167$, p

= .001, $d = 0.76$, participants who had heard about the Safe Schools Coalition reported higher levels of comfort ($M=3.90$, $SD=0.80$) than those who had not ($M=3.47$, $SD=0.48$), $t = 3.357$, $p = .001$, $d = 0.65$, and participants who had previously taught at least one trans or gender diverse student reported higher levels of comfort ($M=3.71$, $SD=0.67$) than did those who had not ($M=2.98$, $SD=0.70$), $t = 2.277$, $p = .024$, $d = 1.06$.

In addition to these relationships between some of the predictor variables and comfort in working with trans and gender diverse students, there was also a moderate positive correlation between comfort and confidence, $r = .577$, $p = .001$. Those who were more comfortable reported higher levels of confidence.

3.3 Confidence in working with trans and gender diverse students

With regard to confidence in working with trans and gender diverse students, and similar to the previous two measures, participants who had heard about the Safe Schools Coalition reported higher levels of confidence ($M=3.03$, $SD=0.79$) than did those who had not ($M=2.06$, $SD=0.89$), $t = 2.611$, $p = .01$, $d = 1.15$. Different to the previous two measures, however, neither participant gender nor having worked with a trans or gender diverse student before predicted confidence. Instead, with regard to confidence it was found that participants who had undertaken training specific to working with trans and gender diverse students reported higher levels of confidence ($M=3.14$, $SD=0.82$) than those who had not ($M=2.00$, $SD=0.81$), $t = 2.341$, $p = .045$, $d = 1.39$, and participants who reported having a friend or family member who was trans or gender diverse reported higher levels of confidence ($M=3.12$, $SD=0.84$) than those who did not ($M=2.09$, $SD=0.76$), $t = 2.080$, $p = .039$, $d = 1.28$.

4 Discussion

The findings reported in this article indicate that overall the teachers and pre-service teachers had positive attitudes towards working with trans and gender diverse students. However, the findings suggest that women had more positive attitudes when compared with men. This echoes findings reported in previous research on the attitudes of school staff (Riggs & Bartholomaeus, 2015; Bowers et al., 2015; Silveira & Goff, 2016), psychologists and psychology students (Riggs & Sion, 2016), and the general population (e.g. Nagoshi et al., 2008; Norton and Herek, 2013) towards trans and gender diverse people, in which men have been found to have a greater investment in, and anxiety about, the gender order and their place in it, which it has been suggested leads to more transphobic attitudes and behaviours (Riggs & Sion, 2016; Nagoshi et al., 2008; Norton and Herek, 2013).

This gender disparity was replicated in terms of teachers' comfort in working with trans and gender-diverse students, with women in general reporting higher scores than men, although the gender gap was narrower than for the measure of attitudes towards inclusion.

Interestingly, the same gender differences were not observed when considering the items relating to confidence in working with trans and gender diverse students. This may suggest that confidence addresses a different aspect of participant identity than measures of attitude or comfort. Smith and Payne (2016) discuss a similar phenomenon in their study, where teachers felt transgender children should be included, but expressed considerable anxiety about the many challenges this presents in the context of schools that may be ill equipped to support both teachers and students with regard to gender diversity.

As such, it may be suggested that professional support systems are vital for teachers when working in an area such as this that is politically and ethically sensitive. One of the clearest

findings from the present study in this regard is that the presence of support organisations (e.g. the Safe Schools Coalition), and teachers' awareness of their work is critical in furthering sensitive work in this area. All three of our dependent measures were statistically related to teachers' knowledge of the Safe Schools Coalition. The survey asked a closed-ended question; if participants had 'heard of' the Safe Schools Coalition and, if they had, there was an option for an open-ended response to write where they had heard about it and what they knew about it. A small number of responses indicated awareness via direct involvement in Safe Schools Coalition training. Others wrote that they had heard about it from their school, colleagues, other educational training/outlets, media, and social media, or, for the pre-service teachers, at university. Importantly, it should be noted that the survey was conducted prior to increased negative media coverage of the Safe Schools Coalition in 2016 which was sparked by conservative lobby groups and politicians, and resulted in a subsequent review of the program (Louden, 2016). We suggest that teachers and pre-service teachers would be more likely to have 'heard' of the Safe Schools Coalition in 2016 than 2015 when the survey was conducted. More research is needed to assess the impact of this debate in different states in Australia, as it has likely both influenced teachers' and pre-service teachers' attitudes and capacity to work in this area, and made teaching about topics relating to gender diversity more difficult.

