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The Influence of Creative Personality Factors on Interpersonal Adjustment in Adolescents: What's the Relationship?

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Abstract

The relationship between factors of creative personality and interpersonal adjustment was analysed in 130 Sicilian adolescents aged 14-18 years. Test of creative personality (Williams, 1994) was used for the evaluation of curiosity (Cu), preference for complexity (Co), imagination (Im), and willingness to risk-taking (Wr); Interpersonal Adjustment Questionnaire (Di Nuovo, 1998) was utilized for the analysis of passivity, impulsivity, narcissism, Self-image worry, and social stress. Results showed that Cu and Wr correlated both negatively with passivity, and Wr correlated negatively with stress in social situations.

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1. Introduction

The framework of the current study for the analysis of creative personality traits was represented by the model of Williams (1969, 1994), based on the Guilford's studies about divergent thinking (1950) and Torrance's creative thinking (1966). For the cognitive factors of creative thinking, Williams valued the fluency (the ability to generate a large number of ideas), the flexibility (the capacity to change ideas passing from one category to another different category), the originality (the facility to produce rare, infrequent, and out of obvious ideas), and the elaboration (the capacity to develop, embellish and enrich of details the ideas). Additionally, for the emotional factors of creative feeling, the author indicated the main characteristics of personality: 1) *curiosity* (that is, the capacity to investigate elements and ideas, finding new and not always direct and obvious connections); 2) *preference for complexity* (the tendency to look for new alternatives and solutions to problems, to restore order out of chaos); 3) *imagination* (that is, the ability to visualize the mental images); 4) *willingness to risk-taking* (the inclination to act under unstructured conditions and to defend one's own ideas).

Creativity has an important role in the development of all individuals and can be defined as an "inherent latent power" (see Baran, Erdogan, & Çakmak, 2011) present in each person. It is a psychological process that involves

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certain characteristics such as multidimensional thinking, sensitivity, alertness and interest in people and environment, being able to think and act comfortably, quickly and independently, and being able to arrive at different and diverse conclusions (Gough, 1979; Çakmak & Baran, 2005); therefore, creativity is considered one of the main personality traits useful both for adaptation and maladjustment of individuals to environment (Csikszentmihalyi, 1996; De Caroli, Licciardello, & Sagone, 2008). As reported by Csikszentmihalyi (1996), creative individuals are “remarkable for their ability to adapt to almost any situation and to make do with whatever is at hand to reach their goals”.

Recently, scholars investigated the relationship between creativity and adjustment (see Ogoemeka, 2011) both in gifted and non-gifted students, indicating that gifted adolescents exhibited maladaptive behavioural patterns (Ziegler & Stoeger, 2010), and were significantly higher in neuroticism and lower in openness and had less emotional and educational adjustment than non-gifted ones (Ramzi, Pakdaman, & Fathabadi, 2011). On the contrary, Lopez and Sotillo (2009) found out no significant differences between gifted students and their peers on global measures of adjustment; additionally, the authors suggested that gifted children and adolescents were neither significantly more poorly nor better adjusted than non-gifted peers. Currently, there are two competing perspectives regarding the contribution of giftedness to psychological adjustment: the first one sustains that giftedness is by itself a risk factor for social adaptation while the second one holds that high cognitive abilities involve distinctive features useful for the protection and growth of individual adjustment.

Few evidences were found about the relation between traits of creative personality and psychological adjustment only in non-gifted adolescents. Only, Ogoemeka (2011) found out that creativity was a potent predictor of social problem solving and both creativity and cognitive ability were strong predictors of adjustment.

About this last dimension, according to Di Nuovo (1998), interpersonal adjustment is composed by a set of psychological dimensions focused on passivity, impulsivity, narcissism, worry for self-image, and social stress, and identifies the grade of individuals’ difficulties to adapt themselves to interpersonal relationships. The dimension of passivity is characterized by low levels of assertiveness and deficit in social skills in interpersonal relationships; impulsivity is considered in terms of high levels of dysfunctional reactions to ambiguous situations; worry for self-image is related to tension deriving from stress provoked by others’ judgment and by worry for the loss of self-esteem; narcissism is a personality trait defined by the individual’s need to be liked, desired, and appreciated, and characterized by the loss of specialness; and finally, social stress derives from the incapacity to manage adequately the social situations, such as speaking in public.

