# Physical education and female participation: A case study of teachers' perspectives and strategies 

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#### Abstract

We argue that gender issues in physical education (PE) remain in some schools, despite advances in PE research and curricula aimed at engaging females in PE. We interviewed five Australian PE teachers ( 1 male and 4 females) at a co-educational, regional high school about the factors affecting female participation in PE and the strategies they used to engage female students. The key strategies the teachers reported using, such as modified scoring in mixed gender activities, single gender classes, school policies and extra-curricular activities, were (a) shaped by their individual views on the factors affecting female participation, (b) primarily embedded in (and reproduced) stereotypes of gender and (c) generally not a reflection of what is being advocated in the literature. Therefore, our study highlights the need for policies and programs aimed at supporting PE teachers to implement gender-sensitive strategies in their daily practice.


## Introduction

Engaging female students in physical education (PE) has been recognised as a challenge for high school teachers (Rich, 2004; Slater \& Tiggemann, 2010; Wright, 1999). Historically, female students have been positioned as 'the problem' and often blamed for their lack of engagement in the physical activity component of PE (Azzarito, Solmon, \& Harrison, 2006; Enright \& O’Sullivan, 2010; Flintoff \& Scraton 2001; Garrett, 2004; Keay, 2007; Wright 1996). Over time, it has become increasingly recognised by PE researchers that, "'the problem' is more often located in the curriculum and pedagogical contexts within which girls are expected to participate and relates to the social construction of gender through PE" (Enright \& O’Sullivan, 2010, p. 204). Rich (2004, p. 215) claimed that there is "a growing body of research pointing towards the continued prevalence of gender inequality and exclusion in often complex ways within the PE curriculum, structures and practices". In particular, female students in rural and regional settings have additional factors affecting their participation in PE, such as lack of school sporting facilities and equipment (Casey et al., 2009). Our study examines the perspectives of five teachers in a regional New South Wales (NSW) high school regarding factors affecting female participation in PE, as well as the pedagogical and management strategies that these PE teachers report using to address female participation. Our research is informed by theories on the gendered nature of PE and an understanding that gender is socially constructed (Wright, 1995; 1999; 2001). This framing allows us to show how traditional notions of gender, femininity and masculinity can be challenged and/or reproduced through PE teachers' perspectives, as reported through their accounts of their everyday practices.

PE has long been recognised as gendered in its philosophy, content, organisational structure and through its association with sport (Garrett, 2004; Rich 2004; Wright, 1999). Research informed by an understanding of gender as socially constructed has shown how teachers play a role in constructing gender and (re)producing relations of power through
their teaching practices (Wright, 2001). Such an approach asks teachers to reflect on the consequences of their practice, rather than simply 'blame' the female students as problematic. This approach aligns with a poststructuralist perspective (among others) in that it recognises that what it means to be male or female, masculine or feminine, is socially and historically located and open to change (Azzarito et al., 2006; Rich, 2004; Wright, 1999). Therefore, knowing what teachers say and do in their PE classes, how they organise their classes and their choices of activities is important because these social practices have the potential to construct, reproduce or challenge assumptions based on gender (Wright, 2001).

According to Macdonald and Penney (2009), health and physical education in Australia aims to play a key role in challenging social constructions, such as gender stereotypes, that limit student engagement. In particular, the NSW Syllabus for Years 7-10 Personal Development, Health and Physical Education held "a great deal of potential for a genderinclusive approach which challenges narrow constructions of gender differences" because it was "conceptually based" and allowed teachers choice in terms of activities, content and assessments (Wright, 1999, p. 192). In recent years, however, gender issues in PE have not been the major focus in Australian policy or educational agendas. For instance, while the new Australian Curriculum: Health and Physical Education (Foundation-Year 10) adopts a strengths-based approach, rather than a deficit-based model of health, its focus on sexuality and gender diversity is primarily in relation to health, not PE (Australian Curriculum, n.d.). Prior to the year 2000 the NSW Department of Education and Training (now DEC; Department of Education and Communities) provided considerable funding and support for gender equity in schools (Wright, 1999). In the past five-ten years this support has been significantly downgraded and the DEC's focus has moved away from recognising and challenging the social construction of gender through PE. The emphasis is now on 'girls in sport' to address 'the problem' of females' lack of participation in physical activity (see NSW Premier's Sporting Challenge, 2014). Among this focus on sport has been the introduction and development of the 'Games Sense' model in PE, which aims to "challenge the traditional hegemony of the highly directed, formal and 'textbook' skill and drill oriented sport teaching" (Pill, 2011, p. 4). In other words, the 'Game Sense' approach is a method of teaching PE that develops the broader meanings of sport and physical activity through problem solving in physical education (Pill, 2011, see note 3). However, despite these changes, we argue that research and support specifically for gender sensitivity and inclusion in PE need to be put back on the agenda of the NSW DEC because our study provides preliminary evidence that gender issues, which Wright (1999) identified over a decade ago, remain in the PE context.