In terms of the survey findings, it is also worth noting that direct experience in teaching a trans or gender diverse student does not seem to help teachers feel more confident in their work, whereas it does appear to impact positively on attitudes and comfort levels. This suggests a skills gap in this area, where teachers may feel broadly more accepting through direct experience of trans or gender diverse students, while still lacking clarity about how to teach or support students. It may also suggest that despite positive attitudes, teachers are

hesitant to put their knowledge into action for fear of institutional or individual reprisals, as noted earlier in this article and in the conclusions below. As McEntarfer (2016) suggests, there has been a significant increase in the availability of knowledge around trans and gender diverse people's lives in recent years, which has the potential to provide a basis for effective training of teachers in this area, though much of the work of such training is still to happen. In this regard it is important to note that while the survey assessed knowledge about gender diversity in conjunction with attitudes (as can be seen in the specific items of the measure), the survey did not assess the actual skills that teachers have. This then suggests the need for further research on the skills that teachers hold with regard to working with trans and gender diverse students.

4.1 Limitations

The findings reported in this article must be considered in the context of the limitations of this study. As noted earlier, the study is the first of its kind in surveying teachers and pre-service teachers at the primary level in Australia. Nonetheless, it must be acknowledged that the survey produced a small sample size, and one that was geographically limited to one state within the Australian education system. It was surprising not to find differences between the two cohorts of teachers and pre-service teachers. These cohorts differed in expected ways, with the younger cohort showing greater sexuality and gender diversity, in line with the age differences noted in existing surveys of the wider population (Richters et al. 2014 455). Despite these differences, the two samples did not differ in terms of attitudes to gender diversity, even when controlling for age. This reflects previous research with teachers and school psychologists which has tested for age but has generally found no significant differences (e.g. Bowers et al., 2015; Silveira & Goff, 2016; Walzer, 2015).

The strong effect sizes seen within the study suggest that the findings reported here are not statistical artifacts, but represent meaningful relationships between demographic variables and the three measures explored within this study. Importantly, however, the samples reported in this study may not be representative of the wider educational profession. It is likely that the sample represents a more motivated and aware sample of teachers than those across primary schools in general, which might explain the lack of difference found between the two cohorts, as well as the generally low response rate to these surveys, which many may have avoided because of unfamiliarity with the topic. Specifically, the sample itself may have been more inclusive of trans and gender diverse people due to sampling (one way of recruiting teachers was via links with the Safe Schools Coalition which may have impacted who completed the survey), and high numbers of people personally knowing someone who was trans or gender diverse (approximately a fifth of participants had at least one friend or family member who is trans or gender diverse).

Finally, the survey focuses on the self-reports of teachers and pre-service teachers. While the survey sought to examine personal experiences, attitudes, comfort, and confidence, this may have been impacted by social desirability, encouraging participants to provide more inclusive responses. Future research is needed to assess the role of teachers using additional methods such as ethnographic research in classrooms, as well as further intervention studies which evaluate the impact of teacher education programs (such as has been undertaken internationally, see Smith & Payne, 2016).

