

## Comparison of exercise *versus* sport participation motives among Filipino university students

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Despite the many documented benefits of exercise and physical activity on physical and psychological health, only a small percentage of Filipinos engages in regular exercise according to national surveys. Regular participation in leisure-time physical activities, such as exercise and sport, is positively associated with reduced anxiety and depression, enhanced mood and improved psychological well-being. Earlier studies have demonstrated that different motives may operate behind participation in various types of physical activity such as exercise (physical activity that is volitional, purposive and requires simple motor skills) *versus* sport (physical activity that is usually competitive, has organized rules and requires complex motor skills). In order to extend existing literature on sport and exercise psychology in the Philippine setting, motives for exercise participation *versus* sport engagement of Filipino university students were examined. Specifically, three hypotheses were tested: (1) That health and fitness motives are more associated with exercise than sport; (2) That motives concerning weight management and appearance are related more to exercise than sport, and (3) Motives related to social engagement figure in participation in sport more than in exercise. One hundred ninety-four university students from Metro Manila, Philippines completed two versions of the Exercise Motivation Inventory 2 (EMI-2, Kilpatrick et al. 2005, Markland & Ingledew 1997) to differentiate motives for exercise *versus* for sport participation. All three hypotheses were supported. Furthermore, enjoyment appeared to be an important factor in sport engagement. Implications for program design and physical activity promotion among Filipinos are also discussed.

**Keywords:** leisure-time physical activity, exercise behavior, sport engagement, participation motives

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## INTRODUCTION

Regular participation in physical activity such as exercise and sport is acknowledged by health authorities as an important health-promoting behavior and a low-cost preventive measure for many lifestyle-related diseases like diabetes, hypertension, and obesity (Department of Health 2011, World Health Organization 2010). Numerous studies have consistently demonstrated the physiological and psychological benefits of regular physical activity (Landers & Arent 2007, Penedo & Dahn 2005, Strohle 2009, Thogersen-Ntoumanis, Fox & Ntoumanis 2005, Warburton, Nicol & Bredin 2006). Despite this knowledge, national data from the Philippines indicate that only a small percentage of Filipinos engage in regular physical activity (Food and Nutrition Research Institute, Department of Science and Technology 2008).

Physical inactivity, or lack of physical activity, is a health risk factor prevalent not only in well-developed countries but also in developing Asian nations such as the Philippines (World Health Organization 2010). Many studies have shown that physical inactivity is high among Filipino youth (Yuchingtat et al. 2007) and adults (Food and Nutrition Research Institute, Department of Science and Technology 2008). In a population-based survey conducted by the FNRI-DOST in 2008, only 7% of Filipino adults engage in regular exercise. Regular exercise was defined in the study as participating in leisure-time physical activity 3-5 times a week at 30-45 min per session. This amount of exercise is the minimum recommendation for health and fitness benefits (World Health Organization 2010).

***Exercise versus sport as leisure-time physical activity.*** Regular participation in physical activity, either structured (i.e. joining a group exercise class at the local gym) and unstructured (i.e. playing hoops with friends at a neighborhood basketball court) are associated with positive health and psychological well-being (Biddle & Mutrie 2008). Both exercise and sport belong to a class of physical activities performed during free time, commonly referred to as leisure-time physical activity (Biddle & Mutrie 2008).

Exercise is defined as a subclass of leisure-related physical activity that is planned, structured, repetitive, and which maintains or improves health and physical fitness (Biddle 1992, Caspersen, Powell & Christenson 1985). It is volitional, purposive, and usually requires relatively simple motor skills. Exercise maintains or improves health-related components of fitness, namely, cardiovascular fitness, muscular fitness, flexibility, and body composition, as well as balance, a skill-related component of fitness associated with improved functioning among older adults (World Health Organization 2010). Because of these straightforward associations with public health and fitness, the social organization of exercise includes stakeholders like state public health agencies, the fitness industry and the private sector. Among Filipinos, the three most popular forms of exercise are walking, running, and weight lifting (Cagas, Torre & Manalastas 2010).

