



Published in final edited form as:

*Leisure (Waterloo)*. 2011 ; 35(3): 227–252. doi:10.1080/14927713.2011.615641.

## A mixed-method analysis of free-time involvement and motivation among adolescents in Cape Town, South Africa

Lori-Ann Palen<sup>a,1</sup>, Linda L. Caldwell<sup>b</sup>, Edward A. Smith<sup>c</sup>, Sarah L. Gleeson<sup>b</sup>, and Megan E. Patrick<sup>d</sup>

<sup>a</sup>Risk Behavior and Family Research, RTI International, Research Triangle Park, North Carolina 27709-2194 USA;

<sup>b</sup>Department of Recreation, Park & Tourism Management, The Pennsylvania State University, University Park, Pennsylvania 16802 USA

<sup>c</sup>Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania 16802 USA

<sup>d</sup>Institute for Social Research, University of Michigan, Ann Arbor, Michigan 48106-1248 USA

### Abstract

Using focus group ( $N = 114$ ) and survey ( $N = 946$ ) data, this study employed Self-Determination Theory (SDT) as an organizing framework to examine free-time use and motivation among predominantly mixed-race adolescents from one area in South Africa. Adolescents reported participating in a broad range of activities, with socializing, media use, sports, risk behaviour, and performing arts being most frequently mentioned. All of the motivation types proposed by SDT were spontaneously mentioned by focus group participants. Free time was most strongly characterized by intrinsic motivations, such as competence, relatedness, and positive affect. Activities were also seen as a way to achieve outside goals. With few exceptions, multiple motivations were identified for the same activities, and specific motivations were reported across multiple activity types. The findings suggest that positive motivational experiences were not limited to a specific subset of activities. However, future longitudinal research on participation, motivation, and outcomes is needed to determine the developmental implications of different forms of free-time motivation.

### Keywords

adolescents; South Africa; free-time activities; motivation; mixed-method research

### Introduction

Worldwide, between one quarter and one half of adolescents' waking hours are typically discretionary, meaning they are not occupied by obligatory activities such as school, chores, or maintenance activities (Larson & Verma, 1999). Activities done during free time have the potential to positively and negatively influence development and health outcomes (e.g., Eccles, Barber, Stone, & Hunt, 2003; Witt & Caldwell, 2005). *Motivations* for adolescent free-time activity choices have also been associated with outcomes (Coatsworth, Palen, Sharp, & Ferrer-Wreder, 2006; Palen, Caldwell, & Smith, 2007; Reddon, Pope, Friel, & Sinha, 1996). However, past studies examining free-time activities/motivation and

---

<sup>1</sup>Corresponding author. lpalen@rti.org.

associated outcomes have been largely quantitative in nature, and they have tended to ignore youth in developing countries

This mixed-method study examined free-time activity participation and associated motivations among predominantly mixed-race adolescents from one area of South Africa. Qualitative data, such as those included in this study, allow for vivid description (Johnson & Onwuegbuzie, 2004) and offer arguably the best means of examining phenomena that occur in complex social contexts, like communities or cultures (Nastasi & Schensul, 2005). When paired with quantitative data, qualitative data also allow for “triangulation,” or verification of data across sources, thereby enhancing the validity of any complementary quantitative findings (Nastasi & Schensul, 2005).

Self-Determination Theory (SDT) is one way that scholars have organized thinking around motivation. However, to our knowledge, only a few quantitative studies have used SDT as a framework for understanding the free-time motivation of South African adolescents, so this study offers the opportunity to delve deeper into the cross-cultural applicability of SDT. It will also allow for the identification of specific examples of how each type of motivation is manifested in this particular population.

### Free-time motivation

Self-Determination Theory (SDT) is one possible way to organize thinking and data about free-time motivation. SDT posits that humans have three basic psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2000). Provided that these needs are met, individuals will be intrinsically motivated, displaying the “tendency to seek out novelty and challenges, to extend and exercise one’s capacities, to explore, and to learn” (p. 70). Intrinsic motivation is theoretically important for human development because it fosters initiative, which is crucial for transitioning to adulthood and successful adult functioning (Larson, 2000; Waterman, 2004). Empirically, intrinsic motivation has been linked to positive outcomes such as subjective well-being, social competence, positive identity (Coatsworth et al., 2006), self-esteem, innovation, and tolerance (Reddon et al., 1996). Alternatively, adolescents who lack intrinsic motivation during their free time are more likely than their intrinsically motivated peers to experience boredom (Weissinger, Caldwell, & Bandalos, 1992), which has been associated with a variety of negative behaviours and outcomes including cigarette smoking (Smith & Caldwell, 1989), illegal drug use (McIntosh, MacDonald, & McKeganey, 2005), delinquency (e.g., stealing, weapons carrying; Newberry & Duncan, 2001), binge eating (Vanderlinden, Grave, Vandereycken, & Noorduin, 2001), and lower levels of optimism and self-esteem (Hunter & Csikszentmihalyi, 2003).

If an individual does not fully experience autonomy, competence, or relatedness, he or she will either be amotivated (i.e., have no intention to act) or exhibit extrinsic motivation. According to organismic integration theory (OIT; Ryan & Deci, 2000), the subtypes of extrinsic motivation, arranged from least to most autonomous, are external regulation, introjected regulation, identified regulation, and integrated regulation. External regulation occurs when action is motivated completely by outside forces, typically in the form of a potential reward or punishment. With introjected regulation, behavior is motivated by the potential of experiencing positive or negative emotions as a result of being judged by others. Identified regulation occurs when behavior is motivated by purposeful action to achieve a valued goal. Some have argued that the final type of extrinsic motivation, integrated regulation, is not exhibited until adulthood (Vallerand, 1997); therefore, it is not addressed in the present study.

Several studies have tested cultural differences in the applicability and strength of the relations between motivational constructs as posited by SDT (Chirkov, Ryan, Kim, & Kaplan, 2003; Deci et al., 2001; Levesque, Zuehlke, Stanek, & Ryan, 2004; Walker, Deng, & Dieser, 2005). This research supports the generalizability of many basic tenets of SDT, although there may be certain nuanced differences across cultures. Thus, there is support for the validity of using SDT as an initial framework for studying motivation across cultural contexts.

### Activity-specific free-time motivation

Motivation can be conceptualized at general (i.e., motivational approach to daily life), domain-specific (e.g., work, leisure, school), or activity-specific (e.g., soccer, drama) levels. Each approach carries methodological and conceptual challenges. See Baldwin and Caldwell (2003) for a discussion of these challenges related to the Free-Time Motivation Scale for Adolescents.

Research on motivation for specific uses of free-time activities is sparse, aside from sports and physical activities. The physical activity literature documents mixed findings in terms of whether intrinsic motivations (e.g., enjoyment, challenge, skill development, self-expression, self-improvement) or extrinsic motivations (e.g., stress relief, social recognition, opportunities to travel) are more prominent (Allison et al., 2005; Pedersen, 2002; Tsorbatzoudis, Alexandris, Zahariadis, & Grouios, 2006). Although research on non-physical activity motivations is less common than for sports, studies of drama (Martin & Cutler, 2002), television-watching (Conway & Rubin, 1991), instrumental music (Schmidt, 2005), and volunteerism (Omoto & Snyder, 1995) have generally shown that motivations on the intrinsic end of the continuum are more prominent than extrinsic motivations. However, we are unaware of single studies that have directly compared motivation across multiple types of activities.

### Free-time activities in South Africa

A number of studies have documented differences in how time is used across cultures (e.g., Flammer & Schaffner, 2003; Larson & Verma, 1999; Vazsonyi, Pickering, Belliston, Hessing, & Junger, 2002; Verma & Larson, 2003; Zuzanek, 2005). The present study examined time use of adolescents from a specific area in Cape Town, South Africa (see Caldwell et al., 2004). Residents in this area self-identify as “Coloured,” a population group that encompasses individuals of mixed African, European, and Asian descent. This blend of ancestry is reflected in the variety of linguistic (English, Afrikaans, Xhosa) and religious (Christian, Muslim) traditions represented in the area. The local culture is also shaped by the legacy of Apartheid, in the form of low financial and material resources.

In the empirical literature, there have only been a few descriptions of the free-time involvement of South Africans generally or South African adolescents specifically. The most extensive study of free-time use and experiences was conducted by Valerie Møller (Møller, 1992). Møller found that the most frequent and preferred uses of free time among African Black residents of urban, low-income townships included sports (especially soccer), socializing (including drinking alcohol with friends), watching television or movies, and religious activities. The most common reason for preferring activities was that they were fun or interesting. However, participants also preferred certain activities because they were novel, educational, or filled instrumental needs such as fitness or money.

