

Building self-esteem and wellbeing through physical activity

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Mounting evidence of the positive impact of physical activity on self-esteem, a key indicator of emotional, cognitive and social wellbeing, is providing impetus and guidance to those wishing to implement exercise programmes that make a positive contribution to the lives of individuals and society more broadly.



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High self-esteem is associated with positive characteristics such as independence, leadership, adaptability, and resilience to stress and health-related behaviours

Introduction

The argument for physical activity is often phrased in terms of the negative consequences that result from inactivity. For example physical inactivity is the fourth leading cause of death in the UK and contributes to one in six premature deaths, the same impact as smoking ⁽¹⁾. The enormous cost of inactivity is also frequently cited, estimated at £7.4bn a year to the UK economy ⁽²⁾. Despite the widespread promotion of these stark statistics, data shows that 33% of men and 45% of women are still not meeting physical activity recommendations for health ⁽³⁾. It is also disappointing to note that there was no overall change in the physical activity levels of the UK population between 2008 and 2012.

Arguably this negative framing of the messages around physical activity tends to result in a narrow focus on the benefits of physical activity for chronic conditions and obesity prevention ⁽⁴⁾. The potential benefits of physical activity in terms of emotional, cognitive and social wellbeing receive relatively less attention. This paper provides a positively framed message focusing on the potential of physical activity to enhance our wellbeing. In particular it concentrates on self-esteem as a key indicator of emotional health.

The significance of self-esteem

Self-esteem is fundamental to psychological wellbeing. It is regarded as a key indicator of emotional stability and adjustment to life demands ⁽⁵⁾. High self-esteem is associated with a number of positive characteristics such as independence, leadership, adaptability and resilience to stress and health-related behaviours. On the other hand, low self-esteem is associated with mental illness such as depression and anxiety ⁽⁶⁾. The drive to maintain or develop positive self-esteem is a powerful motivator and we are constantly striving for a positive presentation both to ourselves and to others.

A recent study which followed a large sample (n=1824) of adults aged 16 to 97 over a 12-year period provides further evidence of the importance of self-esteem to wellbeing across the lifespan. Low self-esteem was predictive of developing depression. On the other hand high self-esteem predicted greater positive mood states and fewer negative mood states ⁽⁷⁾. Greater self-esteem also predicted higher levels of relationship satisfaction, job satisfaction, occupational status, salary and physical health later in life. Interestingly, these life events did not have a reciprocal influence on self-esteem (relationship satisfaction etc. did not predict self-esteem later in life). Furthermore self-esteem did not vary across generations, contradicting a popular perception that self-esteem of recent generations is higher than that of previous generations.



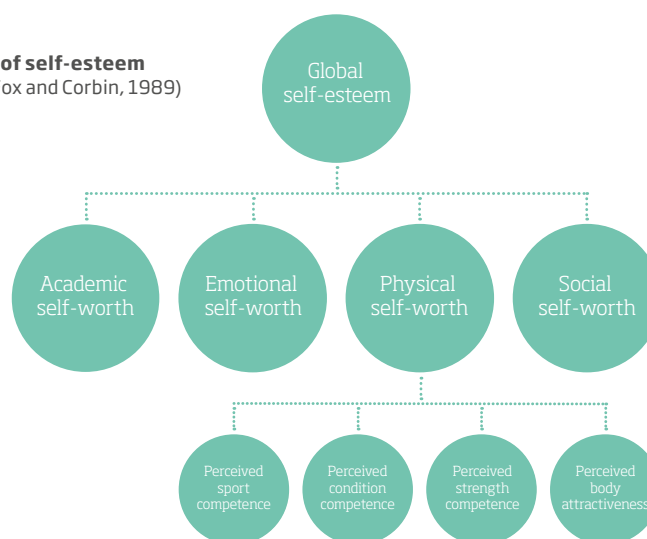
The importance of the physical domain to overall judgements of self-esteem provides a rationale for using physical activity to enhance self-esteem

The structure of self-esteem

At the broadest level, self-esteem refers to evaluations of one's significance or value as a person. It has been summarised as 'the awareness of good possessed by the self' ⁽⁸⁾.

The self-structure is conceptualised as multidimensional and hierarchical ⁽⁹⁾. The multidimensional element means that people's overall or global self-concept is comprised of beliefs made by the individual with regard to different areas of their life, for example academic, social, emotional and physical aspects. Similarly, global self-esteem is comprised of an individual's perceptions of self-worth across a number of different areas, or domains, of their life. The hierarchical element of self-esteem structure refers to the fact that self-perceptions made in each domain can themselves be further divided into subdomains. For example physical self-worth is comprised of perceptions of competence regarding stamina, strength, sport ability and body attractiveness ⁽¹⁰⁾. Perceptions in these subdomains are themselves further divided, for example strength competence is comprised of perceptions of competence regarding upper body strength, leg strength, core strength etc.

