



# Serious Leisure, Self-perceptions and Everyday Creativity

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The article includes two studies, the first analyses relationships between participation in leisure and creativity. Five hundred sixty-two men and women from Córdoba (Argentina) participate in the first study. The participants' ages range from 18 to 60 years. The instruments of data collection are Creative Actions Scale, Test CREA, Test of Unconventional Uses and Leisure Activities Questionnaire. The aim of Study 2 is to investigate self-perceptions about creativity and analyses activities where people develop creative processes. In Study 2 participate two hundred five persons who has been surveyed in Study 1. The data collection instrument is a survey with open-ended questions. The results indicate positive effects of serious leisure activities on creativity. Participants who consider themselves creative obtain the highest mean scores in all measures of creativity. Qualitative analysis indicated that most participants consider themselves as creative in different activities and think that leisure activities are opportunities to develop creativity.

## **Keywords**

Creativity, serious leisure, involvement, self-perceptions, creative achievements.



## **Introduction**

Leisure activities offer opportunities to develop creativity (Hegarty, 2009; Hegarty & Plucker, 2012; Iwasaki, 2016; Richards, 2007; Trnka, Zahradnik & Kuska, 2016). Previous studies indicated relations between creativity and leisure activities (Batey, Chamorro & Furnham, 2009; 2010; Furnham, Batey, Anand & Manfield, 2008). Wolfradt and Pretz (2001) concluded that people who participated in leisure activities obtained higher scores on measures of creativity with respect to who did not participate. Biographical studies also found relations between creativity (scientific and artistic) and leisure (Csikszentmihaly, 1996; Root-Bernstein & Bernstein 1995). In organizational context, there were evidences about positive impact of leisure activities in creative employee performance (Davis, Hoisl & Davis, 2014). In educational settings, Cotter, Pretz and Kaufman (2016) argued that participation in extracurricular leisure activities is a predictor of student's creativity.

The article includes two studies. Study 1 analyses relationships between creativity, (potential and achievement), and leisure activities, considering casual and serious leisure, according to Stebbins 'classification (2016). Different types of leisure and number of activities developed for each participant are considered. Study 2 investigates self-perceptions, activities and places where people consider themselves creative, integrating quantitative and qualitative methodologies.

The studies pretend to generate empirical evidence about relations between leisure and creativity, and contribute in identification of leisure activities that promote creative processes. Coinciding with Long (2014), are necessary studies on new domains and contexts of everyday creativity. The studies also propose to provide information on the importance of leisure as a way of daily creativity, recognizing the diversity of contexts, situations and fields in which creative processes are possible, recovering people's voice in relation to their own creative possibilities.

In agreement with Veal (2015), leisure is considered a human right. Stebbins (2011) emphasizes the importance of leisure research, especially studies that indicate positive impacts



of leisure in everyday life and social relations. The positive influences of leisure activities on daily life creativity (Richards, 2007; Tanggaard, 2015), life quality (Mannell, 2007; Newman, Tay & Diener, 2014) and ethnic minority groups (Stodolska, 2015), revealed the social relevance of present studies.

### **Everyday Creativity and Leisure**

Theories of everyday creativity emerge from the study of real-life creative activities within the general population. Everyday creativity is defined in terms of human originality at work and leisure, across the diverse activities of everyday life (Jauk, Benedek & Neubauer, 2012; Richards, 2007). According to Silvia *et al.*, (2014) everyday creativity is both a cause and a consequence of positive development because allows people to explore their identities, form new relationships, cultivate competence, and reflect critically on the world.

In theories of everyday creativity, it is relevant distinguish between creative capacities or potentials and creative achievements. *Creative capacities* are potentials to formulate and solve problems in different ways (Corbalán *et al.*, 2015; Ivcevic, 2009). *Creative achievements* refer to original performances in artistic, cultural, social and scientific fields (Silvia, Wigert, Reiter & Kaufman, 2012). "Creativity expressed in behavior and achievement is a product of creative potential in personality and cognition, which interact with the immediate situation and an implicit situation or larger culture" (Ivcevic, 2009, p. 20).

Creative potential refers to an individual's cognitive ability to generate something novel and useful and reflects a normally distributed trait. It is commonly assessed by means of divergent thinking (DT). Creative achievement refers to actual real-life creative accomplishments (such as composing a piece of music, making a scientific discovery, or writing a book) and is commonly assessed by means of biographical measures (Jauk, Benedek & Neubauer, 2012). In addition to the tests and questionnaires, experience sampling method, instrument that intensively assess people as they go about their normal lives, is a compressive method to study everyday creativity. In a study using this method, Silvia *et al.*, (2014) shown that when people reported doing something creative, they reported feeling significantly happier and more active. Openness to experience strongly predicted spending time on something creative,



conscientiousness also predicted everyday creativity. Likewise, the traits that predicted creativity reflect both imagination (high openness) and self-regulation (high conscientiousness).

While some researchers emphasize the importance of investigating creative potential (Ivcevic, 2009; Smith & Smith, 2017), others support methodologies that investigate creative achievements in different areas of knowledge (Silvia, Wigert, Reiter & Kaufman, 2012). In the field of creativity, also have developed interesting debates about unidimensionality or multidimensionality of the construct (Baer, 2012; An & Runco, 2016). In the present studies were articulate creative potential measurement (one dimension) and creative achievements instruments (different dimensions). Study 2 also integrates methodologies quantitative and qualitative analysis of perceptions.

