



Creativity, Involvement, and Leisure Time: The More, the Better

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The study examined relationships between participation in leisure activities and creative potential, creative achievement, ideational behavior, and participants' self-assessment. Men and women ($N = 659$) living in Córdoba, Argentina, participated in the research. The sample represented socio-demographic diversity, including age, level of schooling, and occupation. Interesting correlations between leisure activities and the different assessments of creativity were observed. Involvement in leisure activities and self-assessment of creative potential seemed to be accurate indicators of creativity in everyday contexts. Interesting lines of intervention and future investigation emerged. Implications are presented, along with limitations to the research.

Participation in leisure time activities seems to be related to various expressions of creativity (Boyd Hegarty, 2009; Gruber, 1988; Milgram & Hong, 1993, 1999; Wolfradt & Pretz, 2001). Many people who participate in artistic, cultural, and community activities show higher creative achievement than those who are not so involved (Elisondo, 2013). One explanation for this is that openness to experience, which is related to creative potential, is also involved in leisure time involvement (Elisondo & Donolo, 2014a). There is some uncertainty, however, because of the diversity of definitions, methodological perspectives, and cultural contexts (Batey, Chamorro, & Furnham, 2010; Batey & Furnham, 2008; Batey, Furnham, & Safiullina, 2010; Corbalán & Limiñana, 2010; Donolo & Elisondo, 2007; Elisondo & Donolo, 2011; Furnham, Batey, Anand, & Manfield, 2008; Furnham, Batey, Booth, Patel, & Lozinskaya, 2011; Furnham, Crump, Batey, & Chamorro-Premuzic, 2009; Hughes, Furnham, & Batey, 2012; Runco & Jaeger, 2012; Zeng, Proctor, & Salvendy,

2011). Not surprisingly, correlations among the different creativity assessments have varied.

Recent studies point to the need for research on creativity in real contexts and everyday life (Jauk, Benedek, & Neubauer, 2014; Plucker, Qian, & Schmalensee, 2014; Richards, 2010; Zeng, Proctor, & Salvendy, 2011). This is especially true because there may be a link between everyday creative behavior and positive psychological processes. Indeed, everyday creative behavior may be both the cause and effect of positive psychological processes. The present investigation was designed to examine this possibility. It examined relationships among leisure activities, creative self-perceptions, and different creativity assessment in a wide group of adults of different ages and schooling levels. This investigation is original in its analysis of relationships between participation in leisure activities, creative abilities, ideational behavior, creative achievements, creative personality, and creative self-perceptions in adults of different ages and levels of education. Some work has investigated leisure activities (e.g., Milgram & Hong, 2000) but the present investigation included a wide array of potentially relevant creativity indicators as well as an impressively sociodemographic diverse sample. This investigation should contribute to the growing research on the topic of creativity in everyday contexts.

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Method

Participants

Research participants included 659 men and women living in Córdoba province, Argentina. The group was formed considering socio-demographic diversity. Participants are 18–87 years old. People with different schooling levels (primary, secondary school, and university) were included, with diverse occupations (professionals, technicians, operators, businessmen, students, housewives, and retired people). It was important for this investigation to define the groups according to their participation in active leisure activities. In previous research active leisure activity was defined in terms of actions in diverse contexts which were freely chosen and occurring in a regular manner over a period of time (Cuenca y Cuenca, 2013; Elisondo, 2013). Of the study participants, 31% of the participants do physical activity and/or sports, 20% do handcrafts, 8% help non-governmental organizations (NGO), 6% practice dance, and 5% participate in artistic activities (plastic arts, music, or literature). Some respondents claim to participate in more than one activity, 18% participates in two activities, 4% in three activities, and 1% in four. Seven percent of the participants said they do not participate in any structured leisure activity.

Procedure and Instruments

The following instruments for data collection were administered: a general questionnaire; the CREA divergent thinking assessment; the Runco Ideational Behaviour Scale (RIBS); the Creative Behavior Inventory (CBI); and the Adjective Check List (ACL). What follows is a description of the main characteristics of the instruments used.

The *general questionnaire* included socio-demographic variables, questions about everyday and leisure activities, and a measure of self-perception about creativity. For the latter, participants were asked if they believed they were creative, and to assign themselves a score (from 1 to 10, where 1 is lowest) so as to value their creative potential.

