



Received: 19 December 2014  
Accepted: 04 May 2015  
Published: 08 June 2015

\*Corresponding author: Arun Pratap Singh, Department of Psychology, School of Education, MG International Hindi University, Wardha 442001, Maharashtra, India  
E-mail: [jyotiarun13@gmail.com](mailto:jyotiarun13@gmail.com)

Reviewing editor:  
Peter Walla, University of Newcastle, Australia

Additional information is available at the end of the article

## HEALTH PSYCHOLOGY | RESEARCH ARTICLE

# Pattern of leisure-lifestyles among Indian school adolescents: Contextual influences and implications for emerging health concerns

Arun Pratap Singh<sup>1\*</sup> and Girishwar Misra<sup>2</sup>

**Abstract:** In view of a rampant increase in availability of and access to many health-compromising leisure choices and opportunities in India during the last few decades, this study examines the pattern of leisure practices in a sample of school-going adolescents from rural, urban, and metro regions of North India ( $n = 1,500$ ). Data were collected through an anonymous leisure survey from consenting students. Results show a greater prevalence of the use of electronic media and telecommunication gadgets, reflecting a larger engagement in sedentary activities than in cultural, community, and physically demanding leisure activities. In particular, the students from metro and urban areas reported greater involvement in multiple sedentary activities, while rural adolescents reported greater engagement with watching television, listening to fast music and religious leisure. The results implicate an urgent need for revisiting adolescent health policy and promoting positive leisure education in schools.

**Subjects:** Behavioral Sciences; Development Studies, Environment, Social Work, Urban Studies; Education; Education Policy; Humanities; Sport and Leisure Studies; Sports and Leisure

**Keywords:** adolescent; leisure; TV; Internet; videogame; mobile; sports; religious; health

### ABOUT THE AUTHORS



Arun Pratap Singh

Arun Pratap Singh is an assistant professor at the Department of Psychology, MG International Hindi University. His research interests primarily include adolescent lifestyle and health, human nature, and yoga. He is serving as the deputy coordinator of Youth Development Centre and in-charge of the Department of Psychology at the university.

Girishwar Misra is the vice chancellor of MG International Hindi University, Wardha. He has been a senior Fulbright fellow at Swarthmore College, Philadelphia and University of Michigan, Ann Arbor; and dean, Faculty of Arts, University of Delhi. He has written more than 25 books on cultural and indigenous psychology, health psychology, social psychology, human development, self and identity, and emotions and edited Sixth ICSSR Survey of Psychological Research in India. He edits *Psychological Studies* (published by Springer).

### PUBLIC INTEREST STATEMENT

Indian society is undergoing a rapid flux in environmental, social, and economic arenas. Tradition is waning but is still remaining with modernity. In such a backdrop, there might be emergence of overwhelming critical issues related with school adolescent leisure-lifestyles. Recently, the need for recognizing health-relevant adolescent leisure-lifestyle choices in diverse contexts has been articulated widely. The understanding of contextual variation in leisure-life styles may provide informed choices for health practitioners and policy-makers for effective implementation and improvement of health care education in schools. Therefore, the present study endeavored to study the pattern of leisure engagements among different sections of adolescents divided in demographic categories according to gender, residence, and developmental stage. It noted important health-related implications for leisure-lifestyles.

## 1. Introduction

In the last few decades, the Indian society has been witnessing rapid transformation in the environmental, social, and economic arenas of life under the impact of globalization. It has led to acculturation and waning of traditional institutional arrangements and cultural norms. Concomitant to these changes, the life tasks are being reorganized by the introduction of various time-saving gadgets, home appliances, entertainment devices, and communication instruments (e.g. laptop, mobile, videogames, iPod, iPad, television, and Internet). Taken together, they tend to reorganize the pattern of time use and engagement with physical exercise. A major consequence of this has been the emergence of newer leisure opportunities for the younger people (Ahmed, 2013; Larson & Verma, 1999; Verma & Saraswathi, 2002). With the increase in exposure to powerful technology and media representations coupling with predominance of relatively unattractive learning environments, the younger generation is becoming receptive to a wide variety of commercial products and entertainment activities, many of which are unproductive and sometimes health compromising also (Kansal & Ohri, 2014; Larson, Wilson, Brown, Furstenberg, & Verma, 2002; Singh & Misra, 2012; Singh & Gopalkishna, 2014; Verma & Sharma, 2003). Several researchers and health agencies have expressed alarming concern about the possible adverse impacts of some such leisure practices (Ahmed, 2013; Pillai et al., 2008; Small & Vorgan, 2008; WHO, 2004).

It is generally acknowledged that socio-ecological and cultural contexts play a critical role in determining the choices of leisure activities of school-going adolescents (Feinstein, Bynner, & Duckworth, 2005; Mahoney & Stattin, 2000). The ecological model draws attention to diverse variables, located both in proximal and distal categories, in shaping leisure choices among adolescents (Bronfenbrenner, 1994). The contextual approach to the investigation into leisure can offer a better understanding of leisure education policies and their implementation (Larson et al., 2002). It can also help school health practitioners make informed choices about channelizing adolescent energy for developmentally beneficial leisure-lifestyles (Stebbins, 2011).

In the Indian context, very little empirical analysis has been undertaken to examine the prevalence of leisure-lifestyles (Ahmed, 2013; Archana, 2004; Goel, Roy, Rasania, & Bachani, 2014; Hans, 1994; Khanna & Singh, 2000; Larson & Verma, 1999; Lloyd, Grant, & Ritchie, 2008; Sibal, 1997; Verma & Sharma, 2003; Wadkar, 1998). These efforts have several limitations related to settings and coverage (Kapur, 1992; Rangnathan, 2003; Singh & Misra, 2012; Singh & Gopalkrishna, 2014).

Being a developing country, India evinces substantial regional variations in opportunities, degree of exposure to media, extent of family support, and extent of peer pressure. This makes it imperative to adopt a contextual investigation into leisure-lifestyles. To this end, the ecological continuum ranging from rural (village) to metro setting was considered pertinent. These settings varied in the degree of complexity of the environment. Thus, schools running in rural, urban, and metro settings presented three different developmental ecological contexts. The rural setting was characterized by traditional ethos, agrarian economic organization, and limited opportunities for social mobility. The urban setting being relatively less industrialized offered a transitional stage. Finally, the metro setting had a fast pace of life, technologically advanced, and a relatively mechanized functioning in various aspects.