A more recent, post-Apartheid study of adolescents and young adults in the KwaZulu-Natal province (Kaufman, Clark, Manzini, & May, 2002) found that participants' free-time activities could be categorized into three groups: hanging out, which included doing nothing,

spending time at shopping malls or on street corners and going to bars or parties; home-based activities, which included television-watching and talking on the telephone; and organized activities, which were specified as sports, religious clubs, and community programs. Sports were the most popular organized activity among boys (45% participating), and religious activities were the most popular organized activity among girls (31% participating).

Despite the contributions of Møller (1992) and Kaufman et al. (2002), questions remain about time use by South African adolescents. For example, both studies defined youth fairly broadly, as 15- to 25-year-olds and 14- to 22-year-olds, respectively. This merged findings about school-aged adolescents with findings about individuals who may have adult roles and responsibilities. In addition, neither study examined time use among Coloured adolescents, an important subgroup to investigate because Coloured individuals comprise about 9% of the national population and more than half of the population in the Western Cape and Northern Cape provinces (Statistics South Africa, 2003).

## Free-time motivation in South Africa

Two previous studies have examined general free-time motivation among South African adolescents, both using SDT. One study examined changes in motivation over time and suggested that identified, introjected, and extrinsic motivation all tend to decrease over the high school years (Caldwell, Patrick, Smith, Palen, & Wegner, 2010). A second, person-centred study identified three free-time motivation profiles: participants could be classified as high on all types of motivation, low on all types of motivation, or high on only the more intrinsic types of motivation (Palen et al., 2007). Similar to Caldwell et al., over time, prevalence of the first profile decreased and prevalence of the latter two profiles increased. Low motivation was associated with the highest odds of substance use, whereas high intrinsic motivation was associated with the lowest odds of substance use.

Despite these studies, research sheds little light on how free-time motivation is experienced in a South African context, and whether the same specific motivations identified in previous studies (e.g., socializing, self-expression, stress relief) are found among South African adolescents. Additionally, it is not known whether and how motivation differs across specific types of activities.

## The current study

The overall aim of the present study was to understand free-time activity participation and related motivations of adolescents in a peri-urban area near Cape Town, South Africa. It examined free-time motivation at both general and activity-specific (e.g., sports) levels. This mixed-method study used a concurrent triangulation design (Creswell & Plano Clark, 2007), in which qualitative focus group data and quantitative survey data were collected within the same time frame, each type of data was analyzed separately using customary methods (i.e., statistical analyses and constant comparison), and then the two sets of results were compared and contrasted to arrive at an overall interpretation of the data.

This study has four specific aims that were addressed with varying combinations of qualitative and quantitative data:

**Aim 1.** Describe what adolescents do in their free time, by:

- a. Listing the types of activities in which adolescents were involved (qualitative).
- b. Documenting the relative frequencies of identification of and participation in various activity types (qualitative and quantitative).

**Aim 2.** List and describe the types of free-time motivation reported by adolescents (qualitative), including:

- a. Describing the range of specific free-time motivations subsumed under more general motivation types (i.e., intrinsic, identified, introjected, extrinsic, amotivation).
- b. Noting the types of activities in which different motivations tend to be mentioned.

**Aim 3.** Examine the relative frequency of each general motivation type across all possible uses of free time (quantitative and qualitative).

- *Hypothesis:* Intrinsic motivation would be the most commonly reported type, and identified and introjected motivation would be more common than either extrinsic motivation or amotivation.

**Aim 4.** Examine whether there were any notable differences in the relative frequencies of free-time motivations across the various activity types (qualitative and quantitative).

- *Hypothesis:* Within a given activity type, all motivation types would be reported and intrinsic motivation would be endorsed most frequently. However, there was little basis for hypotheses about whether or how levels of each type of motivation would vary by activity type.

## Method

### Participants

The study sample was drawn from the HealthWise South Africa research trial, which was a joint effort of researchers in the United States and South Africa. HealthWise is a comprehensive, risk-reduction life skills curriculum for adolescents. Its goals are: (1) to reduce the transmission of HIV/AIDS and other STIs, (2) to reduce substance abuse, and (3) to increase positive use and experience of free time. Intervention participants were from Mitchell's Plain, a low-income township near Cape Town established during the Apartheid era. There are 25 high schools in the Mitchell's Plain area and students from the four schools selected to receive the HealthWise curriculum were included in the current study.

Focus group participants ( $N = 114$ ; 54% female) were eighth- and tenth-grade English-speaking students. The quantitative sample was selected to be chronologically proximal and demographically comparable with the focus group sample. Therefore, the study examined quantitative survey data from the 946 eighth- and tenth-grade students who completed an assessment in October 2006. The mean ages of the eighth- and tenth-grade students were 14 and 16 years, respectively. Among the quantitative sample, 53% were female. The racial composition of the sample included Coloured (87%), Black (9%), White (3%), and Indian or other (1%) adolescents. Among these adolescents, 70% completed the survey in English and 30% completed it in Afrikaans.

### Participant recruitment and data collection: Focus groups

Focus groups were conducted in August and September 2006. Potential participants were selected at random from a list of students identified by their teachers as being able to express themselves verbally in English. The following were targeted for recruitment from each of the four schools: 10 eighth-grade girls, 10 eighth-grade boys, 10 tenth-grade girls, and 10 tenth-grade boys.

The program's Youth Development Specialists visited selected students to explain the study and gauge interest. If students were interested in participating, they read an information letter and completed an assent form. In addition, the students were given an information letter/consent form to carry home to their parent or guardian, and they were responsible for returning the signed parental consent forms to the Youth Development Specialists. For each student who was not interested in participating, an additional student was selected at random and recruited following this procedure.

Focus groups were conducted separately by gender and by grade. They were held in unused classroom spaces, typically during school hours. However, one school required focus groups to be scheduled after school. Students from the population of interest had relatively high levels of school absenteeism. Therefore, not all recruited students actually participated in a focus group. The 15 focus groups consisted of 4 to 10 participants each. At one school, however, only two tenth-grade boys arrived for their focus group, which was then cancelled.

Focus groups were moderated by two members of the U.S. research team, and each group lasted approximately 90 minutes. Each focus group began with a warm-up game and facilitator introductions. Students then answered questions about such topics as free-time activities, substance use, sexual behaviour, and the HealthWise intervention. Each session concluded with refreshments, and each student was given a T-shirt as a token of appreciation for participating. Focus groups were audiotaped and then transcribed verbatim by a South African transcriptionist. Members of the U.S. and South African research team then checked all transcripts for accuracy.

**Focus group questions**—At the outset of each focus group, the facilitator defined *free time* as “time that you’re not spending in class, doing school work, or doing chores at your home” and *free-time activities* as “things like clubs or events, and they could take place in your school, your home or your community” that take place during free time. Participants were asked to draw pictures of free-time activities that they did or other students in their area did and then share the activities from their drawings. As each activity was mentioned, the facilitator asked how many students from their class, out of 10, participated in the activity, how participants felt about the activity, and which elements they specifically liked. The facilitator continued to elicit additional activities until the participants agreed that their list was exhaustive. The facilitator also probed specifically for ways that adolescents use their free time outside of organized activities or clubs (i.e., unstructured activities).

**Qualitative data analysis**—Three of the present authors coded the focus group transcripts. An initial coding scheme was developed based on theory and the authors' impressions from having conducted the groups. To achieve reliability (see Creswell & Plano Clark, 2007), each of the coders independently applied the scheme to each transcript. Any discrepancies were resolved by group consensus. The coding scheme was modified as needed to accommodate unanticipated information. This is consistent with the constant comparative method for establishing validity in qualitative research (Silverman, 2005).

Transcripts and their corresponding codes were entered into ATLAS.ti software. Following data entry, quotation lists for each code were reviewed by the coders to verify that the codes were applied consistently and correctly across all transcripts. The final coding list, including example quotes, was then reviewed by another author who did not participate in the coding process but was familiar with both the population and constructs of interest. This type of external audit is an accepted procedure for establishing the validity of qualitative results (Creswell & Miller, 2000).

Each activity mentioned was assigned an activity type (Aim 1a). Eight of the activity types corresponded to those from the quantitative survey (see section on Survey Measures). Additional codes were developed for activities that did not fit within one of the existing categories.

The question about how many classmates, out of 10, participated in a given activity was coded to provide a general gauge of participation rates. If most focus group participants indicated three or fewer out of 10 classmates participated in that activity, the activity was coded as having low perceived participation levels; if participant numbers were between four and six, the activity was considered to represent moderate involvement; and seven or more participants was coded as perceived high involvement (Aim 1b).

Participants also discussed what they liked about each of the activities that they drew at the outset of the focus group. These explanations were interpreted as motivations to initiate and maintain involvement in the activities. An examination of the focus group transcripts confirmed this interpretation; the given reasons were consistent with the types of motivation encompassed by SDT. Consequently, reasons for liking activities were coded as representing intrinsic motivation, identified motivation, introjected motivation, extrinsic motivation, or amotivation, with more specific sub-codes for each (Aim 2). ATLAS.ti was used to generate a count of the quotations describing each type of motivation, both in general (Aim 3) and by activity type (Aim 4).

