



the Autonomous Management School of  
Ghent University and Katholieke Universiteit Leuven

**Vlerick Leuven Gent Working Paper Series 2005/36**

**NEED FOR CLOSURE AND YOUNGSTERS' LEISURE**

**TIME PREFERENCES**

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## **ABSTRACT**

*Summary.-* The Need for Closure is introduced as an individual characteristic that can help explain individual differences in engagement in leisure activities. Both a leisure engagement inventory and a validated Dutch version of the Need for Closure Scale were administered to a convenience sample of 1035 young adults aged between 15 and 24 of which about 54% were female. As hypothesized, leisure engagement differs for groups differing in Need for Closure. More specifically, youngsters who have a high (versus low) Need for Closure engaged more in structured, cognitively effortless and predictable leisure activities like shopping for fun and going to the cinema, while young adults low (versus high) in Need for Closure more often participated in unstructured, unpredictable, cognitively effortful or challenging leisure activities like going to a party, a pub, or a pop concert, idly lazing away, visiting or hosting friends, attending an evening class and playing computer games.

Youngsters nowadays can engage in a variety of leisure activities in their free time. In addition to out-of-the-home activities like visiting friends, going to a café or restaurant, attending the theater, opera, or a sports event, youngsters can entertain themselves at home by watching television, reading, or listening to music.

The question of what motivates different individuals to engage in specific leisure activities is interesting both from an academic and practical point of view. For academics this type of research can lead to an understanding of why people do engage in certain activities and not in others. For providers of leisure activities it could give an idea of how to position their activities more successfully by tapping the underlying motivations of specific target groups. For governments it could be the start to formulate a strategy to enhance the participation in certain activities (e.g., practicing sports) and decrease the participation in other activities (e.g., television viewing). Although the current understanding of motivations for engagement in leisure activities is far from complete, the question has already received considerable attention. Hills, Argyle, and Reeves (2000) investigated the applicability of several theories of leisure motivation to a range of activities. In general, all the theories start from the idea that leisure activities are highly enjoyable and intrinsically motivating if they are balanced with the individual's relevant capabilities, feelings of self-efficacy or needs and desires. Previous research identified some general needs (e.g. need for achievement, self-actualization and stimulation) that could help explain these differences in leisure motivation (Crandall, 1980; Pelletier, Vallerand, Green-Demers, Blais, & Brière, 1996). In addition, the preference for similar types of leisure can be explained by the notion 'self-to-prototype'- matching (cf. North, Hargreaves, & O' Neill, 2000). This states that a person is more likely to choose one activity or object over another if the prototypical image of the former corresponds more with the person's own self-image than does the prototypical image of the latter activity or object.

Moreover, previous research showed that personality characteristics such as the Five Factor Model (Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Intellect-Openness), social desirability, and Sensation Seeking are related to the preferred leisure activity (Vandenberg & Price, 1978; Furnham, 1982, 1990; Schierman

& Rowland, 1985; Avni, Kopper, & Fox, 1987; Hicks, Hicks, & Hicks, 1991; Courneya & Hellsten, 1998; Hills & Argyle, 1998).

Overall then, people gravitate to particular kinds of leisure because they have particular personality characteristics, capabilities, feelings or needs that are satisfied by the leisure activity. The objective of the current study is to contribute to the understanding of why people engage in some but not other activities by introducing the individual difference measure Need for Closure. The Need for Closure is related to the reluctance of ample cognitive processing, the quest for structure and predictability, and the approval of conservative, traditional ideas. Since different leisure activities demand different cognitive capacities, differ in predictability and structure, and in their conventionalism, this need may well be related to the preference for specific leisure activities.

### **NEED FOR CLOSURE**

The Need for Closure concept was introduced as a dimension of individual differences, which is related to a person's motivation concerning knowledge construction, decision making and judgment (Kruglanski, 1990). According to the Need for Closure theory the Need for Closure reflects the desire for clear, definite, or unambiguous knowledge that will guide perception and action, as opposed to the undesirable alternative of ambiguity and confusion (Kruglanski, 1990). A high Need for Closure is assumed to be a motivation to terminate cognitive processing quickly and to neglect views different from one's own because high accessible structures, like pre-existing knowledge structures or stereotypes, afford immediate closure (Ford & Kruglanski, 1995). In addition, individuals high in this feature are assumed to advocate conservative, non-deviant, structured and predictable ideas and situations. Those low at this feature, are assumed to be sensitive to new, alternative information and competing, divergent views when closure is "in danger" of forming and they are assumed to be open to unorthodox, non-conformist, unstructured, and unpredictable ideas and situations (Kruglanski & Webster, 1996). The main idea behind this theory is that individuals with a high Need for Closure tend to experience a negative feeling when closure is threatened or undermined and a positive feeling when closure is attained or facilitated. The motivation to avoid these

negative feelings is assumed to prompt activities aimed at the acquisition of closure and consequently biases the individual's choices and preferences toward closure-bound pursuits (Kruglanski & Webster, 1996).

