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The 'Ideal' Pe Kit to Help Reduce Body Image Concerns within Adolescent Girls

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Abstract:

Introduction: Adolescent girls typically possess dissatisfaction towards their bodies and is particularly prevalent when taking part within Physical Education (PE) lessons. It is therefore important to investigate whether the design of their own PE kit could have a positive effect on how they participate within PE.

Methods: A sample of $n = 40$ female participants from Years 7 and 11 were recruited from two secondary schools, to provide a comparison. A non-validated questionnaire was designed to address the 3 research objectives using a Likert scale. Descriptive statistics and percentages were used for further analysis and interpretation.

Results: 20% of Year 7 girls were most dissatisfied with their feet as opposed to 35% of Year 11's with their upper arm. With regards to their current PE kit, Year 7 girls were least satisfied with shorts (20%) and Rugby shirt (25%), whereas, the Year 11's were least satisfied with skirt and shorts (15%) and the polo shirt (15%). The design of the PE kit saw similarities between both Year 7 and 11, in particular where the designs covered up the body parts the participants were least satisfied with.

Conclusion: Overall, girls would prefer a PE kit that was fitted, to allow for comfort and ease of movement, but also that covered certain body parts, including thighs and upper arm. By allowing girls to have a choice of their own PE kit, could help increase participation levels as they move through adolescence.

Recommendations: Future research could involve all year groups within secondary schools.

Key Words: physical education, pe kit, body shape, body image

Introduction

The meaning and definition of body image has a broad and evolving history (Bailey, Gammage & Ingen, 2017), therefore in order to understand what the meaning of the definition, in current society it is somewhat complex (Pruzinsky & Cash, 2002). The term "*body image*" consists of body-related self-perceptions and self-attitudes, including; thoughts, beliefs, feelings and behaviours towards oneself and others (Bailey, Gammage & Ingen, 2017), thus suggesting that body image is not based upon what we actually look like, but how we think and see ourselves. Moreover, most research around body image is focused upon the negative and fails to consider the positive body image (Tylka, 2012) which may impact the field of study around body image, limiting the understanding of body image (Smolak & Cash, 2011) and preventing the promotion of health and well-being, and the treatment of disorders.

What is a positive body image?

Positive body image is reported to be a unique construct (William, Cash & Santos, 2004). In order to understand and allow individuals to accept and see positive elements of their body William, Cash and Santos (2005) studied acceptance and mechanisms to conquer positive body image.

Their research found that finding that a positive body image is based upon having respect for your body, leading individuals to be able to appreciate their uniqueness, accept how they look, despite differences compared to others and to be able to feel confident to emphasize their assets instead of focusing on the negatives (Wood-Barcalow, Tylka & Augustus-Horvath, 2010).

What is a negative body image?

Conversely having a negative body image is associated with disliking and believing something is wrong with the individual's body (Lewis, 2016). Therefore may often leads to people feeling awkward and self-conscious, because they are unhappy with the way they look, this more than often leads to having a negative body image (Lewis, 2016). Additionally, the way people feel about their bodies can change from day to day, depending on what they are wearing, doing or whom they are with (Littleton & Ollendick, 2003). However people who feel negatively towards their body image struggle to see any positives in themselves, which can lead to further issues including eating disorders (Littleton & Ollendick, 2003).

Body image in adolescent girls

Research has suggested that both boys and girls become conscious of how their body looks prior to adolescence (Gadbois & Bowker, 2007). However, Gadbois and Bowker (2007), found that females hold greater dissatisfaction towards their bodies, compared to males. Adolescence is a time where individuals go through physical changes to the body including an increase in body hair and breast tissue (Lewis, 2016). These individual changes, especially if they are developing at different rates to others, may result in individuals feeling more subconscious on their appearance, eating habits and ultimately how they are going to impress others (Davison, Susman & Birch, 2003; Lewis, 2016). These changes can often lead to the movement away from the ideal body image, possibly due to the fact that adolescent girls, are highly influenced by external factors, including family and peers (Thompson, Heinberg, Altabe & Tantleff-Dunn, 1999; Burgess, Grogan & Burwitz, 2006). However, the media is seen to have the biggest influence, due to the exposure to images of models and celebrities that have the ideal body (Grabe, Ward & Hyde, 2008). Moreover, females who are sports orientated are often influenced by their sporting role models, but do not focus on their athletic ability and achievements, but more on their femininity and appearance (Fink & Kensicki, 2002).