CREA (Corbalán et al., 2003) measures a participant's capacity for elaboration. The assessment involves three stimulus cards (A, B, and C) from which interviewees must formulate as many questions as possible in the time allotted. Considering the high correlations among the CREA cards shown in previous studies (Elisondo, 2013; Elisondo & Donolo, 2011; Elisondo, Donolo, & Corbalán, 2009), and instructions in the instrument's manual, only card B was administered. Several studies demonstrated technical properties of the instrument, correlations with divergent thinking tests, and success in measuring creative potential in different groups and contexts (Almansa, López-Martínez,

Corbalán, & Limiñana-Gras, 2013; Clapham & King, 2010; Donolo & Elisondo, 2007; Elisondo & Donolo, 2010; Gutiérrez-Braojos, Salmeron-Vilchez, Martin-Romera, & Salmerón, 2013; Limiñana, Bordoy, Ballesta, & Corbalán, 2010; Limiñana, Corbalán, & Sánchez-López, 2010; López Martínez & Brufau, 2010; Rigo, Donolo & Ferrándiz, 2010).

RIBS is a 23-item self-reporting scale which assesses individuals' tendency to generate novel ideas (Runco et al., 2001). Participants assign a rating (Likert scale from 1 to 5) to indicate the frequency of their ideational behaviors. Research has shown that the questionnaire fulfills the basic technical quality standards for this type of instrument (Batey, Chamorro, & Furnham, 2010; Benedek, Mühlmann, Jauk, & Neubauer, 2013; Benedek & Neubauer, 2013; Clapham & King, 2010; Pannells & Claxton, 2008; Plucker, Runco, & Lim, 2006).

CBI (Hocevar, 1979), consists of 90 items representing creative achievement in music, literature, plastic arts, handcraft, acting, and science. Participants complete the questionnaire by indicating how many times they have performed the activity: 0 (never), 1 (once or twice), 2 (from 3 to 5 times) or 3 (more than 5 times). In the present study the total score was used.

ACL (Gough, 1979) consists of 30 items in which individuals agree or disagree with the adjectives presented as being descriptive of themselves. Several research studies use the scale as indicator of creative personality (Aranguren & Irrazabal, 2012; Carson, Peterson & Higgins, 2005; Piffer, 2014). The list contains items positively related (18 adjectives) and negatively related (12 adjectives) to the creative personality. In this study the total score of positive items is considered.

The assessment and questionnaires were administered in groups in paper-and-pencil format. Participants granted their informed consent for the investigation and publishing of results, preserving data confidentiality.

Results and Discussion

Table 1 shows mean scores and standard deviations for creative personality (ACL), creative potential (RIBS), ideation (CREA), and creative achievement (CBI), according to the type of leisure activities in which respondents participate (general questionnaire). Table 2 presents means and standard deviations in creativity assessment according to the amount of leisure activities participants are involved in. The analysis of variance data (ANOVA) are also included for both tables.

As in previous studies, it was observed that the amount of leisure activities, rather than activity type, is most relevant to everyday creativity (Elisondo, 2013; Elisondo & Donolo, 2014). Significant differences in the mean scores of CREA

and CBI of people who do not participate, or participated in one, two, three, or more activities, were noticed. In Table 2, it can be clearly observed how the scores in creativity assessment (CREA, CBI, RIBS, and ACL) increase in relation to the amount of structured leisure activities in which participants are involved.

There are two concepts of interest in the analysis and interpretation of the results. First, if we understand creativity as a potential that can be developed in different fields and knowledge areas, then creativity is not exclusively linked to artistic activities, but it can also be developed in scientific, sport, cultural, and community fields. Several theoretical considerations and research studies about everyday creativity support our analysis (Beghetto & Kaufman, 2009; Elisondo, Donolo, & Rinaudo, 2013; Richards, 2007; Runco, 2010). These have emphasized diversity in environment and action where it is possible to develop creative processes.

Second, results indicate that people who participate in more activities tend to be more creative, at least in the assessments used here. This is related to a widely-developed idea in the field of creative processes research regarding the relation between creativity and the openness to experiences (Batey et al., 2010; Furnham et al., 2008; Furnham, et al., 2009; Hughes et al., 2012; Miller & Tal, 2007). People who participate in multiple and diverse leisure activities may benefit from the openness to experience and show an interest in developing actions in different contexts with the purpose of building new knowledge and experience. Similar results have been found in diverse studies in the research team (Elisondo, 2008; Elisondo, 2013) and it has been argued about the relevance of understanding everyday creativity from the relation between openness to experiences and participation in leisure activities (Elisondo & Donolo, 2014a). In all, the participation in diverse leisure activities is a powerful indicator of everyday creativity that shows the field diversity in which creativity is possible and the importance of openness to experiences in the everyday creative processes.