5 Conclusions

As those who follow media reporting on the topic of gender diversity would be aware, the topic of gender diversity is keenly contested, particularly where children and young people are concerned. Currently in Australia, work by the Safe Schools Coalition, along with people engaged in advocacy or research about the inclusion of trans and gender diverse students in schools, are under attack by conservative media, politicians, and lobby groups. Educating young children about gender (and sexuality) diversity is seen by some as a fundamental challenge to 'traditional' patterns of family and community life. Such objections create a climate of fear and antagonism that every teacher must negotiate even if they are willing to teach in gender-complex ways so as to acknowledge the experiences and needs of people who are trans or gender diverse (Rands, 2009). This also means that educational bodies must negotiate with competing demands from pressure groups who may often be unsupportive of trans and gender diverse children and young people, which can lead to schools withdrawing support for teachers who wish to support individual students and/or teach in gender-complex ways.

As the findings reported in this article suggest, professional comfort for working with trans and gender diverse students is still relatively limited, particularly in primary schools, and many teachers lack confidence in doing so. This is where the support of organisations with expertise around gender diversity is vital. The visibility of such organisations provides legitimacy and support for all teachers' work, whether their school currently has a formal connection with such organisations or not. For those teachers who have access to this expertise, the findings reported here suggest that this has a positive impact on their confidence in working with children in this politically sensitive area. In open-ended survey responses not reported here, participants asked for explicit and practical training and advice

on working with trans and gender diverse students and teaching about gender diversity with all of their students (see Bartholomaeus, Riggs, & Andrew, 2016).

Due to the scrutiny and withdrawal of federal financial support for the Safe Schools Coalition, the capacity of this leading initiative to provide training and resources in Australia may be further limited in the future. Even with the withdrawal of specific support organisations such as the Safe Schools Coalition, however, it is hoped that improved practices around gender diversity will become part of teachers' ongoing professional development. In Australia, programs such as 'Quality Teaching Rounds' (Gore et al. 2015) are already showing significant impacts on the lives of the most marginalised students, through explicitly supporting teachers to improve their teaching in areas such as 'cultural knowledge', 'inclusivity', and 'social support'. Such professional development can be supported by resources supplied by those education departments who have released policies supporting trans and gender diverse students. For example, in South Australia in early 2017 the Department for Education and Child Development released a *mandatory* procedure outlining support for transgender and intersex students (DECD 2016b), which fits alongside a new mandatory policy for supporting same sex attracted, intersex, and gender diverse students (DECD 2016a). Ongoing research will be useful to assess the impacts of procedures and policies such as these, in building capacity amongst teachers and pre-service teachers for working with trans and gender diverse students. Jones' (2015) work demonstrates how even quite simple policy-driven changes, such as support for displaying promotional posters, can have a significant impact on the experiences of gender and sexuality diverse students, and the perceived safety and acceptance of school communities. There are also an increasing number of guides focused on supporting trans and gender diverse students in schools which may be

useful sources for teachers internationally, and which advocate for discussions of gender and gender diversity in the curriculum (e.g. Orr & Baum, 2015; Wells, Roberts & Allan, 2012).

The findings from the study reported in this article suggests a compelling case for effective professional learning programs for all teachers and pre-service teachers for working with and supporting trans and gender diverse students, given the well-known negative impacts of school cultures on trans and gender diverse school students of all ages (e.g. Jones et al., 2016, Pullen Sansfaçon, et al., 2015) and the rapid rise in primary school-aged children identifying in ways different from that normatively expected of their sex assigned at birth (e.g., Telfer et al., 2015). This includes such strategies as respecting (and recording officially) a child's affirmed name and pronouns, making sufficient gender-inclusive toilet facilities available, making all school uniform options available to every student, and addressing in-class micro-aggressions relating to gender non-conformity promptly and effectively. These types of strategies – directed at an institutional level – would help to engender inclusive school environments. Such changes will also support teachers who, as seen in this study, hold positive attitudes, but feel inhibited from putting these into practice due to their experience of current institutional barriers in schools.

References

- Ansara, Y. G. (2015). Challenging cisgenderism in the ageing and aged care sector: Meeting the needs of older people of trans and/or non-binary experience. *Australasian Journal on Ageing*, 34(S2), 14-18.
- Australian Bureau of Statistics. (2016). Schools, Australia, 2015 (cat. no. 4221.0). Canberra: ABS.