### Participant recruitment and data collection: Survey assessment

Beginning in 2004 and for three consecutive cohorts, all eighth-graders from the four participating schools were invited to participate in a quantitative survey. Passive parental consent procedures were used, and adolescent assent was obtained. Participants completed surveys on personal digital assistants (PDAs) near the beginning and end of each school year. These surveys were identical across individuals, waves, and cohorts, with the exception of skip patterns that allowed respondents to omit follow-up questions that were not applicable given earlier responses. The surveys used in this study were from October 2006 (second eighth-grade assessment for Cohort 3 and second tenth-grade assessment for Cohort 1), as these respondents were from the same cohorts as the focus group participants and they completed the survey shortly after the focus groups occurred.

**Survey Measures**—Respondents were asked about their involvement in eight activities: hanging out with friends, sports or other physical activities, playing a musical instrument or singing, drama or dance groups, hobbies or creative activities (e.g., artwork, drawing, woodwork, needlework, beadwork, collecting things), going to a park or community/sports centre, watching TV or movies, and volunteer work. They responded, yes or no, as to whether they spent time doing each of these activities in the past 4 weeks. For the items about friends, sports, music, drama/dance, and hobbies or creative activities, there was the added qualifier of this participation taking place after school or over weekends.

For each activity for which a respondent reported participation, additional follow-up questions were presented. One of these questions asked about typical frequency of participation in the activity, with the response options of: 0 = less than 1 hour per week, 1 = 1 to 5 hours per week, 2 = 6 to 10 hours per week, or 3 = more than 10 hours per week. Respondents were also prompted to select one of the following reasons why they usually participate in the activity: “I want to,” “I do it for a purpose,” “I feel like I have to,” or “There is nothing else to do.” According to SDT, these response options correspond to intrinsic motivation, identified motivation, extrinsic motivation, and amotivation, respectively. There was no response option for introjected motivation due to the complexity of assessing that construct with a short phrase.

Overall levels of free-time motivation were assessed using a modified version of the Free Time Motivation Scale for Adolescents (Baldwin & Caldwell, 2003). This instrument measures intrinsic, identified, introjected, and extrinsic motivation, as well as amotivation. Response options for all items were on a 5-point Likert scale (0 = strongly disagree to 4 = strongly agree). Scale scores were created by calculating the mean of items representing a given type of free-time motivation. Descriptive information for these scales is presented in Table 1.

### Quantitative data analysis

**Activity participation rate (Aim 1b):** Differences in participation by activity type were assessed using an 8 (activity type) x 2 (participation; yes/no) chi-square. If the omnibus test achieved significance, each of 28 pairwise chi-squares were calculated. To reduce the chance of Type I error given the numerous comparisons, the significance level for these follow-up tests was adjusted using a Bonferroni correction, resulting in a critical  $p$ -value of .0018.

**Time spent in activities (Aim 1b):** Differences in mean levels of time spent in each activity were assessed using a one-way ANOVA. If necessary, a significant result was followed up with a Tukey's HSD post-hoc test.

**Overall free-time motivation (Aim 3):** Differences in mean levels of each type of free-time motivation were assessed using a one-way ANOVA. If necessary, a significant result was followed up with a Tukey's HSD post-hoc test.

**Motivation by activity type (Aim 4):** Differences in motivation by activity type were assessed using an 8 (activity type) x 4 (motivation type: intrinsic, identified, extrinsic, amotivation) chi-square. If the omnibus test achieved significance, each of 28 pairwise (by activity type) chi-squares was calculated. As with activity participation, a Bonferroni correction ( $p < .0018$ ) was used.

## Results

### Aim 1: Description of the free-time context in focus groups and surveys

Table 2 presents the focus group data, including the types of activities mentioned, the number of groups mentioning each activity type, and the participation levels that adolescents ascribed to activities within that type. Table 3 presents the results from the survey data on participation rates and frequency of participation for each of the eight measured activity types.

The participants in each focus group listed between 9 and 23 free-time activities in which adolescents their age participate (mean number of reported activities = 15), including all eight activity types measured in the survey. They also mentioned several types of activities similar to, yet distinct from, the original eight activities, as well as a number of unique, previously unmeasured free-time activities.

**Sports and physical activities**—Sports and other physical activities were the only type of activity to be discussed in all 15 focus groups, with an average of three or four specific sports mentioned per group. Team sports, particularly soccer, tended to be mentioned most often and were rated as having high or moderate participation levels. Individual sports and physical activities were discussed in only one or two focus groups, and typically they were described as having either moderate or low participation. Spectating was an activity not assessed in the survey instrument; however, some participants mentioned that adolescents



spend time watching sports either at school or at the professional level. Some participants also reported involvement in a number of “extreme” activities, such as skateboarding and car racing, which could also be considered sports or physical activities.

In the quantitative data, sports were still fairly popular, although not to the degree in the qualitative data. Fifty-three per cent of respondents reported involvement in sports, with average involvement of between 1 and 5 hours a week. A significantly larger proportion of respondents participated in sports than participated in the arts, volunteerism, or going to parks and recreation centres; and respondents who were involved in sports spent significantly more time in that activity than did participants in hobbies or creative activities or in activities at parks and recreation centres. However, the proportion of respondents who were involved in sports, and the amount of time participants spent in sports, was still smaller than what was reported for watching television or movies.

**Performing arts**—Focus group participants reported playing musical instruments, singing, and participating in drama and dance groups as well as involvement in less formal versions of these performing arts activities, including informal dancing, going to dance clubs, and listening to music.

The data on prominence and popularity of performing arts activities were mixed. Instrumental and vocal music were among the most frequently mentioned activities (mentioned in 11 groups). However, according to both the quantitative and qualitative data, participation rates and frequency of participation for musical performance were moderate. Informal dance had high perceived participation and was more popular than organized drama or dance groups. This is consistent with the survey data showing that participation in drama/dance groups was the least common of the eight activity types measured in the survey, with 24% of respondents participating.

**Media use**—Watching television or movies was the most frequently mentioned media use activity (mentioned in 8 groups). However, participants also reported using media that were not widely available either during previous studies (Kaufman et al., 2002; Møller, 1992) or at the time the HealthWise survey was designed. For example, participants discussed using MXit, an inexpensive mobile-phone-based text-messaging program, and also mentioned playing electronic games. Media use, regardless of type, was almost always described as having high levels of participation.

Media use, in the form of watching television or movies, was the most popular free-time activity according to the quantitative survey data, with 89% of adolescents reporting participation in the preceding month. Along with hanging out with friends, watching television or movies took up the most time of all of the measured activities, with adolescents spending an average of between 1 and 10 hours watching per week.

**Hanging out with friends**—Spending time with friends was mentioned as a free-time activity in seven focus groups. Participants used a variety of verbs to label this type of activity, including “chilling,” “hanging out,” “playing,” “visiting,” “walking around,” “spending time,” and “sitting.” Participants also mentioned a type of social activity that was not explicitly measured in the survey assessment: spending time with romantic partners.

As compared with other activities, hanging out with friends was a fairly popular free-time activity. In the survey, this activity was associated with a 70% participation rate and the highest reported frequency of involvement of all of the measured activities (between 1 and 10 hours per week). Hanging out with friends and romantic partners also was associated with high perceived participation levels in the focus groups.

**Parks, recreation centres, volunteerism, and hobbies or creative activities—**

The remaining activities assessed in the survey instrument tended to be the least frequently mentioned by focus group participants. For example, participants in four focus groups mentioned going to parks and to the YMCA. Participants in two focus groups mentioned volunteerism, in the forms of cleaning up in their community and working in a peer-education program. Participants in one focus group mentioned painting as a hobby or creative activity; however, none of the other examples given in the corresponding survey item (drawing, woodwork, needlework, beadwork, collecting things) were mentioned. Painting was associated with low perceived participation in the focus groups. These qualitative findings somewhat contradict the survey data on parks and recreation centres, volunteerism, and hobbies and creative activities inasmuch as over one third of survey respondents said that they participated in each of these activities, yet these activities were among those with the lowest time spent in participation.

**Risk behaviours—**Focus group participants mentioned a number of activities that had not been measured previously in the free-time portion of the HealthWise survey. Chief among these were risk behaviours, the second most frequently reported type of free-time activity in the focus groups (see Patrick et al., 2010 for a more detailed description of focus group data on risk behaviours). Risk behaviours were mentioned as free-time activities in all but one focus group, with participants reporting an average of about three specific risk behaviours per group. The use of substances, including cigarettes, alcohol, marijuana, and other drugs, was the most frequently mentioned risk behaviour; it was mentioned in 14 focus groups and represented 71% of the risk behaviours reported. Substance use levels were either reported as high or moderate. Crime, gang involvement, and fighting were mentioned in four focus groups, and sexual behaviour was mentioned in two focus groups. Participation levels were reported as high for fighting and moderate for sex.