The structure of self-esteem
(adapted from Fox and Corbin, 1989)



Physical self-worth has been found to have a strong influence on global self-esteem ⁽¹¹⁾, and may have mental wellbeing properties in its own right ⁽¹²⁾. It has been argued ⁽¹³⁾ that this is to be expected given the physical self has a unique role within the self-system: 'the body, through its appearance, attributes and abilities provides the substantive interface between the individual and the world'. In other words the body is the primary means through which we communicate socially and provides information about status and sexuality. This results in it playing a significant role in global self-esteem.

This importance of the physical domain to overall judgements of self-esteem provides a rationale for using physical activity and exercise interventions to enhance self-esteem. The structure described above would suggest that exercise interventions enhance physical self-worth and this in turn improves global self-esteem. Research which has investigated this relationship is discussed below.



Exercise has the same influence on self-esteem regardless of intensity, the type of activity, how long each session is or how often the sessions are

The impact of physical activity on self-esteem

A review of studies which had used exercise as an intervention to try to improve self-esteem found that approximately 50% of these reported significant increases in self-esteem (Leith, 2009). Meta-analyses (analyses which combine the results of several studies that address a particular question) provide an estimate of the strength of an intervention effect. Two meta-analyses have found that exercise interventions have small but significant positive impact on global self-esteem of children⁽¹⁴⁾ and adults⁽¹⁵⁾.

In addition to looking at the overall relationship between physical activity and self-esteem, the meta-analysis of Spence et al⁽¹⁵⁾ provides data on the extent to which potential moderating factors influence this relationship. Factors that were analysed included: characteristics of the exercise interventions such as exercise intensity, mode, duration and frequency and characteristics of the participants such as physical fitness, age and gender. This type of analysis is helpful because it provides an indication of the aspects of exercise programmes that could be most effective at enhancing self-esteem.

The analyses showed that exercise intensity, mode, duration, frequency and length of programme were not significant moderators of the relationship between exercise and self-esteem. This indicates that exercise has the same influence on self-esteem regardless of intensity, the type of activity engaged in (cycling, walking, football etc), how long each session is, how often the sessions are or the length of the intervention. With regard to characteristics of the participants, it was found that the greatest gains in self-esteem occurred for people whose fitness increased during an intervention.

These findings are informative and have weight because they represent the combined data from a large number of studies (n=113). However, it has been suggested that the finding that programme duration does not influence exercise and self-esteem may be the result of methodological limitations⁽¹⁶⁾. Previous authors have argued it takes at least 12 weeks for an exercise programme to enhance global self-esteem⁽¹⁷⁾. Further research is required to understand the role of programme duration in the exercise and self-esteem relationship.

Research which measures physical activity and global self-esteem potentially fails to observe important changes in the domain of physical self-worth. An example of an intervention which has explored the effect of exercise on physical self-worth and global self-esteem is a six month Tai Chi intervention for people over 64 years⁽¹⁸⁾. They found increases in global self-esteem, physical self-worth and its subdomains conditioning, body appearance and strength competence, with the strongest effect for conditioning.



Physical activity can be an effective intervention to enhance self-esteem for both those with healthy, and those with initially lowered, self-esteem

A further study on older adults compared the effects of a structured exercise programme (fitness centre based), a home based exercise programme (using lifestyle-related exercises) and a control group on physical self-worth and global self-esteem⁽¹⁹⁾. The intervention was made up of three exercise sessions a week for 11 months. Both exercise conditions led to increases in conditioning and sport competence. There were also significant increases in physical appearance and physical self-worth for the lifestyle exercise group only.

It is encouraging that perceptions of worth in the physical domain are accessible to change through physical activity interventions. This is especially so given the important role that the physical self plays in overall self-esteem.

How exercise influences self-esteem

From the evidence presented above it is clear that physical activity can be an effective intervention to enhance self-esteem. It is effective for across the lifespan and for both those with healthy, and those with initially lowered, self-esteem. However, not all physical activity interventions are effective and some may even be detrimental to self-esteem. Therefore it is important to consider the underlying mechanisms for how and why physical activity improves self-esteem, as this knowledge can help practitioners and policymakers develop interventions that successfully enhance wellbeing.

The Exercise and Self-esteem Model⁽²⁰⁾ provides more detail about how exercise impacts self-esteem. It states that improvements in performance of specific activities (for example, time taken to walk one mile) increase confidence in one's ability to complete that activity, in turn increasing perceived ability in that facet (walking speed), which in turn increases perceptions of ability in that subdomain (condition competence), and so on up to global self-esteem. Therefore in order to enhance self-esteem, physical activity interventions should be devised so that individuals are made aware of improvements in performance.

How self-esteem influences exercise

Discussion so far has considered the role of exercise in enhancing self-esteem. Recent reviews of the area highlight an emerging view, that the relationship between these two variables is in fact reciprocal^(6, 21, 22). In other words self-esteem influences physical activity as well as physical activity influencing self-esteem. Evidence to support this position has been demonstrated in physical activity and sport contexts and by a larger body of research regarding self-esteem and academic achievement⁽²¹⁾. The implication of this model is that interventions which promote both physical activity and self-esteem may be most effective.