- Bartholomaeus, C., Riggs, D. W., & Andrew, Y. (2016). Exploring trans and gender diverse issues in primary education in South Australia. Adelaide: Flinders University.
- Bauer, G. R., Hammond, R., Travers, R., Kaay, M., Hohenadel, K. M., & Boyce, M. (2009). 'I don't think this is theoretical; this is our lives': How erasure impacts health care for transgender people. *Journal of the Association of Nurses in AIDS Care*, 20(5), 348-361.
- Beemyn, G., & Rankin, S. (2011). *The lives of transgender people*. New York: Columbia University Press.
- Bowers, S., Lewandowski, J., Savage, T. A., & Woitaszewski, S. A. (2015). School psychologists' attitudes toward transgender students. *Journal of LGBT Youth*, 12(1), 1-18.
- Brant, C. A. R. (2014). *Pre-service teachers' perspectives on methods, pedagogy and self-efficacy related to gender and sexuality as a part of their multicultural teacher education* (Unpublished PhD thesis). Ohio State University.
- Brill, S., & Pepper, R. (2008). *The transgender child: A handbook for families and professionals*. San Francisco: Cleis Press.
- Clark, T. C., Lucassen, M. F. G., Bullen, P., Denny, S. J., Fleming, T. M., Robinson, E. M., & Rossen, F. V. (2014). The health and well-being of transgender high school students: Results from the New Zealand adolescent health survey (Youth'12). *Journal of Adolescent Health*, 55(1), 93-99.
- Conron, K. J., Scott, G., Stowell, G. S., & Landers, S. J. (2012). Transgender health in Massachusetts: Results from a household probability sample of adults. *American Journal of Public Health*, 102(1), 118-122.

- de Jong, D. (2015). 'He wears pink leggings almost every day, and a pink sweatshirt....' How school social workers understand and respond to gender variance. *Child and Adolescent Social Work Journal* 32(3), 247-255.
- Department for Education and Child Development. (2016a). Supporting same sex attracted, intersex and gender diverse students. Adelaide: DECD.
- Department for Education and Child Development. (2016b). Transgender and intersex student support. Adelaide: DECD.
- Department of Education and Training. (n.d.). Selected Higher Education Statistics – 2013 Student Data. Australian Government.
- Frohard-Dourlent, H. (2016). 'I don't care what's under your clothes': The discursive positioning of educators working with trans and gender-nonconforming students. *Sex Education: Sexuality, Society and Learning*, 16(1), 63-76.
- Georgia Safe Schools Coalition. (2016). About us.
<http://www.georgiasafeschoolscoalition.org/about-us/> Accessed 1.09.16
- GLSEN, & Harris Interactive. (2012). *Playgrounds and prejudice: Elementary school climate in the United States, a survey of students and teachers*. New York: GLSEN.
- Goff, S. (2014). Music teachers' attitudes toward transgender students and their needs. Oregon State University.
- Gore, J., Smith, M., Bowe, J., Ellis, H., Lloyd, A., & Lubans, D. (2015). Quality Teaching Rounds as a professional development intervention for enhancing the quality of teaching: Rationale and study protocol for a cluster randomised controlled trial. *International Journal of Educational Research*, 74, 82-95.
- Greytak, E. A., & Kosciw, J. G. (2014). Predictors of US teachers' intervention in anti-lesbian, gay, bisexual, and transgender bullying and harassment. *Teaching Education*, 25(4), 410-426.