In the survey, risk behaviours were not measured with the same types of items with which pro-social free-time activities were measured. However, follow-up analyses of risk behaviour involvement showed that 27% of respondents reported using alcohol in the month preceding the survey, 32% reported using cigarettes, 15% reported using other drugs (marijuana, inhalants, and/or methamphetamine), and 8% reported engaging in vaginal intercourse. A total of 48% of respondents reported engaging in at least one of these risk behaviours in the past month. As compared with data on past-month pro-social activity participation, these data position risk behaviours as a moderately popular activity.

**Other activities—**In terms of other previously unmeasured activities, participants in nine focus groups reported going to “game shops,” which are community establishments where they either play pool or watch others play. This activity was associated with moderate to high levels of participation. Some students mentioned shopping, which included going to the mall and window shopping, and involvement in games such as chess, dominoes, hide and seek, and tag. Other free-time activities included sleeping/napping, reading, and participating in Christian Fellowship. When focus group participants reported participation in these activities, the levels tended to be low to moderate.

Finally, a few activities were mentioned with either insufficient frequency or detail (often in response to the unstructured activity follow-up question) to merit the assignment of categories for analysis. These included eating, going to parties, spending time with family, standing or sitting on street corners (without reference to doing this with friends), going to theme parks, and playing with dolls.

## Aim 2: Types of free-time motivation as reported in focus groups

This aim focused on understanding why students participated in free-time activities. The focus group data were helpful in promoting an in-depth understanding of how different types of motivation were manifested. Comments were coded using SDT; however, care was taken to identify instances of other forms of motivation.

**Intrinsic motivation**—Intrinsic motivations tended to fall into five categories: affective experience of intrinsic motivation, challenge, relatedness, competence, and autonomy.

**Affective experiences of intrinsic motivation:** These experiences included liking (either the activity in general or specific aspects of the activity), enjoyment, and excitement. Affective motivations were mentioned in relation to all activity types, with the exception of time spent with romantic partners. Often, the discussion of liking or enjoyment led to a discussion of other types of motivation. In the example below, an eighth-grade boy moves from discussing affective experiences in pool to discussing challenge:

*Interviewee:* It is fun to shoot.

*Interviewer:* Why is it fun?

*Interviewee:* I don't know, it's fun. You concentrate, especially you have to think a lot in that game also. You can't just shoot; you have to think about the next shot...It isn't always the same because the balls don't lay the same every time.

**Challenge:** Challenge was another type of intrinsic motivation that participants discussed. This included not only the feeling of having one's abilities challenged, but also experiences like competition and persistence. Challenge was discussed in the context of a number of activities, including sports, extreme activities, the performing arts, and games (including video games).

**Relatedness:** Relatedness emerged as another intrinsic motivation theme. In general, this involved situations in which adolescents participated in an activity as a way of building and maintaining social connections. Within relatedness, evidence indicated two very specific types of motivation: meeting new people and companionship.

Meeting new people was expressed in relation to numerous activities. However, it was the most frequently reported motivation for involvement with MXit, as exemplified by one tenth-grade girl:

*Interviewer:* Okay, what sorts of conversations are fun?

*Interviewee:* You getting to know people ... Meeting new people ... Maybe finding a boyfriend ... Many people find husbands on MXit.

Companionship was another specific relatedness motivation that emerged. Participants sometimes expressed doing an activity as a way to socialize with or become closer to people who were already in their lives. This was, again, a frequently reported motivation for using MXit. It was also the most frequently reported motivation for hanging out with friends and the only reported motivation for spending time with romantic partners.

**Competence:** Another theme within intrinsic motivation was either demonstrating or building competence. Some adolescents indicated that they participated in a certain activity to learn new skills or information. This was a frequent motivation for watching television, as well as the most frequently mentioned motivation for reading, as noted by one eighth-grade girl:

*Interviewee:* You learn a lot of stuff from reading.

*Interviewer:* You learn a lot of stuff? What kind of stuff?

*Interviewee:* Being what the book is about, and it expand your vocabulary.

Participants discussed acquiring a number of other practical, interpersonal, and self-management skills within their activities, including dancing, doing maneuvers in activities such as ice skating and skateboarding, self-discipline, and teamwork.

As part of competence, participants reported having achievement motivations. That is, activities afforded the opportunity to achieve benchmarks of competence, such as scoring points or winning a game. This is distinct from the experience of extrinsic motivation because it did not involve external rewards for competence, but rather the recognition of competence in a way inherent to the nature or rules of an activity, as demonstrated by a group of tenth-grade girls:

*Interviewer:* What do people like about playing netball [similar to basketball], and what do they not like about playing netball?

*Interviewee:* The winning part.

*Interviewer:* The winning part. They like that or don't like that?

*Interviewee:* They like it.

*Interviewer:* Okay, what do you like about winning? What's good about that experience of winning, what happens that's good?

*Interviewee:* You feel good.

Although mentioned infrequently, another aspect of competence was when participants reported doing an activity to build or enhance self-confidence or self-esteem.

**Autonomy:** A less frequently mentioned aspect of intrinsic motivation was autonomy, relating to freedom or independence within an activity. Sometimes, activities also afforded participants the opportunity to express identity, personal qualities, or opinions. This type of self-expression is a subtheme under autonomy, given that it reflects recognition of one's own values and desires. This awareness is, in turn, requisite to acting in a way that is consistent with those values (i.e., autonomous action). One group of tenth-grade boys expressed several facets of autonomy within dancing, including how levels of autonomy might vary across styles of dance:

*Interviewee:* You can express yourself also...You can dance like you want; there is not a right way to dance.

*Interviewer:* Okay, okay, so it's a chance to be like an individual, there's no right or wrong.

*Interviewee:* It depends also what kind of dancing you do...You see, you get group dancing, like ballroom and stuff like that, and you have to dance right.

**Identified motivation**—As with intrinsic motivation, focus group participants expressed a number of specific motivations under the more general category of identified motivation. Specifically, participants reported that engaging in activities could further six types of goals: health/fitness, escape, career, travel, keeping busy, and avoiding risk behaviour.

**Health/fitness:** Health and fitness-related motivations, including maintaining a healthy weight and appearance, were the most commonly reported identified motivation. Health motivations were primarily reported in sports and physical activities. In one instance, getting thin was also discussed as a motivation for methamphetamine use. Health was also the most frequently reported motivation for engaging in sleep during free time, with participants stating that it helped people look healthy and feel well rested.

**Escape:** Another commonly reported set of identified motivations related to escape. Participants often reported doing an activity because it allowed them to escape stress, anxiety, or negative emotions; to cope with negative situations; or to relax. Escape motivations were evident in a number of different activities. They were frequently mentioned in relation to substance use, as well as in the context of sports, as noted by a group of eighth-grade girls:

*Interviewee:* When you run you get out and you have stress in your house or something and you just can run and you don't feel.

*Interviewee:* You feel, like, you feel alone on the road and so.

*Interviewee:* Relief.

*Interviewer:* It's a relief. Relief from what?

*Interviewee:* From stress ... Like, I'll make an example now ... Your parents and you have a fight and then you just start running ... and you get out of the house.

**Career:** Focus group participants sometimes discussed how their free-time activities could further career goals. Typically, this involved becoming a professional athlete or artist (singer, musician, painter). Participants in one focus group with tenth-grade boys also discussed how some students volunteered as peer counsellors because "they want to be like [U.S. television talk show hosts] Doctor Phil and Ricki Lake."

**Travel:** Opportunities for travel were another identified motivation discussed in the context of performance activities (sports and music). One eighth-grade boy discussed the traveling done by an elite female swimmer at his school:

There is competition in swimming because if you win, you go out to far places like the girl in our class. She won in backstroke, she won one race and she got a trip to, um, Jo'burg [Johannesburg] or Durban, somewhere there.

**Keeping busy:** Focus group participants also discussed how their free-time activities could serve as diversions. A number of activities, including sports, pool, games, and reading were seen as ways to either avoid boredom or stay occupied, as stated by one eighth-grade boy:

*Interviewer:* What specifically about swimming is fun?

*Interviewee:* That you wanna get out or something.

*Interviewer:* That you wanna get out of something. So, like what kind of things?

*Interviewee:* If something is boring in your house and you go to a club or something then you join it or something.

**Avoiding risk behaviour:** Sometimes, activities were also seen as an alternative to engaging in risk behaviours, such as fighting, gangsterism, substance use, and loitering. Typically, this was in the context of sports and physical activities; however, a group of eighth-grade boys also discussed risk behaviours as they related to video games:

*Interviewee:* Play[ing] with your friends ... keeps you away from all the wrong stuff and keep inside doing that game and complete that stage or so.