The Need for Closure concept has been investigated a considerable number of times in relation to information processing and other decision making variables (e.g. confidence ratings) in a social context (for a review, see Vermeir, forthcoming). For example, individuals high in Need for Closure are less willing to spend time and energy in processing large amounts of information (e.g. Kruglanski, Atash, DeGrada, Mannetti, Pierro, & Webster, 1997; Vermeir & Van Kenhove, 2005).

According to several authors, individuals have stable personal differences in the degree to which they value closure and these individual differences are presumably general across topics (Webster & Kruglanski, 1994; Kruglanski & Webster, 1996; Chiu, Morris, Hong, & Menon, 2000; Houghton & Grewal, 2000). Considering the more recent studies that tried to relate the Need for Closure to a wide variety of human behaviours, this assumption seems to hold. The Need for Closure appears to be also significantly related to political preferences (e.g., Kossowska & Van Hiel, 2003), consumer behavior (e.g., Vermeir, Van Kenhove, & Hendrickx, 2002, Vermeir & Van Kenhove, 2005), group behavior (e.g. Pierro, Mannetti, De Grada, Livi, & Kruglanski, 2003), humor styles (Saroglou & Scariot, 2002), ethical beliefs (Van Kenhove, Vermeir, & Verniers, 2001) and decision making styles (Shiloh, Koren, & Zakay, 2001).

## **HYPOTHESES**

People gravitate to particular kinds of activities because they have particular personality characteristics, issues and/or needs that are either reflected in the activity they choose or that the activity satisfies (e.g. Hills & Argyle, 1998; Hills et al., 2000). We argue that the need for closure can be associated with the preference for a specific type of leisure activity.

High NFCL individuals desire immediate closure. In addition, they long for an enduring closure that provides them with a clear-cut, non-ambiguous answer to a problem (Kruglanski & Webster, 1996). Furthermore, high Need for Closure subjects are motivated to terminate cognitive processing quickly and tend to advocate conservative,

non-deviant, structured and predictable ideas and situations. Some leisure activities are more easily available and therefore could help high NFCL individuals to reach immediate closure. In addition, some leisure activities require few cognitive resources and can easily help to pass time quickly without unexpected consequences. Finally, the predictability and linearity of some leisure activities can satisfy the high NFCL individuals' need for consistent knowledge across situations and provides them with a clear-cut, non-ambiguous answer to the problem of passing time.

Those low at Need for Closure could be more open to less immediate gratifying and more unpredictable and cognitive stimulating activities because they tend to be sensitive to new, alternative information and competing, divergent views and they are open to unorthodox, non-conformists, unstructured and unpredictable ideas and situations.

It could be argued that youngsters who have a similar Need for Closure could display a preference for similar leisure activities because they value the same kind of structures and ideas. This results in the following hypotheses:

H1. Youngsters with a different level of Need for Closure participate to a different extent in leisure activities.

H2. Youngsters with a high versus low Need for Closure participate more often in leisure activities that are structured, conventional, predictable or cognitively effortless.

## **METHOD**

### **Subjects**

The original sample consisted of 1035 respondents. Using tertiles to identify respondents high and low in Need for Closure (see further) resulted in a total of 749 respondents. The age of the respondents ranged from 15 to 24 years, with a mean of 18.9 (SD=2.8). About half of our respondents were men (46.7%) and half women (53.3%). 44.6% of the working youngsters were blue-collar workers, 10.2 % were self employed,

and 34.9% engaged in clerical work. The education level of the student respondents was predominantly secondary education (77.8%) and college education (21%). 90.3% of the respondents lived with their parents, while only 5.1% lived alone, and 4.6 % lived with their partner or friends.

