

Dr Nicola Brown, Dr Jenny Smith and Professor Joanna Wakefield-Scurr – Written evidence (NPS0038)

Written evidence submitted by Dr Nicola Brown (St Mary's University), Professor Joanna Wakefield-Scurr (University of Portsmouth) and Dr Jenny Smith (University of Chichester)

1. Introduction

1.1 We are writing in response to the Committees enquiry into the National Plan for Sport and Recreation. We think we have a valuable contribution to make towards your call for information related to questions 2 and 3; specifically, how female adolescents and adult women can be encouraged to participate in sports and recreation and lead more active lifestyles. We are a team of academics who have published research on how the breast impacts physical activity participation of females. This female specific issue is commonly over-looked and rarely considered when discussing female participation in sport and physical activity. We welcome the opportunity to share our findings with the Committee.

2. Physical activity and the breast

2.1 The breast has limited anatomical support and our research has identified that the breast can move up to 15cm during running without breast support.¹ This breast movement can cause discomfort, pain and embarrassment, and even damage to the delicate tissue structures of the breast. We have identified that these breast-related issues create a barrier to physical activity participation, with 17% of adult females² and 46% of schoolgirls³ avoiding physical activity because of their breasts. For this reason, wearing an appropriate, well fitted sports bra is recommended for females when exercising. However, our research indicates that sports bra use is low,²⁻³ knowledge of breast health and bra fit is low,³⁻⁴ and women are commonly reported to be wearing ill-fitting bras⁵.

2.2 In 2015 we surveyed adult women² and identified the breast as the fourth greatest barrier to physical activity, behind energy/motivation (first), time constraints (second), and health (third). Previous physical activity literature has omitted the breast as a potential barrier to physical activity. "*I can't find the right sports bra*" and "*I am embarrassed by excessive breast movement*" were the most influential breast related barriers to physical activity. In 2017 we surveyed over 2000 adolescent girls⁵ and 46% indicated that their breasts stopped them participating in physical activity, with over half of girls reporting that they never wore a sports bra during exercise. The most common sports-specific breast concerns reported included breast bounce, and breast pain; issues that can be reduced, if not eliminated, by wearing appropriate breast support such as a sports bra. However, girls also highlighted their lack of knowledge of sports bras and how sports bras should fit. Encouragingly, 87% of girls reported that they wanted to learn more about these topics.

3. Breast education

3.1. Schools are fundamental settings for promoting health. However, there seems to be a reluctance to discuss concerns about breast health and currently the school curriculum in the UK offers no compulsory breast education beyond the biological aspects of puberty. Armed with the knowledge of girls' breast concerns we have developed an effective, evidence based, breast education resource to improve knowledge of breast health, bra fit and the importance of breast support.⁶ Our 50-minute *Treasure Your Chest* breast education resources are designed to support educators to deliver high quality breast education across a variety of settings, and have significant long-lasting benefits.

3.2 We have conducted extensive evaluation of our *Treasure Your Chest* breast education resources, recruiting over 750 schoolgirls across control and intervention schools. Using validated evaluation tools⁷ we identified significant improvements in girls' breast knowledge and attitudes towards breasts, and their engagement with positive breast habits.⁸ These improvements were sustained six months later. The girls described the session as "*informative*" and said it made them "*feel more confident and less embarrassed*" about their breasts. Importantly, they also reported wanting to exercise more and to change their bra purchasing and bra wearing habits, demonstrating the wider positive impact of our breast education session.

3.3. We have conducted further case studies, evaluating the effectiveness of ten *Treasure Your Chest* workshops with 408 girls, across five schools. Following the workshops:

- 98% of girls reported that their breast knowledge had increased
- 78% of girls reported that they felt more confident talking about breasts
- 90% of girls reported more positive attitudes towards their breasts
- 97% of girls reported that they wanted to make positive changes, including wearing a sports bra when taking part in sports and exercise

Example quotes girls provided following the workshop are below:

- "*Learning why we need to wear a sports bra in sports is really important. The workshop was very helpful and informative.*"
- "*The best bit of the lesson was learning how to check if a bra fits and how to find a good bra because I didn't know this before; it is really useful to know.*"

3.4. Across the five schools that received *Treasure Your Chest* workshops, 11 teachers provided feedback about the impact and importance of the workshops. 100% of teacher reported that they would recommend the workshop to colleagues and other schools, and 100% reported that they intend to include the workshop in their schools curriculum moving forward. Teachers described the workshop as: "*excellent*", "*well structured*", "*informative*" and "*interesting*".

Example quotes teachers provided following the workshop are below:

- "Teaching girls about breast and breast health in schools is an overlooked opportunity."
- "The Treasure Your Chest workshop is a really positive campaign, which must be delivered in all schools."
- "The girls have even been checking their bras today after the workshop and some have told me they are going to go shopping for new bras at the weekend!"

Summary

4.1 Our research has highlighted common breast related issues experienced by adult and adolescent females that act as a barrier to physical activity participation. However, when discussing barriers to physical activity and considering strategies to improve physical activity, the impact of the breast is rarely, if ever, considered. Appropriate breast support is important to allow females to develop and maintain a positive relationship with physical activity and educating females about the importance of breast support and correct bra fit can reduce barriers to physical activity participation. Our *Treasure Your Chest* resources demonstrate the positive impact of breast education, resulting in increased willingness to exercise, improved breast knowledge levels and increased engagement with sports bra use. However, breast education is not included in the school curriculum. With nearly half of adolescent girls reporting that they avoid physical activity because of their breasts, we believe it is important that this overlooked issue starts to gain the recognition it deserves.

We thank you for the opportunity to contribute to this inquiry.

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