*Interviewer:* Okay, so is everybody saying the fact that it's more challenging than playing in the street and that it keeps you off the street?

*Interviewee:* Yes, Ma'am. I also play every day because ... all of the boys my age smoke dagga [cannabis] and drugs.

**Introjected motivation—**Focus group participants discussed a number of specific types of introjected motivations, including achievement of social status, social recognition, peer pressure, and subordinating other participants.

**Achievement of social status:** The most frequently mentioned introjected motivation was achievement of social status. This included getting attention, looking cool, impressing others, and being popular. This motivation was mentioned across a number of different activity types. One tenth-grade girl discussed social status as it related to dancing: “I think most people, like, love dancing. For instance, we at a party and the latest dance or the most recent dance, if you dance the latest dance, almost everyone is going to look at you, the attention.” In relation to sports, participants sometimes discussed aspirations to become a legend, like Michael Jordan or David Beckham.

Social status also was a frequent motivation for engaging in risk behaviour, as shown by a group of tenth-grade boys:

*Interviewee:* They enjoy [smoking]...Because they think if they can stand with a cigarette they ... they big.

*Interviewee:* Yeah, they, it's like, they wanna be cool ... They just wanna show everybody that they can do it.

*Interviewee:* Or try to impress their friends.

In a related vein, some participants mentioned being motivated by social conformity. This motive was only discussed in relation to risk behaviours. In two focus groups, participants discussed smoking to be in the “in” or “cool” crowd. Participants in another focus group discussed how teen pregnancy was fashionable.

**Social recognition:** In the context of sports and musical performance, participants sometimes discussed social recognition in the form of attention from fans, spectators, and audiences. An eighth-grade boy discussed the possibility of being seen by fans locally and nationwide:

The reason why people, um, like rugby is there's...there's, like, more fun. And there is lot of people and there's, like...if you start now here by a local team, like, here in Mitchell's Plain, you will come far because there is mostly trials for rugby and you can see on the TV. And, like, here by Newlands Stadium there's always a rugby match on a Saturday...

**Peers pressure:** Direct pressure from peers was only mentioned as a motivation for participation in risk behaviours. For example, some tenth-grade girls discussed how virgins were laughed at and called “losers.” Girls in this same focus group also discussed having sex in order to please one's partner, whereas a group of tenth-grade boys discussed fighting so as not to be labeled a “moffie” (i.e., gay).

**Subordinating other participants:** Given the previous literature, one type of unanticipated introjected motivation came to light: subordinating other participants. Across a number of different types of competition-centred activities (sports, extreme activities, music, dance, pool, fighting) focus group participants discussed using activities as a way to subordinate other participants, including defeating or showing superiority to others. Boys in one eighth-grade group discussed subordination in the context of a risk behaviour:

*Interviewer:* Do people like anything about fighting? Why do people do it?

*Interviewee:* It's to show that they the strongest ... They wanna impress girls ... Just to show them who's boss.

*Interviewer:* Show who who's boss?

*Interviewee:* Show your opponent who's boss.

**Extrinsic motivation—**Participants occasionally mentioned experiences of extrinsic motivation in their free-time activities. In the context of sports and extreme activities, participants discussed the possibility of receiving trophies, medals, and sponsorship. Prizes

and money also were discussed in relation to dancing, being in a band, and playing pool. Unanticipated extrinsic motivations included using sports injuries to get out of school and receiving free food while volunteering.

**Amotivation**—Focus group participants rarely mentioned amotivation. However, when mentioned, it was in the form of “just doing” an activity or doing an activity because there was “nothing better to do.” Amotivation was not specific to any one activity type, being mentioned one time each in the context of singing, risk behaviour, video games, and sleeping. Interestingly, amotivation did not come up in the context of activities for which it was most common in the survey: hanging out with friends, watching television or movies, or going to parks and recreation centres (see Aim 4).

**Other motivations**—One type of motivation for participation was not easily classified according to SDT. As part of the discussion on each activity, the facilitator asked focus group participants if girls or boys were more likely to participate in a given activity. If participants stated that adolescents of one gender were more likely to participate, the facilitator asked them why. In the subsequent discussion, gender typically emerged as a reason for engaging in the activity. In some cases, participants ascribed certain strengths, abilities, or preferences to one gender, which in turn made their participation more likely, as noted by a group of tenth-grade boys:

*Interviewer:* Okay, why are boys skateboarding more than girls?

*Interviewee:* I think they into more extreme sports.

*Interviewee:* They not scared to fall and get hurt.

In other cases, participation by one gender seemed to be promoted by broader cultural conceptions about assigning gender to the activity itself, as indicated by a group of eighth-grade girls:

*Interviewer:* Okay, why are girls more likely to play netball?

*Interviewee:* Because it's a girly sport.

*Interviewer:* It's a girly sport. What makes it a girly sport? How do you know it's a girly sport?

*Interviewee:* Because you have to run, jump and ...

*Interviewee:* You wear skirts.

*Interviewer:* You wear skirts, okay. So what makes that not a boy's sport? What makes that a girl's sport?

*Interviewee:* Because it's something different to basketball, and basketball is ... mostly a boy's sport.

A more complete discussion of gender, activity participation, and motivation was provided by Gleeson (2008).

### **Aim 3: Frequencies of general free-time motivations in surveys and focus groups**

The mean for each type of general free-time motivation reported in the survey data appears in Table 1. Overall, the means were significantly different [ $F(4, 4663) = 357, p < .001$ ]. Post-hoc tests revealed that levels of intrinsic motivation were highest; levels of introjected motivation, extrinsic motivation, and amotivation were lowest; and levels of identified motivation fell in between.

The focus group data were generally consistent with the survey data. Intrinsic motivation was the most commonly reported motivation type across activities, with 100 mentions. Identified motivation was the second most common type, with 62 mentions. The frequencies for the remaining motivational types were 33 mentions of introjected motivation, 10 mentions of extrinsic motivation, and 4 mentions of amotivation.

#### Aim 4: Motivation by activity type in focus groups and surveys

The number of times focus group participants mentioned each general motivation type in relation to each activity type is shown in Table 4. There were a few findings of note. Intrinsic motivation was the most (or among the most) commonly endorsed motivation type for nearly every activity type. The only exceptions were listening to music and sleeping, for which there were several more mentions of identified motivation. In addition, several activity types were especially high in intrinsic motivation (two thirds or more of total motivations discussed): spending time with romantic partners, spectating, hanging out with friends, drama/dance groups, watching television or movies, and playing pool. Risk behavior was the only frequently mentioned activity type for which introjected motivation was as common as intrinsic motivation.

As with the focus group data, intrinsic motivation was the most commonly endorsed type of motivation across all activity types in the survey data (see Table 5). However, the omnibus chi-square test was significant, indicating overall differences in motivation across activity type ( $\chi^2_{21} = 381, p < .001$ ). Post-hoc chi-square values were used to explore the differences between each of 28 pairs of activity types. For example, volunteerism was compared with sports to determine whether they differed in the percentage of adolescents reporting intrinsic, identified, extrinsic, or amotivated reasons for participation. This comparison was not significant, indicating similar motivation frequencies in these two types of activities (see Table 4).

The pairwise tests revealed that the patterns of motivation for hanging out with friends and watching television or movies were distinct from those for the other activity types. Both of these activities had comparatively high frequencies for intrinsic motivation. They also had the highest frequencies of reported amotivation out of any of the activity types, whereas the frequencies of both identified and extrinsic motivation were the lowest out of all activity types. Spending time at parks and recreation centres had a motivation pattern similar to hanging out with friends and watching television or movies, although the frequencies of identified motivation, extrinsic motivation, and amotivation were not as extreme.

The remaining activity types tended to have similar profiles of motivation: comparatively high frequencies of identified and extrinsic motivation coupled with comparatively low frequencies of amotivation. This pattern was especially pronounced for volunteer work and sports.

## Discussion

The overall aim of this study was to better understand the free-time context for a group of predominantly mixed-race South African adolescents. The study identified a diverse set of free-time activities via focus groups, and then used both qualitative and quantitative data to determine which activities had the highest frequency of participation and were most commonly discussed. It then used Self-Determination Theory as a framework for exploring motivation within and across activities.

Consistent with previous South African research (Kaufman et al., 2002; Møller, 1992), socializing and media use were fairly popular. Informal dance, going to game shops, and risk behaviours were also popular. Data on the popularity of sports were mixed across the focus group and survey data. It is possible that sports are a highly visible activity in this population, regardless of actual participation rates. Alternatively, given the seasonal nature of sports, it is possible that a student might report participation in a sport during a focus group discussion (in which a time frame for activity involvement was not specified) but not



in the survey (which used a past month time reference). Either way, this suggests that sports are a potentially important activity context for these youth.