Several personality traits and psychological dimensions are related to interpersonal adjustment, such as neuroticism and extraversion (Gomez et al., 1999; Kardum & Krapić, 2001), happiness (Cheng & Furnham, 2002), hope (Ciarrochi, Heaven, & Davies, 2007), self-efficacy (Caprara & Steca, 2005), and curiosity (Jovanovic & Brdaric, 2012); for example, in Jovanovic and Brdaric’ study (2012), adolescents with high levels in curiosity reported higher levels of life satisfaction and positive affect and greater sense of purpose in life and hope (all factors typically included in psychological adjustment) than adolescents with both low and average levels in curiosity. Few evidences were found in reference to the influence of creative personality factors (only for curiosity and risk taking) on interpersonal adjustment in adolescence. This last relationship represented the main purpose of our study carried out in a sample of adolescents attending to Secondary Schools in Catania (Sicily), Italy.

2. Methodology

2.1. Participants

The sample consisted of 130 Sicilian adolescents aged between 14 and 18 years ($M=16$, $SD=1.4$), divided in 66 boys and 64 girls, randomly chosen among all students attending to three Secondary Public Schools in Catania, Sicily (Italy).

2.2. Measures and procedure

The first measure was constituted by the *Test of Creative Personality* (TCP - Williams, 1994), composed by 50 statements to which subjects evaluated themselves in a 4-points scale (always true, always false, partially true, partially false, I don't know) for the exploration of the following four factors: 1. *curiosity* (Cu): e.g., "Generally I ask questions when I don't know anything"; "I often wonder what other people think"; 2. *preference for complexity* (Co): e.g., "I like ideas which are different from others"; "I prefer trying to solve a problem when there isn't only one correct solution"; 3. *imagination* (Im): e.g., "When I'm reading a newspaper or watching TV, I like to pretend to be one of these protagonists"; "I like to think new ideas no-one ever thought"; 4. *willingness to risk-taking* (Wr): e.g., "I don't like the rules", "I like experiencing new things to see whatever it will happen". Cronbach's α was equal to .82 for the total scale.

The second measure was represented by the *Interpersonal Adjustment Questionnaire* (IAQ - Di Nuovo, 1998), consisted of 50 statements (short version for high school students), on a 3-points frequency scale, for the analysis of *passivity* (e.g., "I'm able to defend my own rights", "I honestly express my feelings to everyone"), *impulsivity* (e.g., "People think that it's too difficult to agree with me", "It sometimes happens that I insulted someone"), *narcissism* (e.g., "I like to be in others' attention", "I like my physical appearance"), *self-image worry* (e.g., "When I am with other people, I'm worried I'm behaving in a ridiculous way", "I'm afraid that other people could refuse what I do"), and *social stress* (e.g., "When I talk to others for the first time, I feel myself worried", "Speaking in public is a problem to me"). Cronbach's α was equal to .79 for the whole questionnaire.

These measures were administered during the school time and in setting face to face by an expert researcher, after parental consent to participation to the current investigation. The examination of the statistical significance of results was carried out using the SPSS 15.0 software by means of the following tests: *t* Student, Pearson's correlation, and linear regressions with stepwise method. Age-groups and sex of participants were considered as independent variables and mean scores obtained in TCP and IAQ were used as dependent variables.

