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## College Students' Intention to Participate in Leisure Time Physical Activity (LTPA)

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**Abstract:** The theory of planned behaviour (TPB) was used to explain college students' intention to participate in leisure time physical activity. The primary objective of the study was assessing the predictive validity of the direct determinants of intention to participate in LTPA. Thus, sample of (N=401) students of Health and Sport Sciences from two public and two private colleges of Ethiopia were selected via stratified proportionate sampling techniques. The extent to which TPB constructs significantly explained college students' physical activity intention was examined using regression analysis. Attitude towards behaviour ( $\beta$ : 0.154,  $p < .000$ ) and perceived behavioural control ( $\beta$ : 0.257,  $p$ : .000) were found significant predictors of college students' intention to participate in LTPA. Subjective norms; both injunctive norm ( $\beta$ : .061,  $p$ : .211) and descriptive norm ( $\beta$ : .078,  $p$ : .117) were found insignificant in predicting college students' intention to participate in LTPA.

**Keywords:** Theory of planned behaviour, LTPA, Behavioural Intention, behavioural attitude, Descriptive norm, Injunctive norm, and Perceived behavioural control.

### I. Introduction

Studies have demonstrated that virtually all individuals (including frail and very old adults) can benefit physiologically and psychologically from vigorous exercise or some type of moderate health-enhancing physical activity (LTPA) when done regularly [1]. Leisure-time physical activity (LTPA) is an important subtype of physical activity undertaken during individual's discretionary time and increases total energy expenditure [2]. Compared to household, occupational, and commuting physical activity, LTPA is likely to be more volitional and performed at higher intensity [3, 4], which may provide greater fitness- and health-related benefits.

However, systematic enquiries have portrayed decline in physical activity across all ages particularly adolescents between 15-25 years, [5, 6]. The percentage of adolescents who are overweight or obese has more than tripled within two and half decades, from 5% to 17%, between 1976 and 2002.

On college and university campuses, the situation is even worse, with 28.8% of female college students and 39.4% of male college students being classified as overweight or obese [7]. According to the 2000 National College Health Assessment, 57% of male and 61% of female college students reported that they performed no vigorous or moderate exercise on at least 3 of the previous 7 days.

Therefore, promoting leisure time physical activity among college students may deem to alleviate the problems, because these activities are done on flexible time schedule as well as less structured in terms of organization when compared with sports, which are more structured, competitive and demands vigorous physical effort. Globally, governments are organizing and leading institutionalized physical activity initiatives in order to capitalize on the potential benefits of physical activity on community health, [8].

However, for initiatives to be effective, they must be guided by empirical findings and scientific principles. As mentioned previously on barriers to participation of college students in LTPA, there are a lot of factors determining college student's decision regarding use of physical activity as their leisure part activity. One may argue that students' motivation is the only factors determining their intention regarding use of LTPA. The value students attribute to the use of LTPA may be the other influence. Students may not use LTPA if they do not value it. Another possible reason is the opinions of significant others (their college friends). If, for example, college friends usually ride bicycle during their leisure time, students might be motivated to comply with their friend's behaviour of riding a bicycle.

As a result designing physical activity program for college students without considering other factors limits their potential impact. Practically, it is important to support these possible factors that might significantly predict the use of LTPA via extensive research. This issue can be addressed using one of the famous health model; the theory of planned behaviour, [9]. It is an explanatory model for a wide variety of behavioural intention and has been used successfully to understand a wide variety of human behaviours; ranging from smoking and drinking to use of technologies.

According to TPB, LTPA's intention is the frontier determinant for involving in leisure time physical activities. In turn, the behavioural intention is predicted by three main determinants: a) the extent to which individuals **view** LTPA positively (attitude toward the behaviour), b) the extent to which individuals **think** that significant others want them to engage in LTPA (subjective norm), and c) the extent to which individuals **believe** that he/she is able to perform LTPA (perceived behavioural control), serve as direct

determinants of the strength of their intention to carry out the behaviour(see fig-1 on appendix-A).