Body image within schools and Physical Education

The school environment is a place where learning, social hierarchies and relationships are formed (Valentine, 2000). As a result of group's norms being formed, the ideal body can be affected by the impact of the school including appearance, dieting and exercise (Mac & Ghail, 1994; Ricciardelli & Yager, 2016). Carlson-Jones (2004) stated how body image concerns rise throughout an individual's school life, as girls begin to worry about how they look when they become more involved with boys, as they believe boys will pay more attention to them, if they have the ideal body. There is evidence to suggest that some schools have developed programmes to encourage and promote positive body image (Ricciardelli & Yager, 2016). Studies based on body image in schools, have highlighted that girls in single-sex schools are more likely to have a poor body image (Dyer & Tiggemann, 1996 & Granleese & Joseph, 1993). A particular study on Australian girls suggested that those who attend single sex schools were more likely to desire for a thinner body and develop eating disorders such as, anorexia and bulimia (Dyer & Tiggemann, 1996). In contrast, other researchers have not replicated these particular findings among adolescent girls (Tiggemann, 2001) or girls in college settings (Spencer, Barrett, Storti & Cole, 2013). However, some researchers have argued that girl's whom attend single-sex schools may demonstrate higher levels of body dissatisfaction, due to the high number of female peers, whom they try and compare themselves too (Spencer, Barrett, Storti & Cole, 2013). Ultimately, whether girls attend single-sex or mixed-sex schools, they are exposed to conversations around appearance, teasing around appearance from peers and are exposed to appearance-based media throughout their school life (Jones, Vigfusottir & Lee, 2004).

Theberge (1991) discovered upon reflection on the study of body image and Physical Education (PE), that there is little evidence and focus around the body in this particular field. However, Brady (2005) commented how both sports and physical activities have the ability to inspire an identity and body image which involves skills and potential, rather than

being focused around physical appearance and sexuality. Scott and Derry (2005) highlights that a major part to enhancing purposeful views of body image, in girls, is through experimental learning. PE in particular, allows for positive body image to be developed, by giving girls the opportunity to experience freedom of movement, and understand the qualities and potential their bodies have (Kitchen, 2006). Furthermore by improving their components of physical fitness and possibly resulting in girls adapting their bodies to suit the needs of their chosen sports (Burgess, Grogan & Burwitz, 2006; Abbott & Barber, 2011). However, due to the wide range of sporting types that the national curriculum states that schools should be offering, results in there being many body types and different views on what the *ideal* body image should be. For example, girls that participate in physical activities that are aesthetically based, such as gymnastics and dance, thrive for thinness (Slater & Tiggerman, N.D). In contrast, sports which are physically demanding, for example rugby and football, will require a bigger and more muscular body shape. These differences highlight how the *ideal* body image changes dependant on the sporting activities, and if the *ideal* is not met, girls especially will feel that they cannot take part in that particular sport as they feel ashamed of their body, for not fitting in with the rest (Parsons & Betz, 2001).