## Literature review

Much of the literature on this topic of female participation in PE examines young women's perspectives on the barriers and experiences associated with PE, primarily from a sociological or psychological standpoint. There are also many studies which report PE researchers' recommendations on effective practice for enhancing female students' engagement in PE. Very little research, however, has been conducted on "how PE
teachers themselves understand, perceive and address the issue of girls' experiences" in PE (Rich, 2004, p. 216), especially in regional contexts. In this study, regional refers to an inland town with a population of approximately 40,000 .

Many socio-cultural, psychological, and contextual factors affect female students' participation in PE. Factors affecting female students in PE have been shown to relate to social constructions of gender and gender stereotypes (Cockburn \& Clark, 2002; Ennis, 1999; Macdonald, 1990; Rich, 2004; Tinning, 1997; Whitehead, 2008); social support and influences (from parents, peers and role models; Bauer, Yang, \& Austin, 2004; Casey et al., 2009; Coakley, 2006; Dowda et al., 2007; Hall, 2008; Hills, 2007; McNeill, Kreuter, \& Subramanian, 2006; Trost et al., 2003) and; the teaching/classroom environment (e.g., the competitive nature of PE lessons, the teacher; van Daalen, 2005; Dudley Pearson, \& Okley, 2006; Larsson, Fagrell, \& Redelius, 2009). In addition, female students have reported feelings of embarrassment, low perceived ability, concerns over body image, lack of interest in the activities being offered and the dominance of boys in class as affecting their involvement in PE (Flintoff \& Scraton, 2006; Wright 1995; Wright \& Macdonald, 2010). Finally, the location of the school (i.e., a regional as opposed to a metropolitan setting) can impact female students' engagement in PE (Casey et al., 2009). With regard to the latter, in rural or inland townships, where the population is lower than metropolitan regions, female students tend to feel increased embarrassment when they are required to learn a new activity in front of peers that they socialise with or see in the community on a regular basis (Casey et al., 2009). Furthermore, females in rural and regional settings are typically provided with limited PE activities that tend to comply with gender stereotypes of femininity and masculinity (Casey et al., 2009). For example, female students are often required to participate in the traditionally feminine sport of netball, whilst the male students participate in a 'rough and tumble' game of rugby union. Our study will examine regional teachers' perspectives on the factors affecting female students' engagement in PE and the extent to which these teachers report using strategies to address these identified issues.

Recommended teaching strategies for engaging female students in PE include involving girls in curriculum design (Enright \& O'Sullivan, 2010); the use of role models (Bauer et al., 2004; Coakley, 2006; Dowda et al., 2007; Hall, 2008; Wallhead \& Buckworth, 2004); single gender classes (Macdonald, 1990; McCaughtry, 2006; Wright, 1996; 1999) and giving female students a 'voice' and 'choice' in the types of activities offered during a lesson (Azzarito et al., 2006; Fisette, 2008; Flintoff \& Scraton, 2001; Hills, 2007; McMahon, 2007; Oliver, Hamzeh, \& McCaughtry, 2009; Prusak et al., 2004). Other reported strategies for combatting gender exclusive practices, promoting inclusivity and challenging stereotypes include taking the focus away from competition and performance enhancement, such as through adventure PE (Gehris, Kress, \& Swalm, 2010) and emphasising pleasure, cooperation and participation in sport (Dudley et al., 2006; Hills \& Croston, 2012; McCaughtry, 2006; Smyth, Hattam, \& Lawson, 1998; Tinning, 1997). Finally, increasing PE teachers' awareness of gendered discourses and practices through pre-service teacher training courses, workshops and professional development days has been identified as an effective step in the process of gender reform in PE (Azzarito et al., 2006; Brown \& Rich, 2002; Keay, 2007; McCaughtry, 2006; Rich, 2004; Wright, 1999;
2001). Our study describes the pedagogical and management strategies that a group of Australian regional PE teachers report using to determine (a) if they are using any of these recommended strategies, and (b) if traditional notions of gender, femininity and masculinity are being challenged and/or reproduced through their perspectives and accounts of daily practices. Knowing teachers' perspectives and strategies, and how these social practices break down and/or reinforce gendered stereotypes, is significant because in order to achieve gender inclusivity in PE it is necessary to raise awareness of areas still in need of improvement (Brown \& Rich, 2002). If gender issues persist in schools, they can have a negative impact on students' experiences of PE.

