

Theoretical and Review Articles // Artículos teóricos y de revisión

- Ángel Alonso Sanz 115-129 Consideraciones sobre conducta infantil y confinamiento en la crisis por COVID-19 desde la perspectiva funcional del Análisis de la Conducta y ACT. [*Considerations on Children's Behavior and Confinement in COVID-19 Crisis from the Functional Perspective of Behavioral Analysis and ACT.*]
Adrián Barbero Rubio
Bárbara Gil Luciano

Research Articles // Artículos de investigación

- Natalie Bennett 133-145 Identifying Grooming of Children for Sexual Abuse: Gender Effects and Increased False Positives from Internet Information.
William O'Donohue
- Márcia M Schmidt 147-156 Determinants of Low Anger Control in Patients with Coronary Artery Disease.
Karine EB Schmidt
Mauro RS Moura
Mariana L Azeredo
Carlos AM Gottschall
Alexandre S Quadros
- Rossella Falanga 157-166 Are Humor Styles Predictors of Hope? Sex and Age Differences in Italian Adolescents and Young Adults.
Maria Elvira De Caroli
Elisabetta Sagone
Maria Luisa Indiana
- Mohammed Alghamdi 167-176 Validation and Psychometric Properties of the Arabic Psychological Well-Being Post-Traumatic Changes Questionnaire.
Stephen Joseph
Nigel Hunt
- Cristhian A Espitia Pereira 177-188 Psychometric Properties and Measurement Invariance of the Generalized Tracking Questionnaire-Children.
Jessica M Ayala Ávila
María B García Martín
Juan C Suárez Falcón
Francisco J Ruiz
- Jana Hudcovská 189-200 Institutional and Family-based Models of Attention for Colombian Child Soldiers from a Psychosocial Perspective.
Kräuff Schwanhaeuser
- Palmira Faraci 201-209 Psychometric Properties of Saving Cognition Inventory in Italian Nonclinical Samples.
Claudia Perdighe
Giusy Danila Valenti
Claudio Del Monte
Angelo Maria Saliani
- Genís Oña 211-222 Elaboración y validación de un cuestionario para detección del riesgo de reacciones adversas graves por empleo de drogas psicodélicas en terapia. [*Development and Validation of a Questionnaire to Detect the Risk of Serious Adverse Reactions Due to the Use of Psychedelic Drug in Therapy.*]
- Maria Chidi C Onyedibe 223-232 Effectiveness of Group Cognitive Behavioral Therapy on Anxiety and Depression in Nigerian Breast Cancer Patients.
A Chukwuemeka Nkechi
Chuka Mike Ifeagwazi

Notes and Editorial Information // Avisos e información editorial

- Editorial Office 233-234 Normas de publicación-*Instructions to Authors*.
Editorial Office 235 Cobertura e indexación de IJP&PT. [*IJP&PT Abstracting and Indexing.*]

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Are Humor Styles Predictors of Hope? Sex and Age Differences in Italian Adolescents and Young Adults

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ABSTRACT

The study analyzed relationships among humor styles and hope and deepen the role of humor styles as predictors of hope in 582 Italian adolescents and young adults (with age ranged between 14 and 27). Sex and age differences were observed. The Humor Styles Questionnaire was used to assess the inclination to adopt positive (affiliative/self-enhancing) and negative (aggressive/self-defeating) humor styles, and Hope Scale was used to evaluate the general level of hope ("overall" hope score) and its two components (agency/pathways). Significant differences for sex and age-groups were found. Correlation analyses pointed out that positive humor styles were positively related to hope, and self-defeating humor was negatively associated to hope. Linear regressions displayed that self-enhancing and affiliative styles positively influenced hope while self-defeating negatively affected hope. The emerged relationships suggested that promoting the use of humor to amuse the others facilitate interpersonal relationships especially in developmental age.

Keywords: humor styles, hope, individual differences, young adults, adolescents.

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Novelty and Significance

What is already known about the topic?