The PE kit

Clothing is used by individuals to express how they feel and want to show off their body to the rest of society (Rudd & Lennon, 2001). Although research by Scraton (1989), Flintoff and Scraton (2001) and Allender, Cowburn and Foster (2006), found that PE kits are commonly known to have an effect on how girls participate in PE, due to the ill-fitting and how uncomfortable they feel in it. As a result, girls may disengage from PE due to being forced to wear the compulsory PE kit (Scraton, 1989; Flintoff & Scraton, 2001; Allender, Cowburn & Foster, 2006). Velija and Kumar (2009) highlighted that some adolescent girls who are conscious about their body and capabilities, often reported they felt uncomfortable in the compulsory PE kit, and did not like the way it exposed their body. The Cognitive Behavioural Model (CBM) of body image development and experiences assists in explaining how body image can be affected within schools, PE and by the PE kit (Cash, 2002). The CBM suggests that body image is made up of events that trigger responses to bodily experiences and historical events; any past experiences. Cash (2002) stated how within PE, this can be affected by the exposure of the body in the changing rooms and comments made towards individuals when wearing the PE kit. The PE kit has traditionally been seen as a constant battle between pupils and teachers, as most would attempt to go against the school's guidelines and regulations (Velija & Kumar, 2009). This battle would often result teachers letting the pupils wear what they wanted O'Donovan and Kirk (2008). However, Velija and Kumar (2009) highlight how pupils have suggests that by having a choice of PE kit would help reduce body image concerns and would contribute to girls feeling less uncomfortable during PE lessons. With lack of engagement and participation rates in girls being a concern, therefore it is important to further investigate: (i) how satisfied and dissatisfied Year 7 and Year 11 girls were with their body image (ii) the thoughts and perceptions of the PE kit, and how this effects participation within PE lessons and (iii) the design of their own PE kit and whether this would help to improve how comfortable it would make them feel in PE lessons and increase overall participation in PE.

Methods

Participants and recruitment

The study involved $n = 40$ female students, who were recruited from two secondary schools based in Gloucestershire (one private school and one comprehensive school). $n = 20$ girls were recruited from year 7 and year 11 and ranged between 11-16 years of age. Participants were selected using the random sampling technique. The study required a comparison between those whom were in their first year and their final year at secondary school. By using a qualitative sampling technique allowed for a strong comparison in, thoughts, feelings and experiences in relation to the sports kit (Bernard, 2002). The experience, sports and level of participation, was not a factor which affected the recruitment of the participants, which allows for a range of experiences, sports and levels to be captured in the results, but to investigate whether these affects their thoughts and feelings towards the PE kit. Due to the nature of the study, it was necessary to gain approval from the University of Gloucestershire Research Ethics Panel and possess a DBS to minimise possible risks and harm that the participants could face. Informed consent was obtained and participants were informed of their right to withdraw. Anonymity was achieved by replacing names with numbers.

Data Collection

Due to the absence of a pre-validated questionnaire, the design of a new specific questionnaire was designed by the researchers. To ensure the researcher had control of the responses Likert scale questions were used (5 point category -2, -1, 0, +1, +2). The participants were able to firstly rate how they felt towards their different parts of the body (including head to toe) and secondly participants were afforded the opportunity to design their own 'ideal' summer and winter PE kits. Participants were asked to comment on colour, material, fit and brandings (Figure 1.0). The questionnaire took approximately 30 minutes to complete.

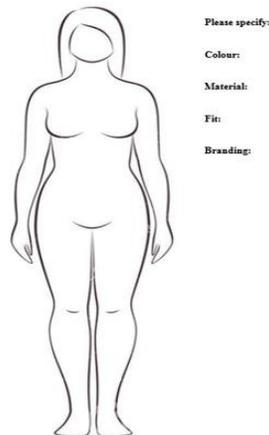


Figure 1: Design your own PE Kit

Data Analysis

Descriptive analysis and percentages were determined within a Microsoft Excel Spreadsheet. Additionally, the design of the PE kit were analysed by using a tally to establish what participants liked the most, would keep the same and like to change. Finally, an 'ideal' PE kit was designed from the most popular suggestions made.

Results and Discussion

Individual Body Parts

Participants were questioned on how satisfied and dissatisfied are on individual body parts. Table 1 presents the year 7 responses, with the hands having the largest satisfaction of 50% responding +2, and the body part the participants are most dissatisfied with being the feet, with 20% responding -2. In comparison, the year 11 responses, highlights the body part which the participants are most satisfied with, being the eyes, with 45% responding +2, and the body part the participants are most dissatisfied with being the upper arm, with 35% responding -2.