Against this backdrop, the present work ventured at exploring engagement in a comprehensive set of leisure activities (e.g. sedentary, physically active sports, games, cultural, community, and religious activities) among school adolescents across multiple socio-ecological and cultural settings. Taking into account the complexity of task, three related objectives were identified. First, it tried to identify the prevalence of various types of leisure activities among school-going adolescents. Second, it examined gender differences in adolescent leisure time activities. Third, it aimed at analyzing the pattern of leisure time activities across early, middle, and late adolescence stages of development.

In view of the variation in opportunity structure across ecological context, gendering of preferences in leisure time activities, and differential developmental significance of leisure time activities, it was expected that there would be significant differences in the endorsement of leisure time activities with reference to gender, ecological setting, and developmental stage.

## 2. Method

### 2.1. Participants

Initially, 1,590 adolescents enrolled in 7th–12th grades at 17 schools located in three residential settings, that is, Delhi (metro city and capital of India), Lucknow (an urban city and capital of Uttar Pradesh State, a north Indian state), and Kaisarganj (rural setting, a block of rural area of Uttar Pradesh) were approached by the first researcher in the school setting. Out of this, 90 (5.92%) refused to participate; hence, only 1,500 (94.08%) adolescents participated in the survey. Their age ranged between 12 and 18 years ( $M_{\text{male age}} = 14.89$ ;  $SD = 1.89$ ). There was an equal participation of boys and girls from rural, urban, and metro socio-ecological settings. With regard to age range, the participation of late adolescents ( $n_{\text{late adolescent}} = 225$ ) was lesser than early ( $n_{\text{early adolescent}} = 817$ ) and middle adolescent groups ( $n_{\text{middle adolescent}} = 458$ ) due to engagement of senior secondary students in annual examination in some schools. The description of the sample is shown in Table 1.

### 2.2. Measures

#### 2.2.1. Adolescent leisure survey (ALS)

This measure was developed on the basis of observations and realizations derived from a pilot study which was aimed at understanding the experiences of adolescents and a careful scrutiny of the existing measures in consultation with developmental psychologists and school counselors. Through a pre-test on a small sample of adolescents ( $n = 50$ ), the measure was scrutinized and improved. Its internal consistency was of moderate level ( $\alpha = .65$ ). The temporal stability of ALS after a period of three months was estimated at .82.

In total, there were 29 items in ALS. They dealt with four areas: sports and games, religious leisure, sedentary leisure, and cultural and community participation. Twelve items were related to frequency of engagement in swimming, walking, racing, cycling, jogging, playing table tennis, badminton, golf, football, hockey, cricket, martial arts or karate, and traditional games such as khokho or kabaddi. Six items assessed participation in religious behaviors (i.e. chanting divine syllables, attending religious congregations, visiting religious places, performing meditation, listening to spiritual hymns, and reading scriptures). Six items evaluated the frequency of involvement in the use of the Internet, TV watching, videogames, mobile chatting, bike riding, and listening to fast music. Five items were related to the number of times of listening to classical music, dancing, reading of newspapers and novels, and participation in cultural activities and Scout/National Cadet Core (NCC). The participants had to indicate engagement in the activity in a usual week. They were asked to endorse one of the five response options ranging from *never*, *through 1–2 times in a week*, *3–4 times in a week*, *5–6 times in a week*, and *more than 6 times in a week*.

**Table 1. Contextual characteristics of sample (N = 1,500)**

Variables	Boys (n = 750)			Girls (n = 750)		
	Rural N (%)	Urban N (%)	Metro N (%)	Rural N (%)	Urban N (%)	Metro N (%)
Age group						
12–14	1,131 (52.4%)	174 (69.6%)	162 (64.8%)	96 (38.4%)	102 (40.8%)	152 (60.8%)
15–16	86 (34.4%)	63 (25.2%)	50 (20%)	83 (33.2%)	125 (50%)	51 (20.4%)
17–18	33 (13.2%)	13 (5.2%)	38 (15.2%)	71 (28.4%)	23 (9.2%)	47 (18.8%)

### 2.3. Procedure

The protocol of the study was approved by Departmental Research Committee of Department of Psychology, University of Delhi, and permission of the principal of the school was obtained before conducting the study. According to the protocol, students were approached in a classroom setting after taking permission from school authorities. Students were explained about the purpose of the study and the voluntary nature of participation. They were also informed about their freedom to withdraw from the process of data collection at any time without giving any reason. Written informed consent was obtained from the participants. After obtaining responses, students were thanked for their cooperation. Strict confidentiality was maintained during the process of data collection, entry, and analysis.

### 3. Results

Data were analyzed using Windows SPSS version 16.0. Initially, relevant descriptive statistics were computed to understand the prevalence of different leisure time activities. Further, the contextual pattern of leisure time use among different segments of participants of the study, the mean scores for each component of the measure were subjected to separate  $3 \times 2 \times 3$  between-group factorial ANOVAs with three levels of setting, two gender categories and three age groups. Post hoc mean comparisons were run to decipher the trends across residential settings and age groups. For want of space, only the significant trends are presented and complete details may be obtained from the first author.

#### 3.1. Prevalence of leisure time activities

Figure 1 illustrates that participants spent more time in sedentary and religious activities than they did in sports and games, cultural, and community service activities, except cycling, racing, and walking. More than half of the participants reported sedentary involvement (i.e. bike riding, mobile chatting, Internet, fast music, videogames, watching TV/cinema). About one-third of the participants reported engagement in cultural activities, different types of sports, games, or other physical activities. Finally, only one-fifth of them were engaged in community or professional activities (i.e. scout/NCC, job work). However, walking, cycling, racing, and reading newspapers were also reported as salient activities during leisure time. It was interesting to see that religious behaviors were commonly practiced by the participants.