- Previous research underlined significant differences for age and sex in the inclination to use the four humor styles, however, especially in reference to sex differences, results could be considered not decisive.
- Some researchers observed that the more subjects were exposed to experience of laughter/humor or humorous videos, the more they showed high levels of hope.

What this paper adds?

- Results provided significant data in relation to sex and age differences in Italian context on humor styles and hope.
- Results showed age-groups differences in hope: young adults expressed higher levels in hope than adolescents.
- Correlation analysis confirmed positive relationship between positive humor styles and hope and negative relationships between self-defeating humor style and hope.

This study examined two main topics: humor styles, analyzed according to Martin's perspective (Martin, Puhlik-Doris, Larsen, Gray & Weir, 2003) and hope in the point of view proposed by Snyder (1994; 2000).

Humor has been considered one of the main resources that individuals could use to increase personal and social well-being (Kuiper & McHale, 2009; Martin, Puhlik-Doris, Larsen, Gray, & Wei, 2003; Penzo, Giannetti, Stefanile, & Sirigatti, 2011; Zhao, Cong, & Wang, 2012) and several studies noted that humor was strictly linked to the ability to overcome difficulties and problems (Able, 2002; Erickson & Feldstein, 2007); in some cases, it was considered a coping strategy (Doosje, Landsheer, de Goede, & van Doornen, 2010; Fuhr, 2002; Henman, 2001), and used with therapeutic intent (Sultanoff, 2013). Martin *et alia* defined humor as "a multi-faceted construct which is best viewed as a class of loosely related traits" (p.49) constituted by cognitive, emotional, behavioural, psycho-physiological, and social components. Martin *et alia* (2003) marked out four humor styles linked to positive or negative ways in which humor was typically used

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in everyday life (see also Martin, 2007). These authors named the two positive humor styles as affiliative and self-enhancing styles and considered the former as functional to facilitate the development of social relationships and the latter as useful to reach personal well-being by means of humor. More specifically, the affiliative style was linked to the tendency to tell jokes, humorous stories, and witticisms in order to amuse the others and ease interpersonal relationships. Self-enhancing style was referred as individual aspects of humor and consisted in the use of humor as a coping strategy and the tendency to find a humorous point of view in stressful situations.

The two negative humor styles were labelled as aggressive and self-defeating styles and were considered detrimental respectively to oneself and to other people. The aggressive humor style was linked to the inclination to use humor to improve one's own personal image harming the others through sarcasm and teasing, while the self-defeating humor style was referred to as the exhibition of excessive behaviours likely to amuse the others at one's own expense, showing ridiculous performances or telling funny stories about oneself in order to improve relationships with others (Martin, 2007).

Scholars underlined significant differences for sex and age in the inclination to use the four humor styles. In reference to sex differences results could be considered not decisive, in the sense that several researches pointed out sex differences for all four humor styles (Martin *et alia*, 2003); only for aggressive, self-defeating, and self-enhancing styles (Saroglou & Scariot, 2002) only for aggressive and self-defeating styles (Cassaretto & Martínez, 2009; Kazarian & Martin, 2004); only for aggressive and affiliative styles (Bilge & Saltuk, 2007); only for aggressive style (Edwards & Martin, 2010; Falanga, De Caroli, & Sagone, 2014; Penzo *et alia*, 2011; Pietrantoni & Dionigi, 2006; Sirigatti, Penzo, Giannetti, & Stefanile 2014; Yip & Martin, 2006), and for none of the four humor styles (Erikson & Feldstein, 2007).

In detail, Martin and his colleagues (2003) noticed that in a very large sample ranged between 14 to 87 years, males scored higher than females in all humor styles, especially in aggressive and self-defeating styles; in fact, they underlined that differences observed for affiliative and self-enhancing humor styles were very small and they concluded that these styles reached significance merely because of the large sample size.