Year 7	-2	-1	0	1	2	Year 11	-2	-1	0	1	2
Head	1	1	5	6	7	Head	1	2	10	2	5
Eyes	1	1	4	7	7	Eyes	1	1	4	5	9
Nose	1	2	6	5	6	Nose	3	2	4	4	7
Mouth	1	2	8	3	6	Mouth	4	1	8	3	4
Chin	2	2	8	4	4	Chin	4	3	9	0	4
Neck	2	1	5	5	7	Neck	3	1	11	2	3
Shoulders	2	3	4	2	9	Shoulders	5	4	8	0	3
Upper Arm	1	3	6	2	8	Upper Arm	7	3	7	0	3
Lower Arm	1	2	5	3	9	Lower Arm	4	3	8	2	3
Hands	1	2	5	2	10	Hands	3	2	9	2	4
Fingers	1	3	7	2	7	Fingers	3	2	9	3	3
Chest	1	2	5	6	6	Chest	0	5	9	2	4
Stomach	2	4	8	2	4	Stomach	5	5	6	1	3
Waist	2	5	5	5	3	Waist	4	6	6	0	4
Hips	2	2	8	4	4	Hips	2	6	7	2	3
Buttocks	2	3	4	3	8	Buttocks	5	2	6	3	4
Thighs	3	2	4	3	8	Thighs	3	3	8	2	4
Lower Leg	2	2	6	4	6	Lower Leg	3	4	8	2	3
Feet	4	1	4	4	7	Feet	5	4	7	0	4
Toes	3	2	5	5	5	Toes	5	5	5	0	5
X	1.75	2.25	5.6	3.85	6.55	x	3.5	3.2	7.45	2.5	4.1
min	1	1	4	2	3	min	0	1	4	0	3
max	4	5	8	7	10	max	7	6	11	5	9
SD	0.85	1.02	1.47	1.53	1.88	SD	1.67	1.61	1.88	1.45	1.52

Table 1: Year 7 and Year 11 responses to satisfaction and dissatisfaction of individual body parts

Participants were asked to highlight what body parts they like, would change and keep the same. Results indicated that 35% liked their head the most, 30% would change their stomach and 15% would keep their face the same. In contrast to this, Year 11 results found that 25% like their head the most, 30% would change their hips and 20% would keep their chest the same. This indicates that in both Year 7 and Year 11 the middle of the body is an important factor when considering their body image and are further developed when considering both their weight and appearance (Ricciardelli and Yager, 2016).

Satisfaction of the PE kit

Participants were asked to rate their satisfaction levels with the different items of the PE kit, including both summer and winter. Figure 2 shows the year 7 and 11 responses to the summer kit. Year 7 indicated that they were most satisfied with the skirt (35% +2), in contrast, the item which the participants are least satisfied with being the shorts (20% -2). In comparison to Year 11 highlighted that the item most satisfied with were the socks (50% +2), in contrast the item which they were least satisfied with being the skirt and shorts (15% -2).