In contrast, sport is a subclass of leisure-time physical activity that has organized formal or informal rules, is marked by competition against an opponent or oneself (Biddle 1992, Kilpatrick et al. 2005), and requires relatively more complex motor skills. Sport is also usually socially organized around institutionalized

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competitive events, with a higher degree of professional regulation and well-defined stakeholder roles such as athletes, coaches and fans. Although basketball, volleyball, and baseball/softball are considered as the most popular sports among Filipinos (Antolihao 2009), interests in other competitive activities such as football, handball, ultimate Frisbee, badminton and floorball are increasing.

The distinction between exercise and sport is not an absolute one, as evidenced by many leisure-time physical activities such as swimming and running, which can be categorized as either depending on the social contexts in which they are performed. In this article, we follow the exercise versus sport distinction as a starting point following other exercise and sport psychologists (e.g., Biddle 1992) to explore how motivational processes may differ between exercise and sport participation.

***Participation motives for exercise and sport.*** To promote physical activity, a good starting point is to identify the reasons why people engage in exercise and sport, what sport and exercise psychologists have termed *participation motives* (Biddle & Mutrie 2008). Participation motives, also called surface motives (Biddle & Mutrie 2008) or goal contents (Deci & Ryan 2000), provide important answers to the basic question of “what motivates people to exercise and do sport?”. Studies have demonstrated that these participation motives play an important role in influencing exercise behavior (Ingledew & Markland 2008, Ingledew, Markland & Ferguson 2009) and in improving an individual’s sense of self-worth and psychological well-being (Sebire, Standage & Vansteenkiste 2009).

Some of the most common physical activity participation motives include: health and fitness promotion, weight management and appearance concerns, social engagement, and enjoyment (Allender, Cowburn & Foster 2006). Many people turn to physical activity to obtain instrumental benefits such as fitness and avoidance of ill health, sometimes at the advice of health care professionals. Others pursue exercise and sport, often in combination with other lifestyle changes such as diet and nutrition, for other extrinsic reasons such as to lose weight and achieve personal goals related to bodily appearance. Some enthusiasts incorporate exercise and sport in their everyday lives as a form of socially engaging activity with friends, family, or a romantic partner. And others are driven by the sheer enjoyment of physical activity without much attention to the external rewards that follow, a phenomenon also known as intrinsic motivation. Multiple motives are also believed to be possible, and in fact may operate differentially across various stages of physical activity participation (Buckworth, Lee, Regan, Schneider & DiClemente 2007).

Our central interest in this paper is in the differences in motives for participating in exercise versus in sport. Research suggests that exercise participation may be more extrinsically motivated than engagement in sport. Extrinsic motives such as health and fitness (Kilpatrick et al. 2005), appearance (Frederick-Recascino & Schuster-Smith 2003), and other body-related motives (Frederick & Ryan 1993) have consistently emerged in the literature as drivers of exercise behavior. On the other hand, when asked why they participate in sport, enthusiasts are more likely to cite enjoyment, fun, or interest (Frederick & Ryan 1993, Kilpatrick et al. 2005, Ryan et al. 1997), competence (Frederick & Ryan 1993, Ryan et al. 1997), and social engagement including competition (Kilpatrick et al. 2005). Among Filipinos,

body-related motives such as weight management and fitness are some of the most cited reasons for exercise participation (Cagas, Torre & Manalastas 2014), while fun has been cited as a top reason for sport engagement (Maculada 2007).

A major limitation of these findings, however, is they are based on investigations of motivations for either exercise behavior only or sport participation only. Very few studies have directly compared participation motives for exercise and sport using the same sample. In one exception (Kilpatrick *et al.* 2005), researchers compared participation motives for exercise versus sport among college students in the southeastern United States. Their results showed that intrinsic motives such as competition, affiliation, enjoyment, and challenge were higher in sport than in exercise. In contrast, extrinsic motives such as health and appearance were reported as the most important reasons for exercise participation. This is consistent with another earlier study that suggested intrinsic motives may play a bigger role in sport participation while extrinsic motives may be more involved in exercise behavior (Kilpatrick, Bartholomew & Hebert 2003).