Similarly, in Belgian university students, Saroglou and Scariot (2002) found that males scored higher than females in self-enhancing and in negative humor styles. In a sample of Lebanese university students, (Kazarian & Martin, 2004) and in Peruvian university students (Cassaretto & Martínez, 2009) the Authors noted that males used both aggressive and self-defeating styles more than females. Moreover, Bilge and Saltuk (2007), in a sample of Turkish university students, noted that males scored higher in the aggressive style than females and, on the contrary, females obtained higher levels in the affiliative style than males. Furthermore, other researches carried out with adolescents and adults (Edwards & Martin, 2010; Falanga, De Caroli, & Sagone, 2014; Penzo *et alia*, 2011; Pietrantoni & Dionigi, 2006; Sirigatti *et alia*, 2014; Yip & Martin, 2006) confirmed that males showed more than females only the inclination to adopt the aggressive style, without significant differences for the other styles. Finally, in a research realized with American adolescents, Erikson and Feldstein (2007) found no differences for sex in the inclination to adopt the four humor styles.

In conclusion, most researches displayed concordance only for one sex difference: males scored higher than females in the aggressive humor style.

In relation to age, Martin *et alia* (2003) noted that middle adolescents (14-18 years old) scored higher than adults (over 25 years old) in affiliative and aggressive

styles; in this sense, “older adults, as compared to adolescents, seem to engage in less affiliative joking and laughing with others, perhaps due to less involvement in social activities [...] and are generally less likely to use humor to disparage, ridicule, or manipulate others than are adolescents” (p.61). Moreover, Authors found that, only for females, young adults obtained higher levels than middle adolescents in the self-enhancing humor style. More recently, Falanga, De Caroli, and Sagone (2014) found that early Italian adolescents were more inclined to adopt self-defeating humor style than late adolescents. No differences emerged between adolescents and young adults in the use of humor styles in a study carried out by Sirigatti *et alia* (2014). These results showed the lack of agreement in scientific literature for age differences in relation to the inclination to use humor styles.

Hope concerns the psychological processes activated by individuals to pursue a desire. In the cognitive-motivational perspective (Snyder, Irving & Anderson, 1991), hope was defined as a tendency to move to action, characterized by cognitive, emotional, and behavioural processes (Snyder, 1994, 2000; Snyder *et alia*, 1991). Hope was considered a protective factor for adolescents, especially in relation to sense of humor (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003). On the contrary, hopelessness could be considered a risk factor: Viñas Poch (2009), in a research carried out with adolescents aged between 12 and 17 years, noted that hopelessness was one of the best indicators of excessive Internet use. According to Snyder *et alia* (1991), hope “is a positive motivational state that is based on an interactively derived sense of successful between (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)” (p.571). Specifically, the agency, defined by Zambianchi (2018) as “the active intervention of individuals in the environment” (p.1), was linked to the person’s motivation to initiate and sustain actions toward goal achievement while the pathways component regarded the person’s ability to conceptualize one or more ways to reach desired goals. In this sense, people with high levels of hope were highly motivated to pursue their own goals and able to find resources to achieve them.

According to Snyder *et alia* (2003), “the findings are very consistent in showing no differences in hope between girls and boys, or young women and men. Indeed, there is not one reported study showing any sex differences”(p.127). However, Ciarrocchi and Deneke (2006), in a study carried out with adults ranged between 18 and 84 years, found that men scored significantly higher than women on hope, especially in pathways. Moreover, a more recent research carried out with adults ranged between 25 and 35 years, Batool, Niazy, and Ghayas (2014) found that levels of hope and agency were higher among men as compared to women.

Few studies investigated age differences in hope. In a sample aged between 7 and 17 years, Snyder and colleagues (1997) found no differences for age, while, in a study carried out with Australian adolescents aged between 13 and 17 years, Venning, Elliott, Kettler, and Wilson (2009) pointed out statistically significant differences in “overall” hope scores across age and, in detail, observed that younger adolescents scored less in pathways than older ones.