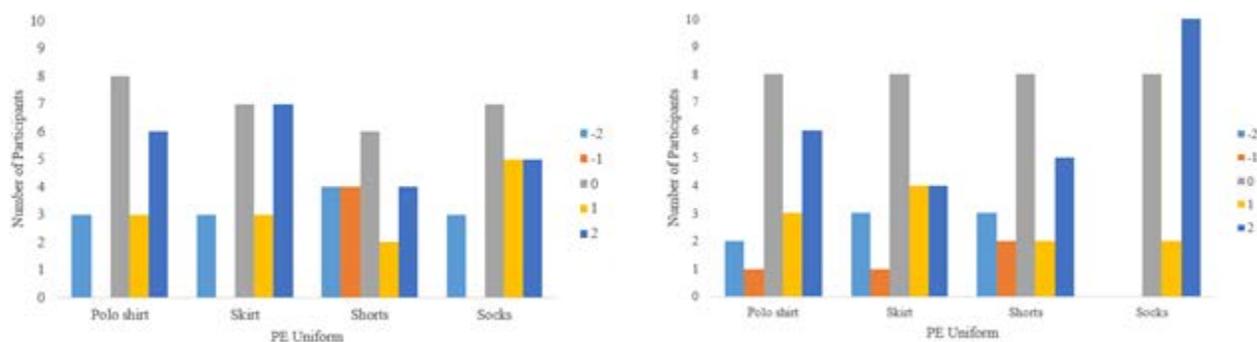


Figure 2: Year 7 and Year 11 participants on their satisfaction of the summer kit

Figure 3 shows the Year 7 and Year 11 responses to the winter kit. The item which Year 7 the participants were most satisfied with was the polo shirt (40% +2), in contrast the item which participants are least satisfied with being the rugby

shirt (25% -2). In comparison the Year 11 responses, highlighting that the item which participants were most satisfied with being the waterproof (30% +2), on the other hand the item which participants are least satisfied with was the polo shirt (15% -2).

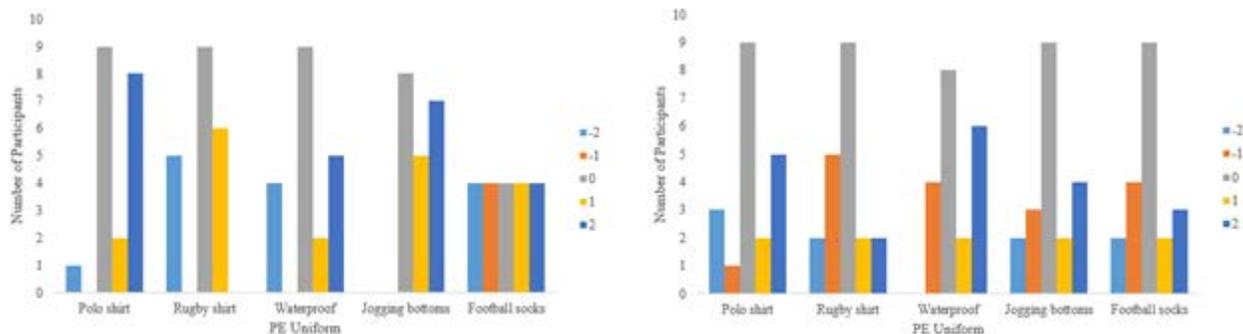


Figure 3: Year 7 and Year 11 participants on their satisfaction of the winter kit

Both sets of results indicate that the Year 7's are not as conscious of what they wear during PE lessons, however as the participants get older and reach year 11, they become more conscious of what is on show, and whether the PE kit they are wearing is going to impress their peers, especially the boys which might see and pay attention to them during the lessons (Carlson-Jones, 2004).

Participants were asked to rate their PE kit in terms of different factors. Figure 3 indicated that Year 7 were most satisfied with how colour co-ordinated the PE kit is (40% +2), and yet they were least satisfied with the colour (20% -2). Year 11 on the other hand suggested the most satisfied factor was how the PE kit allowed them to move (35% +2), with a contrast of the factor that they were least satisfied in was the length and how warm the kit is (15% -2).