In everyday creativity theories, to study people's self-perceptions is also a relevant topic of research. How people perceive their own capacities and creative achievements is a factor to be considered in the studies of everyday creativity. Likewise, self-perceptions about activities and places where people think to be creative are important issues. Several researches have observed effects of self-perceptions in creativity (Kaufman, Beghetto & Watson, 2016; Pretz & Kaufman, 2015).

Leisure is investigated from different theoretical and methodological perspectives (Iwasaki, 2016; Rower, 2016). Present researches considers Stebbins (2016) classification of leisure: *serious, casual and project-based leisure*. *Serious leisure* refers to the systematic practice of amateur, voluntary activities or hobby, which are sufficiently substantial and interesting for the participants. Serious leisure is defined by six distinguishing qualities: need to *persevere*, finding a leisure *career* in the serious leisure role, *effort* based on specially acquired knowledge, training and experience, *durable benefits* (self-development, self-enrichment, self-expression, enhancement of self-image, social interaction, belongingness), development of *unique ethos* and *identify* with pursuits (Stebbins, 2016). Serious leisure involves discretionary and temporary commitment which includes initiatives or personal intentions to allocate time for activities of interest (Stebbins, 2011). Serious leisure also involves motivation, involvement



and reconstruction of identity (Jun *et al.*, 2012; Liu, Bradley & Burk, 2016; Munusturlar & Argan, 2016). *Casual leisure* is an immediate, pleasant and intrinsically rewarding activity, relatively short, that requires little or non-specific training. It is fundamentally hedonic, engaged for pure enjoyment or pleasure. *Project-based leisure* involves creative performances in the short term, reasonably complicated and performed only once or occasionally but infrequently. It requires considerable planning, effort, and sometimes skill or knowledge, but is not serious leisure because It does not meet all qualities defined for this type of leisure (persevere, career, effort, durable benefits, unique ethos and identify).

In sum, everyday creativity theories and serious leisure perspectives are theoretical supports for the present researches. These perspectives emphasize the importance of creativity in daily life and allow to distinguishing different types of leisure activities.

### **Study 1**

The aim of the study is to compare scores on creativity measures considering participation in leisure activities. The design is quantitative, non-experimental and comparative.

### **Participants**

Participants were selected by convenience non-probability sampling method, considering diversity of ages and levels of education. Five hundred sixty-two (N=562) men and women participated in the research. The participants lived in small and medium cities of Cordoba province (Argentina). All the participants spoke Spanish and had an average socioeconomic level. Sixty-three percent of participants were female. The participants' ages ranged from 18 to 60 years: 18-25 = 60%; 26-45 = 20%; 46-60 = 20% (M = 30.48; SD = 12.76). People with different schooling levels were included: primary (7%), secondary (48%) and higher education (45%).

### **Instruments**

Participants answered a questionnaire elaborated for this research to obtain data about socio-demographic variables and leisure activities.

CREA test and Test of Unconventional Uses are instruments used to evaluate creative potentials. CREA test (Corbalán *et al.*, 2015) uses people's ability to develop questions as a



method of measuring creativity. Numerous studies showed the psychometric properties of the instrument and advances in measuring creative skills by the process of making questions (Corbalán *et al.*, 2014; Gutiérrez-Braojos, Salmeron-Vilchez, Martin-Romera & Salmerón, 2013). Martínez Zaragoza (2003) presented a study with the objective of validating test CREA and examined the data obtained from its application in a sample of 2223 individuals from Spanish and Argentinian populations. The results showed high convergent validity with Guilford test and evidence of discriminant validity with Intelligence Test. Clapham and King (2010) examined the reliability and validity of the CREA in an English speaking population. Results indicated that the CREA has positive psychometric characteristics and showed strong alternate form reliability and moderate test-retest reliability. Convergent validity was demonstrated with the Verbal and Figural TTCT, and discriminant validity was established with creativity biodata inventories, personality dimensions, and scholastic achievement. Clapham and King (2010) suggested that the CREA is a quick, easy, useful measure of divergent thinking.

In Test of Unconventional Uses (TUNC) participants should mention possible unusual uses for a brick. The maximum time of the test is four minutes; participants obtain one point for unconventional use. Data collection strategy was developed consider the original tests of Guilford and subsequent studies (Jauk, Benedek, Dunst & Neubauer, 2013; Silvia *et al.*, 2008). Creative Actions Scale-CAS- (Author & other, 2016) evaluate creative activities. The instrument contains 70 items that assess participation in eight areas: Literature, Arts, Science and Technology, Body Language, Music, Craftworks, Social Participation and Everyday Creativity. The items refer to specific actions in areas, such as writing a story, painting a picture, and besides, recognitions regarding performance, i.e. awards and distinctions obtained by the actions developed. Likewise, the scale has different items about involvement in groups and organizations, emphasizing a social perspective of creativity. Participants must choose on a Likert scale one of the following options: 1 (never); 2 (2 or 3 times); 3 (4 or 5 times); 4 (6 or 7 times) and 5 (always). The CAS had shown a suitable internal consistency among items and defined areas (alpha between 0, 72 and 0, 83). The CAS structure corresponds to the initial proposal that includes different areas of knowledge. Preliminary study showed relationship between the CAS and other measures of creativity. Convergent validity was demonstrated by

Biography of Creative Behavior Inventory (Batey, Chamorro & Furnham, 2010). Studies by contrast groups (people who participated in leisure activities and people who did not), also provided evidence of the validity of the instrument (Author & other, 2016).