Motivational theory and research show that having choice and control over the physical activity you do is associated with a more positive impact on wellbeing

Implications for intervention design

A number of recommendations for those aiming to promote physical activity in order to enhance self-esteem are now discussed.

Provide exercisers with choice and control

Motivational theory and research has shown that having choice and control over the physical activity you do (what type of activity, how often and at what intensity) is associated with greater persistence, greater enjoyment of the activity and a more positive impact on wellbeing. Given the evidence that no particular type or dose of exercise is more beneficial for self-esteem, there is a strong rationale for providing exercisers with a range of exercise options to choose from. For example these could vary in aspects such as intensity (high or low), mode of delivery (home or exercise centre based) and type (individual and group based activities).

Provide opportunities for feedback

Exercisers benefit from getting feedback on their progress with regard to physical fitness and ability. This could be through a range of different assessment types such as standard body composition, aerobic fitness, flexibility and strength tests; ability to perform activities of daily living such as stair climbing or carrying shopping; ability to perform specific sport related skills accurately. If tests are conducted at baseline, that is, before a client begins exercising, and then repeated at regular intervals, it will provide them with a source of information they can use to judge their progress.

It is important to note that it is clients' subjective evaluations of their progress rather than the actual objective progress that will influence their perceptions of their ability and in turn their physical self-worth and global self-esteem. Asking someone how they feel about the progress they are making can elicit this key information. Responses may be surprising, in that one person who has made little objective progress may perceive this very positively whereas another person who has made large objective gains in fitness may perceive their progress as limited.

Set realistic goals

Another way of maintaining motivation and enhancing self-esteem gains is the setting of achievable goals. This is linked to feedback in that seeing progress towards realistic but challenging goals contributes to increased perceptions of ability, which can in turn positively influence self-worth. Physical activity goals should be set so that they are achievable and result in feelings of success. For this to be achieved the duration, type, intensity and frequency of physical activity in any programme should be set in relation to an individual's physical fitness and previous physical activity experience. Goals that are self-set or set through a collaborative discussion with a health/exercise professional are more likely to be effective than goals that are set by a health/exercise professional without discussion⁽²³⁾.

Reinforce good performance and effort

Coaching, or exercise leadership style, has been shown to influence the self-esteem of exercisers. Positive forms of instruction such as praising good performance and effort, providing technical instruction in a non-judgemental way and mistake-contingent encouragement (that is, encouraging an athlete following a mistake: 'It's OK, keep up the good work') lead to increased self-esteem compared to traditional coaching approaches ⁽²⁴⁾. This was particularly the case for individuals who initially had low self-esteem.

Similarly exercise climates where individuals are encouraged to focus on improving their own skills and performance rather than on comparison with others are associated with greater increases in competence and self-esteem. Competition and evaluation in comparison to other's performance can be particularly problematic for those with the lowest ability and self-esteem.

Encourage social interaction

Where physical activity is undertaken as part of a group or brings the exerciser into contact with other people, there is an opportunity for individuals to increase their social networks and make friends. There is extensive research that shows that good social relationships and networks promote and are a protective factor for wellbeing and mental health ⁽²⁵⁾.

Intervention recommendations

A number of recommendations can be made to promote self-esteem through physical activity.

- Ensure a diverse range of physical activity opportunities are available. These can include traditional gym settings but also opportunities to exercise outdoors, do novel types of exercise and incorporate activities into daily life.
- Train exercise and sport providers in the motivational aspects of physical activity so they understand the motivational processes underlying behaviour change and adherence and how to maximise the wellbeing benefits of exercise.
- Incorporate individual choice and personal control into the design of physical activity interventions.
- Provide opportunities for people to monitor progress towards their goals through regular feedback on their exercise-related skills and ability.
- Use a positive instructional style where effort and improvement are praised.
- Invest in research to further explore the role of physical activity in enhancing self-esteem.

Conclusion

This paper has set out the importance of self-esteem to our wellbeing across the lifespan. Research into the structure of self-esteem has shown that the physical self has a strong influence on our overall, or global, self-esteem and that the physical self is influenced strongly by participation in physical activity. Furthermore evidence demonstrates that physical activity can be used as an effective intervention for enhancing self-esteem. The research on exercise and self-esteem relationships and motivational theory is used to provide guidance for those wishing to implement interventions that are effective in enhancing self-esteem.

I hope this paper has prompted you to think more deeply about the positive contribution physical activity can make to the lives of individuals and society more broadly and provided some suggestions for how to promote self-esteem through exercise interventions.

About the author

Dr Sarah Edmunds is a Senior Lecturer in Exercise Psychology at the University of Chichester, an HCPC registered Sport and Exercise Psychologist and a Chartered scientist with the British Psychological Society. Her research interests include physical activity and wellbeing, qualitative studies to explore physical activity behaviour, promoting physical activity in the workplace and physical activity and diabetes. She is the Editor of 'Physical Activity and Mental Health' and the author of publications related to pedagogical research methods. She has worked as a Research Fellow and Visiting Lecturer at the University of Westminster and as a Senior Lecturer in Exercise and Sport Psychology at St Mary's University College.

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