Data on participants' creative self-assessment are presented in Tables 3 and 4. Mean scores on the three groups' creativity assessment are detailed in Table 3: those who consider themselves creative (shown in the table as *Yes*), those who do not consider themselves to be creative (*No*), and those who define themselves as creative in certain situations and contexts (*Sometimes*). Table 4 shows the each participant's self-assigned score of their personal creativity (shown in the table as *Low* for scores from 0 to 3, *Medium* for 4 to 7, and *High* from 8 to 10). It also presents the means for creativity assessment of the three groups and the results on the ANOVA test.

In all the analyses, significant mean differences on creativity assessment are observed in favor of those who consider themselves creative (always or in specific situations)

and those who assign higher scores in the self-assessments. The means in creativity assessment increase as the self-assessment scores do.

It is interesting to notice, as in a previous study (Elisondo, 2013), that most people consider themselves creative. This aspect is important in the field of creativity studies in that creativity pre-conceptions are considered important perceptions that would favor the development of creativity in everyday contexts. Considering the incidence of self-assessment in creative processes (Kauffman, 2009; Kaufman, Cole & Baer, 2009; Runco, 2010), it is important to note that considering oneself to be creative positively affects the development of creativity in everyday situations.

One relevant result was the variation in mean scores in all assessments following the participants' self-assessments. In previous studies the relation between self-assessments, potential, achievements, and creative personalities has also been observed (Elisondo, 2013; Furnham et al., 2008; Kaufman & Baer, 2004). In the study of everyday creative processes, considering people's self-assessments regarding their potentialities and achievements seems to be, as the involvement in leisure activities, an interesting indicator and an aspect to consider in multidimensional creativity assessments.

Correlations of low intensity (.163 between CBI and ACL; .180 between CREA and RIBS; .232 between ACL and RIBS) and moderate intensity (.308 between CBI and CREA and .314 between CBI and RIBS) have been observed. In all cases, the correlations were significant at .01 level. Similar results, significant correlations of low or moderate intensity between different creativity assessment were found in previous studies (Batey, Chamorro, & Furnham, 2010; Batey & Furnham, 2008; Batey, Furnham, & Safiullina, 2010; Furnham, Batey, Anand, & Manfield, 2008; Furnham, Batey, Booth, Patel, & Lozinskaya, 2011; Furnham, Crump, Batey, & Chamorro-Premuzic, 2009; Hughes, Furnham & Batey, 2013). The intensity of the correlations may seem low. However, for the field of studies of creative processes it is interesting to find relations between different aspects of creativity, a phenomenon which can be difficult to study analytically. The data indicate links between creative abilities, achievements in different fields, ideational behavior and creative personality in a large and diverse group of adults who perform multiple occupational and leisure activities. The results found are relevant in that they show relations and discrepancies in different assessment, procedures, and approaches in the study of everyday creativity.

TABLE 1
Means, standard deviations and ANOVA for three instruments: CPS, RIBS, and CREA by type of activity

Leisure activity	ACL		RIBS		CREA		CBI		N
	MS	SD	MS	SD	MS	SD	MS	SD	
Arts	7.24	3.10	67.06	17.00	8.65	3.31	25.74	16.22	34
Dance	7.03	3.77	60.97	11.95	8.57	4.38	25.08	15.00	37
Physical activity	6.55	3.30	62.59	15.25	8.43	4.54	17.96	15.62	206
Craft	7.40	5.35	62.32	13.08	8.41	3.73	22.38	15.06	132
NGO	6.07	3.39	65.24	13.49	8.42	3.25	19.80	12.53	55
ANOVA	1.506		1.314		.033		3.872		
<i>p</i>	.199		.264		.998		.004		

Note. NGO = Non-governmental Organizations

TABLE 2
Means, standard deviations and ANOVA for three instruments: CPS, RIBS, and CREA by amount of leisure activities

Amount of leisure activities	ACL		RIBS		CREA		CBI		N
	MS	SD	MS	SD	MS	SD	MS	SD	
No participation	6.34	3.17	59.76	17.28	7.29	3.37	10.78	10.04	45
One activity	6.82	4.04	63.02	14.38	8.45	4.07	20.57	15.31	466
Two activities	7.09	2.90	68.53	14.37	11.00	4.98	36.90	17.29	115
Three activities	8.00	2.83	68.93	19.34	12.97	5.32	52.55	31.01	29
More than three activities	11.25	4.35	66.50	22.17	14.25	4.11	70.25	13.72	4
ANOVA	2.240		4.904		17.867		60.27		
<i>p</i>	.063		.001		.000		.000		

TABLE 3
Means, standard deviations and ANOVA for three instruments:
CPS, RIBS, and CREA by self-perceptions of the participants regarding their personal creativity