### Procedures and Analysis

The tests and questionnaires were paper-based and were administered in groups. Participants gave their consent to conduct this research and publish data results. The research process was developed considering the ethical principles defined by American Psychological Association (APA, 2017). The statistical analysis, using SPSS 20, were univariate and bivariate (study of frequencies, mean, standard deviations and non-parametric test: Kruskal-Wallis and U de Mann-Whitney).

### Results

In Table 1 has been summarized descriptive statistical analysis about creativity variables.

Table 1.

*Means, standard deviations, minimum and maximum in CREA. TUNC and CAS (areas and total)*

	CREA	TUNC	CAS total	Literature	Arts	Science	Music	Craftworks	Body Language	Social Participation	Everyday Creativity
Media	10.28	7.59	130.22	12.66	13.62	12.61	12.21	17.85	13.93	16.82	30.54
DS	4.31	3.38	28.03	3.60	4.50	3.40	4.33	6.65	5.31	6.61	8.47
Mín	2	0	82	10	10	10	10	10	10	10	10
Máx	28	19	274	39	37	35	40	41	43	47	50
N	562	562	562	562	562	562	562	562	562	562	562

Note: CREA=TEST CREA; TUNC= Test of Unconventional Uses; CAS= Creative Actions Scale.

Considering qualities of serious leisure, perseverance, career, effort, durable benefits, unique ethos and identify (Stebbins, 2016), are identified participants that developed these types of leisure activities. Most participants (54%) perform casual leisure activities: physical, household, social and recreational activities. Twenty-four percent of the participants (N = 138) performed serious leisure: craftwork (12%), art (5%), dancing and physical expression (3%), participation in NGOs (4 %). Some participants (12%) do more than one serious leisure activity



(4 people do more than two activities) and ten percent of participants (N = 55) said not to perform any activities in their free time.

The study determined significant mean differences ( $p < .05$ ) in the all variables, except TUNC, among participants who were not involved in any leisure activity, who carried out casual leisure actions and who regularly practiced serious leisure activities (one activity or more activities). Participants involved in serious leisure activities obtained best scores than participants who performed casual leisure activities (See Table 2). Table 2 shown that in all variables, mean scores increase considering leisure (no participate, casual leisure and serious leisure). People who did not participate in leisure activities get the lowest scores while, who participated in more than one serious leisure activity get the highest scores.

It were calculated effect sizes for each pair of groups that differs significantly in Mann-Whitney Test. Results shown significant differences ( $p < .05$ ) and small effect size between people who did not participate in leisure activities and people performed casual leisure activities in CAS total ( $r = .10$ ), Literature ( $r = .13$ ); Arts ( $r = .17$ ); Science ( $r = .13$ ) and Social Participation ( $r = .12$ ). Between not participate and participate in one serious leisure, it were observed significant differences ( $p < .05$ ) and small effect sizes in Literature ( $r = .18$ ); Science ( $r = .20$ ); Music ( $r = .23$ ), Body Language ( $r = .23$ ) and Everyday Creativity ( $r = .18$ ). In CAS total ( $r = .37$ ), Craftworks ( $r = .35$ ); Arts ( $r = .31$ ) and Social Participation ( $r = .30$ ) were observed significant differences and medium effect size. Between not participate and participate in two or more serious leisure activities, it were observed significant differences and medium effect size in CREA ( $r = .30$ ); Literature ( $r = .37$ ); Arts ( $r = .42$ ); Science ( $r = .36$ ); Craftwork ( $r = .40$ ); Body Language ( $r = .31$ ), Social Participation ( $r = .35$ ) and CAS total ( $r = .40$ ). In TUNC ( $r = .24$ ); Music ( $r = .25$ ) and Everyday Creativity ( $r = .18$ ) effect sizes were small. Between people perform casual leisure and people involve in one serious leisure activity were observed significant differences and small effect sizes in Arts ( $r = .17$ ), Body Language ( $r = .18$ ), Social Participation ( $r = .15$ ) and CAS Total ( $r = .25$ ), medium effect size were observed in Craftwork ( $r = .30$ ).



Table 2

*Means, standard deviations and Kruskal-Wallis test in CREA, TUNC and CAS (areas and total) by type of leisure.*

Leisure		CREA	TUNC	CAS total	Literature	Arts	Science	Music	Craftworks	Body Language	Social Participation	Everyday Creativity
No participate	MS	9.75	7.05	117.65	11.65	11.89	11.40	11.36	15.31	12.73	14.82	28.49
	N	55	55	55	55	55	55	55	55	55	55	55
	DS	4.35	3.10	24.00	2.59	2.96	2.46	4.23	4.48	4.13	6.96	8.59
Casual Leisure	MS	9.92	7.55	124.83	12.36	12.80	12.53	11.82	16.27	12.97	15.84	30.22
	N	303	303	303	303	303	303	303	303	303	303	303
	DS	4.13	3.35	24.31	3.05	3.38	3.18	3.26	5.77	4.13	5.46	8.56
Serious Leisure (one activity)	MS	10.39	7.49	139.55	13.21	15.07	12.55	12.70	20.94	15.37	18.20	31.54
	N	138	138	138	138	138	138	138	138	138	138	138
	DS	4.47	3.39	29.48	4.60	5.70	3.07	4.74	7.57	6.25	7.06	8.32
Serious Leisure (two or more activities)	MS	12.14	8.44	145.92	13.71	15.80	14.02	13.70	20.70	16.32	20.08	31.61
	N	66	66	66	66	66	66	66	66	66	66	66
	DS	4.36	3.66	31.96	3.85	5.56	4.95	6.81	6.67	7.20	8.42	8.03
	X <sup>2</sup>	<b>17.26</b>	<b>6.42</b>	<b>61.14</b>	<b>19.90</b>	<b>38.87</b>	<b>18.52</b>	<b>11.62</b>	<b>65.64</b>	<b>32.45</b>	<b>31.62</b>	<b>7.54</b>
	df	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
	p	<b>.001</b>	<b>.093</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.009</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.050</b>