### **Instruments and Materials**

A ‘leisure engagement inventory’ was created based on street interviews. Twenty-five young adults (12 men, 13 women, aged 15-24) were asked to list the activities they engaged in during their free time. In total, 22 different leisure activities were mentioned. These leisure activities encompassed all major leisure domains like intellectual, music, artistic, social, and out-of-the-home activities, TV viewing, and sports. More specifically, the leisure activities that were mentioned were going to a restaurant; a pub; a party; a disco; a pop concert; the cinema; the theater, a ballet, the opera, a dance recital; a sports event; a museum or exhibition; going shopping for fun; taking a day trip; playing sports; attending an evening class; hosting and visiting friends; listening to music; watching television and videos; playing videogames; reading a book; idleness; and being bored.

The respondents were asked to indicate the amount of time they spend on these 22 different leisure activities on a 7-point scale, ranging from 1=never to 7=daily. Principal component analysis<sup>1</sup> with Varimax rotation was performed to reduce the number of variables to some common factors. The analysis resulted in 7 leisure activities (pubs & parties; relaxing; cultural, social, cognitive, sports, and out of home activities). Three variables (watching TV, videos and playing video games) had to be left out of the analysis since they had loadings <.30 on each factor (see Table 1).

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Insert Table 1 About Here

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<sup>1</sup> Leisure activities were reduced to some common factors in order to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables (Hair, Anderson, Tatham & Black, 1998).



The different leisure activities were classified by three independent judges according to four inherent characteristics that are important to Need for Closure: structure, cognitive complexity, conventionality, providing alternative views and predictability. We used these characteristics to help interpret and explain the preference differences between high and low Need for Closure groups. The latter four characteristics are supposed to be embraced by high Need for Closure individuals, while avoided by low Need for Closure individuals (Kruglanski & Webster, 1996). Interjudge reliability was .70, .86, .78, and .88 for structure, cognitive complexity, conventionality and predictability respectively (see Table 2 for characteristics per leisure activity). For example, going to a pub was categorized as “less cognitively complex”, while reading a book was labeled “more cognitively complex”. In addition, leisure activities were labeled as more conventional if they were common (for youngsters), accepted activities elements like visiting friends and watching television, while going to a museum and following an evening course are labeled unconventional (i.e. more uncommon activities). Activities that have a more structured character were labeled as “structured” (e.g. playing sports) while unstructured activities like idle were labeled as “unstructured”. Finally, activities like listening to music and playing computer games yielded the label “predictable”, while going to a party and playing sports are labeled less predictive because of their inherent surprises.

Need for Closure was measured by a validated<sup>2</sup> translation (Vermeir, forthcoming) of the original Need for Closure Scale (Webster & Kruglanski, 1994). The scale consists of 25 items<sup>3</sup> (6 items are reverse scored) that have to be rated on a 6-point Likert-type scale ranging from ‘I totally disagree’ to ‘I totally agree’. Respondents’ composite Need for Closure is calculated by calculating the average across all the individual items (after reverse scoring the appropriate items). Higher scores indicate a higher Need for Closure. The reliability of the scale used in this study is moderate ( $\alpha=.64$ ), but exceeds the minimal values of .60 cited by Bagozzi and Yi (1988).

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<sup>2</sup> A satisfactory five factor model was found ( $\chi^2=480.57$ ,  $df=247$ ,  $p<.001$ ;  $\chi^2/df= 1.95$ ;  $RMR=.04$ ;  $AGFI=.94$ ;  $TLI=.96$ ). Results show that the translated instrument possesses unidimensional, convergent, discriminant and nomological validity and is reliable ( $\alpha=.88$ ) (Vermeir, forthcoming).

<sup>3</sup> E.g., I like to have a place for everything and everything in its place; I dislike unpredictable situations; I dislike it when a person’s statements could mean many different things; I tend to struggle with most decisions; When thinking about a problem, I consider as many different opinions on the issue as possible.

Following previous research, high and low Need for Closure respondents were categorized using tertiles (e.g., Klein & Webster, 2000; Webster & Kruglanski, 1994) (Need for Closure means of the full sample range between 1.5-5.9). Respondents scoring in the upper third of this distribution (mean score exceeding 4.1;  $SD=.34$ ;  $n=381$ ) were classified as high in dispositional need for closure, and those scoring in the lower third of the distribution (mean score below 3.60;  $SD=.41$ ;  $n=368$ ) were classified as low in this need. High and low Need for Closure groups significantly differ in their Need for Closure level ( $F_{1, 748}=2250.94$ ,  $p<.001$ ).

## **PROCEDURE**

Data were collected using street interviews. Youngsters were addressed at random in a shopping mall or on the street near stores during two weeks. Both the shopping mall and the street are located in the city centre and are places where youngsters often hang out (even those not interested in shopping). Youngsters were encouraged to participate in the survey and instructions were given to fill in the questionnaire truthfully. The questionnaire, containing the 'leisure engagement inventory', Need for Closure Scale and demographic variables, was self-administered and completely anonymous.