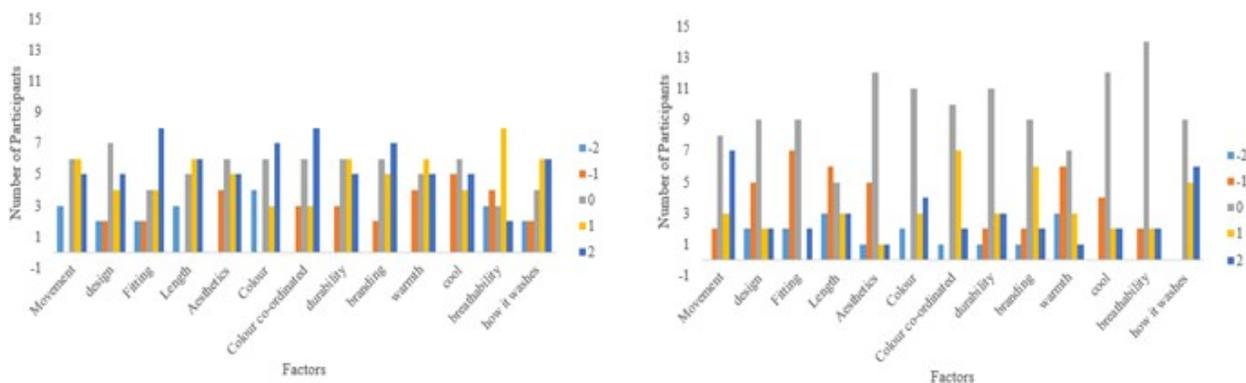


Figure 3: Year 7 and Year 11 participants of different factors of the PE kit

PE Kit ratings

Table 2 illustrates the Year 7 responses to how they rated their PE kit compared to different statements. Out of 20 participants, 60% disagreed with “the PE kit makes me feel uncomfortable”, 75% disagreed with “the PE kit makes me sweat too much”, 50% disagreed but 50% agreed with “the PE kit prevents me from performing my best”, 50% disagreed but 50% agreed with “the PE kit prevents me from looking my best” and 60% of participants disagreed with “the PE kit prevents me from moving aesthetically”. In comparison with Year 11 responses, 50% disagreed and 50% agreed with “the PE kit makes me feel uncomfortable”, 65% agreed that “the PE kit makes me sweat too much”, 55% agreed “the PE kit prevents me from performing my best”, 60% agreed “the PE kit prevents me from looking my best” and 65% agreed “the PE kit prevents me from moving aesthetically”.

	YEAR 7	-2	-1	0	1	2
The PE uniform makes me:						
Feel Uncomfortable	45%	15%	40%	-	-	-
Sweat too much	25%	50%	25%	-	-	-
Prevents me from:						
Performing my best	-	50%	20%	15%	15%	-
Looking my best	-	50%	15%	-	35%	-
Moving aesthetically	-	60%	20%	-	20%	-
I would prefer to:						
Provide own	20%	20%	20%	15%	25%	-
Design Own	20%	20%	20%	-	40%	-
	YEAR 11	-2	-1	0	1	2
The PE uniform makes me:						
Feel Uncomfortable	15%	35%	35%	15%	-	-
Sweat too much	20%	15%	40%	15%	10%	-
Prevents me from:						
Performing my best	30%	15%	40%	15%	-	-
Looking my best	15%	25%	40%	20%	-	-
Moving aesthetically	40%	15%	50%	10%	5%	-
I would prefer to:						
Provide own	20%	10%	30%	20%	20%	-
Design Own	25%	5%	20%	25%	25%	-

Table 2: Year 7 and 11 responses

The final two statements asked the participants whether they would provide or design their own PE kit. Year 7 responses showed that 60% of participants would prefer to provide or design their own PE kit, and in comparison, the year 11 responses showed that 70% of participants would prefer to provide or design their own PE kit. These findings are in agreement with research conducted by Velija and Kumar (2009), who claimed that if girls are comfortable in what they are wearing and have a choice, they are more likely to get involved in PE lessons, thereby possibly increasing overall participation rates.

Designing PE kit

Participants were given the opportunity to design their own summer kit. Figure 4 illustrates the *ideal* summer kit from the Year 7 and 11 participants. Both designs involved a short sleeved polo shirt, which 30% of both year 7's and 11's stated they were comfortable in. Additionally, the sleeves in the year 11 design covered the majority of the upper arm, which 35% stated they disliked about themselves. Furthermore, both designs included shorts, which 20% of year 7's and 25% of year 11's stated they liked in the summer kit. However, the length of the shorts differed, and the year 11's showed interest in longer shorts, which cover up the thighs, as 15% of participants stated they disliked this part of the body.