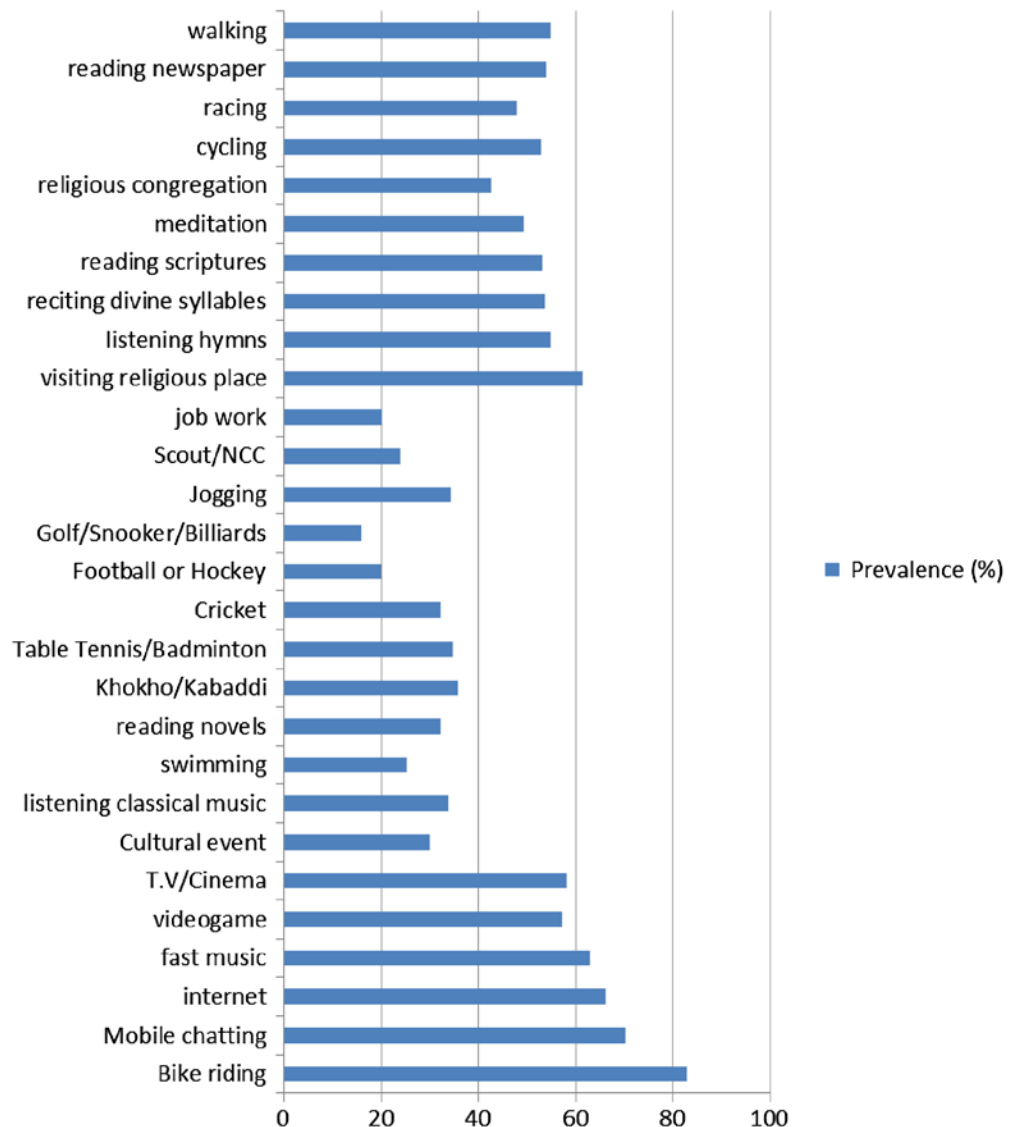
#### 3.2. Significant patterns across groups

The analysis of main effects of gender, residential setting, and age group for different leisure time activities and subsequent *post hoc* analysis yielded specific patterns of leisure time activities among different sections and sub-sections of participants (as given in Table 2). These patterns have been analyzed as follows.

Female adolescent participants reported a lesser frequency of involvement in physically demanding leisure (i.e. walking, racing, cycling, jogging, table tennis, badminton, and *kabaddi*), scout/NCC volunteering but more of surfing the Internet, playing videogames, religious behaviors, dancing, and practicing martial arts/karate. On the contrary, boys indicated more preference for listening to fast music, participation in active leisure such as walking, racing, cycling, playing table tennis, jogging, playing traditional games, martial arts or karate, scout/NCC volunteering, but lesser participation in dancing and religious leisure activities such as reciting divine syllables and listening to hymns during free time.

Rural adolescent participants displayed greater watching of TV/cinema, listening to fast music, involvement in religious behaviors but lesser practice of different types of sports and games in comparison with adolescent participants from other two residential settings and comparably little cultural participation than metro adolescent participants but not significantly different from urban ones. Urban adolescent participants' leisure time was distinguished by a greater use of the Internet than their counterparts from other two more playing of videogames, listening to fast music but less cultural participation, participation in Scout/NCC, and racing in comparison to metro adolescents but

**Figure 1. Prevalence of leisure time activities among Indian school adolescents (N = 1,500).**



not significantly different from rural adolescents, however significantly less religious involvement in particular ways (i.e. reciting mantra, attending satsanga, meditation, and reading scriptures) than rural adolescents. Metro participants' leisure time use was featured by greater practice of racing, listening to classical music, cultural participation, dancing, jogging, playing table tennis, martial arts, and scout /NCC than participants from rural and urban settings, and larger involvement in playing videogames, Internet use, visiting religious places but less practice of other religious behaviors (i.e. reciting mantra, attending satsanga, and listening to hymns) in comparison to rural adolescents but not significantly different from urban adolescents. However, chatting on mobile and visiting religious places were commonly prevalent among participants across residential settings.