3. Results

3.1. Factors of creative personality

The analysis of data carried out on factors of creative personality showed that participants obtained high means in *curiosity* ($M=18.2$; $SD=3.4$), *preference for complexity* ($M=16.4$; $SD=2.8$), and *willingness to risk-taking* ($M=17.9$; $SD=2.9$) and medium means in *imagination* ($M=15.4$; $SD=3.1$), compared with the normative sample (respectively, for *curiosity*: 15-17; for *preference for complexity*: 13-15; for *imagination*: 15-17; for *willingness to risk-taking*: 14-15). Statistically significant differences for sex and age group were found: girls reached higher scores than boys on *preference for complexity* ($M=16.9$; $SD=2.5$ vs. $M=15.3$; $SD=2.9$; $t_{(128)}=3.41$, $p=.001$) and *willingness to risk-taking* ($M=18.8$; $SD=2.6$ vs. $M=17.1$; $SD=2.9$; $t_{(128)}=3.46$, $p=.001$); older adolescents (16-18 years) obtained higher scores than younger ones (14-16 years) on the factors of *curiosity* ($M=19.5$; $SD=2.9$ vs. $M=17.3$; $SD=3.5$; $t_{(128)}=3.81$, $p<.001$), *preference for complexity* ($M=16.8$; $SD=2.6$ vs. $M=15.6$; $SD=2.9$; $t_{(128)}=2.51$, $p<.05$), *imagination* ($M=16.7$; $SD=3.1$ vs. $M=14.4$; $SD=2.8$; $t_{(128)}=4.37$, $p<.001$), and *willingness to risk-taking* ($M=19.1$; $SD=2.7$ vs. $M=17.1$; $SD=2.8$; $t_{(128)}=4.05$, $p<.001$).

Linear correlations among factors of creative personality indicated that the more adolescents were curious, the more they were complex ($r=.51$, $p<.001$), imaginative ($r=.39$, $p=.001$), and willing to risk-taking ($r=.53$, $p<.001$); in addition, the more they were complex, the more they were imaginative ($r=.41$, $p<.001$) and willing to risk-taking ($r=.48$, $p<.001$); finally, the more they were imaginative, the more they were willing to risk-taking ($r=.33$, $p=.001$).

3.2. Dimensions of interpersonal adjustment

Descriptive analyses carried out on dimensions of interpersonal adjustment showed that boys reached scores very close to the mean on *passivity* ($M=.64$; $SD=.28$) and *worry for self-image* ($M=.88$; $SD=.35$), above the mean on *impulsivity* ($M=1.12$; $SD=.32$), *narcissism* ($M=.92$; $SD=.29$), and *social stress* ($M=.73$; $SD=.39$). Girls obtained scores under the mean on *passivity* ($M=.67$; $SD=.28$) and above the mean on *impulsivity* ($M=1.02$; $SD=.46$), *narcissism* ($M=1.08$; $SD=.34$), *worry for self-image* ($M=1.18$; $SD=.40$), and *social stress* ($M=.92$; $SD=.41$). (Note. All mean scores were compared with the normative sample: respectively, for boys, passivity .63, impulsivity .76, narcissism .84, worry for self-image .81, and social stress .56; for girls, passivity .74, impulsivity .75, narcissism .79, worry for self-image .99, and social stress .70). Effects for sex were observed on *narcissism* ($t_{(128)}=-2.85$, $p=.005$), *worry for self-image* ($t_{(128)}=-4.67$, $p<.001$), and *social stress* ($t_{(128)}=-2.69$, $p=.008$), in the sense that girls obtained higher mean scores than boys. Differences for age groups were found only on *passivity* ($t_{(128)}=2.50$, $p=.014$): younger adolescents obtained higher mean scores ($M=.71$; $SD=.29$) than older ones ($M=.59$; $SD=.22$).

3.3. Correlations between factors of creative personality and dimensions of interpersonal adjustment

Linear correlations were computed between factors of creative personality and dimensions of interpersonal adjustment: *curiosity* ($r=-.34$, $p<.001$) and *willingness to risk-taking* ($r=-.39$, $p<.001$) correlated both negatively with *passivity*; *preference for complexity* ($r=-.20$, $p=.02$) and *willingness to risk-taking* ($r=-.27$, $p=.002$) correlated both negatively with *social stress*. The deepening of analyses by means of linear regressions with stepwise method indicated that *willingness to risk-taking* affected *passivity* ($\beta=-.39$, $t=-4.76$, $p<.001$), *impulsivity* ($\beta=.26$, $t=2.91$, $p=.004$), and *social stress* ($\beta=-.26$, $t=-3.10$, $p=.002$); *imagination* affected *impulsivity* ($\beta=-.23$, $t=-2.59$, $p=.01$).