## Methods

This qualitative case study focused on the perspectives and experiences of five PE teachers from a regional high school (Meadow High) (Note 1.). It uses a single-case study research design, specifically referred to by Yin (2009) as a 'type one' case study. Although the findings from this case study cannot be generalised to the entire NSW PE teacher population, they highlight the particularities of the PE staff at one school, which may have implications and provide learning opportunities for other PE teachers in regional areas of Australia (Stake, 1995). Stake defines an intrinsic case study as "the study of the particularity and complexity of a single case" (1995, p. xi). He further explains that with such a case study, the intention is not to generalise, but rather to examine in depth the intrinsic uniqueness of the individual case for its own sake. Consistently, Burns (2002, p. 477) noted that, "the aim [of a case study] has been to understand in depth one case and not what is generally true for most".

The school and teachers were purposively sampled. Purposive sampling allowed us to meet our research aims via "gaining insight and understanding into a particularly chosen phenomenon" (Burns, 2002, p. 465). Therefore, the school had to be located in regional NSW, Australia and the participant sample was based on the following 'typical-casesampling' criteria (Patton, 2002): they were required to be a current teacher of at least one PE class from Years Seven to Ten at Meadow High. There was an average of 10.2 years of service in the sample.

## The case

The school setting
The PE teachers who participated in this study were employed at Meadow High, a Years Seven-Ten catholic co-educational secondary school in a diocese of regional NSW. The PE department is funded by the Catholic Education Office, which receives additional funding by the State Government. Meadow High consists of 88 teaching staff, with ten Key Learning Area (KLA) coordinators. The PE department is managed by a (male) KLA course coordinator who primarily oversees the Personal Development, Health and Physical Education (PDHPE) subjects and staff.

The school's PE department consists of nine staff members, with five females and four males aged between 26 and 42 years. Within the department there is a (male, Dale) sports
coordinator who is generally responsible for all sporting teams and events. Other staff typically adopted coaching roles for one of the several sporting teams offered by the school. Within the community where the school is located, physical activity is identified as being important. The town enjoys more than 82.55 hectares of public open space set aside for active recreation and it has more than 20 sporting fields that are well maintained (Note 2.).

## The participants

The participants were one male and four female PE teachers (aged 26 years to 42 years; mean $=34$ years) from Meadow High. Three participants had completed their teacher education degree at a regional university in NSW while two were trained in metropolitan areas. The number of years of teaching experience across the sample ranged from five to 19. One participant had taught only in Catholic schools, three had taught within both Catholic and Public schools and one had experience with Catholic, Public and Distance Education schooling. All participants were employed full-time in their current teaching position. Refer to Table 1 for details.

Table 1: Overview of participants

| Pseudonym | Gender | Age | Teacher <br> training | Teaching <br> experience | Schooling <br> systems |
| :--- | :--- | :--- | :--- | :---: | :--- |
| Dale | Male | 33 years | Regional NSW | 11 years | Catholic |
| Natalie | Female | 27 years | Regional NSW | 5 years | Catholic and public |
| Kellie | Female | 35 years | Metropolitan NSW | 11 years | Catholic, public and |
|  |  |  |  |  | distance education |
| Emma | Female | 26 years | Regional NSW | 5years | Catholic and public |
| Kimberly | Female | 42 years | Metropolitan NSW | 19 years | Catholic and public |

## Data collection

A semi-structured interview guide approach (Patton, 2002) was used to collect data on teacher demographics, teaching experience, perceived factors affecting female participation in PE and their pedagogical and management strategies. Follow-up interviews clarified any uncertainties from the first interview. The interviews averaged 30 minutes, were audio recorded and subsequently transcribed.

Documents which detailed Meadow High school policies, specifically 'No Hat. No Play', 'Uniform Policy' and 'Non-Participation Awards', were collected and reviewed. These documents were useful in providing a context for the study and verifying any school procedures and policies that were mentioned by participants. Therefore, these policies provided additional information or contextual details that accompanied interview data (Yin, 2009), as will be discussed in the findings section.

## Data analysis

The interview data were analysed through the use of coding and comparison procedures that resulted in the development of themes (Berg \& Latin, 2008; van Manen, 1998). This type of thematic analysis is appropriate for identifying patterns, similarities and differences
emerging from the data (Burns, 2002). The emphasis is on illuminating and representing the multiple perspectives of participants and developing common themes across participants (Patton, 2002; van Manen, 1998).