Note:

CREA=TEST CREA; TUNC= Test of Unconventional Uses; CAS= Creative Actions Scale

Between people perform casual leisure and people involve in two or more serious leisure activity were observed significant differences and small effect sizes in CREA ( $r = .20$ ); Literature ( $r = .17$ ); Arts ( $r = .23$ ); Science ( $r = .10$ ); Music ( $r = .10$ ); Craftwork ( $r = .26$ ), Body Language ( $r = .20$ ); Social Participation ( $r = .19$ ) y CAS total ( $r = .27$ ). Between people involve in one serious leisure activity and involve in two or more activities were observed significant differences and small effect sizes in CREA ( $r=.20$ ) and Literature ( $r=.14$ ).

Considering only groups that did casual and serious leisure activities (one or more activities), the statistical analysis showed significant mean differences in all variables except TUNC, Science and Everyday Creativity areas. Participants involved in serious leisure activities obtained best scores on all measures of creativity. Medium effect size were observed in Craftworks ( $r = .34$ ) and CAS total ( $r = .30$ ) and small effect size in CREA ( $r = .11$ ); Literature ( $r = .11$ ); Arts ( $r = .22$ ); Music ( $r = .10$ ); Body Language ( $r = .23$ ) and Social Participation ( $r = .19$ ).

### **Discussion**

The Study 1 showed that participants involved in serious leisure activities obtained higher scores on creative potential and achievement compared to people non involve in leisure or involve in casual leisure. The results agreed with previous studies (Aranguren & Irrazabal, 2012; Author & other, 2016; Author, 2013; Hegarty, 2009, Wolfradt & Pretz, 2001) that indicated a relationship between leisure and creativity. These studies indicated that participants who were actively involved in leisure obtained higher scores on measures of creativity with respect to non-participants.

In present research, higher scores in creativity (potentials and achievements) were observed in participants involved in serious leisure activities. Serious leisure extend possibilities of creative achievements in different fields, as shown previous researches (Hegarty, 2009; Hegarty & Plucker, 2012; Iwasaki, 2016; Richards, 2007; Trnka, Zahradnik & Kuska, 2016). The results indicated positive effects of serious leisure activities on creativity (potentials and creative achievements). The highest effects have been observed in total CAS scores and craftworks. The involvement in serious leisure influence creative achievements in different areas. People who participate regularly and engaged in serious leisure activities are people with greater creative achievements.

Likewise, the results shown that the amount of serious leisure activities is linked to the creative potential. People who participate in several activities get significantly higher scores in CREA, respect who do not participate, perform casual leisure or people involve in one serious leisure activity. This result is linked to previous studies that indicate relationships between creativity



and openness to experience (Batey, Chamorro & Furnham, 2010; Hughes, Furnham & Batey, 2012; Jauk, Benedek, & Neubauer, 2014; Kaufman, 2013). People with greater creative potential are more open to experience, therefore show interest in participating in various serious leisure activities. People who participate in several serious leisure activities can be considered open to the experience while looking for diverse activities where to develop their interests. Specifically, with preference for variety, curiosity and openness to actions, main facets of openness to experience (Mc Crae, 1993).

## **Study 2**

Study 2 integrate quantitative and qualitative methodologies. First, comparisons are made in the measurements of creativity according to creativity self-perceptions, then the voice of the participants is recovered to analyze activities and contexts where they develop creative processes.

## **Participants**

Participated two hundred five (N=205) people who had been surveyed in Study 1. Participants were selected by convenience non-probability sampling method. Fifty five percent of participants were female. The participants' ages ranged from 18 to 50 years: 18-25 = 72%; 26-50 = 38%; People with different schooling levels were included: primary (6%), secondary (46%) and higher education (48%).

## **Instruments**

The principal data collection instrument is a questionnaire with open-ended questions. The items referred to creative self-perceptions, leisure activities and places for the development of creativity. Creativity measurements (CREA; TUNC; CAS) are also taken into account in present study.

## **Procedures and Analysis**

The questionnaires were paper-based and were administered in groups. American Psychological Association's (APA) Ethical Principles of Psychologists and Code of Conduct are considered in the study. Participants gave their consent to conduct this research and publish

data results. The statistical analysis, using SPSS 20, were univariate and bivariate (study of frequencies, mean, standard deviations and non-parametric test: Kruskal-Wallis and U de Mann-Whitney). The qualitative analyzes were done with constant comparative method.