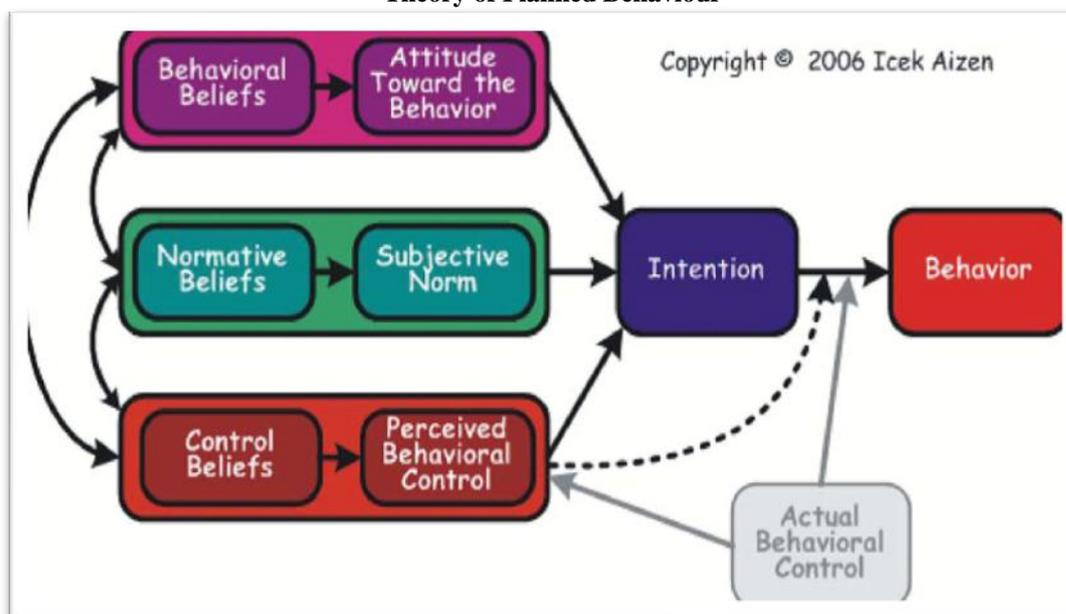
## II. Materials and Methods

The study was conducted on college students of Nekemte city, Ethiopia, to assess the predictive validity of the four direct determinants of intention (AB, IN, DN & PBC) to use LTPA. There are nine colleges and two universities (6 public and 5 privates), and four colleges (two private colleges namely; Rift Valley University and New generation University College, and two public colleges

namely, Wollega University and Nekemte teachers' training centre) were selected through random sampling techniques. The samples were purely students of health and sports science, assuming that these students have good knowledge regarding health benefits of doing physical activity on regular basis than students of other departments. In these departments, there are a total of 2700 students (1,604 male and 1,096 females), and a total of 401 college students were taken using proportionate stratified sampling technique. The data was obtained using structured questionnaire and analyzed using regression analysis; SPSS version 20.

### Appendix-A

#### Theory of Planned Behaviour



### Appendix-B

#### Regression Analysis Predicting Behavioural Intention (N=401)

	R <sup>2</sup>	F	B
Model	13.4	15.264***	
Attitude towards Behaviour(AB)			.154***
Injunctive Norm(IN)			.061
Descriptive Norm			.078
Perceived Behavioural Control(PBC)			.257***

Note. \*\*\*p<.001, \*\*\*\*p<.000

## III. Results

### Demographic Characteristics of College students

The mean age of the participants was 22.8 years (SD=3.58), with 57.4% of the participants being male (male=230, female=171). In terms of college affiliation, 57.5% of the students were from sport science while the rest 42.5% from health science.

### Predictive Validity of Direct Determinants of Intention

The predictive validity of the four direct determinants of intention (AB, IN, DN & PBC) to participate in leisure time physical activity were analysed using simple linear regression. The analysis revealed that only the two direct determinants (i.e. attitude toward the behaviour,  $t(396) = 3.238, p < 0.01$ , and subjective norm,  $t(396) = 5.216, p < 0.01$ ) were found highly significant predictors of college students'

intentions to participate in leisure time physical activity. Together, the two direct determinants accounted for 12% of the variance in college students' intentions to participate in LTPA. This finding is in contrast to that of Lee, J. et al (2010). In their study, they found all the four direct determinants to be significant predictors of behavioural intention (see table-1 on appendix-B).

## IV. Discussion

Most elicitation studies in the areas of physical activity came up with personal factors than social factors for engaging in physical activity. For example, in a study examining the motivations of college students for being active, the reasons identified as being the most motivational included positive health, strength and endurance, appearance, and weight

management<sup>[10]</sup>. In this study, other people being active (i.e., descriptive norm) was not even mentioned as a motivator.

While the possibility exists that individuals simply are not influenced by others, it also is possible that they tend to under report normative types of reasons because they are undetected. This has yet to be investigated in the activity setting. Scholars<sup>[11]</sup> found in the energy conservation area that individuals tend to internalize the reason for their behaviour and fail to report what others around them are doing as influencing their behaviour, and then the effect of subjective norms (IN & DN) on physical activity could be undetected.

The significance of direct determinants of intention brings different findings with previous works. In one study<sup>[12]</sup>, all the direct determinants (AB, SN, PBC) were found statistically significant determinant of behavioural intention. However, research conducted on non activity settings<sup>[13]</sup>, found that SN and PBC were the only two significant predictors of behavioural intention. A study by Sugar and his friends<sup>[14]</sup> identified AB as the only significant predictor of BI. Salleh and Albion<sup>[15]</sup> found that only AB and SN were significant predictors of the behaviour. Therefore, attitude-behaviour investigations done so far using theory of planned behaviour brought inconsistency regarding significance of TPB's constructs.

## V. Conclusion

Attitude towards the behaviour and perceived behavioural control were significantly predicted college student's behavioural intention. It suggested that practitioners need to consider students' attitude and their perceived behavioural control (their ability to take part in LTPA in terms of internal (ability) and external (facilities, time) factors while developing recreational sports for college students using the theory of planned behaviour. In other way, if students have got information on the health benefits of doing LTPA as well as provided with suitable facilities, and have got skills necessary for doing it, these resulted in increased leisure time physical activity participation. Further, the combined relative strength of both attitude towards the behaviour and perceived behavioural control (PBC) in predicting college students intention was 41 % (  $\beta$  of AB +  $\beta$  of PBC).

Thus, it is recommended for future research to focus on searching of appropriate ways of disseminating health

benefits of LTPA information and ways of improving student's skill level (knowhow of physical activity).

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