Early age-group adolescent participants were greatly engaged in watching TV/Cinema, practicing religious behaviors (i.e. visiting religious places, meditation), racing, cycling, dancing, jogging, playing khokho/kabaddi, or doing some job work but in less of playing football or hockey, traditional games (i.e. khokho or kabaddi), martial arts or karate than other counterparts in different age groups and played videogames, did chatting on mobile more than late adolescents but not significantly different from middle adolescent age group however they reported than other adolescent participants. The middle age-group adolescent group's leisure life was characterized by a higher use of the

**Table 2. Summary of ANOVA main effects for leisure-lifestyle among Indian school adolescents (N = 1,500)**

Leisure-lifestyle variables	Residential setting						Gender			Age				
	Rural	Urban	Metro	MS	F <sub>(2,1497)</sub>	Boys	Girls	MS	F <sub>(1,1498)</sub>	12-14	15-16	17-18	MS	F <sub>(2,1497)</sub>
Surfing the Internet	1.19 <sup>a</sup>	3.30 <sup>b</sup>	2.67 <sup>c</sup>	346.07	180.08 <sup>***</sup>	2.1 <sup>a</sup>	2.60 <sup>b</sup>	75.15	39.10 <sup>***</sup>	2.35 <sup>a</sup>	2.54 <sup>b</sup>	2.20 <sup>c</sup>	9.25	4.81 <sup>**</sup>
Watching TV/cinema	2.22 <sup>a</sup>	1.71 <sup>b</sup>	1.76 <sup>b</sup>	31.39	15.18 <sup>***</sup>	2.0	1.77	2.70	1.30	2.01 <sup>a</sup>	1.80 <sup>b</sup>	1.67 <sup>b</sup>	18.98	9.18 <sup>***</sup>
Videogame	.82 <sup>a</sup>	2.61 <sup>b</sup>	2.50 <sup>b</sup>	368.84	208.77 <sup>***</sup>	1.87 <sup>a</sup>	2.08 <sup>b</sup>	10.59	5.99 <sup>*</sup>	2.07 <sup>a</sup>	2.02 <sup>b</sup>	1.52 <sup>b</sup>	8.74	4.95 <sup>**</sup>
Chatting on mobile	2.49	2.40	2.42	4.71	2.47	2.47	2.40	1.85	.97	2.56 <sup>a</sup>	2.42 <sup>a</sup>	2.00 <sup>b</sup>	28.17	14.75 <sup>***</sup>
Listening to fast music	2.49 <sup>a</sup>	2.19 <sup>b</sup>	2.00 <sup>b</sup>	22.25	9.48 <sup>***</sup>	2.40 <sup>a</sup>	2.05 <sup>b</sup>	21.03	8.96 <sup>**</sup>	2.25	2.27	2.05	3.54	1.51
Walking	1.96 <sup>ab</sup>	2.08 <sup>b</sup>	7.80	3.23 <sup>*</sup>	2.00	1.85	20.19	8.36 <sup>**</sup>	1.93	1.84	2.08	5.64	2.33	1.73 <sup>a</sup>
Racing	1.43 <sup>a</sup>	1.60 <sup>a</sup>	1.97 <sup>b</sup>	7.23	3.23 <sup>*</sup>	1.88	1.45	65.13	29.09 <sup>***</sup>	1.90 <sup>a</sup>	1.38 <sup>b</sup>	1.38 <sup>b</sup>	29.38	13.12 <sup>***</sup>
Cycling	1.72 <sup>a</sup>	2.03 <sup>b</sup>	1.97 <sup>b</sup>	.90	.37	2.17	1.64	58.74	24.21 <sup>***</sup>	2.09 <sup>a</sup>	1.70 <sup>b</sup>	1.68 <sup>b</sup>	19.46	8.02 <sup>***</sup>
Cultural participation	.84 <sup>a</sup>	.98 <sup>a</sup>	1.43 <sup>b</sup>	23.67	14.81 <sup>***</sup>	1.16	1.01	2.10	1.31	1.14 <sup>a</sup>	.90 <sup>b</sup>	1.23 <sup>a</sup>	5.35	3.34 <sup>*</sup>
Listening to classical music	.87 <sup>a</sup>	1.15 <sup>b</sup>	1.48 <sup>c</sup>	33.88	18.53 <sup>***</sup>	1.15	1.19	1.67	.91	1.15	1.11	1.35	5.97	3.26 <sup>*</sup>
Dancing	.96 <sup>a</sup>	1.35 <sup>b</sup>	1.88 <sup>c</sup>	71.55	37.86 <sup>***</sup>	1.24	1.55	28.35	15.00 <sup>***</sup>	1.54 <sup>a</sup>	1.16 <sup>b</sup>	1.35 <sup>ab</sup>	12.86	6.80 <sup>**</sup>
Jogging	.65 <sup>a</sup>	1.38 <sup>b</sup>	1.69 <sup>c</sup>	82.00	44.92 <sup>***</sup>	1.33	1.15	9.74	5.34 <sup>*</sup>	1.44 <sup>a</sup>	1.05 <sup>b</sup>	.89 <sup>b</sup>	13.17	7.21 <sup>**</sup>
Table tennis or badminton	.78 <sup>a</sup>	1.26 <sup>b</sup>	1.52 <sup>c</sup>	50.34	26.14 <sup>***</sup>	.82	.27	29.97	77.71 <sup>***</sup>	.62 <sup>a</sup>	.46 <sup>b</sup>	.48 <sup>b</sup>	27.69	.32
Football or hockey	.44 <sup>a</sup>	.84 <sup>b</sup>	.86 <sup>b</sup>	21.23	5.39 <sup>**</sup>	.86	.66	127.09	1.95	.71 <sup>a</sup>	.74 <sup>b</sup>	.95 <sup>b</sup>	7.41	4.80 <sup>**</sup>
Cricket	.74 <sup>a</sup>	1.01 <sup>b</sup>	1.10 <sup>b</sup>	14.97	14.35 <sup>***</sup>	1.79	2.00	567.41	.08	1.77 <sup>a</sup>	2.00 <sup>b</sup>	2.12 <sup>c</sup>	3.86	11.20 <sup>***</sup>
Khokho or kabaddi	1.08 <sup>a</sup>	1.27 <sup>ab</sup>	1.38 <sup>b</sup>	4.38	18.14 <sup>***</sup>	1.08	.70	7.79	20.69 <sup>***</sup>	.93 <sup>a</sup>	.79 <sup>b</sup>	.75 <sup>b</sup>	10.66	.92
Marial arts or Karate	.29 <sup>a</sup>	.55 <sup>b</sup>	.80 <sup>c</sup>	26.28	21.06 <sup>***</sup>	3.1	3.45	78.11	17.90 <sup>***</sup>	3.09 <sup>a</sup>	3.53 <sup>b</sup>	3.53 <sup>ab</sup>	.32	4.65 <sup>**</sup>
Some job work	.60 <sup>a</sup>	.79 <sup>ab</sup>	.88 <sup>b</sup>	8.34	12.55 <sup>***</sup>	2.51	2.19	3.02	1.84	2.49 <sup>a</sup>	2.17 <sup>ab</sup>	2.19 <sup>b</sup>	7.41	3.77 <sup>**</sup>
Reading newspapers	1.71 <sup>a</sup>	2.10 <sup>b</sup>	1.87 <sup>b</sup>	35.39	39.39 <sup>***</sup>	4.31	4.50	.19	3.56	4.34 <sup>a</sup>	4.63 <sup>b</sup>	4.17 <sup>b</sup>	27.64	6.24 <sup>**</sup>
Scout/NCC volunteering	.75 <sup>a</sup>	.74 <sup>a</sup>	1.18 <sup>b</sup>	30.11	10.33 <sup>***</sup>	2.74	2.27	34.34	23.84 <sup>***</sup>	2.64	2.27	2.47	1.53	6.14 <sup>**</sup>

