

The influence of social status and social economic status on adolescent intrinsic motivation for physical activity

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Introduction

- Few researchers have explored the significance of peer interactions in physical education (PE) classes upon self determination (Gagne & Deci, 2005) and wider engagement with physical activity (PA).
- Intrinsic motivation for PA declines in later childhood (Hassandra et al., 2003) especially for girls and those from lower socioeconomic status (SES) homes (Fakhouri et al., 2013).
- Peer social status is related to PA with popular boys showing higher intrinsic motivation than girls for PA (Pelletier et al., 1995).
- However, social influences on intrinsic motivation (such as SES and social status) have not been assessed together to understand influences on engagement with PA.

Adopting a socio-ecological perspective (Brown et al., 2014), this study assessed the influence of social status and SES on adolescent intrinsic motivation for PA.

1. It was predicted that **higher** social status would predict **higher** levels of self-determined motivation for PA.
2. Increasing age and social status would moderate this relationship.
3. Boys with higher social status would show higher levels of intrinsic motivation for PA.

Methods

Participants: One hundred and nine (59 males and 50 females) participants aged 11 years 1 month to 16 years 9 months ($M=13$ years 5 months) were recruited from schools across the South East of the UK. They completed measures of SES, physical activity self-determined motivation (BREQ-2) and ratings of school peer's social status (generating popularity scores).

Materials: *Demographic questionnaire* - Included questions regarding gender, nationality, and whether they received free school meals. Free school meals was included as a proxy measure for SES (receiving free school meals categorised as a 'lower SES'; not receiving free school meals was categorised as a 'higher SES').

- *BREQ-2 questionnaire* (Markland & Tobin., 2004): A modified version of the 19- item BREQ-2 questionnaire was used to assess intrinsic motivation in physical activity. Responses were scored using a 5- point Likert scale ranging from 0 (not true for me)- 4 (very true for me).
- *Social Status:* Social Network Analysis was used to measure the social status of participants (Kindermann, 1993). Participants were asked to select pupils in the class whom they considered their *closest friends* and those whom they would most likely *invite to a party*. They were able to select as few as 1 or as many as 8 peers. Social status was calculated based on:
 - popularity or the number of nominations directly received (indegree).
 - Status or the position within the network (betweenness)

Procedure: Participants were seen in their usual classroom in pairs to complete the above three questionnaires. They were seated apart out of sight of each other to reduce the possibility of copying from each other. SPSS was used for the regression analysis. Social Network statistics were calculated using UCINET and diagrams were visualised using Netdraw.

Results

- Hierarchical multiple regression showed that neither popularity (indegree) or status (betweenness), were significant predictors of self determination for PA.
- Neither SES nor gender significantly contributed to self determination for PA.