It took respondents on average 10 minutes to complete the questionnaire. Respondents received a soft drink as a reward for their participation.

## **RESULTS**

Multivariate analysis of variance with the composite factors of leisure activities as the dependent variable and Need for Closure as the independent variable showed a significant main effect of the Need for Closure ( $F_{1, 748}=4.58$ ,  $p<.001$ ). This means that the groups high and low in Need for Closure indeed differ in the type of leisure activities they engage in, which lends support for H1. Univariate analyses (see Table 2) indicated a significant difference for five of the seven leisure factors. The groups low (versus high) in Need for Closure was significantly more often engaged in pubs and parties, social activities, sports, and cognitive activities, while they participated less frequently in out-

of-the-home activities. No significant differences were found for cultural and relaxing activities.

H2 posed that the group with a high Need for Closure would participate more often in leisure activities that are structured, conventional, predictable or cognitively effortless than the group with a low Need for Closure. Although the data do not allow to formally test this hypothesis, additional analyses were performed on the level of the individual leisure activities to get an idea of the type of associations between Need for Closure and leisure activities. Multivariate analysis of variance taking Need for Closure as independent variable and the 22 leisure activities as dependent variables, again showed a significant main effect of Need for Closure ( $F_{1, 726}=3.19, p<.001$ ). Univariate analyses indicated a significant association for 11 of the 22 leisure activities (see Table 2).

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Insert Table 2 about here

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Concerning the factor “Pubs and parties”, the results revealed that the low (versus high) Need for Closure group went more often to a pub and party, but did not differ in frequenting a disco. Although for the cultural factor as a whole no association with the Need for Closure was found, analyses on the level of the separate leisure activities indicated that the group high (versus low) in Need for Closure more often went to a pop concert. No difference was found between the high and low Need for Closure group for visiting a theater, a ballet, an opera, or a dance recital, and a museum or exhibition. The social factor was composed of the items ‘hosting friends’ and ‘visiting friends’. The high (versus low) Need for Closure group more often engaged in both activities. The groups with a high versus low Need for Closure did not differ with respect to the Relaxing factor, although significant differences could be found for two of the three composing items. The low versus high Need for Closure group had a higher tendency to idle, while the high versus low Need for Closure group more often felt bored. Both groups equally often listen to music. The significant difference concerning the Cognition factor can be attributed to a significant higher tendency of the group low in Need for Closure to attend evening classes. No difference was found with respect to the frequency of reading a book. Although a significant main effect of Need for Closure was found on the Sports factor, no

significant differences were found for the two composing items, i.e. playing sports and attending a sports manifestation. The significant association between Need for Closure and out-of-the-home activities seems mainly driven by the fact that the group high versus low in Need for Closure engaged more in shopping for fun and going to the cinema. No significant difference was found for taking a day trip and going to a restaurant. Finally, considering the three items that were not included in the factor analysis, we found that the low (versus high) Need for Closure group significantly more often played computer games, but did not differ in the frequency with which they watched videos and watched television.

In sum, the group low (versus high) in Need for Closure significantly more often engaged in parties, pubs, pop concerts, and hosting and visiting friends, all of which are unstructured and unpredictable activities. Moreover, they also engaged more often in evening classes and computer games, activities that both require cognitive effort. Furthermore, the group low (versus high) in Need for Closure more often went shopping for fun and visited the cinema, activities characterized by a high structure and minimal cognitive effort. As a consequence, these results seem to lend partial support for H2.

## **DISCUSSION**

Although the activities ‘going to a party or a pub’, ‘visiting or hosting friends’ and ‘going to a pop concert’ also share the characteristics of being conventional and cognitively effortless, it seems more probable that the group low in Need for Closure embraced the unpredictability, the lack of structure and organization, the possibility to encounter new, alternative ideas or differences in opinion or the exciting, energetic challenge or sensation-seeking associated with these activities.

On the other hand, the possible linearity of a known sequence of shops in a known shopping street or mall in addition to the relative cognitive effortless and mainstream character of shopping provides groups high in Need for Closure with a clear-cut, non-ambiguous heuristic manner to pass their time. In addition, the effortless and predictability of going to the cinema in addition to its structured pattern could attract high Need for Closure groups. Groups have a higher control over shopping for fun and going

to the cinema, an activity that can happen at almost any moment, while taking a day trip, or going to a restaurant depends more on the willingness of others (these activities often happen in company), or the available opportunity or the specific situation (e.g. good weather, dinner time or money availability).