Initially we used open coding (also known as inter-coding), "in which the researcher decides on tentative conceptual categories into which the data will be coded" (Berg \& Latin, 2008, p. 253). The initial codes were: school context (SC); factors affecting female participation (FA); and teaching strategies (TS). Next, the data were tabulated using audit coding which involved "linking the data identified in open coding with the source and context" (Berg \& Latin, 2008, p. 253). An example of this coding is shown in Table 2.

Table 2: Demographic information, perceived FA and TS of participants

| Participant | Age | Gender | Years teaching <br> experience | Employment <br> and training | Factors <br> affecting (FA) | Teaching <br> strategies (TS) |
| :--- | :---: | :--- | :--- | :---: | :---: | :---: | :---: |
| Kellie | 35 | Female | 11 years | Full-time and <br> metropolitan | Peers; <br> body image; | Netball academy; <br> disciplinary action; <br> modified scoring. |

Finally, axial coding was conducted, which meant "the complete picture, in which events pertaining to the research topic, related topics, implications from research and description of a proposed conceptual model are tied together" (Berg \& Latin, 2008, p. 253). Participant responses and themes were linked to existing literature on social constructions of gender, peer or parent influence, teaching/classroom environment, the dominance of boys in class and girls' feelings of embarrassment, low perceived ability and concerns over body image. In doing so, we drew out conceptual relationships across the data, such as the relationship between the teachers' perceptions on factors affecting female participation and their chosen pedagogical strategies. We also applied theories on the gendered nature of PE and the view that gender is socially constructed (e.g., Wright, 1995; 1999; 2001) to show how traditional notions of gender, femininity and masculinity were being challenged or reproduced through the teachers' perspectives and accounts of their everyday practices. In support of this approach to analysis, Burns (2002) noted that there are three stages to coding, and that coding often requires reviewing data in light of the literature in order to identify and interpret emerging themes.

There were a number of themes developed from data analysis. Firstly, four common perceived factors affecting female participation in PE were: the peer group; body image; role modelling; and the competitive nature of PE classes. Secondly, four key teaching strategies aimed to engage females in PE were: modified scoring in mixed gender activities, single gender classes, school policies and extra-curricular activities. Individual teachers also described allowing for student choice and taking the focus away from competition, but not all teachers used these latter approaches.

## Findings and discussion

The discussion of findings will initially provide a brief overview of the teachers' perspectives on the key factors affecting female participation in PE. Next we will describe
the teaching strategies they reported using to address female participation in their classes and show how these teachers' accounts of their practices were shaped by their (primarily gendered) perspectives on this issue.

## Teachers' perceived factors affecting female student participation in PE

## The peer group

Three teachers said the peer group was the most influential factor affecting female participation in PE. Kellie explained that some female students divert other females away from participation:

I think there is a group of girls in every year group that believe it's too uncool to participate. They've got other interests outside of school, and they pursue those and encourage others that it's not good to participate in PE. (11 years teaching experience)

Emma felt that the way females tend to act with their peers contributes to their limited interest in PE: "the socialising nature of girls, they'll stand in the back of a court or a field or they'll just stand in a group and talk if you allow them to do that," (5 years teaching experience). In addition, Natalie explained that many female students feel uncomfortable participating in front of their peer group or friends:

I think the main factor is being embarrassed to put themselves out there in front of their friends. I think a lot of girls at school just follow what their friends are doing. If their friends don't have a go, I think a lot of girls are shy, and don't participate ... (5 years teaching experience)

Casey et al. (2009) noted that feelings of embarrassment are often heightened for students in rural and regional areas because they are typically required to participate in new activities in front of peers they socialise with on a regular basis.

More specifically, Dale, the only male in the sample, noted the impact of mixed-gender learning environments when he said, "you have got the male-female ideals... they [female students] don't want to be shamed in front of males". Dale further explained that sport is often described as a masculine activity that male students typically want to be involved in, while some female students may feel that their femininity is challenged when placed in a physically competitive context. On the other hand, Kimberly (19 years teaching experience) acknowledged that there are some girls who are "sporty" and "get in and have a go". However, she explained that there are also many "girls on the sideline who socially are more chatty... [and who] will just sit there and cheer on the boyfriend rather than be involved".

In summary, the teachers tended to view most females as 'naturally' passive, more social, easily influenced by their friends and less interested in PE than males. In other words, they seem to make sense of their students by only applying narrow notions of femininity and masculinity (Wright, 2001).