Contrary to previous research with other South African populations (Kaufman et al., 2002; Møller, 1992), religious activities were not a popular activity among these focus group participants. It is possible that this finding reflected low participation in religious activities among adolescents in this specific, predominantly Coloured population or that this finding represents a downward trend in religious activity participation among South African youths in general. Alternatively, this finding may be an artefact of how the activity question was posed. The focus group facilitator asked about activities that take place in “free time,” outside of school and chores. However, the data from both focus groups and interviews with school educators indicate that a number of student religious organizations meet during school hours, which may have led to them not being reported in the focus groups. Also, it is possible that participants viewed attendance at non-school religious activities as obligatory rather than freely determined, although no empirical studies have examined this possibility. In short, religious involvement may be a use of time that could not be captured by the methods used in this study. In future quantitative and qualitative studies, researchers might consider asking questions specifically about religious free-time activities.

The second aim of the study was to undertake an exploratory analysis of activity motivation, using Self-Determination Theory as a guiding framework. The use of qualitative data allowed for a rich description of how free-time motivation was and was not manifested in this population. The types of motivation proposed by SDT were all spontaneously mentioned in the focus groups, suggesting that this framework was suitable for application to research with this population. Intrinsic motivation was reported in relation to all discussed activity types, and it included affective experience of intrinsic motivation, challenge, relatedness, competence, and autonomy. Given that theorists from the United States (e.g., Havighurst, 1972) position the achievement of independence from parents as a crucial developmental task of adolescence, it was surprising that achievement of independence from parents was not mentioned specifically as an intrinsic motivation. Some literature suggests that whereas the achievement of autonomy might be a universal task of adolescence, it can be achieved in different ways across cultures. Specifically, an individual might become autonomous while still maintaining physical and emotional proximity to others, including parents (Chirkov et al., 2003; Greenfield, Keller, Fuligni, & Maynard, 2003). Unfortunately, there is a paucity of South African research on changes in family relationships in adolescence and how these might relate to developmental outcomes. Therefore, it is not possible to determine whether it is unusual or problematic for these adolescents not to identify activities as opportunities for achieving independence from parents. However, this represents an opportunity for future research.

Identified motivations included the goals of health/fitness, escape, career, travel, keeping busy, and avoiding risk behaviour. These motivations were discussed in relation to almost all types of activities, and they are consistent with the identified motivations reported in previous research (e.g., Allison et al., 2005; Conway & Rubin, 1991; Omoto & Snyder, 1995; Pedersen, 2002; Reddon et al., 1996). It is encouraging that a number of these goals relate to positive developmental experiences, such as dealing with stress, experiencing new places, and becoming economically self-sufficient. However, a caveat is that goals are context dependent and may not be unilaterally positive for adolescents. It may be that certain goals can promote involvement in risky free-time activities, as when focus group participants discussed substance use as a way of coping with problems and as a way to lose weight. Alternately, certain goals and activities may hinder successful development when they interact. For example, activity-based career goals typically focused on professions in which few individuals succeed, such as professional athlete, professional musician, and

television talk show host. To the degree that adolescents focus on unlikely careers and foreclose exploration of more realistic options, they may not be fully prepared when it is time to enter the adult world.

Introjected motivations were often discussed in relation to performance activities (sports, performing arts) or risk behaviour. These motivations took a number of different and expected forms, including achieving social status and experiencing pressure from peers. Participants also discussed using activities as a means of subordinating others; however, this specific motivation has not been previously documented. One anticipated introjected motivation not mentioned was pressure from parents. It is possible that the questions asked in the focus groups, such as “What do you like about participating in soccer?”, were not conducive to eliciting discussion about parental pressure for activity participation. Alternatively, as with African American families in the U.S. (Lareau, 2002), parents in South Africa may have values that limit the degree to which they structure children’s activity participation. Unfortunately, there is currently a lack of research on how parents influence adolescent free-time use in South Africa. This is another focus area for future studies.

On the infrequent occasions when extrinsic motivation was mentioned, it often took forms that have been documented previously, including trophies, medals, prizes, and money. Focus group participants also discussed less typical extrinsic motivations, including free food and getting out of school. Amotivation was rarely reported in the focus groups.

Focus group participants mentioned gender as a reason for participating in activities, and this motivation was not easily classified within SDT. This suggests that, at a minimum, there may be a need to engage in scholarly discussion about how best to integrate social and cultural norms into the SDT model. Norms could be integrated with one of the existing motivation types, or they could be considered as potential distinct or overarching types of motivation.

The third study aim was to examine relative levels of different types of motivation in free time in general. On the whole, these findings were consistent with the study hypotheses and consistent across both the survey and focus group data. Intrinsic motivation was the most frequently reported motivation type in the focus groups, as well as the type with the highest level of agreement in the survey data. Identified motivation had the next highest scores in both types of data. In the focus groups, frequency of reported motivations continued to be stepped: introjected motivation, followed by extrinsic motivation, and then amotivation being least frequent motivation type. However, in the survey data, the levels of these final three motivation types were statistically equivalent. This discrepancy may suggest that there is a difference between the presence of a motivation (as assessed in the focus groups) and strength of a motivation (as assessed in the survey), although this would require empirical testing.

The fourth study aim was to examine differences in motivation patterns across various activity types. As expected, intrinsic motivation was the most frequently endorsed motivation type for all but two activity types (for the focus groups, listening to music and sleeping) across both forms of data. This included sports, an activity type for which previous studies yielded mixed results on the primacy of intrinsic motivation (Allison et al., 2005; Pedersen, 2002; Tsorbatzoudis et al., 2006). These similarities might be because adolescents tend to join activities for intrinsic reasons or because they only remain in activities where they experience intrinsic motivation. This explanation remains to be examined empirically and might be best explored with intensive longitudinal studies that assess activity selection, retention, and exit processes. Regardless, this finding is encouraging because it suggests that

adolescents can experience intrinsic motivation in a number of different activity contexts. Parents, teachers, and others interested in ensuring that adolescents have rich free-time experiences that promote development do not necessarily need to encourage involvement in specific types of activities.

As mentioned previously, risk behaviour was characterized by many of the same motivations as more pro-social activities. However, risk behaviour was also characterized by a comparatively high number of mentions of introjected motivation. It also was the only activity type for which peer pressure and conformity were discussed. These results are consistent with previous theory and research on social influences on substance use and other risk behaviours (e.g., Ajzen, 1991; Akers, 1977; Palen et al., 2008; Patrick et al., 2010). Risk behaviour has a number of barriers that may be uniquely prominent in this activity type, such as risks of legal consequences, punishment from parents, and health consequences. Perhaps social pressures are important in moving adolescents past these particular barriers to participation. However, one previous study showed that peer conformity is greater for pro-social activities than delinquent activities (Berndt, 1979), which contradicts the present results. More research will be required that directly compares introjected motivation across pro-social activities and risk behaviour to determine whether risk behaviour truly has a unique pattern of motivation.

Hanging out with friends and watching television or movies were unique in being associated with high levels of amotivation in the survey data. It is possible that these activities are less likely to foster conditions or opportunities (e.g., feedback and challenge) that are conducive to the maintenance of more intrinsic forms of motivation (Ryan & Deci, 2000). Alternatively, both of these activities may serve as “default activities,” or ways to use time when participants are not otherwise engaged. This notion is supported by evidence of “passing time” as a motivation for watching television (Conway & Rubin, 1991).

However, in the focus group data, amotivation was not reported in the context of friends or watching television or movies. One possible explanation is that the survey’s activity motivation items necessarily offered a limited range of responses: “I want to,” “I do it for a purpose,” “I feel like I have to,” or “There is nothing else to do.” Having nothing else to do might be a reasonable “default option” for adolescents whose specific motivation was not listed as a possible response. In contrast, the focus group format was conducive to eliciting a broad range of motivations, both because of its open-ended nature and because the facilitator probed for follow-up to responses like “I don’t know” or “just because” that could be construed as amotivation. This may have served to reduce reported amotivation within this assessment format.

### **Limitations and directions for future research**

One potential limitation of this study is that the participants were eighth- and tenth-grade adolescents from four schools in one under resourced area near Cape Town, South Africa. The sample was mostly Coloured, but Coloured individuals make up only 9% of South Africa’s total population (Statistics South Africa, 2003). Thus, it is possible that the results presented here do not generalize to adolescents in other areas of South Africa or the world, or to children or adults outside of the age range studied. In addition, adolescents in this study were participating in a program designed to impact their free-time attitudes and behaviours. It is possible that this program had an impact on reported prevalence of participation or motivation, or on the association between free-time variables. That being said, researchers interested in describing free time and motivation in different populations could, at the very least, use this study to inform research questions, hypotheses, and measurement for use in future empirical work.