Differences for sex were analyzed (Table 1). For boys only, negative correlations between *preference for complexity* and both *passivity* and *social stress*; positive correlation between *imagination* and *narcissism*; in addition, significant correlations between *willingness to risk-taking* and both *impulsivity* and *worry for self-image*. For girls only, negative correlations between *curiosity* and both *worry for self-image* and *social stress*; negative correlations between both *imagination* and *impulsivity* and *willingness to risk-taking* and *passivity*.

Table 1. Pearson's linear correlations: differences for sex of participants

Correlations between creative personality and adjustment	Sex	Passivity	Impulsivity	Narcissism	Self-image worry	Social stress
Curiosity	Boys	-.28(*)	.19	-.13	.08	-.12
	Girls	-.44(**)	-.15	-.06	-.40(**)	-.35(**)
Preference for complexity	Boys	-.25(*)	.08	.19	-.19	-.35(**)
	Girls	-.06	-.16	-.06	-.16	-.22
Imagination	Boys	.04	.12	.35(**)	.00	.03
	Girls	-.08	-.27(*)	-.19	-.10	-.21
Willingness to risk-taking	Boys	-.24	.29(*)	-.05	-.39(**)	-.37(**)
	Girls	-.66(**)	.20	.10	-.17	-.35(**)

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Differences for age groups were found (Table 2). For younger adolescents only, negative correlation between *curiosity* and *social stress*; positive correlation between *preference for complexity* and *narcissism*; negative correlations between both *imagination* and *impulsivity*, and *willingness to risk-taking* and *social stress*. For older adolescents only, negative correlation between *curiosity* and *passivity*; positive correlations between both *willingness to risk-taking* and *impulsivity*, and *willingness to risk-taking* and *narcissism*.

4. Discussion and conclusions

The main purpose of our study was to explore the influence of creative personality factors on interpersonal adjustment in a sample of adolescents. About factors of creative personality, results showed that adolescents preferred to investigate elements and ideas, not always finding direct and obvious connections, and evaluated themselves ready to act in unstructured conditions and to defend their own ideas; they also tended to be interested in looking for new alternatives. Girls reached higher scores on complexity and willingness to risk-taking than boys; adolescents aged 16-18 obtained higher scores on curiosity, preference for complexity, imagination, and willingness to risk-taking than adolescents aged 14-16.

Table 2. Pearson's linear correlations: differences for age-groups of participants

Correlations between creative personality and adjustment	Age groups	Passivity	Impulsivity	Narcissism	Self-image worry	Social stress
Curiosity	14-16 yrs	-.19	-.16	-.17	-.11	-.31(**)
	16-18 yrs	-.50(**)	.15	.10	-.02	-.00
Preference for complexity	14-16 yrs	-.05	-.16	.24(*)	.09	-.18
	16-18 yrs	-.22	-.01	-.03	-.21	-.23
Imagination	14-16 yrs	.33(**)	-.46(**)	.01	.05	-.01
	16-18 yrs	-.35(**)	.14	.13	-.00	-.12
Willingness to risk-taking	14-16 yrs	-.24(*)	.03	-.07	-.14	-.43(**)
	16-18 yrs	-.54(**)	.36(**)	.32(*)	-.09	-.07

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Regarding to dimensions of interpersonal adjustment, girls obtained higher mean scores on narcissism, worry for self-image, and social stress than boys. Adolescents aged 14-16 obtained higher mean scores on passivity than adolescents aged 16-18.

About the influence of creative personality factors on interpersonal adjustment, results indicated that willingness to risk-taking affected passivity, impulsivity, and social stress; additionally, imagination affected impulsivity. It meant that the more the adolescents were likely to act under non-structured and at risk situations, the more they obtained high levels of impulsivity and of assertiveness and worthy ability in social skills and, on the contrary, low levels of stress in social situations. These results provided new indications in reference to the impact of creativity, in terms of personality traits, on the psychological adaptation of individuals, as just reported by Csikszentmihalyi (1996) and, more recently, by Jovanovic and Brdaric (2012) in adolescents.

Future researches could be addressed to the knowledge of the relation between creative personality factors and dimensions of interpersonal adjustment, considering as mediating variable the cognitive styles (“innovators” vs. “adaptors”) recognized as typical of creative personality (see Kirton, 1994) also in adults sample.

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