Note: Mean values with different superscript letters differ significantly in Tukey's significant difference comparison.

\*Level of significance at  $p < .05$ .

\*\*Level of significance at  $p < .01$ .

\*\*\*Level of significance at  $p < .001$ .



Internet in comparison to other adolescents age-group participants and showed less religious involvement (i.e. visiting religious places, meditation), physically active leisure (i.e. racing, cycling, jogging, table tennis, badminton), cultural activities (i.e. dancing), job work, scout/NCC volunteering than early adolescents. The late adolescent group's (17–18 years) leisure engagement was marked by significantly more of listening to classical music, playing football than their counterparts but less of religious involvement (i.e. visiting religious places, meditation), active leisure (i.e. racing, cycling, table tennis, badminton, etc.), scout/NCC volunteering than early age-group adolescent but not significantly more than middle age-group adolescent participants.

Rural female participants reported lesser involvement in playing cricket ( $M = 0$ ;  $F_{(3, 1497)} = 3.37$ ,  $p < .001$ ), traditional games such as kabaddi ( $M = .84$ ;  $F_{(3, 1497)} = 5.48$ ,  $p = .004$ ), cycling ( $M = 1.20$ ;  $F_{(3, 1497)} = 11.36$ ,  $p < .001$ ), some job work ( $M = .36$ ;  $F_{(3, 1497)} = 9.98$ ,  $p < .001$ ) than their counterparts from urban and metro settings. Moreover, rural boys reported significantly more frequent TV watching ( $F_{(3, 1497)} = 11.68$ ,  $p < .001$ ), practice of religious behaviors such as visiting religious places ( $M = 4.02$ ;  $F_{(3, 1497)} = 9.67$ ,  $p < .001$ ), reading scriptures ( $M = 4.22$ ;  $F_{(3, 1497)} = 8.24$ ,  $p < .001$ ), attending satsanga ( $M = 3.82$ ;  $F_{(3, 1497)} = 10.08$ ,  $p < .001$ ), listening to fast music ( $F_{(3, 1497)} = 4.09$ ,  $p = .03$ ) but least of walking ( $M = 1.56$ ;  $F_{(3, 1497)} = 6.69$ ,  $p < .001$ ) than their counterparts from urban and metro settings. Older adolescent girls participated least in games such as table tennis ( $M = .59$ ;  $F_{(4, 1496)} = 3.00$ ,  $p = .04$ ), football or hockey ( $M = .18$ ;  $F_{(4, 1496)} = 3.84$ ,  $p = .03$ ), racing ( $M = 1.07$ ;  $F_{(4, 1496)} = 3.89$ ,  $p = .02$ ), and walking ( $M = 1.95$ ;  $F_{(4, 1496)} = 4.65$ ,  $p = .005$ ) but greatly engaged in surfing the Internet ( $M = 2.53$ ;  $F_{(4, 1496)} = 6.68$ ,  $p < .001$ ) than other adolescents.

#### 4. Discussion

This study sought to investigate the overall prevalence of leisure time activities and their patterning among school-going adolescents' diverse groups. The results indicated a substantially greater engagement in sedentary leisure particularly Internet use, mobile chatting, and surfing on social networking sites and reduced participation in community, physical, and cultural activities with popularity of chatting on mobile across segments of participants. The study showed persistence of gender-specific leisure engagements such as dancing and religious leisure among girls in rural areas but sports and games among boys across residential settings with certain exceptions in metro schools (Goel et al., 2014; Khanna & Singh, 2000; Larson & Verma, 1999; Lloyd et al., 2008; Sandhu & Mehrotra, 1999).

There might be three important factors for the vast gender differences in the practice of leisure time activities (Ram, Strohschein, & Gaur, 2014). First, female child-rearing practices in rural areas have been traditionally focused on developing an interdependent and even sacrificial self as part of efforts to prepare them for their future roles as daughters-in-law, wives, and mothers. Second, their gender identity has been construed to be more strongly related to home-based activities. Third, gender disparities may stem from the differences in alternative ways of spending time outside the school. Therefore, as girls mature, their lives become increasingly restricted to their homes. However, with greater access to educational facilities and urbanization, girls are beginning to assert for autonomy in opting for modern choices of living as displayed in findings regarding use of the Internet and playing videogames among metro and urban girls (Sandhu & Mehrotra, 1999; Verma & Sharma, 2003).