## Results

### Creative self-perceptions and leisure

The study demonstrated significant differences in all variables, except Music, between participant that considered themselves as creative and participants that not. Participants who considered themselves creative obtained best scores in all measures of creativity. Medium effect size were observed in Craftworks ( $r = .31$ ) and CAS Total ( $r = .33$ ) and small effect size in CREA ( $r = .15$ ); TUNC ( $r = .27$ ); Literature ( $r = .20$ ); Arts ( $r = .24$ ); Body Language ( $r = .24$ ); Social Participation ( $r = .29$ ); Science ( $r = .28$ ) and Everyday Creativity ( $r = .21$ ).

Table 3

*Means standard deviations and U de Mann-Whitney test in CREA. TUNC and. CAS by creative self-perceptions*

Self-perceptions		CREA	TUNC	CAS total	Literatur	Arts	Scienc	Music	Craftwork	Body Language	Social Participation	Everyday Creativity
No creative	MS	8.83	5.30	114.43	11.54	11.72	11.26	12.83	14.33	12.46	13.67	26.63
	N	46	46	46	46	46	46	46	46	46	46	46
	DS	3.814	2.699	20.157	2.429	2.062	2.408	5.225	4.527	4.651	4.243	7.368
Creative	MS	10.67	7.26	134.38	12.89	14.43	13.28	12.64	18.90	14.53	17.07	30.65
	N	159	159	159	159	159	159	159	159	159	159	159
	DS	4.615	3.218	28.876	4.172	5.286	4.121	4.988	6.525	5.835	5.940	7.989
	U	<b>2547</b>	<b>2017</b>	<b>1711</b>	<b>2352</b>	<b>2147</b>	<b>1982</b>	<b>3137</b>	<b>1821</b>	<b>2129</b>	<b>1909</b>	<b>2276</b>
	Z	<b>2.19</b>	<b>3.86</b>	<b>4.80</b>	<b>2.86</b>	<b>3.48</b>	<b>4.04</b>	<b>-.35</b>	<b>4.47</b>	<b>3.55</b>	<b>4.19</b>	<b>3.03</b>
	p	<b>.029</b>	<b>.000</b>	<b>.000</b>	<b>.004</b>	<b>.000</b>	<b>.000</b>	<b>.726</b>	<b>.000</b>	<b>.000</b>	<b>.000</b>	<b>.002</b>
	r	<b>.15</b>	<b>.27</b>	<b>.33</b>	<b>.20</b>	<b>.24</b>	<b>.28</b>	<b>.02</b>	<b>.31</b>	<b>.24</b>	<b>.29</b>	<b>.21</b>

Note: CREAB=TEST CREA; TUNC= Test of Unconventional Uses; CAS= Creative Actions Scale.

### Creative activities

Qualitative analysis indicated that people consider themselves creative in diverse activities. We present some expressions of the participants that are relevant to the understanding of each category. The analysis indicated that twenty-four percent of the participants (24%) said to be creative in activities related to craftworks, decoration, clothes design, accessories and spaces.

*I consider that I develop my creativity making crafts; I make ornaments, necklaces and objects to decorate my house (Maria, 30 years).*

*I am creative in everything that has to do with crafts, I love doing recycled and design things (Sonia, 29 years).*

Fifteen percent (15%) considered being creative in solving everyday life problems (managing family money, taking care of kids, helping others in difficult situations, organizing schedules, etc.).

*I'm not creative for art and crafts, but if to solve problematic situations of daily life, in those things you always have to be creative (Juan, 45 years).*

Ten percent (10%) said to develop creativity at work. Cooking was another activity in which several participants said to develop their creativity (5%). Participants said to be creative in drawing, painting and photography (5%), dancing and physical expression (5%), sports (5%), relationships with others (3%) and participation in social organizations (3%), studies (2%), music (3%), and writing (1%). Nineteen percent (19%) of participants did not consider themselves creative in any of the activities or situations.

*Participating in organizations is for me a way of being creative, I have to always solve problems and create new things. To help people, you have to be very creative (Cynthia, 23 years).*

The leisure activities seem to be the ones that offer the most opportunities for the development of creativity. Table 4 showed that most participants (83%) involved in serious leisure considered themselves creative in this activities (craftwork, art, dancing and physical expression, participation in NGOs), while those involved in casual leisure activities considered themselves creative mainly in physical and work activities (23%), as well as solving problems of daily life (22%). Most people who did not participate in leisure activities answered "in none of the activities or situations" (45%).

Table 4

*Type of activities in which people considered themselves creative by type of leisure*

	No participate	Casual	Serious Leisure (one activity)	Serious Leisure (two or more activities)	Total
Nothing	13	18	8	2	40
Craftworks	6	7	16	11	40
Arrangements and cleaning	0	3	2	2	7
Cooking	4	4	2	0	10
Work	2	13	1	2	18
Study	1	1	2	0	4
Physical activity	0	10	0	1	11
Solving everyday life problems	3	20	2	6	31
Drawing, painting and photography	0	2	3	5	10
Participation in social organizations	0	11	3	1	15
Dancing and physical expression	0	1	6	4	11
Music	0	0	2	3	5
Writing	0	0	1	1	2
Total	29	90	48	38	205

### Contexts for creativity

People mention various contexts where they develop creative processes. Table 5 exhibited places where participants said to be creative. Most of them, regardless of the type of leisure, claimed to be creative at home (50%). Participants who did casual leisure activities said to be creative mainly in sports and work contexts (26%). Many of those participants involved in serious leisure activities mentioned workshops and independent groups as the places where they developed creativity (22%).