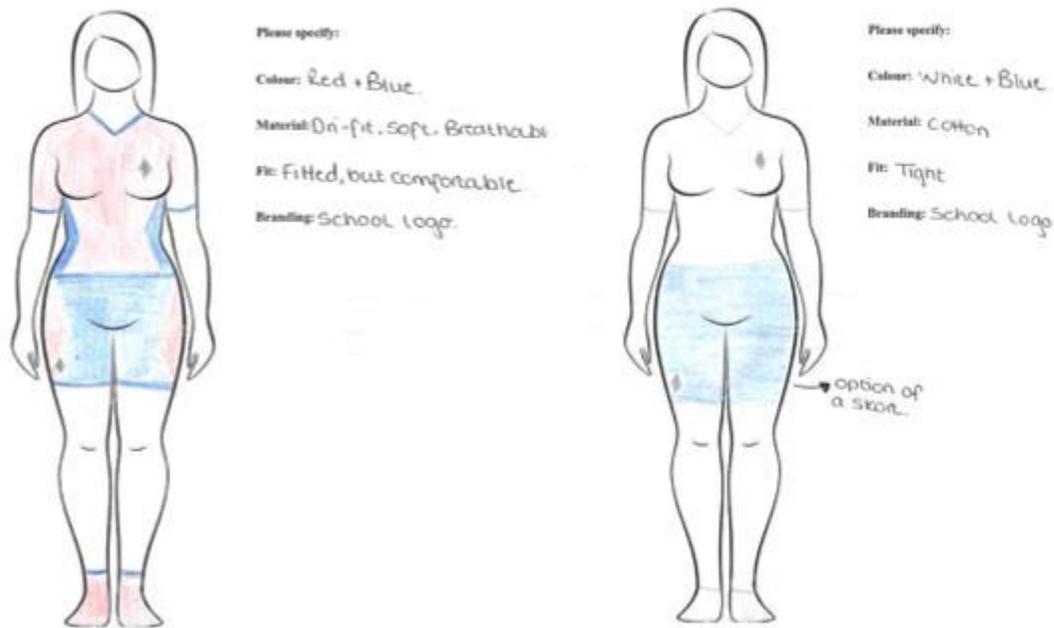


Figure 4: Year 7 and Year 11 *ideal* summer kit

Participants were then given the opportunity to design a winter kit. Figure 5 illustrates the *ideal* summer kit from the Year 7 and 11 participants. Both designs included fitted Nike branded leggings, which 35% of year 7's and 20% of year 11's stated they were happy in. Additionally, the Year 7 design included a skin and polo shirt, which are both fitted. In comparison, the Year 11 design included a polo shirt and a loose fitted sweatshirt. This indicated that as girls get older they prefer sportswear that they feel more comfortable in, rather than being fitted to their body, ultimately allowing them to show off their body to their peers, in a way they are comfortable with (Rudd & Lennon, 2001).