The present findings reflect segregation and sharing both in features of leisure time use among participants from rural, urban, and metro residential settings. Urban adolescents' pattern of leisure-lifestyles reflects transitional state of choices with similarity in the extent of cultural participation, doing job work, scout/NCC participation with rural adolescents but not different from metro participants in listening to fast music, cycling, playing football or hockey, cricket, khokho/kabaddi, and job work. Rural adolescent participants' pattern of leisure indicates transgression of traditional boundaries of leisure by urbanization and industrialization. Despite similarity in practice of certain sedentary leisure with urban segment of adolescents, metro adolescent participants seem to increase their awareness for a healthy leisure time use as reflected in the findings related to greater practice of

ancing, cultural participation, and scout/NCC health among them. It seems efforts by different governmental and non-governmental agencies through different channels of media are inducing a positive impetus.

Multiple sociocultural and environmental alterations including an array of distal and proximal factors seem to explain adolescents' leisure choices reflecting greater consumerism and diminished self-regulation. The distal (e.g. gender-linked choices, socioeconomic differences, the level of media exposure) and proximal factors such as interactions with parents, teachers, and peers seem to differ across residential settings. It seems that the proliferation of opportunities for sedentary leisure through mall culture, powerful presence of models in media, and rise in the economic status of parents seem to influence sedentary leisure time activities in the metro and urban settings. Expansion of infrastructure, transgression of rural territories, and industrialization might be narrowing the rural-urban divide. The reports on the lack of involvement in sports and games and cultural activities among older adolescents seem to reflect the influence of increased peer relationship and thinning of close ties with family. The older adolescents might be undergoing increased potential for clash between continuing role of parents and friends as a major source of advice. In the context of increasing assertion of autonomy, change in the pattern of leisure time is becoming inevitable.

#### **4.1. Emerging health concerns**

Along with sharing of some leisure time activities, results have also indicated the possibility of emergence of segregated concerns due to greater TV viewing and listening to fast music among rural boys; higher involvement in Internet use, mobile chatting, and playing videogames among urban adolescents; and least participation in physically demanding leisure among older metro adolescents. Several cognitive and emotive concerns among Indian adolescents may be differentially ensuing in these different segments of adolescents (Strasburger, Jordan, & Donnerstein, 2010). Urban and metro adolescents may have the opportunity for viewing/downloading pornographic and violent materials or sending explicit sexual photographs or messages which can lead to harassment or experience of being bullied and transgressing sexual norms (Brown & L' Engle, 2009; Ybarra & Mitchell, 2007; Ybarra et al., 2008). They may also be prone to invading the privacy and indulging in cybercrimes (DiMaggio, Hargittai, Neuman, & Robinson, 2001).

Crude exposure to violence through TV may negatively influence cognitive and emotional developments of rural adolescents. Problems such as low creativity (Vandewater, Bickham, & Lee, 2006), body image concerns (Strasburger et al., 2010), and problems in physical and social developments (Caldwell, 2008) cannot be ruled out. Portrayals of sexual encounters in TV serials through legitimate or illegitimate means may be inducing alternative attitudes and norms leading to sexual obsessions (Baya & Mberia, 2014). TV viewing does not affect badly only during the period of adolescence, but has been found to be associated with antisocial behavior in early adulthood (Robertson, McAnally, & Hancox, 2013). Remaining couched in front of TV for long hours has also been found to be a strong predictor of obesity (Viner & Cole, 2005).

Videogames, most of which are violent (Anderson, Gentile, & Buckley, 2007), may encourage aggression, antisocial beliefs and behaviors, and loss of interest in community involvement resulting in a low level of social well-being among early urban adolescents (Larson et al., 2002). A compelling body of evidence on effects of excessive mobile use points to the emergence of several serious health risks including growth of brain tumors (Frei et al., 2011), damage to the blood-brain barrier (Eberhardt, Persson, Brun, Salford, & Malmgren, 2008), and serum melatonin production resulting in sleep problems (Srivastava & Saxena, 2014). Bike riding, which has been found as widely popular among participants, may have many health implications. Indian roads, which are often full of pedestrians, animal-drawn vehicles, bicycles, motorcycles, cars, buses, and trucks, may make adolescents vulnerable to accidents (Ravikumar, 2013).



Despite several serious implications for emergence of health concerns among adolescents, the present findings have indicated the existence of some opportunities in leisure involvement among school adolescents. In view of the extensive use of media leisure, there is possibility for enhancing empathy, social connectedness, and developing academic competence by airing educational programs on TV channels and using mobile devices for executing weight-loss intervention programs (Hogan & Strasberger, 2008; Linebarger & Walker, 2005; Lyzwinski, 2014). Media can provide information for fostering awareness for several safe health practices. By increasing the practice of extra-curricular activities during leisure time, adolescents can improve academic performance, psychological well-being, social support through community involvement, and self-esteem through networking with teachers and peers (Fischer, Radisch, & Schupbach, 2014). If leisure time activities are performed in self-defining and expressive ways (related to goals or fostering flow experience), there would be a greater possibility of experiencing well-being and developing internal assets (Coatsworth, Palen, Sharp, & Ferrer-Wreder, 2006) and in turn strengthening identity, academic achievement, initiative, and competence. However, in the case of decreased parental control, increased importance of and access to peers, leisure time may provide opportunities for engaging in multiple risk behaviors (see Strasburger et al., 2010).

The study does provide a pointer toward the dismal scenario of healthy leisure time activities among Indian school adolescents; however, the results need to be interpreted with caution. Due to voluntary participation, there could have been biases in sample selection. In addition, owing to the self-reported nature of data, some cognitive and affective issues related to leisure could not be explored. In-depth studies are essential to examine how several aspects of surroundings and society shape different types of leisure habits? How Internet use might be affecting cognitive processing in adolescent minds? To what extent each leisure activity does contribute to health problems in mediation or moderation of some other relevant aspects? How religious leisure can be invoked in leisure time for promoting wellness among metro and urban adolescents? (Caldwell, 2008; Hutchinson & Kleiber, 2011; Mannell, 2007)

## 5. Conclusion

The present study provides a snap of emerging scenario of leisure time activities in different segments of adolescents. It indicates the continuance of influence of traditional gender roles, narrowing of rural-urban divide, and several implications for leisure time use among Indian school adolescents for their health and well-being. In view of relevance of leisure time use to health, we need to acknowledge that leisure time is developmentally a valuable activity, and therefore it should be utilized to acquire and enhance competencies and wellness and not for burdening with health problems.