Table 5

*Places where people said to develop creativity by type of leisure*

Places to Develop Creativity	No participate	Casual	Serious Leisure (one activity)	Serious Leisure (two or more activities)	Total
Nowhere	13	17	8	2	40
Home	13	43	23	25	104
Work	2	14	1	2	19
Educational institutions	1	2	2	1	6
Workshops and independent groups	0	1	11	6	18
Sport Club	0	10	1	1	12
NGO	0	3	2	1	6
<b>Total</b>	<b>29</b>	<b>90</b>	<b>48</b>	<b>38</b>	<b>205</b>

Note. NGO= Non-governmental Organizations

The participants state that they develop creative processes in different contexts. These expressions relate to the activities analyzed in the previous category. The home appears as the environment most mentioned by the participants, especially by those who carry out crafts and those who consider themselves creative in solving everyday problems.

*I develop my creativity in my home; there I make crafts, accessories and things to decorate (Paula, 22 years).*

*I am creative in the workshop of arts and crafts that is dictated in the neighborhood of my neighborhood, there I share with other people and we create new and original things (Sofia, 44 years).*

*I'm creative in my work, to sell something you have to be very creative if people do not buy you if you do not agree with many ideas and show them the advantages of the products (Martin, 30 years)*

## Discussion

The analysis indicated that most participants consider themselves as creative in different activities and contexts. The Study 1 showed relevant results about creative self-perceptions, the participants who considered themselves creative obtained higher scores in all measurements



(creative potential and achievement). Several studies had reported a relationship between creativity and self-perceptions (Kaufman, Beghetto, & Watson, 2016; Pretz & Kaufman, 2015). Reiter Robinson, Kaufman and Santo (2012) and Park, Youngshin and Chun (2016) argued that self-perceptions should be included in multidimensional assessments of creative processes. It was important to stand out that most participants considered themselves creative in different areas and contexts. Participants' perceptions corresponded to theories of creativity as potential possible in all people and different situations (Ivcevic, 2009; Smith y Smith, 2017). The diversity of activities in which participants said to be creative also realized conceptions about everyday creativity (Richards, 2007). From these perspectives it is understood that creative processes are developed in different situations of daily life and that all people have the necessary potential to do so. The participants' words are also related to the statements that refer to the specificity of the construct (Baer, 2012), it is considered that creativity acquires particular characteristics according to the fields and domains in which it develops. From this position it is considered that people are creative in certain domains and that creativity should be studied in each area and context in particular.

Participants mentioned diverse places where develop creativity, home was the most cited. Other studies also found that home is the place chosen to develop the creativity through craftworks, cooking, etc. (McCabe & de Waal, 2013; Pollanen, 2015). Home seems to be a favorable context to do creative activities and solve complex problems related to family economy, child care, time and space organization and coping with difficult situations. Furthermore, education institutions are also places for creativity, specifically for those who claimed to be creative in teaching and studying. In addition, several participants referred to organizations, clubs, neighborhood, independent groups as places to develop creativity in artistic, cultural, political, community and social activities. The great majority of participants involved in serious leisure considered themselves creative in leisure activities. However, participants who did not perform serious leisure, said to be creative at work or physical activity.

## **Conclusion**

The results indicate relationships between creativity, self-perception and leisure. Participation in leisure activities seems to enhance creativity and the offer of activities and contexts in which





to develop creative processes. Also, analyzes showed that people who consider themselves creative have the best results in creativity measurements. The participants' expressions suggest diversity of activities and contexts where it is possible to develop creativity. The results correspond to previous research that indicates relations between leisure and creativity (Hegarty, 2009, Hegarty & Plucker, 2012, Iwasaki, 2016, Trnka, Zahradnik & Kuska, 2016; Wolfradt & Pretz, 2001). Analyzes also support the positions of daily creativity that indicate the diversity of activities and contexts in the creative development (Richards, 2007, Silvia et al., 2014; Tanggaard, 2015).

Although effects were small and medium, the study indicated relations between serious leisure activities and creative processes. Include qualitative perspectives for understanding participant meanings and analyze connections between creativity, leisure and health promotion are topics for future research. Phenomenological studies about creative leisure (Hegarty, 2009) as perspective that integrates creativity and leisure, and emphasizes the importance of leisure in meaning-making (Iwasaki, 2016) and self-expression (Hegarty & Plucker, 2012) shown interesting themes for future studies.

Considering, as Zittoun (2016) argues, that creativity allows people to experience institutions not only as constraints, but also as potentialities to develop skills and abilities, in future research it is relevant to study the role of creativity in the interactions that occur between people and the various institutions they inhabit. According to the author, creativity can allow people to develop in acceptable environments, explore distant experiences, escape institutional limitations and propose alternatives.

Also, it is considered promising in future investigations of daily creativity can integrate sociocultural perspectives (Glaveanu, 2014) and participatory approaches (Hanchett Hanson (2015). From these perspectives it is possible to understand the relationships between creativity and leisure in the context of social interactions, languages and particular cultural practices. In future studies it is necessary to deepen the analysis of participants' perceptions including interviews, life stories and other qualitative research techniques.



The breadth and diversity of the group, not only included university students, is strength of the study. The integration of everyday creativity perspectives and serious leisure theories, and results observed about relationships between abilities, creative achievements and serious leisure also were strengths of the research. Lack of representativeness of the sample and use of self-report non-validated instruments in other contexts are the main limitations of the study. The problem of social desirability and other response-style tendencies may limit validity of self-report. Likewise, the classification used in relation to leisure may be a limitation of other expressions of leisure. To develop qualitative studies in different cultural context regarding leisure, self-perception and creativity are future lines of research. Integrating different theories of creativity and leisure is a challenge for future studies.