Self-perceptions	ACL		RIBS		CREA		CBI		N
	MS	SD	MS	SD	MS	SD	MS	SD	
Yes	7.77	3.24	67.86	14.58	9.48	4.56	30.45	21.18	344
Sometimes	6.49	2.99	62.09	12.74	9.51	3.94	23.02	14.49	100
No	5.76	4.51	58.85	15.12	8.14	4.46	15.54	12.84	215
ANOVA	20.60		26.53		6.69		46.31		
<i>p</i>	.000		.000		.001		.000		

TABLE 4
Means, standard deviations and ANOVA for three instruments:
CPS, RIBS, and CREA by self-assessments of the participants regarding their personal creativity

Self-assessments	ACL		RIBS		CREA		CBI		N
	MS	SD	MS	SD	MS	SD	MS	SD	
High	8.61	3.23	71.11	15.12	9.43	4.94	34.81	25.08	131
Medium	6.80	3.96	64.02	14.12	9.33	4.33	24.22	16.91	396
Low	5.61	3.04	57.07	14.55	7.84	4.24	14.92	11.97	132
ANOVA	22.61		31.13		6.12		40.06		
<i>p</i>	.000		.000		.002		.000		

Discussion

The participation in leisure activities and self-assessment on creative abilities seem to be powerful indicators of creativity in everyday contexts. Interesting relationships between those indicators and the different assessment of creativity were observed. It would be worth wondering about the direction of the relations found; that is, does taking part in diverse leisure activities foster creative potential, or do people participate in different leisure activities because they are more creative? Similar questions may be asked about the participants' self-assessment of their creative potential. Do they consider themselves more creative because have more creative potential, achievements, and characteristics? Do they participate more because they consider themselves to be more creative? Do creative achievements and involvement in different kinds of leisure activities have an impact in self-assessment?

Perhaps all the answers are in the affirmative. In everyday creativity studies it may be difficult, and perhaps impossible, to find unilateral, unambiguous, stable relations. Interpretations and conclusions in the complex and paradoxical field of creativity are always partial and provisory. Creativity seems to develop between apparent paradoxes and contradictions. The only certainty is the lack of logic and pre-established paths. In a recent document (Elisondo & Donolo, 2014b), the illogical character of the logic of creative processes is emphasized.

Results show that asking ordinary people about free-time activities and how they assess their creativity is relevant for the understanding of creative processes in everyday contexts. Questions in this tenor are important in multidimensional assessments of creativity. Participants' answers show that creative processes are possible in different fields of knowledge and that they are somehow related to the openness to new experiences as a particular way of interacting with the world (Elisondo & Donolo, 2014a). We observe openness to experiences in people's expressions of their interest for taking part in multiple and diverse activities as a route to learning, interacting with others and developing creative processes. In this sense, we understand that openness to experiences is one of the main conditioning factors in everyday creativity.

The analyses carried out also contribute to the interpretation and validation of the tools for assessing creativity that have been used. It is meaningful to have found relationships between the assessment undertaken and between these and participation in leisure activities. Links between achievement questionnaires and leisure activities are expected because much of the achievement assessed involves participation in artistic, cultural, scientific, and community activities. The relationships observed between leisure

activities, creative capacity assessment, and personality are the most intriguing in that they show that the instruments were assessing aspects of creativity from indicators such as the ability to formulate questions and the use of ordinary adjectives. The procedure used by the CREA to assess creativity is simple and parsimonious (Corbalán & Limiñana, 2010); however, it seems to be powerful for the evaluation of everyday creativity and its diverse manifestations. The results and analyses carried out in this investigation broaden the arguments offered by several authors on instrument validity, contributing with more data on the proof's predictive validity in relation to creative achievements in everyday contexts. The ability to formulate questions is a good indicator not only of creative potential, but also of creativity in a broader sense. Those who question themselves the most seem to be the ones who search for proposals, situations, and contexts in which to build new experiences, knowledge, and learning. Those who question the most are the ones most open to experience. They seem to search for difference modes of expression.

From the results and the considerations presented, interesting lines of intervention and investigation emerge. The study of working and professional contexts seems to be interesting for a better understanding of everyday creativity. Analyzing how the different constructs studied are related, considering the groups' peculiarities regarding working and leisure activities, is a new path to explore in this kind of research. Another relevant topic for future studies is analyzing the relationship between performance in working contexts and free time and creative self-assessment in different areas. It also seems interesting to study creative processes in ordinary conflict resolution and in the development of unstructured leisure activities.

Building spaces where it is possible to create, interact, and develop different perspectives is fundamental for fostering everyday creativity. The challenge is to consider the results of research projects in the field of creativity that help to understand links between free time and creative activity and to design future investigations, interventions, and policies which will promote leisure activities, positive self concepts, and rich creative experience.

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