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Original Citation

Lewis, Kiara and Sellars, Chris (2006) Student Physical Activity Behaviour – Executive Summary. Research Report. University of Huddersfield, Huddersfield. (Unpublished)

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Student Physical Activity Behaviour – Executive Summary

Physical activity is now recognised world wide as an important contributor to general health and well being of the population as a whole, regardless of age, gender or ethnicity.

The lack of physical activity is a major cause of death, disease and disability...more than two million deaths each year are attributable to physical inactivity

World Health Organisation 2002

Exercise is advocated even for those of apparently good health as a means of preventing ill health and promoting positive mental well being (Bird, 1999). The role of physical activity had become a focus of recent government reports (Wanless, 2004) and white papers (Choosing Health, 2005; At least 5 a Week, 2004).

If we consider participation in physical activity it can be seen that there is a general decline with increasing age. The steepest decline occurs during adolescence (15-18) and young adulthood (20-25) (Stephens *et al.* 1985). Activity levels decline by a staggering 64% between the ages 18-19 (Hardman and Stensil, 2004) Figures from the 2003 Health Survey for England suggest that at age 15 – 70% of boys and 50% of girls are meeting physical activity recommended levels but between ages of 16 - 24 this falls to 53% and 30% respectively (Heartstat., 2005). One suggestion for a decline at this time is the move away from the structured school environment (Leslie, 1999) to an environment where young people have more freedom of choice over their behaviour. Conversely the University environment provides a unique opportunity to provide opportunities for young people to take up new activities and learn skills that will enable them to be lifelong adheres. However little is known about the determinants for participation in this population or the key transitional phases of going to University/ moving away from home (Leslie, 1999).

The aims of this study are three fold, to:

- 1) find out the levels of participation in physical activity of a sample of University students
- 2) examine the potential role of key determinants of activity
- 3) consider if there are any gender/ethnic differences in participation or determinants.

This information should prove useful to the University and the local authority in determining how best they can help prevent the expected decline in activity when students enrol at University.

Definitions

The following definitions of terms have been used throughout this project:

Physical Activity (PA): any bodily movement produced by skeletal muscle that results in energy expenditure (Casperson *et al.* 1985).

Vigorous activities: activities that require hard physical effort and make you breathe and sweat much harder than normal. (From International Physical Activity Questionnaire (IPAQ)).

Moderate activities: activities that take moderate physical effort and make you breathe and sweat somewhat harder than normal. (From IPAQ).

Activity Recommendations:

Adults

All adults should accumulate 30 minutes of moderate physical activity on at least 5 days a week (ACSM guidelines adopted by the DoH)

Adolescents (11-21)

All adolescents should be physically active daily, or nearly daily as part of play, games, sports, work, transportation, recreation, physical education, or planned exercise.

All adolescents should engage weekly in three or more sessions of activities that last 20 minutes or more at a time and that require moderate to vigorous levels of exertion.

(From the International Consensus Conference on Physical Activity Guidelines for Adolescents 1994)

Adults Targets

By 2020, 70% of individuals to be undertaking 30 minutes of physical activity on at least 5 days a week. An interim target of 50% of individuals reaching this target by 2011. (Department of Health Guidelines as written in to 'Game Plan' – available through Sport England)

Funding

This project was funded through the University Of Huddersfield's Collaborative Research scheme. The steering group consisted of Kiara Lewis (project lead), Chris Sellars (project researcher), Anne Little (research assistant), Nigel King (Reader in Behavioural Sciences), Alison Morby (Kirklees Metropolitan Borough Council (MBC) and Umar Rafiq (Kirklees MBC).

Methods Overview

It was decided that to get an overview of a large sample of students a survey would be the best method of data collection. The steering group reviewed a number of questionnaires that have been used to measure physical activity behaviour and potential predictors of physical activity behaviour. The final survey included the following sections.

Designed by the steering group:

- Demographic details
- Use of University/Kirklees MBC/other facilities

Previously validated questionnaires

- Current physical activity level (1)
- Stage of change for physical activity (2)
- Self-efficacy for physical activity (3)
- Social support for physical activity (4)
- Beliefs about physical activity benefits (5)
- Physical activity enjoyment (6)

A total of 358 undergraduate students (63% female) completed the questionnaires. A majority - 64% were from the School of Human and Health Sciences and most were in the age range 18-21 (64%)

Questionnaire data once collected were coded and data input into the SPSS Version 11.0 statistics package for analysis.