### Funding

The authors received no direct funding for this research.

### Competing Interests

The authors declare no competing interests.

### Author details

Arun Pratap Singh<sup>1</sup>

E-mail: [jyotiarun13@gmail.com](mailto:jyotiarun13@gmail.com)

Girishwar Misra<sup>2</sup>

E-mail: [misragirishwar@gmail.com](mailto:misragirishwar@gmail.com)

<sup>1</sup> Department of Psychology, School of Education, MG International Hindi University, Wardha 442001, Maharashtra, India.

<sup>2</sup> MG International Hindi University, Wardha 442001, Maharashtra, India.

### Citation information

Cite this article as: Pattern of leisure-lifestyles among Indian school adolescents: Contextual influences and implications for emerging health concerns, Arun Pratap Singh & Girishwar Misra, *Cogent Psychology* (2015), 2: 1050779.

### References

- Ahmed, M. D. (2013). Comparative study of well-being, thought control, academic achievement and health related physical fitness of active and inactive adolescent school students. *International Leisure Review*, 2, 135–156. doi:10.6298/ILR.2013.2.2
- Anderson, C. A., Gentile, D. A., & Buckley, K. E. (2007). *Violent video game effects on children and adolescents*. New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780195309836.001.0001>
- Archana, P. V. (2004). *A study of health related behaviors among adolescents* (Unpublished MSc project). University of Madras, Chennai.
- Baya, S. Y., & Mberia, H. K. (2014). Impact of television viewing in influencing adolescent sexual behavior. *International Journal of Scientific and Research Publications*, 4(5), 1–4.
- Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education* (2nd ed., Vol. 3). Oxford: Elsevier. Reprinted in M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (2nd ed., 1993, pp. 37–43). New York, NY: Freeman.

- Brown, J. D., & L'Engle, K. L. (2009). X-rated: Sexual attitudes and behaviors associated with us early adolescents' exposure to sexually explicit media. *Communication Research*, 36, 129–151.  
<http://dx.doi.org/10.1177/0093650208326465>
- Caldwell, L. L. (2008). Adolescent development through leisure: A global perspective. *World Leisure Journal*, 50, 3–17.  
doi:10.1080/04419057.2008.9674523
- Coatsworth, J. D., Palen, L. A., Sharp, E. H., & Ferrer-Wreder, L. (2006). Self-defining activities, expressive identity, and adolescent wellness. *Applied Developmental Science*, 10, 157–170.  
[http://dx.doi.org/10.1207/s1532480xads1003\\_5](http://dx.doi.org/10.1207/s1532480xads1003_5)
- DiMaggio, P., Hargittai, E., Neuman, W. R., & Robinson, J. P. (2001). Social implications of the internet. *Annual Review of Sociology*, 27, 307–336.  
<http://dx.doi.org/10.1146/annurev.soc.27.1.307>
- Eberhardt, J. L., Persson, B. R., Brun, A. E., Salford, L. G., & Malmgren, L. O. (2008). Blood-brain barrier permeability and nerve cell damage in rat brain 14 and 28 days after exposure to microwaves from GSM mobile phones. *Electromagnetic Biology and Medicine*, 27, 215–229.  
doi:10.1080/15368370802344037
- Feinstein, L., Bynner, J., & Duckworth, K. (2005). *Leisure contexts in adolescence and their effects on adult outcomes*. London: Centre for Research on Wider Benefits of Learning, Institute of Education. Retrieved from <http://eprints.ioe.ac.uk/5967/2/Feinstein2005leisure.pdf>
- Fischer, N., Radisch, F., & Schupbach, M. (2014). International perspective on extracurricular activities: Conditions of effects on student development, communities and schools-Editorial. *Journal for Educational Research Online*, 6, 5–9.
- Frei, P., Poulsen, A. H., Johansen, C., Olsen, J. H., Steding-Jessen, M., & Schuz, J. (2011). Use of mobile phones and risk of brain tumours: Update of Danish cohort study. *British Medical Journal*, 343, 1–9.
- Goel, M. K., Roy, P., Rasanias, S. K., & Bachani, D. (2014). A cross-sectional study on leisure time management and physical activity index among female adolescent medical students in Delhi. *Indian Journal of Youth and Adolescent Health*, 1, 18–26.
- Hans, G. (1994). Lifestyle education for student youth: Need and strategy. *The Indian Journal of Social Work*, LV, 25–39.
- Hogan, M. G., & Strasberger, V. C. (2008). Media and prosocial behaviour in children and adolescents. In I. Nucci & D. Narvaez (Eds.), *Handbook of Moral and Character Education* (pp. 537–553). Marwah, NJ: Lawrence Erlbaum.
- Hutchinson, S. L., & Kleiber, D. A. (2011). Gifts of the ordinary: Casual leisure's contributions to health and well-being. *World Leisure Journal*, 47, 2–16.
- Kansal, O. P., & Ohri, P. (2014). Adolescents: A key pivotal in India's health strategy. *Indian Journal of Youth and Adolescent Health*, 1, 48–55.
- Kapur, M. (1992). School mental health in India. In S. Malhotra, A. Malhotra, & V. K. Sharma (Eds.), *Child mental health in India* (pp. 179–188). Delhi: Macmillan.
- Khanna, N., & Singh, J. (2000). A study of leisure time utilization by students in Delhi. *Journal of Educational Research and Extension*, 37(1), 1–11.
- Larson, R., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*, 125, 701–736.  
<http://dx.doi.org/10.1037/0033-2909.125.6.701>
- Larson, R. W., Wilson, S., Brown, B. B., Furstenberg, Jr., F. F., & Verma, S. (2002). Changes in adolescents' interpersonal experiences: Are they being prepared for adult relationships in the twenty-first century? *Journal of Research on Adolescence*, 12, 31–68.  
<http://dx.doi.org/10.1111/1532-7795.00024>
- Linebarger, D. H., & Walker, D. (2005). Infants' and toddlers' television viewing and language outcomes. *American Behavioral Scientist*, 48, 624–645.  
<http://dx.doi.org/10.1177/0002764204271505>
- Lloyd, C. B., Grant, M. J., & Ritchie, A. (2008). Gender differences in time use among adolescents in developing countries: Implications of rising school enrollment rates. *Journal of Research on Adolescence*, 18, 99–120.  
<http://dx.doi.org/10.1111/jora.2008.18.issue-1>
- Lyzwinski, L. N. (2014). A systematic review and meta-analysis of mobile devices and weight loss with an intervention content analysis. *Journal of Personalized Medicine*, 4, 311–385.  
<http://dx.doi.org/10.3390/jpm4030311>
- Mahoney, J. L., & Stattin, H. (2000). Leisure activities and adolescent antisocial behavior: The role of structure and social context. *Journal of Adolescence*, 23, 113–127.  
<http://dx.doi.org/10.1006/jado.2000.0302>
- Mannell, R. C. (2007). Leisure, health and well-being. *World Leisure Journal*, 49, 114–128.  
doi:10.1080/04419057.2007.9674499
- Pillai, A., Patel, V., Cardozo, P., Goodman, R., Weiss, H. A., & Andrew, G. (2008). Non-traditional lifestyles and prevalence of mental disorders in adolescents in Goa, India. *The British Journal of Psychiatry*, 192, 45–51.  
doi:10.1192/bjp.bp.106.034223
- Ram, U., Strohschein, L., & Gaur, K. (2014). Gender socialization: Differences between male and female youth in India and associations with mental health. *International Journal of Population Research*, 2014, 1–11.  
<http://dx.doi.org/10.1155/2014/357145>
- Rangnathan, N. (2003). Puberty, sexuality and coping: An analysis of the experience of urban adolescent girls. *Psychological Studies*, 48, 56–63.
- Ravikumar, R. (2013). Patterns of head injuries in road traffic accidents involving two wheelers: An autopsy study. *Journal of Indian Academy of Forensic Medicine*, 35, 349–352.
- Robertson, L. A., McAnally, H. M., & Hancox, R. J. (2013). Childhood and adolescent television viewing and antisocial behavior in early adulthood. *Pediatrics*, 131, 439–446. doi:10.1542/peds.2012-1582
- Sandhu, P., & Mehrotra, N. (1999). Time pattern of female students: With reference to leisure time activities. *Indian Journal of Social Research*, 40, 285–296.
- Sibal, B. (1997). *A study of life style and health profile of senior secondary school boys in Delhi* (Unpublished doctoral dissertation for MD (preventive and social medicine)). University of Delhi, Delhi, India.
- Singh, A. P., & Misra, G. (2012). Adolescent lifestyle in India: Prevalence of risk and promotive factors of health. *Psychology and Developing Societies*, 24, 145–160.  
doi:10.1177/097133361202400203
- Singh, S., & Gopalkishna, G. (2014). Health behaviours and problems among young people in India: Cause for concern & call for action. *Indian Journal of Medical Research*, 140, 185–208.
- Small, G., & Vorgan, G. (2008). *iBrain: Surviving the technology alteration of the modern mind*. New York, NY: Harper Collins.
- Srivastava, A., & Saxena, Y. (2014). Effect of mobile phone usage on serum melatonin levels among medical students. *Indian Journal of Physiological Pharmacology*, 58, 395–399.
- Stebbins, R. A. (2011). Leisure studies: The road ahead. *World Leisure Journal*, 53, 3–10. Retrieved February 1, 2013, from <http://dx.doi.org/10.1080/04419057.2011.552197>
- Strasburger, V. C., Jordan, A. B., & Donnerstein, E. (2010). Health effects of media on children and adolescents. *Pediatrics*, 125, 756–767.  
<http://dx.doi.org/10.1542/peds.2009-2563>