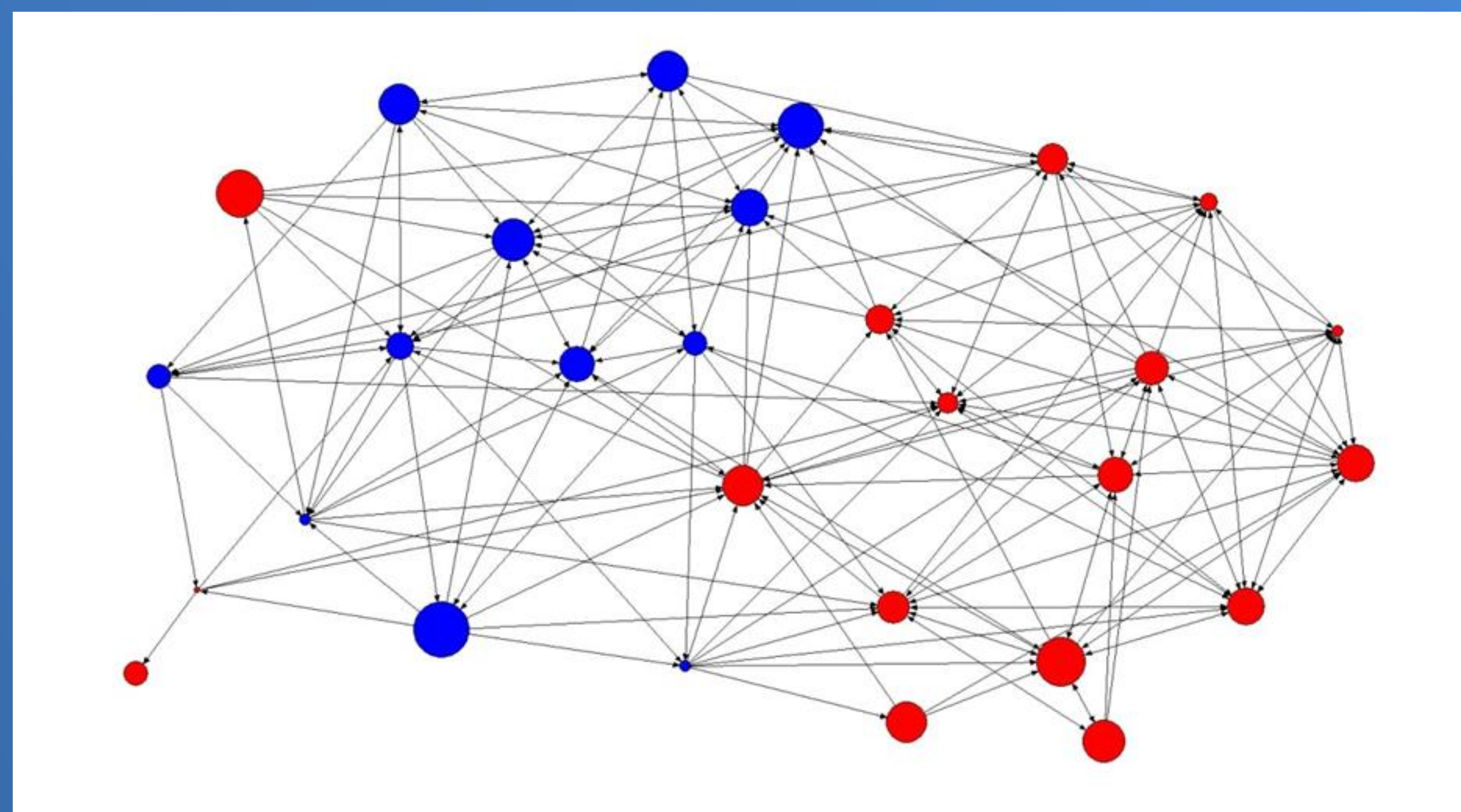


Figure 1: Self-determination for physical activity in 11-12 year olds
Colour = Gender (Blue = boys; Red = girls). Size = degree of Self-Determination

Figure 1 shows peer nominations in relation to motivation scores of 11-12 year olds. Friendships tend to be same-sexed, with girls reporting more friends than boys. There appears to be no relationship between the number of friends and self-determination for PA.

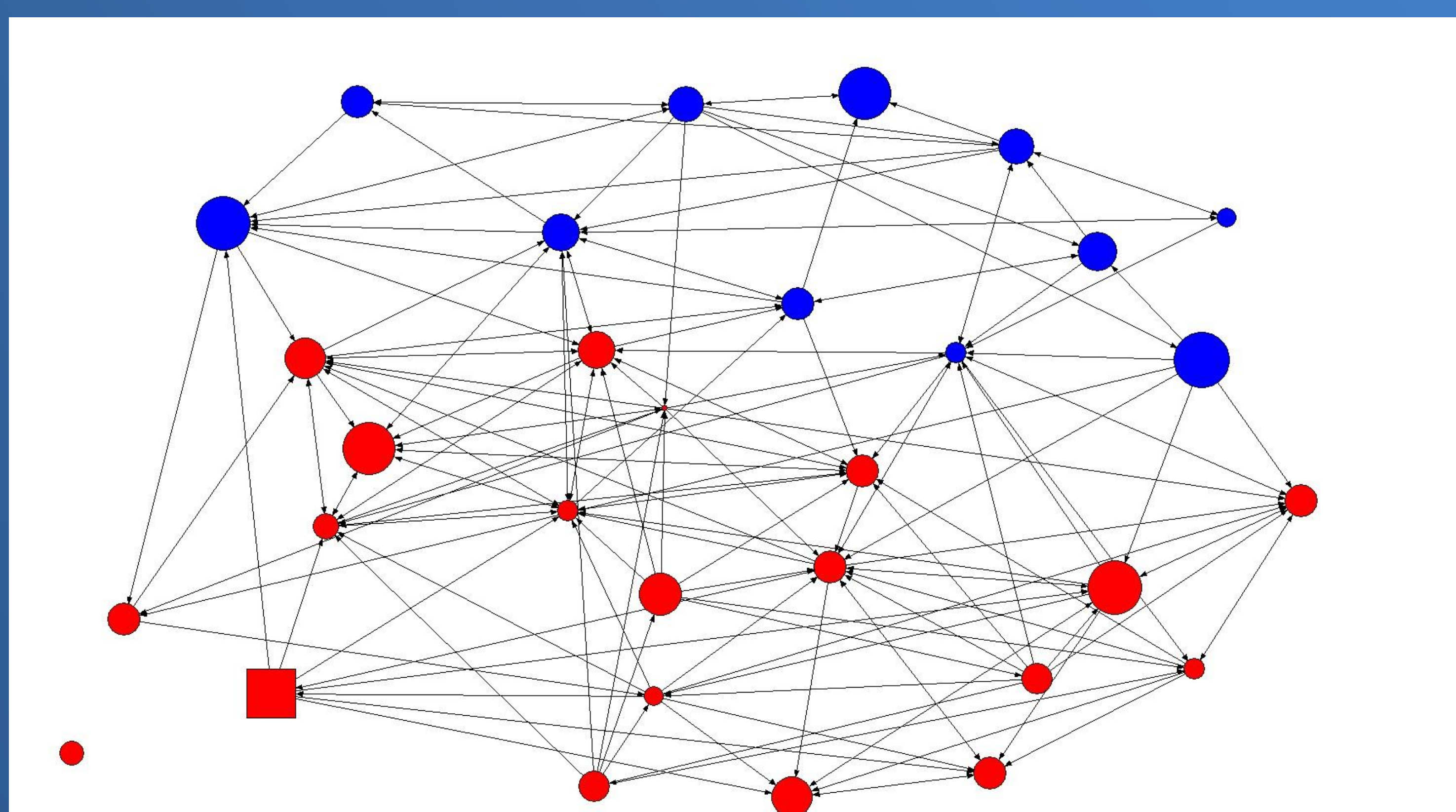


Figure 2: Self-determination for physical activity in 15-16 year olds
Colour = Gender (Blue = boys; Red = girls). Size = degree of Self-Determination. Shape = SES (Circle = high; Square = low)

Older children shown in Figure 2 also tend to have same-sexed friendships, with girls reporting more friends than boys. Boys, nominated by girls (higher betweenness), appear to have lower self-determination for PA.

Discussion

- Regression analysis revealed no relationships between social status on self determination for PA.
- However the mixed individual findings regarding the influence of popularity and status in relation to age and gender on self-determined PA suggest the importance of assessing the interplay of multiple socio-ecological factors using inclusive social network analysis on an individual basis in relation to understanding and promoting intrinsic rather than regulated motivation towards PA.
- Different forms of PA and a more diverse population could be assessed in future research

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