- Hill, D. B., & Menvielle, E. (2009). 'You have to give them a place where they feel protected and safe and loved': The views of parents who have gender-variant children and adolescents. *Journal of LGBT Youth*, 6(2-3), 243-271.
- Hill, D. B., & Willoughby, B. L. B (2005). The development and validation of the *Genderism and Transphobia Scale*. *Sex Roles*, 53, 531-544.
- Ingrey, J. C. (2014). The limitations and possibilities for teaching transgender issues in education to preservice teachers. In E. J. Meyer & A. Pullen Sansfaçon (Eds.), *Supporting transgender & gender creative youth: Schools, families, and communities in action* (pp. 97-110). New York: Peter Lang Publishing.
- Jennings, T., & Macgillivray, I. K. (2011). A content analysis of lesbian, gay, bisexual, and transgender topics in multicultural education textbooks. *Teaching Education*, 22(1), 39-62.
- Johnson, D., Sikorski, J., Savage, T. A., & Woitaszewski, S. A. (2014). Parents of youth who identify as transgender: An exploratory study. *School Psychology Forum*, 8(1), 56-74.
- Jones, T. (2015). *Policy and gay, lesbian, bisexual, transgender and intersex students*. Cham, Heidelberg, New York, Dordrecht and London: Springer.
- Jones, T., Smith, E., Ward, R., Dixon, J., Hillier, L., & Mitchell, A. (2016). School experiences of transgender and gender diverse students in Australia. *Sex Education: Sexuality, Society and Learning*, 16(2), 156-171.
- Kitchen, J., & Bellini, C. (2012). Making it better for lesbian, gay, bisexual, and transgender students through teacher education: A collaborative self-study. *Studying Teacher Education: A journal of self-study of teacher education practices*, 8(3), 209-225.
- Kuvalanka, K. A., Weiner, J. L., & Mahan, D. (2014). Child, family, and community transformations: Findings from interviews with mothers of transgender girls. *Journal of GLBT Family Studies*, 10(4), 354-379.

- Larrabee, T. G., & Morehead, P. (2008). Prospective teachers' reflections: Responding to a call for LGBT-inclusive classrooms. *International Journal of Multicultural Education, 10*(1).
- Louden, W. (2016). *Review of appropriateness and efficacy of the Safe Schools Coalition Australia program resources*. Department of Education and Training. Retrieved from https://docs.education.gov.au/system/files/doc/other/review_of_appropriateness_and_efficacy_of_the_ssca_program_resources_0.pdf
- Luecke, J. C. (2011). Working with transgender children and their classmates in pre-adolescence: Just be supportive. *Journal of LGBT Youth, 8*(2), 116-156.
- Malins, P. (2016). How inclusive is 'inclusive education' in the Ontario elementary classroom?: Teachers talk about addressing diverse gender and sexual identities. *Teaching and Teacher Education, 54*(February), 128-138.
- McCabe, P. C., Rubinson, F., Dragowski, E. A., & Elizalde-Utnick, G. (2013). Behavioral intention of teachers, school psychologists, and counselors to intervene and prevent harassment of LGBTQ youth. *Psychology in the Schools, 50*(7), 672-688.
- McEntarfer, H. K. (2016). *Navigating gender and sexuality in the classroom: Narrative insights from students and educators*. New York, NY and Abingdon, Oxon: Routledge.
- Nagoshi, J. L., Adams, K. A., Terrell, H. K., Hill, E. D., Brzuzy, S., & Nagoshi, C. T. (2008). Gender differences in correlates of homophobia and transphobia. *Sex Roles, 59*(7-8), 521-531.
- National Association of School Psychologists. (2014). *Position statement: Safe schools for transgender and gender diverse students*. Bethesda, MD: NASP.