Findings

Levels of activity

49% of the sample population questioned are sufficiently active according to recommendations (see above). Levels of activity were found to be slightly higher in female students (54%) compared to males students (46%) This level is higher than expected for females (30% at age range 16-24 which is where the majority of the sample fall) and slightly lower for males (53% age 16-34). 27% claim to do no physical activity at all in a typical week – of these students the majority (71%) were female. If we look across the age ranges activity levels decline as expected

(14% sufficiently active in the 26+ group – this is lower than expected). The reasons for the findings are unknown.

Key finding: From the sample of students questioned; 50% are not meeting Government recommendations for physical activity. More females than males are meeting the recommendations; however more females describe themselves as completely inactive.

Types of activities

Key finding: The most popular physical activities are walking, cycling and swimming.

Use of University Sports Facilities:

Key finding: 61% of students who answered the relevant questions have never used University sports facilities. Of the facilities on offer the highest usage figures were for the fitness centre yet only 12% of students claimed to use the fitness centre regularly (more males than females).

Key finding: Asian female students questioned do not use the University sports facilities; however with a sample of 15 we cannot be confident that this reflects all female Asian students.

Use of Kirklees MBC Facilities

Students were also asked if they used Kirklees local authority facilities (Huddersfield Sports Centre (swim), Huddersfield Sports Centre (other), McAlpine (swim), McAlpine (other)). The most popular was swimming at Huddersfield sports centre (5% regular users, 24% occasionally) (University does not have it's own pool and this is the nearest facility to the University), followed by HSC (other) 3% regular, 14% occasionally, McAlpine (swim) 2% and 8% and McAlpine (fitness) 2% and 5%. For Asian females swimming at HSC 6% occasionally swam and none regularly but for white females 25% occasionally and 7% regularly swam – again suggesting that more white females than Asian are using HSC.

Key finding: Of the Kirklees MBC fitness facilities only 2% of the sample of students use the McAlpine (now Galpharm) fitness centre. Swimming at HSC is more popular particularly among female students

Use of private facilities

Key finding: Private fitness centres appear to be more popular than either University or local authority facilities. Male students use private gym facilities more than University or local authority (36 % use occasionally or regularly, compared to 29% for University and 10% for McAlpine). There is a similar pattern for Females (29% use occasionally/regularly, compared to 18% University and 6% McAlpine).

Key finding: The limited data on Asian students suggest that this group is even more likely to use Private gyms compared to University or Local Authority facilities and that difference in participation rates between Asian and white disappears.

Factors associated with participation:

A number of factors considered in the literature to be important in determining whether or not people are active were assessed (personal and social factors).

Key finding: Sufficiently active students were found to have significantly higher levels of self-efficacy towards exercise behaviour when compared to less active students.

Key finding: Sufficiently active students were more likely to describe physical activity as enjoyable (statistically different from insufficiently active group).

Key finding: Active males appear to rely more on family support to be active than support from friends/peers.

Key finding: No differences were found between active and inactive students on knowledge of physical activity

Conclusions

Between 50-55% of the student population survey are not sufficiently active to accrue health benefits (in line with Government recommendations); of these 27% claim to do no activity at all. Females and Asian students appear to be more likely to be in the insufficiently active group (however, the number of Asian students participating is too low to be confident of this conclusion). Those who are active appear to be more likely to be involved in vigorous activity compared to general population – however most common activities are walking/swimming and cycling, as is the case for the general population. Private fitness facilities appear to be more popular with students than either University or Kirklees facilities and confidence in being active is the only factor studied which showed differences between active and insufficiently active groups. Physical inactivity is a modifiable risk factor for a number of diseases and is a major concern for public health. The findings suggest that something is needed to help encourage activity levels of students if they are to meet recommended guidelines. The activities most students take part in are not facility based. To increase facility based usage both the University and Kirklees LA may need to consider what is offered at private fitness centres that has led to greater usage than the (cheaper) alternatives. Factors not assessed include environmental factors such as – opinions on the provision of sporting/physical activity opportunities available both at the University and locally and opportunities to take part in walking and cycling may prove to be important contributing factors as to why students are not active.

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