Furthermore, no significant differences were found for cultural, relaxing and cognitive activities. We expected that the low Need for Closure group would engage more frequently in cultural activities because of a preference for more alternative and non conformist activities and ideas, and a generalized desire to investigate complex cognitive structures, making them more open for intellectually challenging and complex activities. However, some leisure activities like attending the theater or a museum were not often engaged in, decreasing the necessary dispersion of these variables for reliable statistics. There may be a ceiling effect: young adults low in Need for Closure spent so little time on some cultural activities that it is impossible for those high in Need for Closure to score even lower. Looking at the only cultural leisure activity that was engaged in now and then, i.e. going to a pop concert, it was found that groups low (versus high) in Need for Closure respondents did attend them more. Similarly, listening to music and watching television is an activity that is so common and often engaged in that possible differences between high and low Need for Closure groups could be concealed.

In addition, groups low in Need for Closure may embrace an inactive moment where they can fantasize unstructured thoughts or idly laze , while high Need for Closure individuals have an urgent desire for goal-oriented, predictable, and certain situations. We did find that high Need for Closure subjects get more bored. Possibly, getting bored is an unwanted activity that happens without much willingness from the part of the individual while idly lazing away is an activity that is willingly engaged in.

Based on Need for Closure theory and research, one would expect that higher Need for Closure groups would be less prone to engage in cognitive effortful activities. We did indeed find that the group low in Need for Closure more frequently attended evening classes. The non-significant effect of reading books could be explained as follows. Possibly, the measurement of cognitive activities like reading was too restrictive as both cognitive effortful (book) and effortless (tabloids) reading material exist.

Finally, the unstructured character and necessity of investing cognitive resources, probably makes computer games an unattractive medium for high Need for Closure groups.

Although the foregoing is not a firm proof of why exactly groups differing in Need for Closure engaged in different activities, it does show that there are clear differences and that the Need for Closure theory can explain these differences.

### **LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

Several limitations can be noticed. The main purpose of this study was to investigate if leisure participation differs between high and low Need for Closure groups, and if so, for which activities. A second objective was to see whether Need for Closure theory could account for these differences. However, neither an experimental design was used, nor were the respondents asked to what extent they thought the activities were structured, conventional, cognitively effortful or predictive. As a consequence, we can only assume but not prove that the different groups participated to a different extent in the activities because of the foregoing characteristics.

Secondly, a distinction was not made between extrinsic and intrinsic motivation to engage in leisure activities. Some of the leisure activities investigated could be a means to an end, e.g., reading a book for school, going to a party to meet a friend, instead of a natural and inherent tendency to pursue one's own interests produced by innate needs. Only the latter intrinsically motivated leisure activities could be explained or predicted by an individual's level of Need for Closure.

Thirdly, the number of hours the subjects engaged per day in the specific leisure activities was not measured. For some daily cognitive effortful (e.g. reading) or effortless (watching television) activities, the number of hours spent per day on the activity could differ for high and low Need for Closure young adults. Future research could explore if differences exist in the amount of hours spent on effortful and effortless leisure activities for young adults high and low in Need for Closure.

Another interesting future research track is investigating if high and low NFCL individuals attend the same pubs, shops, restaurants, and which kind of films, pubs & café's, restaurants, sports they prefer.

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**TABLE 1****Results of Principal Components Analysis on 22 Leisure Activities**

Leisure items	LEISURE FACTORS						
	Pubs & Parties	Cultural	Social	Relaxing	Cognition	Sports	Out-of- the-home
Going to a party	.846						
Going to a pub	.749						
Going to a disco	.698						
Going to the theater, ballet, opera, dance recital		.712					
Visiting a museum or exhibition		.712					
Going to a pop concert		.542					
Hosting friends			.869				
Visiting friends			.844				
Idleness				.812			
Being bored				.764			
Listening to music			.319	.530			
Reading a book					.647		
Attending an evening class					.596		
Playing sports						.789	
Visiting a sports manifestation						.787	
Fun shopping							.675
Taking a day trip							.605
Going to a restaurant		.331					.553
Going to the Cinema							.529
% Variance	12.2	9.9	9.2	7.1	6.3	5.7	5.3

\* Item loadings &gt;.30 are shown

**TABLE 2**

**ANOVA results and the means and standard deviations of the low and high Need for Closure groups on the five leisure factors and the twenty-two leisure items**