- Norton, A. & Herek, G. (2013). Heterosexuals' attitudes towards transgender people: Findings from a national probability sample of U.S. adults. *Sex Roles, 68*(11), 738-753.
- Orr, A., & Baum, J. (2015). Schools in transition: A guide for supporting transgender students in K-12 schools. New York, NY, San Leandro, CA, Washington, DC, San Francisco, CA and Washington, DC: ACLU, Gender Spectrum, Human Rights Campaign Foundation, National Center for Lesbian Rights and National Education Association.
- Parsons, L. T. (2016). Learning from preservice teachers' responses to trans-themed young adult literature: Improving personal practice in teacher education. *Discourse: Studies in the Cultural Politics of Education, 37*(6), 933-947.
- Payne, E., & Smith, M. (2014). The big freak out: Educator fear in response to the presence of transgender elementary school students. *Journal of Homosexuality, 61*(3), 399-418.
- Pullen Sansfaçon, A., Robichaud, M. J., & Dumais-Michaud, A. A. (2015). The experience of parents who support their children's gender variance. *Journal of LGBT Youth, 12*(1), 39-63.
- Rahilly, E. P. (2015). The gender binary meets the gender-variant child: Parents' negotiations with childhood gender variance. *Gender & Society, 29*(3), 338-361.
- Rands, K. E. (2009). Considering transgender people in education: A gender-complex approach. *Journal of Teacher Education, 60*(4), 419-431.
- Richters, J., Altman, D., Badcock, P. B., Smith, A. M. A., de Visser, R. O., Grulich, A. E., . . . Simpson, J. M. (2014). Sexual identity, sexual attraction and sexual experience: The second Australian study of health and relationships. *Sexual Health, 11*(5), 451-460.

- Riggs, D. W., & Bartholomaeus, C. (2015). The role of school counsellors and psychologists in supporting transgender people. *The Australian Educational and Developmental Psychologist*, 32(2), 158-170.
- Riggs, D. W., & Bartholomaeus, C. (2016). Australian mental health professionals' competencies for working with trans clients: A comparative study. *Psychology & Sexuality*.
- Riggs, D. W., & Sion, R. (2016). Gender differences in cisgender psychologists' and trainees' attitudes toward transgender people. *Psychology of Men and Masculinity*. doi: 10.1037/men0000047
- Riley, E. A., Sitharthan, G., Clemson, L., & Diamond, M. (2013). Recognising the needs of gender-variant children and their parents. *Sex Education: Sexuality, Society and Learning*, 13(6), 644-659.
- Safe Schools Coalition. (n.d.). About us. http://www.safeschoolscoalition.org/about_us.html
Accessed 1.09.16
- Safe Schools Coalition Australia. (n.d.). Who we are.
<http://www.safeschoolscoalition.org.au/who-we-are> Accessed 1.09.16
- Schneider, M. S., & Dimito, A. (2008). Educators' beliefs about raising lesbian, gay, bisexual, and transgender issues in the schools: The experience in Ontario, Canada. *Journal of LGBT Youth*, 5(4), 49-71.
- Silveira, J. M., & Goff, S. C. (2016). Music teachers' attitudes toward transgender students and supportive school practices. *Journal of Research in Music Education*, 64(2), 138-158.
- Singh, A. A., & Burnes, T. R. (2009). Creating developmentally appropriate, safe counseling environments for transgender youth: The critical role of school counselors. *Journal of LGBT Issues in Counseling*, 3(3-4), 215-234.

- Slesaransky-Poe, G., Ruzzi, L., Dimedio, C., & Stanley, J. (2013). Is this the right elementary school for my gender nonconforming child? *Journal of LGBT Youth, 10*(1-2), 29-44.
- Smith, M. J., & Payne, E. (2016). Binaries and biology: Conversations with elementary education professionals after professional development on supporting transgender students. *The Educational Forum, 80*(1), 34-47.
- Telfer, M., Tollit, M., & Feldman, D. (2015). Transformation of health-care and legal systems for the transgender population: The need for change in Australia. *Journal of Paediatrics and Child Health, 51*(11), 1051-1053.
- Walzer, A. J. (2015). *School psychologists' knowledge of and attitudes toward transgender students* (Unpublished Master's thesis). Rowan University, Glassboro, New Jersey.
- Wells, K., Roberts, G., & Allan, C. (2012). Supporting transgender and transsexual students in K-12 schools: A guide for educators. Ottawa, ON: Canadian Teachers' Federation.