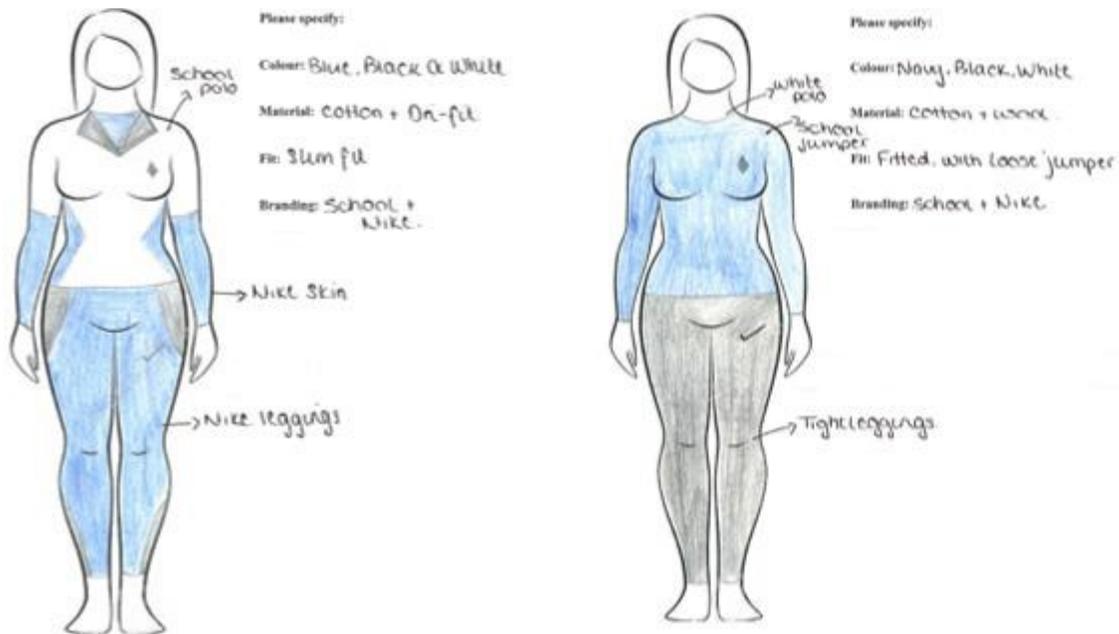


Figure 5: Year 7 and Year 11 *ideal* PE winter kit

Conclusions

This investigation looked to address three research objectives. Firstly, to investigate how satisfied and dissatisfied Year 7 and Year 11 girls were with their body image. Results indicated that Year 7's most liked body part being the hands, with 50% of participants rating +2, and the least favourite being the feet, amongst 20% of participants, whereas, Year 11's favourite body part was the eyes, amongst 45% of participants, and the least liked body part being the upper arm, amongst 35% of participants. These results agrees with literature, as it demonstrates that as girls go through adolescence they begin to pay more attention to the individual body parts, especially those which are often on show (Byely, Archibald, Graber & Brook-Gunn, 2000).

Secondly, to investigate the thoughts and perceptions of the PE kit, and how this effects participation within PE lessons. In terms of the summer kit, 35% of the Year 7's voted skirts and 30% polo shirts, and 25% of the Year 11's voted for shorts, with 30% voting for polo shirts, as the items they liked the most and feel most comfortable in. In comparison to the designs, both the Year 7's and 11's designed kit which involved both shorts and polo shirts, with were fitted, but comfortable. Additionally, for the winter kit, 40% of Year 7's voted for polo shirts, and 35% jogging bottoms, and 25% of Year 11's voting for polo shirts, and 20% jogging bottoms. In comparison to the designs, the Year 7's preferred to have a skin, under the polo shirt, compared to the Year 11's having a polo shirt and sweatshirt.

Finally, to investigate the design of their own PE kit and whether this would help to improve how comfortable it would make them feel in PE lessons and increase overall participation in PE. Both the Year 7's and Year 11's included a skin and fitted polo shirt, but the Year 11's added a loose fitted sweatshirt as their preference. Furthermore, both the Year 7's (35%) and Year 11's (20%) designed kit which included Nike branded fitted leggings. These findings are in agreement with Rudd and Lennon (2001), who state that girls will only wear clothes that show off their body in a way, they want peers to see them. Further indicating that as girls go through adolescence they become more uncomfortable with their body image and often want to hide how they look from others.

Results from this investigation suggest that by allowing pupils to design their own kit, and have a choice on what they kit includes would help increase participation levels, especially amongst girls. As Allender, Cowburn and Foster (2006), stated that often the PE kit provided was *ill-fitting*, causing barriers to participation. Additionally, the choice of kit would lead to the avoidance of battles, which teachers often face with girls, when it comes to the current PE kit (O'Donovan & Kirk, 2008).

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