## Body image

Teachers acknowledged that female students' perception of their body image, including their physical self and self-esteem, affected their participation in PE. Kellie explained:

> I think body image has a lot to do with it... you always get more participation amongst younger female students, like especially Year 7 , Year 8 , they love getting out there and getting active. But once they sort of hit puberty, that enthusiasm sort of tapers. (11 years teaching experience)

Natalie identified body issues that affect a minority of female students, such as being overweight, "bigger girls would be more self-conscious of their body image, feeling embarrassed" (5 years teaching experience). Emma highlighted that these feelings of embarrassment or uncertainty can be heightened in specific curriculum requirements such as aquatics: "I think for the girls, particularly swimming and those sorts of sports, where they're self-conscious [it negatively affects female participation]". Here, the teachers are acknowledging the issues young women face when living in a society and time which constructs the ideal female body in terms of slimness and fitness (Wright, 1999). Studies have shown that girls' feelings of embarrassment, low perceived ability and concerns over body image are associated with cultural expectations of femininity and ultimately affect their involvement in PE (Flintoff \& Scraton, 2006; Wright 1995; Wright \& Macdonald, 2010).

## Role modelling

Role modelling, from both the PE teacher and students' parents, was seen by the teachers as a factor affecting female participation in PE and physical activity in general. For example, Kellie said, "Family. Some are to do with family values. That's going to influence whether or not their child is going to be active or inactive, I think," (11 years teaching experience). Kellie explained:
... parents need to try and encourage girls to be more active and less concerned about their overall body image, and try and encourage them to be more positive within themselves, and in doing that, exercise and being active is probably one tool they can go and improve their feelings for themselves. (11 years teaching experience)

In contrast to the findings in the previous theme on body image, if female students have positive perceptions of themselves, and if this perception is reinforced by their parents, then they may be more likely to actively participate in PE. Bauer et al. (2008) noted that, to an extent, participation levels in PE are based on parental encouragement and support. If parents are creating a positive environment where physical activity is encouraged, then female students may be more likely to continue those patterns within PE (Coakley, 2006; Dowda et al., 2007; Hall, 2008; Wright, 1999).

In addition, Kimberly placed a large amount of responsibility with the PE teacher in regard to affecting female participation:

I think it's the role model of your teacher too ... if you're encouraging them, that they don't have to be the best, but to get in and have a go ... So I think if you've got a teacher
that's encouraging that... then they [females] will involve themselves a lot more. (19 years teaching experience)

Kimberly explained the importance of the teacher creating an environment for female students to focus on 'doing your best' rather than competing against others. This strategy of taking the focus away from competition has been identified in the literature as an effective strategy for disrupting the gendered nature of PE and encouraging pleasure, cooperation and participation among females in PE (McCaughtry, 2006; Smyth et al., 1998; Tinning, 1997).

## The competitive nature of PE

Teachers viewed the emphasis on competitive sport and performance-based activities in PE and the competitiveness of boys in co-educational contexts as negatively affecting female student participation. Natalie explained her experience of this situation:

The competitive nature of the mixed classes, having boys and girls in the class, the boys are really competitive, I guess, and that puts the girls off participating. And the boys being quite rough too. ( 5 years teaching experience)

Emma added, "I think the boys limit [female participation] - that would be my number one factor, the boys are very overbearing... [the boys] overtake because they're very skilled and they tend to hog [the games/balls/play]". Both Emma and Natalie believed that the boys were naturally more skilful, stronger and more competent than females.

Like the teachers in research by Larsson et al., the teachers of Meadow High were clearly aware of the dominance of some boys in mixed-gender PE classes, but they regarded this dominance "as something normal or natural, and ... something to be managed rather than challenged" (2009, p. 14). The two most prominent strategies that Meadow High teachers said they used to 'manage' issues of male dominance and females' lack of engagement in PE were modified scoring in mixed gender activities and single gender classes, as described below. Other common strategies included the use of school policies to gain parental support and extra-curricular activities to address the peer group factor identified above.