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### **References**

- American Psychological Association's (2017). Ethical Principles of Psychologists and Code of Conduct. Retrieved from <http://www.apa.org/ethics/code/ethics-code-2017.pdf>
- An, D. y M Runco (2016). General and domain-specific contributions to creative ideation and creative performance. *Europe's Journal of Psychology*, 12(4), 523–532, doi:10.5964/ejop.v12i4.1132
- Aranguren, M. & Irrazabal, N. (2012). Diseño de una escala para la evaluación del comportamiento creativo en diferentes dominios. [Designing a scale for assessment of creative behavior in different domains]. *Ciencias Psicológicas*, 4, 29-41.
- Author (2013).
- Author (2015).
- Author & other (2016).
- Baer, J. (2012). Domain specificity and the limits of creativity theory. *The Journal of Creative Behavior*, 46(1), 16-29.
- Batey, M., Chamorro, T. & Furnham, A. (2010). Individual differences in ideational behavior: can the big five and psychometric intelligence predict creativity scores? *Creativity Research Journal*, 22, 90-107. doi: 10.1080/10400410903579627



- Batey, M., Chamorro, T. & Furnham, A. (2009). Intelligence and personality as predictors of divergent thinking: The role of general, fluid and crystallized intelligence. *Thinking Skills and Creativity*, 4, 60–69. doi:10.1016/j.tsc.2009.01.002
- Clapham, M. & King, W. (2010). Psychometric characteristics of the CREA in an English speaking population. *Anales de Psicología*, 26(2), 206-211.
- Corbalán, J., Martín-Brufau, R., Donolo, D., Clapham, M., Limiñana, R., García Peñas, V. & King, R. (2014). CREA.A cross-cultural study. *Personality and Individual Differences*, 60, 54-55.
- Corbalán, J., Martínez, F., Donolo, D., Alonso, C., Tejerina, M. & Limiñana, M. (2015). *CREA. Inteligencia Creativa. Una medida cognitiva de la creatividad*. [CREA. Creative Intelligence. A Cognitive measurement of creativity]. Madrid: TEA Ediciones. Second Edition.
- Cotter, K., Pretz, J. & Kaufman, J. (2016). Applicant extracurricular involvement predicts creativity better than traditional admissions factors. *Psychology of Aesthetics, Creativity, and the Arts*, 10(1), 2-13.
- Csikszentmihalyi, M. (1996). *Flow and the psychology of discovery and invention*. New York: Harper Collins.
- Davis, L., Hoisl, K. & Davis, J. (2014 June). Spanning the creative space between home and work: leisure time, hobbies and organizational creativity. Paper presented at *DRUID Society Conference 2014*, Copenhagen. Retrieved from <http://openarchive.cbs.dk/bitstream/handle/10398/9045/Davis.pdf?sequence=1>
- Furnham, A., Batey, M., Anand, K., & Manfield, J. (2008). Personality, hypomania, intelligence and creativity. *Personality and Individual Differences*, 44(5), 1060-1069.
- Glaveanu, V. (2014). The Psychology of Creativity: A Critical. *Creativity. Theories – Research – Applications*, 1 (1), 10-32.
- Gutierrez-Braojos, M., Salmeron-Vilchez, J. Martin-Romera, S. & Salmerón, A. (2013). Efectos directos e indirectos entre estilos de pensamiento, estrategias metacognitivas y creatividad en estudiantes universitarios. [Direct and indirect effects between thinking styles, metacognitive strategies and creativity in college students]. *Anales de psicología*, 29(1), 159-170.
- Hanchett Hanson, M. (2015). The Ideology of Creativity and Challenges of Participation. *Europe's Journal of Psychology*, 11(3), 369–378. doi:10.5964/ejop.v11i3.1032.
- Hegarty, C. (2009). The value and meaning of creative leisure. *Psychology of Aesthetics, Creativity and the Arts*, 3(1), 10–13.
- Hegarty, C. & Plucker, J. (2012). Creative leisure and self-expression. *The International Journal of Creativity & Problem Solving*, 22(2), 63–78.
- Hughes, D., Furnham, A., & Batey, M. (2012). The structure and personality predictors of self-rated creativity. *Thinking Skills and Creativity*, 9, 76-84.
- Ivcevic, Z. (2009). Creativity map: Toward the next generation of theories of creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 3, 17-21.