Another possible limitation is that the focus groups only included participants proficient in spoken English, despite the fact that some students in Mitchell's Plain speak Afrikaans or Xhosa. However, the benefits of including non-English speakers were outweighed by the time and expense that would have been required to train Afrikaans- and Xhosa-speaking focus group facilitators and to translate written transcripts into English. A multilingual research design also would have introduced facilitator effects that would be necessarily confounded with language effects. In addition, only a minority of adolescents completed the quantitative survey in Afrikaans, implying high English literacy (and therefore high focus group eligibility) in this population.

Finally, there is a need for more research linking motivational experiences to both positive and negative outcomes, especially longitudinally. This information is essential in determining whether and which types of free-time motivation are viable mediators for programs designed to prevent problems or promote well-being among adolescents. The qualitative portion of this study laid the groundwork for further investigation by providing a list of specific activities and motivations that are valid within this population.

In sum, this study offered an inventory of the types of, largely unstructured, activities that characterize the free-time landscape for this group of South African adolescents. It showed that Self-Determination Theory was a reasonable fit to the types of motivations that adolescents identified, and it gave rich, concrete examples of how those motivations were manifested in the free-time context. In general, motivations were not limited to specific types of activities, suggesting that adolescents have a variety of opportunities for positive motivational experiences.

## Acknowledgments

This research was funded by National Institutes of Health (NIH) Grants R01 DA01749, T32 DA017629-01A1, and F31 AA017014-01 (to M. Patrick). The views expressed here are solely those of the authors and do not necessarily reflect the views of NIH. The authors wish to thank Lisa Wegner, Xavier September, and Inshaaf Evans for their assistance in focus group and interview scheduling, participant recruitment, focus group recording, and transcript checking.

## References

- Ajzen I. The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*. 1991; 50:179–211.
- Akers, RL. *Deviant behavior: A social learning approach*. 2. Belmont, CA: Wadsworth; 1977.
- Allison KR, Dwyer JJM, Goldenberg E, Fein A, Yoshida KK, Boutilier M. Male adolescents' reasons for participating in physical activity, barriers to participation, and suggestions for increasing participation. *Adolescence*. 2005; 40(157):155–170. [PubMed: 15861623]
- Baldwin CK, Caldwell LL. Development of the Free Time Motivation Scale for Adolescents. *Journal of Leisure Research*. 2003; 35(2):129–151.
- Berndt TJ. Developmental changes in conformity to peers and parents. *Developmental Psychology*. 1979; 15(6):608–616.
- Caldwell LL, Patrick ME, Smith EA, Palen L, Wegner L. Influencing adolescent leisure motivation: Intervention effects of HealthWise South Africa. *Journal of Leisure Research*. 2010; 42(2):203–220.
- Caldwell LL, Smith EA, Wegner L, Vergnani T, Mpofu E, Flisher AJ, Mathews C. HealthWise South Africa: Development of a life skills curriculum for young adults. *World Leisure*. 2004; 3:4–17.
- Chirkov V, Ryan RM, Kim Y, Kaplan U. Differentiating autonomy from individualism and independence: A Self-Determination Theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*. 2003; 84(1):97–110. [PubMed: 12518973]

- Coatsworth JD, Palen L, Sharp EH, Ferrer-Wreder L. Self-defining activities, expressive identity, and adolescent wellness. *Applied Developmental Science*. 2006; 10(3):157–170.
- Conway JC, Rubin AM. Psychological predictors of television viewing motivation. *Communication Research*. 1991; 18(4):443–463.
- Creswell JW, Miller DL. Determining validity in qualitative inquiry. *Theory into Practice*. 2000; 39(3):124–130.
- Creswell, JW.; Plano Clark, VL. *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage; 2007.
- Deci EL, Ryan RM, Gagné M, Leone DR, Usunov J, Kornazheva BP. Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*. 2001; 27(8):930–942.
- Eccles JS, Barber BL, Stone M, Hunt J. Extracurricular activities and adolescent development. *Journal of Social Issues*. 2003; 59(4):865–889.
- Flammer A, Schaffner B. Adolescent leisure across European nations. *New Directions for Child and Adolescent Development*. 2003; 99:65–77. [PubMed: 12741204]
- Gleeson, SL. Unpublished Master's thesis. The Pennsylvania State University; University Park, PA: 2008. Gender differences in leisure motivation, participation, and constraints for South African adolescents. Retrieved May 28, 2010, from [http://etda.libraries.psu.edu/theses/approved/WorldWideFiles/ETD-2664/Thesis\\_Final.pdf](http://etda.libraries.psu.edu/theses/approved/WorldWideFiles/ETD-2664/Thesis_Final.pdf)
- Greenfield PM, Keller H, Fuligni A, Maynard A. Cultural pathways through universal development. *Annual Review of Psychology*. 2003; 54:461–490.
- Havighurst, RJ. *Developmental tasks and education*. 3. New York: David McKay Company; 1972.
- Hunter JP, Csikszentmihalyi M. The positive psychology of interested adolescents. *Journal of Youth and Adolescence*. 2003; 32(1):27–35.
- Johnson RB, Onwuegbuzie AJ. Mixed methods research: A paradigm whose time has come. *Educational Researcher*. 2004; 33(7):14–26.
- Kaufman, CE.; Clark, S.; Manzini, N.; May, J. *How community structures of time and opportunity shape adolescent sexual behavior in South Africa*. New York, NY: Population Council; 2002.
- Lareau A. Invisible inequality: Social class and childrearing in black families and white families. *American Sociological Review*. 2002; 67:747–776.
- Larson RW. Toward a psychology of positive youth development. *American Psychologist*. 2000; 55(1):170–183. [PubMed: 11392861]
- Larson RW, Verma S. How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*. 1999; 125(6):701–736. [PubMed: 10589300]
- Levesque C, Zuehlke AN, Stanek LR, Ryan RM. Autonomy and competence in German and American university students: A comparative study based on Self-Determination Theory. *Journal of Educational Psychology*. 2004; 96(1):68–84.
- Martin JJ, Cutler K. An exploratory study of flow and motivation in theater actors. *Journal of Applied Sport Psychology*. 2002; 14:344–352.
- McIntosh J, MacDonald F, McKeganey N. The reasons why children in their pre and early teenage years do or do not use illegal drugs. *International Journal of Drug Policy*. 2005; 16:254–261.
- Møller V. Spare time use and perceived well-being among Black South African youth. *Social Indicators Research*. 1992; 26(4):309–351.
- Mullan E, Markland D. Variations in self-determination across the stages of change for exercise in adults. *Motivation and Emotion*. 1997; 21(4):349–362.
- Nastasi BK, Schensul SL. Contributions of qualitative research to the validity of intervention research. *Journal of School Psychology*. 2005; 43:177–195.
- Newberry AL, Duncan RD. Roles of boredom and life goals in juvenile delinquency. *Journal of Applied Social Psychology*. 2001; 31(3):527–541.
- Omoto AM, Snyder M. Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*. 1995; 68(4):671–686. [PubMed: 7738770]