With the growing evidence that members of the general population in Asian societies such as the Philippines do not achieve the sufficient levels of physical activity required to promote health, it is an important task for researchers in exercise and sport psychology and allied fields to examine factors that drive people to be more physically active in daily life. Empirical research that examines participation motives for the two major classes of physical activity, exercise and sport, is an important step in not just extending and replicating findings in this area of research but also for guiding local health authorities and exercise professionals toward better, locally contextualized physical activity promotion programs.

The current study aimed to answer the question of how different Filipino participation motives are for exercise compared to those for sport. Specifically we tested three hypotheses: (1) Health and fitness motives are more important in exercise participation but less so in sport engagement; (2) Weight management and appearance motives are more important in exercise but less so in sport, and (3) Social engagement motives are less important for exercise but more so for sport.

## **MATERIALS AND METHOD**

**Participants.** One hundred and ninety four students (174 females, 16 males, 4 did not specify) from a private university in Metro Manila, Philippines participated in this study. Ages ranged from 15 to 22 years with a mean of 17.13 (SD = 0.94). The participants reported engaging in exercise and/or sport one to three times per week, for at least 15-30 min per session. The three most cited exercise activities were: jogging, walking and running. For sport, the most common activities were: volleyball, basketball and badminton.

**Instruments. Participation motives.** Participation motives were measured using modified versions of the Exercise Motivation Inventory-2 (EMI-2, Markland & Ingledew 1997) following the procedures by Kilpatrick and co-workers (2005). The EMI-2 is comprised of 51 motive items that form three broad subscales identified through factor analysis (Ingledew & Markland 2008). The health/fitness subscale is composed of 16 items including health pressure (e.g. “because my doctor advised

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me to exercise”), ill-health avoidance (e.g. “to avoid heart disease”), nimbleness (e.g. “to maintain flexibility”), positive health (e.g. “to feel more healthy”) and stress management (e.g. “because it helps to reduce tension”). The appearance/weight subscale includes 8 items on appearance (e.g. “to have a good body”) and on weight management (e.g. “to lose weight”). Finally, the social engagement subscale includes 16 items related to affiliation (e.g. “to spend time with friends”), competition (e.g. “because I enjoy competing”) and social recognition (e.g. “to compare my abilities with other people”). Other items in the full version of the EMI-2 outside this three-factor structure include motives related to enjoyment and to revitalization.

Participants rated each item on the EMI-2 in response to the prompt “Personally I exercise (or might exercise)...” along a Likert-type scale ranging from 0 (not at all true for me) to 5 (very true for me). Two versions of the EMI-2 were presented to each participant, modified similar to the procedures in previous research comparing exercise versus sport participation motives using a repeated-measures design (Kilpatrick et al. 2005). In particular, the sport version of the EMI-2 was reworded to refer to engaging in sport, rather than exercising. Definitions for exercise and sport were also presented as part of the instructions for participants to ensure level understanding of how the two activities may be distinguished.

Internal consistency of both the exercise and sport versions of the EMI-2 were high, with subscale Cronbach’s  $\alpha$ ’s ranging from 0.89 to 0.92 and from 0.89 to 0.93, respectively. Overall reliability coefficients for both the exercise and the sport version of the EMI-2 were the same, Cronbach’s  $\alpha = 0.97$ . **Procedure.** Permission to conduct the study was obtained by the fourth author from pertinent officials of the university. With the assistance of physical education instructors, students were provided with a brief background of the study and verbal instructions on how to complete the questionnaire. They were also informed that participation in the study was voluntary and that their confidential responses would have no bearing on their grades or their final performance in class. On average, the respondents took 10-20 min to complete the questionnaire. **Data analysis.** Participation motives for exercise and for sport were compared using multiple paired t-tests. Bonferroni correction procedures were used to adjust for inflated family-wise error due to multiple comparisons; for the three hypotheses, critical  $p$ -levels were adjusted from 0.05 to 0.017.

## RESULTS

Initial data inspection indicated that four participants had incomplete responses; they were thus, removed from the dataset. The results presented below are based on the final analytic sample of  $N = 190$  participants.

**Participation motives for exercise versus sport.** Results showed that health and fitness motives do appear to be more important in motivating exercise behavior ( $M = 3.69$ ) than sport behavior ( $M = 3.60$ ) as we hypothesized,  $t(189) = 2.62$ ,  $p = 0.009$ . The magnitude of the difference was small (Cohen’s  $d = 0.19$ ). Our first hypothesis, that exercise behavior compared to sport participation could be more strongly driven by health and fitness motives was supported. Our second hypothesis

Table 1. Endorsement of three participation motives for exercise versus sport.