- Iwasaki, Y. (2016). Contributions of leisure to “meaning-making” and its implications for leisure studies and services. *Annals of Leisure Research*, 19, 1-11. doi: 10.1080/11745398.2016.1178591.
- Jauk, E., Benedek, M., Dunst, B. & Neubauer A. (2013). The relationship between intelligence and creativity: New support for the threshold hypothesis by means of empirical breakpoint detection. *Intelligence*, 41(4), 212–221.
- Jauk, E., Benedek, M. & Neubauer, A. (2014). The road to creative achievement: A latent variable model of ability and personality predictors. *European Journal of Personality*, 28, 95-105.
- Jun, J., Kyle, G., Vlachopoulos, S., Theodorakis, N., Absher, J., & Hammitt, W. (2012). Reassessing the structure of enduring leisure involvement. *Leisure Sciences*, 34(1), 1-18.
- Kaufman, J. C. (2006). Self-reported differences in creativity by gender and ethnicity. *Journal of Applied Cognitive Psychology*, 20, 1065-1082.
- Kaufman, J. C., Beghetto, R. & Watson, C. (2016). Creative metacognition and self-ratings of creative performance: A 4-C perspective. *Learning and Individual Differences*, 51, 394-399. doi.org/10.1016/j.lindif.2015.05.004.
- Kaufman, S. B. (2013). Opening up openness to experience: A four-factor model and relations to creative achievement in the arts and sciences. *The Journal of Creative Behavior*, 47(4), 233-255.
- Liu, H., Bradley, M. & Burk, B. (2016). I am roller derby: the serious leisure and leisure identity of roller derby participants. *World Leisure Journal*, 58(1), 28-43.
- Long, H. (2014). An empirical review of research methodologies and methods in creativity studies (2003–2012). *Creativity Research Journal*, 26(4), 427-438.
- McCrae, R. R. (1993). Openness to experience as a basic dimension of personality. *Imagination, Cognition and Personality*, 13(1), 39-55.
- McCabe, M., & de Waal, T. (2013). Creativity and cooking: Motherhood, agency and social change in everyday life. *Journal of Consumer Culture*, 15(1) 48–65
- Mannell, R. (2007). Leisure, health and well-being. *World Leisure Journal*, 49(3), 114-128. doi: 10.1080/04419057.2007.9674499
- Munsturlar, M. & Argan, M. (2016). Development of the serious and casual leisure measure. *World Leisure Journal*, 58(2), 124-141.
- Newman, D., Tay, L., & Diener, E. (2014). Leisure and subjective well-being: A model of psychological mechanisms as mediating factors. *Journal of Happiness Studies*, 15(3), 555-578.
- Park M., Youngshin, M. & Chun L. (2016). Revisiting individual creativity assessment: triangulation in subjective and objective assessment methods. *Creativity Research Journal*, 28(1), 1-10. doi: 10.1080/10400419.2016.1125259
- Pollanen, S. (2015). Elements of crafts that enhance well-being: textile craft makers' descriptions of their leisure activity. *Journal of Leisure Research*, 47(1), 58-78.



- Pretz, J. & Kaufman, J. (2015). Do traditional admissions criteria reflect applicant creativity? *The Journal of Creative Behavior*, 51(3), 240–251.
- Reiter-Palmon, R., Robinson-Morrall, E., Kaufman, J. & Santo, J. (2012). Evaluation of self-perceptions of creativity: Is it a useful criterion? *Creativity Research Journal*, 24(2-3), 107-114.
- Richards, R. (2007). *Everyday creativity and new views of human nature*. Washington: American Psychological Association.
- Root-Bernstein, R., Bernstein, M. y H. Garnier (1995). Correlations between avocations, scientific style, work habits, and professional impact of scientists. *Creativity Research Journal*, 8(2), 115-137.
- Rowe, D. (2016). Complexity and the leisure complex. *Annals of Leisure Research*, 19(1), 1-6. doi:10.1080/11745398.2015.1028949
- Silvia, P., Wigert, B. Reiter, R. & Kaufman, J. (2012). Assessing creativity with self-report scales: A review and empirical evaluation. *Psychology of Aesthetics, Creativity, and the Arts*, 6, 19-34. Doi: 10.1037/a0024071
- Silvia, P., Beaty, R., Nusbaum, E., Eddington, K., Levin-Aspenson, H. & Kwapil, T. (2014). Everyday creativity in daily life: An experience-sampling study of “little c” creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 8(2), 183-188. doi: 10.1037/a0035722.
- Silvia, P. J., Winterstein, B. P., Willse, J. T., Barona, C. M., Cram, J. T., Hess, K. I., Martinez, J. & Richard, C. A. (2008). Assessing creativity with divergent thinking tasks: Exploring the reliability and validity of new subjective scoring methods. *Psychology of Aesthetics, Creativity, and the Arts*, 2(2), 68 -85.
- Smith, J. & Smith, L. (2017). The Nature of Creativity. (pp. 21-35). En Beghetto, R. & Sriraman, B. (Eds.) *Creative Contradictions in Education*. Cham: Springer International Publishing.
- Stebbins, R. (2011). Leisure studies: the road ahead. *World Leisure Journal*, 53(1), 3-10. doi: 10.1080/04419057.2011.552197
- Stebbins, R. (2016). Education for self-fulfillment: process and context. *Educação & Realidade*, 41(3), 873-887.
- Stodolska, M. (2015). Recreation for all: providing leisure and recreation services in multi-ethnic communities. *World Leisure Journal*, 57(2), 89-103.
- Tanggaard, L. (2015). Reaching out for everyday life creativity. *Creativity. Theories-Research- Applications*, 2(1), 75-78.
- Trnka, R. Zahradnik, M. & Kuška, M. (2016). Emotional creativity and real-life involvement in different types of creative leisure activities. *Creativity Research Journal*, 28(3), 348-356.
- Veal, A. (2015). Human rights, leisure and leisure studies. *World Leisure Journal*, 57(4), 249-272.
- Wolfradt, U. & Pretz, J. (2001). Individual differences in creativity: personality, story writing and hobbies. *European Journal of Personality*, 15, 271-310. doi:10.1002/per.409.
- Zittoun, T. (2016). Living Creatively, In and Through Institutions. *Europe's Journal of Psychology*, 12 (1), 1–11, d doi:10.5964/ejop.v12i1.113.