- Vandewater, E. A., Bickham, D. S., & Lee, J. H. (2006). Time well spent? Relating television use to children's free-time activities. *Pediatrics*, 117, e181–e191. doi:10.1542/peds.2005-0812
- Verma, S., & Saraswathi, T. S. (2002). *Adolescence in India: Annotated bibliography*. New Delhi: Rawat Publications.
- Verma, S., & Sharma, D. (2003). Cultural continuity amid social change: Adolescents' use of free time in India. *New Directions for Child and Adolescent Development*, 2003, 37–52.  
[http://dx.doi.org/10.1002/\(ISSN\)1534-8687](http://dx.doi.org/10.1002/(ISSN)1534-8687)
- Viner, R. M., & Cole, T. J. (2005). Television viewing in early childhood predicts adult body mass index. *The Journal of Pediatrics*, 147, 429–435.  
<http://dx.doi.org/10.1016/j.jpeds.2005.05.005>
- Wadkar, A. J. (1998). Television viewing: A survey. *Progress of Education*, LXXIII, 63–66.
- World Health Organization. (2004). *World health report*. Retrieved on July 13, 2004, from <http://www.who.org>
- Ybarra, M., & Mitchell, K. (2007). Prevalence and frequency of internet harassment instigation: Implications for adolescent health. *Journal of Adolescent Health*, 41, 189–195.  
<http://dx.doi.org/10.1016/j.jadohealth.2007.03.005>
- Ybarra, M. L., Diener-West, M., Markow, D., Leaf, P. J., Hamburger, M., & Boxer, P. (2008). Linkages between internet and other media violence with seriously violent behavior by youth. *Pediatrics*, 122, 929–937.  
<http://dx.doi.org/10.1542/peds.2007-3377>



© 2015 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format  
Adapt — remix, transform, and build upon the material for any purpose, even commercially.  
The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.  
You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.  
No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



**Cogent Psychology (ISSN: 2331-1908) is published by Cogent OA, part of Taylor & Francis Group.**

**Publishing with Cogent OA ensures:**

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

**Submit your manuscript to a Cogent OA journal at [www.CogentOA.com](http://www.CogentOA.com)**