## Teaching strategies to address female participation in PE

## Modified scoring in mixed gender activities

All of the teachers claimed that they modified the scoring values and participation rules for female students when playing games with male students. This usually involved increasing the value of the goal/try for female students and requiring them to either score or be involved in the pre-scoring play. Dale explained how this approach worked in a game of touch football:
...boys score first, girls have to score next, or for girls it's worth five points per try, for boys one point. So the idea is they're [the girls are] to participate, all girls have to touch the ball in the lead up to scoring. So it gets them involved that way. The boys have to involve them. (11 years teaching experience)

This particular strategy aimed to ensure that the assumed skilfulness and competitiveness of male students was (somewhat) controlled (Casey et al., 2009). At the same time, this strategy reinforces the notion that females are 'naturally' inferior to males on the sporting field and does little to challenge gender stereotypes (Wright, 1999). However, Emma, the youngest teacher in the sample, with the least amount of experience, showed some resistance to this dominant practice:
... it's a touchy subject because I don't necessarily agree with making rules like two points for a girl's try. A lot of people use that to encourage but I think that's very demeaning and I think if we're going to make females and males equal on the sporting field I don't think ... it sort of defeats the purpose, saying, "Okay we're going to make girls worth double". So I don't tend to use that strategy very much. (5 years teaching experience)

Emma felt that having different activities within the PE lesson, specifically having skillbased activities for female students, allowed them a choice in different types of noncompetitive activities. Research has shown that female students may be more willing to participate in PE if they are involved in co-creating the curriculum because they will select activities that they enjoy (Azzarito et al., 2006; Enright \& O’Sullivan, 2010; Fisette, 2008; Flintoff \& Scraton, 2001; Hills, 2007; McMahon, 2007; Oliver et al., 2009; Prusak et al., 2004).

## Single gender classes

All the teachers agreed that the use of single gender classes for certain activities was the most effective strategy when trying to encourage female students to actively participate in PE. For example, Kellie suggested that "definitely the segregation, yeah, between classes, so having all boys groups and all girls groups. I think that really works effectively" (11 years teaching experience). Kimberly explained that she believes this strategy is useful because female students are not subjected to the pressure of performing in front of their male peers:

Most of the time I have only got females so there's no pressure I guess with the guys. They're not feeling as though the guys are watching them, so they want to be involved. (19 years teaching experience)

This strategy seems to address the body image factor identified by the teachers in this study. This finding has heightened significance in a regional context given that Casey et al. (2009) found that students in regional towns feel embarrassed performing in front of people they see in the community on a daily basis. Van Daalen (2005) and Wright (1999) explained that single gender classrooms often counteract the identified factors of females' embarrassment and unwillingness to participate, because they no longer feel selfconscious in front of their male peers.

On the other hand, Kimberly highlighted that single gender classes are not always possible: "... but there are times when we try to cross it so that they get used to mixing with the other gender as well" (19 years teaching experience). Kimberly also discussed the influence of peers on female participation and the benefits of allowing positive interactions to develop between students in co-educational PE classes. She believed, "If
you allow them to be in friendship groups for most things, they'll have a go" (19 years teaching experience). Wright (1999), and more recently, Hills and Croston (2012), examined opportunities for facilitating positive interactions between male and female students in mixed gender PE settings. Specifically, if students feel comfortable with and supported by their male and female peers then they may be more likely to participate in PE activities and have an enjoyable experience (Casey et al., 2009; Dudley et al., 2006; Hills \& Croston, 2012; Wright, 1999).

## Schoolpolicies

Teachers also reported using school-wide policies to manage female participation in PE. Kellie explained the use of the 'Non-Participation Award' policy:

> If they [the student] are always sitting out, they'll get the faculty detention, they'll get a formal letter sent home, which describes how their child or children are being [inactive] active at school, especially in PE. And then a non-participation award if that continued ... which I have not seen yet being implemented, so it hasn't gotten to that extent. Usually your letter sent home pretty much pulls them into line and they try to participate more. (11 years teaching experience)

This strategy is essentially a form of punishment, which has been introduced by the NSW Board of Studies (2003), in an effort to ensure students are actively participating in required school activities. This strategy is attempting to get the parents on board, which can play a large role in addressing female participation in both PE and physical activity (Bauer et al., 2004; Dowda et al., 2007; Wallhead \& Buckworth, 2004). Such policies also present issues, as described below.

The other two policies enacted at Meadow High have to do with uniform, including 'No Hat. No Play' and the 'Uniform Policy'. These policies require students to have correct footwear, sports uniform and hat (during summer) before they can participate in PE. While teachers noted the importance of these policies, teachers raised a number of specific issues in relation to their effectiveness, particularly Emma:

> I'm totally for the uniform policy ... it's really good in theory. When it doesn't work is when females come to school in the wrong uniform because they don't want to participate. So basically it feeds that behaviour ... we don't have a teacher to take care of them so they get to sit around the hall with their mobile phones and their friends. If they don't bring a hat, which they rarely do because of their hair issue, they get to sit under the veranda on a very hot day and not participate. So I don't know how effective those strategies are. (5 years teaching experience)

Although attempting to address students' non-participation in PE, these types of school policies do not tackle the underlying factors affecting female participation (Wright, 1999). Also, the uniform policies can potentially reinforce non-participation because students who do not want to participate simply do not wear a hat or correct uniform. Furthermore, when teachers were asked if they were aware of any Department of Education and Training/Communities or NSW Institute of Teaching documents that were available to assist them in identifying possible strategies to enhance female participation all of them said that they did not use these or were not aware of such policies.