Motive	Activity	M	SD
Health/Fitness	Exercise	3.69	0.59
	Sport	3.60	0.63
Appearance/Weight	Exercise	3.82	0.76
	Sport	3.65	0.81
Social Engagement	Exercise	3.12	0.74
	Sport	3.46	0.77

on the relative importance of appearance and weight-related motives in exercise but not sport, was also supported by the data. Participants rated appearance/weight concerns to be significantly more important in exercise ( $M = 3.82$ ) than in sport ( $M = 3.65$ ),  $t(189) = 4.59$ ,  $p = 0.001$ . Effect size was moderate (Cohen's  $d = 0.33$ ). Finally, social engagement motives were found to be less associated with doing exercise activities ( $M = 3.12$ ) but more motivationally relevant for engaging in sport ( $M = 3.46$ ) as hypothesized,  $t(189) = 6.83$ ,  $p = 0.001$ . Effect size was also moderate (Cohen's  $d = 0.50$ ).

**Enjoyment as a participation motive.** Because the EMI-2 also contained items that form an ancillary enjoyment subscale that is independent of the three main motives, we also explored the role of this variable in motivating exercise versus sport participation. Enjoyment, a proxy measure of intrinsic motivation, has long been shown to be a powerful motivator in leisure-time physical activity, for both exercise (Ryan et al. 1997) and sport participation (Davey et al. 2009). Data from our participants suggested that sport, significantly more so than exercise, is associated with enjoyment motives,  $M = 3.72$  versus  $M = 3.44$  respectively,  $t(189) = 4.91$ ,  $p = 0.001$ , Cohen's  $d = 0.36$ .

## DISCUSSION

This study aimed to extend past work comparing participation motives for exercise versus for sport to an Asian, specifically Philippine, sample. The three main hypotheses tested were: (1) health and fitness reasons are more important motives for exercise than for sport; (2) that weight management and appearance motives are likewise more salient in exercise than in sport, and (3) that participation in sport is more associated with social engagement than is exercise participation. All three hypotheses were supported. In addition, we found evidence that enjoyment, a common manifestation of intrinsic motivation, might be more salient in sport participation than in exercise.

Our findings are consistent with previous research indicating that participation motives in exercise differ from those in sport (Frederick & Ryan 1993, Frederick-Recascino & Schuster-Smith 2003, Kilpatrick et al. 2005). Although there may be overlaps in the actual activity elements involved, the distinction between exercise and sport appears to a valid one, not just conceptually or sociologically, but also motivationally. Motives for both exercise and sport are no doubt multiple and

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potentially shared; however, our findings indicate that useful divergences are at work. Exercise was more associated with concerns related to health, fitness, weight loss, and appearance - participation motives that are typically considered forms of *extrinsic motivation* (Vallerand 2007). That is, Filipinos may engage in exercise with the mindset of doing so in order to achieve outcomes that are external and separable from the act of exercise itself, such as losing weight or avoiding illness. Generally, extrinsic motivation, such as exercising to lose weight in particular parts of the body like the midsection (“spot reduction”) and other appearance-related concerns, is associated with low adherence to long-term physical activity (Ryan et al. 1997). This may be because the desired changes in weight and physical appearance take time and may not fully conform to an individual’s expectations. On the other hand, health and fitness motives, though typically extrinsic, has been found to enhance exercise behavior, especially when individuals find personal relevance in the activity and assimilate it as part of their cherished values and needs (Ingledeew & Markland 2008). When such internalisation takes place, exercising for extrinsic reasons like health and fitness moves closer to intrinsic motivation and is more likely to be sustained in the long term (Deci & Ryan 2000).