Table 1: Demographic information of participants

		Teachers (n = 75)	Pre-service teachers (n = 105)
Gender ^a	Women	79.2%	81.1%
	Men	20.8%	16%
	Other	0%	2.9%
Trans or gender diverse experience ^a	Yes	2.7%	2.9
	No	97.3%	97.1
Sexual orientation	Heterosexual/straight	88.8%	78.1%
	Bisexual	5.3%	16.2%
	Lesbian/gay	6.7%	5.7%
Age	Average	41.79 years (<i>SD</i> =11.23 years)	26 years (<i>SD</i> =7.96 years)
Education ^b	Undergraduate degree	58.7%	82.9%
	Honours degree	9.3%	0%
	Masters degree	22.7%	17.1%
	Diploma	9.3%	0%
Time spent teaching	Average	15.69 years (<i>SD</i> =11.39 years)	N/A
Sector ^c	Government	90.7%	73.3%
	Catholic	4%	10.5%
	Independent	5.3%	8.6%
	Child care service	N/A	7.6%

^a Of those who indicated ‘other’ for gender, responses given were ‘demi-gender’, ‘genderfluid’ and ‘genderqueer’. So as to avoid enforcing a distinction between trans and non-trans men and women if that did not reflect people’s own experiences of their gender (i.e., some trans women may simply identify as women), a separate question was asked with regard to whether participants were of trans or gender diverse experience (Ansara, 2015).

^b Education refers to teachers’ highest qualification in relation to their career as a primary school teacher and the level pre-service teachers were currently studying in relation to becoming a primary school teacher.

^c Sector refers to the schooling sector that teachers were currently working in and pre-service teachers had undertaken a placement in. 82.9% of pre-service teachers had undertaken a placement, therefore the percentages in the table for this question are for these only.

Table 2: Participants' previous experience

	Teachers	Pre-service teachers
Previously undertaken training specific to working with trans and gender diverse students	16%	6.7%
Had worked with at least one trans or gender diverse student	32%	12.6%
Had heard about the Safe Schools Coalition	33.3%	18%
Had at least one friend or family member who is trans or gender diverse	20%	21%

Table 3. Items in the Attitudes Towards the Inclusion of Trans and Gender Diverse Students Measure

Item	Loading
1. Legal names which are no longer preferred by trans and gender diverse students should be public information at school*	-.443
2. Students should be allowed to decide what pronouns (he, she, etc.) are used to refer to them	.564
3. It is the responsibility of school staff to stop others from making negative comments based on gender identity or expression	.608
4. Students should have to use toilets according to their assigned sex, rather than their gender identity*	-.575
5. Positive representations of trans and gender diverse people should be included in the curriculum whenever possible	.685
6. It is unrealistic for teachers to practice using gender-neutral language in the classroom*	-.554
7. Trans and gender diverse students should have a choice of wearing the school uniform they feel comfortable in	.750
8. It is not important for school staff to become educated on issues of gender identity*	-.463
9. It is acceptable for teachers to comment to a student that s/he is not “masculine” or “feminine” enough*	-.489
10. School staff should receive training on how to intervene against gender-based student harassment	.747
11. Schools should support the presence of Gay-Straight Alliances	.781

or similar groups for lesbian, gay, bisexual, and trans and gender diverse students	
12. It is inappropriate to teach students about gender variance at school*	-.554
13. It is unnecessary for school anti-harassment policies to specifically mention gender identity and expression*	-.572
14. School libraries should include books that feature trans and gender diverse characters	.472
15. School districts should allow trans and gender diverse students to participate in sports on the basis of their gender identity, not assigned sex	.709
16. “Male” and “female” should be the only gender options on schools’ official forms*	-.713
17. Teachers should never use slurs referring to a student’s gender identity or expression	.452
18. Issues about gender identity do not arise until after primary school*	-.412
19. Counsellors should be the ones to deal with issues around gender identity*	-.402

* Negatively scored items

Footnotes

¹ The importance of using ‘trans’ (or ‘transgender’) rather than ‘transgendered’ should be noted, where ‘trans’ is an adjective and ‘transgendered’ is a noun. Language in this area is frequently changing, meaning that now ‘transgendered’ is likely to be viewed as derogatory towards people who are trans.