## Extra-curricular activities

A final strategy that seemed unique to regional areas was the use of extra-curricular activities to engage females in physical activity both inside and outside the school environment. Kimberly explained:

Extra-curricular activities where you're trying to encourage a lot more girls to start a soccer team next year. Triathlons we're encouraging the girls in the triathlons a lot more. The participation level is really high with girls. Has been this year ... volleyball, we've got an all girls' volleyball team, which is started to grow again and now the girls to encourage health and fitness, they've started a cheerleading team. (19 years experience)

This context appears to hold potential for breaking down stereotypes about the types of sports females participate in because soccer and triathlon are not traditional female sports. Although cheerleading (above) and netball (below) are associated with narrow notions of femininity, in this case, female students are choosing to take part in these activities to be with their friends and for health reasons.

The school's netball program was another option for girls:

> We have this netball academy which is available to all students, even if they don't make the school's team, just to come along on Wednesday afternoon. And we usually get quite a few, especially in the opening weeks of it. And that works really well. (Kellie, 11 years teaching experience)

Not only does the netball academy increase the opportunities for female participation, it provides female students space to be with their friends, and in some instances, without males. If students in regional and rural areas have positive relationships in extra-curricular physical activities with their peers, then they may be more likely to participate in PE (Casey et al., 2009). More research is needed to determine whether female students in regional areas are affected by outside social influences and extra-curricular activities more so than students in urban areas and how these activities may work to break down stereotypes of gender-appropriate sports for girls.

## Conclusions and recommendations

The discussion of findings showed how the strategies teachers reported using were primarily embedded in (and reproduced) stereotypes of gender; however potential areas for challenging these stereotypes were identified by a couple of the teachers. Overall, teachers did not discuss involving girls in curriculum design, the use of alternative practices, such as adventure PE, nor involvement in any professional development activities asking them to reflect on their practices, despite these strategies being identified in the literature as effective in engaging females in PE and breaking down gender stereotypes (Azzarito et al., 2006; Brown \& Rich, 2002; Enright \& O’Sullivan, 2010; Gehris et al., 2010; Keay, 2007; McCaughtry, 2006; Rich, 2004; Wright, 1999; 2001). Therefore, the findings of our study support the view that gender issues in PE remain in some schools, despite advances in PE research and curriculum design. Our findings
highlight the need for policies and programs aimed at supporting PE teachers to implement gender-sensitive strategies in their daily practice.

The most common strategies the teachers reported using were shaped by their individual views on the factors affecting female participation. For example, single gender classes were used to address the 'body image' factor, modified scoring was practised to address 'the competitive nature of PE' and extra-curricular activities were used in response to the identified influence of 'the peer group'. However, in general, the teachers' perspectives on the factors affecting female participation were 'gendered', which was also reflected in the strategies they reported using. In particular, the teachers' perspective of boys as naturally physically powerful and dominant in PE and girls as naturally physically inferior and submissive resulted in accounts of teaching strategies that reproduce narrow social constructions of gender, such as modified scoring. Therefore, as was found in research by Larsson et al. (2009, p. 14), "the problem is not the awareness [of gender issues] among the teachers, but the way the teachers are inclined to interpret the dominance [of some students] and what strategies they use (and do not use) to deal with it."

How teachers organise their classes and their choices of activities has the potential to construct, reproduce or challenge assumptions based on gender (Wright, 1995; 2001). In our study, Emma was the only teacher to question the modified scoring approach, which highlights that local sites of resistance are possible. Two teachers also described allowing for student choice and taking the focus away from competition through skilled-based activities, but these approaches (which challenged the gendered nature of PE) were not reported by all teachers. In general, the strategies teachers said they adopted were primarily about managing, rather than challenging, gendered constructions in PE.