Engaging in sport, on the other hand, was more associated with motives related to social engagement as well as to enjoyment. Desiring to be with classmates, friends, romantic partners, and family via sport can be a powerful prompt for physical activity. Many sport activities such as those most frequently engaged in by participants, including volleyball, basketball, and badminton, involve high degrees of social interaction and can thus provide a sense of belongingness and connectedness to significant others. In addition, enjoyment was found to be more important in motivating sport but less so for exercise. As an expression of intrinsic motivation, enjoyment is a very robust driver of physical activity (Ryan et al. 1997, Vallerand 2007). When an activity is enjoyable, challenging, and fun, individuals readily engage in it with playfulness, vigor, and commitment; they require little or no extraneous incentives to do so. It is not surprising then that intrinsic motives in physical activity are associated with long-term adherence (Kilpatrick et al. 2003, 2005), especially when the activity is associated with enjoyment, a sense of competence, and an opportunity for social interaction (Ryan et al. 1997) as in the case of a number of sport activities.

***Implications for health and physical activity promotion.*** From a physical activity promotion perspective, results of this study provide some implications for program design. Other scholars and practitioners of physical activity promotion argue that the most effective interventions are those with content that appeals to the participation motives that individuals bring to the physical activity setting (Ingledeew & Markland 2008). Thus, programs designed to promote exercise for Filipinos would do well to focus on exercise’s positive effects on health and fitness (towards internalization) and on shifting participants’ concerns from appearance and weight loss to health and fitness (to deemphasize extrinsic motives). Programs for sport promotion will benefit by underscoring social engagement - how sport is a bonding activity, how sport is a chance to spend time with valued others - instead of focusing heavily on the formalistic or technical aspects of the activity.

Fitting physical activity prescriptions to suit individuals may also be advantageous; for example, if a group of people are primarily concerned about their health and managing their weight, a program built around dance-based exercise may be more optimal than a program of competitive ball sport. Finally, if resources are limited and only one approach is possible, health and physical activity promotion messages perhaps should emphasize participation in recreational sport rather than primarily exercise, if long-term adherence is the goal (Kilpatrick *et al.* 2005). As pointed out by others, promoting sports has untapped potential as a means to health and fitness promotion (Kilpatrick *et al.* 2003). And to focus on sport rather than exercise is also not without precedent; though in the United States national guidelines focus on exercise for health and fitness, in Europe recreational sports programs are regularly promoted to increase physical activity among the public (World Health Organization 2007).

**Limitations.** A number of caveats need to be kept in mind about the present study. First, because data were obtained from young Filipino university students in Metro Manila, future research should look into broader, more diverse samples including an expanded age range and use of non-student samples to improve the generalisability of the results. Second, no gender comparisons were conducted due to the too few male respondents in the sample. Some studies have suggested that women and men may have different motives for exercise and sport participation (Gillison *et al.* 2009, Maculada 2007) and this may be a crucial moderator in designing messages to promote physical activity participation. Finally, our study was based on a one-shot cross-sectional design. Future investigations should include measures of actual exercise and sport behavior in a time-lagged design in order to determine how participation is influenced and predicted by different motives. As pointed out by Kilpatrick and co-workers (2005), more research is needed that empirically links motivation constructs and actual physical activity adherence, whether in exercise or in sport.

These limitations notwithstanding, a strength of the current research is it is the first to compare participation motives in exercise and sport in a Filipino sample using a within-subjects design. Results can be used to guide physical activity programmers in crafting programs which will suit the need of Filipinos. With the increased prevalence of physical inactivity in the country, studies such as this provide pieces in the puzzle of how best to promote physical activity among Filipinos.

## CONCLUSION

Comparison of exercise versus sport participation motives provides additional evidence that the motivational underpinnings of physical activity varies by the type of activity. Exercise participation is associated more closely with motives concerning appearance and weight, as well as health and fitness, while sport participation is linked more to social engagement motives as well as sheer enjoyment. While more extrinsic outcomes like improved appearance or weight loss may help initiate people to participate in physical activity, developing intrinsic or more self-determined motivation is desirable for long-term participation. Physical activity



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leaders and program directors should look into strengthening physical activity programs that emphasize sport for health, not just exercise, in order address the problem of physical inactivity among Filipinos. Programs that provides a wider range of activities, including both exercise for the appearance and health-motivated, and sport for the social engagement-seekers - may encourage more participation, enjoyment, and long-term adherence to activities that promote health and overall well-being.

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