- Palen, L.; Caldwell, LL.; Smith, EA. Profiles of leisure motivation and substance use in the HealthWise South Africa research trial. Paper presented at the annual meeting of the Society for Prevention Research; Washington, DC. 2007.
- Palen, L.; Smith, EA.; Caldwell, LL.; Graham, JW.; Cleveland, M.; Flisher, AJ.; Wegner, L. Adolescent substance use norms in Cape Town, South Africa. Poster presented at the annual meeting of the Society for Prevention Research; San Francisco, CA. 2008.
- Patrick ME, Palen L, Caldwell LL, Gleeson SL, Smith EA, Wegner L. A qualitative assessment of South African adolescents' motivations for and against substance use and sexual behavior. *Journal of Research on Adolescence*. 2010; 20:456–481. [PubMed: 21625403]
- Pedersen DM. Intrinsic-extrinsic factors in sport motivation. *Perceptual and Motor Skills*. 2002; 95:459–476. [PubMed: 12434838]
- Reddon JR, Pope GA, Friel JP, Sinha BK. Leisure motivation in relation to psychosocial adjustment and personality in young offender and high school samples. *Journal of Clinical Psychology*. 1996; 52(6):679–685. [PubMed: 8912111]
- Ryan RM, Deci EL. Self-Determination Theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*. 2000; 55(1):68–78. [PubMed: 11392867]
- Schmidt CP. Relations among motivation, performance, achievement, and music experience variables in secondary instrumental music students. *Journal of Research in Music Education*. 2005; 53(2): 134–147.
- Silverman, D. *Doing qualitative research: A practical handbook*. 2. London: Sage; 2005.
- Smith EA, Caldwell LL. The perceived quality of leisure experiences among smoking and nonsmoking adolescents. *Journal of Early Adolescence*. 1989; 9(1–2):153–162.
- Statistics South Africa. *Census 2001: Census in brief*. 2003. Retrieved March 18, 2008, from <http://www.statssa.gov.za/census01/html/CInBrief/CIB2001.pdf>
- Tsorbatzoudis H, Alexandris K, Zahariadis P, Grouios G. Examining the relationship between recreational sport participation and intrinsic and extrinsic motivation and amotivation. *Perceptual and Motor Skills*. 2006; 103:363–374. [PubMed: 17165399]
- Vallerand RJ. Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in Experimental Social Psychology*. 1997; 29:271–360.
- Vanderlinden J, Grave RD, Vandereycken W, Noorduin C. Which factors do provoke binge-eating? An exploratory study in female students. *Eating Behaviors*. 2001; 2:79–83. [PubMed: 15001052]
- Vazsonyi AT, Pickering LE, Belliston LM, Hessing D, Junger M. Routine activities and deviant behaviors: American, Dutch, Hungarian, and Swiss youth. *Journal of Quantitative Criminology*. 2002; 18(4):397–422.
- Verma, S.; Larson, R. *New Directions for Child and Adolescent Development*. San Francisco: Jossey-Bass; 2003. Examining adolescent leisure time across cultures: Developmental opportunities and risks.
- Walker GJ, Deng J, Dieser RB. Culture, self-construal, and leisure theory and practice. *Journal of Leisure Research*. 2005; 37(1):77–99.
- Waterman AS. Finding someone to be: Studies on the role of intrinsic motivation in identity formation. *Identity*. 2004; 4(3):209–228.
- Weissinger E, Caldwell LL, Bandalos DL. Relation between intrinsic motivation and boredom in leisure time. *Leisure Sciences*. 1992; 14:317–325.
- Witt, PA.; Caldwell, LL. *Recreation and youth development*. State College, PA: Venture Publishing; 2005.
- Zuzanek J. Adolescent time use and well-being from a comparative perspective. *Loisir et Société/ Society and Leisure*. 2005; 28(2):379–423.

**Table 1**

Descriptive information for free-time motivation scales

Scale	Number of items	Sample item	Mean (SD)	$\alpha$
Intrinsic motivation	2	I do what I do in my free time because I want to.	2.86 (.94) <sup>a</sup>	.69
Identified motivation	6	I do what I do in my free time because I develop skills that I can use later in life.	2.60 (.80) <sup>b</sup>	.80
Introjected motivation	3	I do what I do in my free time because I want people to like me.	1.61 (0.97) <sup>c</sup>	.73
Extrinsic motivation	3	I do what I do in my free time because my parents expect me to.	1.65 (1.07) <sup>c</sup>	.81
Amotivation	3	I don't know why I do my free time activities, nothing much interests me.	1.69 (1.03) <sup>c</sup>	.81

Note. Means are significantly different [ $F(4, 4663) = 357, p < .001$ ].

Means with differing superscripts are significantly different from each other at  $p < .05$ .

**Table 2**

Focus group activity mentions by type, with associated participation rates

Activity type	No. of groups in which motivation was mentioned	Total mentions of type across groups	Perceived participation level (%)		
			High	Med.	Low
Sports and physical activities*	15	55	41	39	20
Soccer <sup>d</sup>	15	15	75	25	0
Netball	7	7	25	50	25
Swimming	7	7	57	43	0
Rugby	5	5	0	50	50
Cricket	3	3	0	100	0
Risk behaviour	14	38	42	58	0
Substance use	14	27	40	60	0
Playing musical instrument or singing*	11	12	11	67	22
Pool/game shop	9	10	43	57	0
Other activities	8	14	100	0	0
Watching television/movies*	8	10	100	0	0
Clubbing/informal dancing	8	9	100	0	0
Hanging out with friends*	7	9	100	0	0
Listening to music	7	7	100	0	0
Sleeping	7	7	33	33	33
Spectating (sports, pool, car races)	6	9	50	0	50
Video games/computers	6	8	80	0	20
Shopping/going to mall	6	7	100	0	0
MXit	6	6	100	0	0
Reading	6	6	0	40	60
Adventure/extreme	5	5	0	67	33
Drama or dance group*	4	6	0	33	66
Spending time with romantic partners	4	6	100	0	0
Games	4	4	50	0	50
Going to park or community/sports centre*	4	4	0	0	100



Activity type	No. of groups in which motivation was mentioned	Total mentions of type across groups	Perceived participation level (%)		
			High	Med.	Low
Volunteer work*	2	2	0	0	100
Hobbies or creative activities*	1	1	0	0	100
Religious/spiritual	1	1	-	-	-

Notes:

<sup>a</sup> Only the five most frequently mentioned sports are tabled. All other sports were only mentioned in one or two groups.

\* Activity types that also were measured in survey assessment.

**Table 3**

Participation in free-time activities as reported in quantitative assessment

Activity	Percentage participating in preceding 4 weeks ( <i>N</i> = 946) <sup>1</sup>	Participants' frequency of participation Mean ( <i>SD</i> ) <sup>2</sup>
Watching TV or movies	89 <sup>a</sup>	1.42 (1.03) <sup>a</sup>
Hanging out with friends	70 <sup>b</sup>	1.45 (1.02) <sup>a</sup>
Sports and physical activities	53 <sup>c</sup>	1.00 (0.87) <sup>b</sup>
Playing musical instrument or singing	43 <sup>d</sup>	.94 (1.00) <sup>b,c</sup>
Hobbies or creative activities	42 <sup>d</sup>	.80 (0.87) <sup>c</sup>
Volunteer work	41 <sup>d</sup>	.81 (0.94) <sup>b,c</sup>
Going to a park or community/sports centre	37 <sup>d</sup>	.77 (0.86) <sup>c</sup>
Drama or dance group	24 <sup>e</sup>	.98 (0.87) <sup>b,c</sup>

Notes:

<sup>1</sup>Participation rates are significantly different [ $\chi^2(7) = 1125, p < .001$ ]. Participation rates with differing superscripts are significantly different from each other at  $p < .0018$ . Between 0 and 3 participants were missing responses for each of these items.

<sup>2</sup>Variable was scaled as follows: 0 = less than 1 hour per week, 1 = 1 to 5 hours per week, 2 = 6 to 10 hours per week, 3 = more than 10 hours per week. Means of participation frequency are significantly different [ $F(7, 3743) = 45.3, p < .001$ ]. Participation frequencies with differing superscripts are significantly different from each other at  $p < .05$ .

**Table 4**

Motivation by activity type as reported in focus groups

Activity Type <sup>b</sup>	Number of mentions by motivation type <sup>a</sup>						
	Intrin.	Ident.	Intrroj.	Extrin.	Amotiv.		
Sports and physical activities	36	28	13	5	0		
Risk behavior	7	6	7	0	1		
Playing musical instrument or singing	8	4	3	1	1		
Pool/game shop	6	1	1	1	0		
Watching television/movies	5	1	1	0	0		
Clubbing/informal dancing	3	3	2	1	0		
Hanging out with friends	4	1	0	0	0		
Listening to music	1	2	1	0	0		
Sleeping	1	3	0	0	1		
Spectating	2	0	0	0	0		
Video games/computers	5	2	0	0	1		
Shopping/going to mall	2	2	1	0	0		
MXit	3	1	1	0	0		
Reading	5	4	0	0	0		
Adventure/extreme	3	0	2	1	0		
Drama or dance group	3	0	1	0	0		
Spending time with romantic partners	2	0	0	0	0		
Games	1	1	0	0	0		
Going to a park or community/sports centre	1	1	0	0	0		
Volunteer work	1	1	0	1	0		
Hobbies or creative activities	1	1	0	0	0		

Notes.

<sup>a</sup>Motivation type: Intrin. = intrinsic, Ident. = identified, Intrroj. = introjected, Extrin. = extrinsic, Amotiv. = amotivation.

<sup>b</sup>No motivations for religious activities were discussed.

**Table 5**

Motivation in free-time activities as reported in survey assessment

Activity	N	Percentage of participants reporting motivation		
		“I want to”	“I do it for a purpose”	“I feel like I have to”
Hanging out with friends <sup>a</sup>	659	48	8	10
Watching TV or movies <sup>a</sup>	840	43	8	11
Going to a park or community/sports centre <sup>b</sup>	345	43	18	14
Hobbies or creative activities <sup>b,c</sup>	392	44	19	18
Playing musical instrument or singing <sup>b,d</sup>	405	43	25	15
Drama or dance group <sup>b,d</sup>	226	41	28	15
Volunteer work <sup>c,d</sup>	383	38	26	22
Sports and physical activities <sup>d</sup>	502	37	28	22

Notes. Frequencies are significantly different [ $\chi^2(21) = 381, p < .001$ ].

Activities with differing superscripts are significantly different from each other at  $p < .0018$ .