Whilst it is acknowledged that the teachers in this study were attempting to implement strategies, management procedures and policies to encourage female participation, they were not effectively addressing the underlying gender issues embedded in their practice, which can have a negative impact on students' experiences of PE. Although these findings are not a representation of all NSW regional PE teachers, the findings highlight that gender issues, which were identified by Wright (1999) over a decade ago, remain unchallenged in some schools. Notably, the reasons given for the lack of engagement in PE among females in this study may not be as relevant to those students living in metropolitan areas. Therefore, it is necessary for rural or regional PE teachers, schools and government departments to develop appropriate pedagogical strategies to counteract identified location-specific issues (Casey et al., 2009).

Given the limited sample size in the current study, more research is needed with larger, more diverse samples. Having a limited breadth within the sample can result in the under or over representation of specific views or opinions (Patton, 2002). For example, there was only one male participant in our study. Nevertheless, it was found that much of what he said was consistent with the females in this study. Another limitation was that we did not have direct access to the teachers' everyday practices. Further research could involve observations of teaching practices and interviews with observed teachers so that comparisons can be made between what teachers say about their teaching approaches and
what they do when teaching. Having said that, such an approach would need to be handled with care, particularly in regional contexts with small populations, because some teachers may feel that they are under surveillance. For instance, in our study a couple of participants raised questions about potential consequences. One asked what would happen if they were found not to be doing anything to increase female participation. Another participant expressed concern that they may not know the correct answer to a question. Although our institution ethically approved our study and we followed ethical procedures with all participants, such as explaining notions of confidentiality, freedom to withdraw without consequence, that there were no 'right or wrong' answers and informed consent to be audio recorded, these occurrences highlight that female participation in PE is a sensitive issue for some teachers. Some of these participants may have refrained from expressing their ideas or opinions for fear of being scrutinised. If observations were also conducted, further concerns may have been raised. Researchers need to negotiate these potential ethical and methodological dilemmas when attempting to observe and interview PE teachers.

It is also important to recognise that teachers work in a context of competing demands on their time, established practices and conflicting priorities (Green, 1998; Wright, 2001). Implementing inclusive and gender sensitive classes is challenging, particularly if there is a resistance to change at the department and school levels (McCaughtry, 2006; Webb \& Macdonald, 2007; Wright, 1999). In the context of gender issues, both Wright (1999) and McCaughtry (2006) have drawn our attention to the struggles teachers face when trying to implement alternative practices in PE that resist the dominant culture. While not focussing on gender issues per se, Green's work on PE teacher biographies, philosophies and practice in the United Kingdom (note 4) highlights the disconnect between 'PE theory' and the practical constraints, contextual pressures and day-to-day realities of teaching PE in schools, such as curriculum requirements, timetabling issues and behavioural management.

Green (1998; 2000; 2002) uses the sociology of knowledge to examine the relationship between what PE teachers claim and the contextual, relational and dispositional circumstances of the teacher making these claims. If this approach is applied to understand PE teachers' perspectives on female students' engagement in PE, the focus is on how and why particular ideas about gender and PE come to be dominant at a particular point in time and how and why these ideas may change. For instance, the content of teacher education programs and the professional development of PE teachers in Australia privileges certain ways of knowing and doing, such as those related to dominant masculinities and femininities, and marginalises others (Tinning, 2004). Tinning (2002) acknowledges the inherent complexities and difficulties when expecting teachers to enact a curriculum that is embedded in a socially critical perspective. Therefore, we recommend that future studies apply the work of Green and Tinning to help explain the gender issues and everyday practical constraints on PE teachers that were raised in our study.

Finally, keeping the above challenges in mind, teachers require professional support and changes in policy and school practices if they are to achieve gender reform in PE. The
kinds of support, practices and policies we believe might be useful in this regard include the implementation of a community development approach on gender inclusivity for all PE teachers to help cultural change at the individual school level. The NSW Syllabus for Years 7-10 Personal Development, Health and Physical Education held "a great deal of potential for a gender-inclusive approach which challenges narrow constructions of gender differences" (Wright, 1999, p. 192) and the development of an Australian Health and PE curriculum offers new opportunities for revisions regarding gender diversity, social justice and inclusivity in sport and PE, as well as health. Therefore, we argue that funding for critical sociological research and professional development activities aimed at gender sensitivity in PE need to be put back on the agenda of the NSW DEC to support teachers, particularly in regional areas.

## Endnotes

1. Pseudonyms have been used for the school and the teachers.
2. Information was gathered from the town's Information Centre website and from speaking with local individuals. Citing these sources would impact on the anonymity of the teachers and the school.
3. Pill (2011, p. 4) explains that the Games Sense model is more commonly identified as ‘Teaching Games for Understanding' (TGfU) in the northern hemisphere.
4. In the United Kingdom physical education is separated from health education, whereas in Australia they are not (Tinning, 2004).

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