Leisure Factors and Items <sup>a</sup>	Characteristics of leisure activities <sup>b</sup>	Need for Closure		F-Value (df= 748)
		Low (n=368)	High (n=381)	
<u>Pubs &amp; Parties</u>		3.2(1.2) <sup>c</sup>	3.1 (1.2)	4.16*
Going to a party	Unstructured, cognitive effortless, conventional <sup>4</sup> , unpredictable	3.3 (1.3)	3.1 (1.3)	3.85*
Going to a pub	Unstructured, cognitive effortless, conventional unpredictable	4.2 (1.7)	3.8 (1.6)	11.09****
Going to a disco	Unstructured, cognitive effortless, conventional, unpredictable	2.2 (1.4)	2.3 (1.4)	.59
<u>Cultural</u>		1.6 (.5)	1.5 (.4)	.62
Going to the theater, ballet, opera, dance recital	Structured, cognitive effortful, unconventional, unpredictable	1.5 (.6)	1.5 (.7)	.66
Going to a museum or exhibition	Structured, cognitive effortful, unconventional, unpredictable	1.6 (.6)	1.5 (.6)	.54
Going to a pop concert	Unstructured, cognitive effortless, conventional unpredictable	1.7 (.6)	1.5 (.6)	3.70*
<u>Social</u>		4.1 (1.3)	3.7 (1.3)	16.47****
Hosting friends	Unstructured, cognitive effortless, conventional unpredictable	3.7 (1.5)	3.3 (1.4)	14.51****
Visiting friends	Unstructured, cognitive effortless, conventional unpredictable	4.4 (1.4)	4.0 (1.4)	11.12****

<sup>4</sup> Conventional for 15-24 year olds

<u>Relaxing</u>			4.2 (1.3)	4.1 (1.4)	.31
Idleness	Unstructured, cognitive effortless, conventional unpredictable		4.9 (1.9)	4.6 (1.9)	4.14*
Being bored	Unstructured, cognitive effortless, conventional unpredictable		3.5 (1.8)	3.8 (1.9)	5.52*
Listening to music	Structured, cognitive effortless, conventional predictable		5.1 (1.9)	4.9 (1.9)	1.86
<u>Cognition</u>			2.2 (1.2)	2.1 (1.1)	2.83(*)
Reading a book	Structured, cognitive effortful, unconventional, predictable		3.0 (1.8)	2.8 (1.7)	.84
Attending an evening class	Structured, cognitive effortful, unconventional, unpredictable		1.5 (1.3)	1.3 (1.0)	13.17(*)
<u>Sports</u>			3.4 (1.2)	3.2 (1.2)	3.03(*)
Playing sports	Structured, cognitive effortless, conventional unpredictable		3.9 (1.3)	4.2 (1.4)	1.13
Going to a sports manifestation	Structured, cognitive effortless, conventional unpredictable		2.4 (1.5)	2.3 (1.5)	1.14
<u>Out-of-the-home</u>			2.5 (.7)	2.6 (.6)	5.22*
Shopping for fun	Unstructured, cognitive effortless, conventional predictable		2.5 (1.2)	2.8 (1.3)	8.29**
Taking a day trip	Unstructured, cognitive effortless, conventional, unpredictable		2.2 (.7)	2.3 (.8)	.28
Going to a restaurant	Structured, cognitive effortless, conventional unpredictable		2.6 (1.1)	2.5 (1.1)	.096
Going to the Cinema	Structured, cognitive effortless, conventional unpredictable		2.6 (.9)	2.8 (.9)	4.99*
<u>Additional activities</u>					

Watching videos	Structured, cognitive effortless, conventional predictable	3.5 (1.4)	3.6 (1.4)	.03
Playing computer games	Unstructured, cognitive effortful, conventional predictable	3.4 (2.0)	3.0 (1.9)	7.61**
Watching television	Structured, cognitive effortless, conventional predictable	6.5 (.9)	6.6 (.9)	.30

\*\*\* p<.001, \*\* p<.01, \* p<.05, (\*) p<.1

<sup>a</sup> Leisure activities are measured on a 7-point scale ranging from never (1) to daily (7)

<sup>b</sup> Each characteristic was evaluated by three independent judges on a 5-point Likert scale (1=not characteristic, 5=characteristic). Means below 3 were classified as not possessing the characteristic, while means above 3 signified possession of the characteristic

<sup>c</sup> Standard deviations are provided between brackets