# Theory of planned behaviour tpb psychology essay



Pregnant women are advised to engage in 30 minutes of exercise per day American College of Sports Medicine, 2000, however exercise can decreases during pregnancy Sternnfeld et al, 1995 with 58% of pregnant women being sedentary, 18% higher than the US adult population (Zhang & Savitz, 1996). This lack of exercise may be due to psychological and physiological strain (Monk et al, 2000). Exercise has been found to decrease anxiety (Hayden & Allen, 1984), decrease depression (Labbe et al., 1988), enhance self-esteem (Koniak-Grif¬ ‡ n, 1994) and improve body image (Wallace & Engstrom, 1987). Moreover regular exercise during the prenatal period has been shown to decrease discomfort during prenatal period (Clapp et al. 1992), shorter labour (Wong & McKenzie, 1987) and prevent excessive weight gain (Polley, Wing & Sims, 2002) helping to prevent depression as a positive association has been found between obesity and depression (de Wit, Luppino, van Straten, Penninx, Zitman & Cuijpers, 2010).

## Literature review

Theory of planned behaviour (TPB) highlights intention as the main determinant for behaviour, with intention informed by three constructs; attitude, subjective norm and perceived behavioural control. Where attitude describes the evaluation of a behaviour, subjective norm describes the social acceptability of a behaviour and perceived behavioural control (PBC), the ability to perform a behaviour (Ajzen, 1991). The model has received support within the exercise literature as the three constructs have been found to explain up to 60% of the variance regarding exercise intention with perceived behavioural control and intention explaining up to 40% of the variance in exercise behaviour (Hagger, Chatzisarantis & Biddle, 2002). TPB is the most widely used theoretical framework within exercise research as it is the most validated framework (Biddle & Nigg, 2000). Chatzisarantis & Hagger (2005) aimed to modify modal salient beliefs regarding exercise through presentation of a message to partipants this was found to increase intention compared with a control group. However, this did not translate into behaviour as physical activity level did not change post-intervention. Such linear interventions have been seen to be repeatedly ineffective (Rhodes, De Bruijn, & Matheson, 2010; De Bruijn, De Groot, Van den Putte, & Rhodes, 2009), leading authors to suggest categorical approaches, which included one of two further stages; action planning or action control, to be more effective (Rhodes, Plotnikoff & Courneya, 2008). Interventions targeting PBC have increased physical activity levels through participants completing an implementation plan (Darkera, French, Eves & Sniehotta, 2010).

Moreover, the theory is applicable to the population of pregnant women as it takes into account attitude, subjective norm and perceived behavioural control which may all change throughout pregnancy (Hausenblas, Giacobbi, Cook, Rhodes & Cruz, 2011). It has been supported that TPB can be used as a theoretical framework within all three trimesters of pregnancy (Downs & Hausenblas, 2003; Downs & Hausenblas, 2004; Downs & Hausenblas, 2007), with intention being seen to predict physical activity within all three, supporting previous findings (Hausenblas, Carron & Mack, 1997). Moreover all three constructs have been found to affect physical activity intention, with attitude identified as the strongest determinant (Courneya, Bobick & Schinke, 1999). However interventions are limited within this population (Hausenblaus & Symons Downs, 2004) as previously the beliefs about exercise within this population group were unknown.

Now research has identified salient beliefs within pregnant populations; with control beliefs derived from the amount of social support and convenience, normative beliefs being derived from health professions, family and spouse or partner and behaviour beliefs driven by improved health and weight control (Hausenblas et al, 2011). This research now allows interventions to be created in this population based on founded salient beliefs.

## Aim

The aim of this intervention is to increase physical activity within pregnant women by modifying attitude, perceived behavioural control through using a pedometer and completing an implementation plan.

## Design

This study will use an uncontrolled trial design, as there are no prior interventions that have been conducted within this population. Although the literature suggests it will be successful, evidence needs to be collected to identify a relationship in order to suggest a further hypothesis for a randomised control trial.

## Sample

The study will be aimed at pregnant women between the ages of 18 to 40. Recruitment will run for 3 months when women will be recruited during the first pregnancy scan. The healthcare profession will provide details of the study to the women and interested participants will be asked to complete a contact for. Further details will then be provided regarding the nature of the study.

#### Intervention

When pregnant women attend their first scan they will be given information about the study, if they are interested in taking part they will be asked to give their contact details which will be given to the researcher. On receipt of these details, participants will be contacted and asked to attend a research session. At the session each participant will be given a questionnaire pack, containing a measure of TPB and physical activity with an information sheet and an informed consent form sheet attached. Once they have completed the questionnaire they will be given a set text to read which aims to improve one's attitude to exercise, suggested by the model to increase physical activity (Chatzisarantis et al, 2005). The text will take the main salient behavioural beliefs from Hausenblas et al (2011) research, including improving physical health and weight control. Partipants will also be given a pedometer which they will be asked to wear for 1 week this will aim to increase their perceived behavioural control over exercise, suggested by the model to increase physical activity (Darkera et al, 2010). As well as targeting these two aspects of TPB participants will also be asked to complete a physical activity planning exercise for the next seven days, as it has been shown that categorical approaches to intervention are more effective. The intervention will run for seven days with a follow up to assess whether any changes in TPB or exercise are sustained.

Assessment

Theory of planned behaviour will be assessed using three questionnaires. Attitude to exercise will be measured using a three item 7 likert-point scale as suggested by Ajzen (2002), which has been found to be reliable in many populations, including cancer patients (Courneya & Friedenreich, 1999) and students (Courneya et al., 1999). Subjective norm will be measured using a 5 item scale with the first 2 items capturing injunctive norm, which has been shown to be reliable in numerous populations including students (Courneya et al., 1999). The final three items will measure descriptive norm based on the format of Ajzen (2002) and the guestions will be based on research by (Hausenblas et al, 2011). Finally perceived behavioural control will be measured using a four item scale recommended by Ajzen & Madden (1986), which asked partipants to what extent they believe they could perform exercise. Prior to completing the physical exercise guestionnaire a definition was provided to provide clarity. Physical exercise will be measured using The Pregnancy Physical Activity Questionnaire (Chasan-Taber et al., 2004), found to be reliable (Hausenblas et al, 2011). The data from the pedometer will also be used to assess the accuracy of the reported physical exercise. Assessment will occur at baseline, after the completion of the intervention (1) week) and six month after the intervention to assess any long term change.

## Limitations

The first limitation is as much of the data collected is self report it may not be entirely accurate; although the self-report measure for physical activity can be compared against the subjective data from the pedometer, the data regarding TPB is not validated. Therefore any findings would need to be interpreted with caution as the constructs that are found to have caused a change in physical activity may not be accurate (ref) . As the intervention is being conducted within the pregnant population it has been found that the dropout rate is higher than the non pregnant population (Dishman, 2002) and therefore this may mean the retention rate is lower and therefore attrition bias could be introduced into the study. However as the intervention is relatively short it is expected that this will be overcome. The intervention is an uncontrolled trial and therefore no cause and effect can be deducted from the results. However this is needed due to the lack of intervention research within this area. Once this study has been completed a more specific hypothesis can be created and a randomised control trial conducted to produce further research informed by this exploratory intervention.