The relationships between humor and hope was an interesting field of research that stimulated several studies carried out by means of various measures. In a research with residents and staff members of an assisted living facility, Wetsburg (2003) noted that experience of laughter/humor, analyzed by means of “The funny Bone History” (Herth, 1991, 1993), positively affected hope levels. Similarly, Vilaythong, Arnau, Rosen, and Mascaro (2003), in a sample ranged between 18 and 42 years, observed a positive

influence by the exposition at humorous videos on levels of hope and measuring humor by means of Multidimensional Sense of Humor Scale (MSHS, Thorson & Powell, 1993) found positive relationships between humor and hope. However, a more recent research, carried out by means of MSHS (Batool, Niazy, & Ghayas, 2014), found no significant relationships between humor and hope.

Cassaretto and Martinez (2009), in a study carried out with Peruvian university students, found significant relationships between humor styles measured by means of Humor Style Questionnaire (HSQ, Martin *et alia*, 2003) and hope (measured by means of Hert Hope Scale, Hert, 1991). In detail, the Authors pointed out positive relationships between affiliative and self-enhancing styles and hope and negative relationships between aggressive style and hope.

Using both HSQ and MSHS Cann and Etzel (2008) found relationships between humor and hope. More specifically, in a study with students attending a state-supported university in the Southeastern United States, Authors found positive relationships between self-enhancing style and hope and negative relationships between self-defeating style and hope. Similarly, by means of HSQ and Hope Scale (Snyder *et alia*, 1991), Cann, Stilwell, and Taku (2010) in a longitudinal study with students attending a South Eastern United States University, observed positive relationships between affiliative and self-enhancing humor styles and hope ("overall" score) and pointed out negative relationships between self-defeating humor style and hope ("overall" score).

The aims of the present study were to verify differences for age-group and sex in humor styles and dispositional hope in Italian context and to enhance knowledge about the relationships among these dimensions.

On the light of results pointed out on previous studies in relation to sex and age differences in humor styles and hope disposition, we analysed these differences without specific hypotheses. On the basis of literature outcomes, the following hypotheses were advanced about the relationships between humor styles and hope: (1) affiliative and self-enhancing humor styles will be positively related to hope dimensions; (2) self-defeating humor styles will be negatively related to hope dimensions; and (3) we hypothesized that humor styles were predictors of hope and its dimensions.

METHOD

Participants

The sample consisted of 582 (356 females) Italian adolescents and young adults, ranged between 14 and 27 years. Participants were randomly recruited among students attending Public High School and University Courses in east Sicily (Italy). Sample was involved on the basis of voluntary participation and was divided in two groups: (1) formed by 271 adolescents attending the first, third, and fifth years of Public High Schools ($M_{age} = 17.60$; $SD = 1.54$); (2) was with 311 young adults attending University Courses ($M_{age} = 21.34$ $SD = 2.65$). All participants gave their informed consent prior to their inclusion in the study (for adolescents under 18 years old, parents gave informed consent).

Measures and Procedure

The group of adolescents were recruited among all students attending the first classes, the third classes, and the fifth classes of two public High Schools in East Sicily

(Italy). They completed measures individually, during school time, in a quiet room with other five or six students and the researcher. The group of young adults were recruited among university students attending the first, the second, and the third year of degree courses in East Sicily. All university students were invited to completed measures individually, before the beginning of course lessons, in a quiet room with other seven students and the researcher. All participants were informed that they were involved in a study on attitudes toward life. They were instructed to choose the response options that better described their opinions and beliefs, in anonymous way and without timeout. Everybody completed measures in approximately 20-25 minutes. Participants didn't receive any benefits.

Parental consent was requested and obtained for the participation of underage students to the research prior to beginning data collection. In detail, parents completed a partially pre-filled form in order to authorize their sons or daughters to participate to a study on attitudes toward life carried out by University of Catania. Researchers followed the ethical code for Italian psychologists (L. 18.02.1989, n. 56), the ethical code for psychological research by Italian Psychologists Association, and DL for data privacy (DLGS 196/2003). The data were collected over three months by two researchers adequately trained.

Participants completed the following measures:

Humor Styles Questionnaire (Martin *et alia*, 2003; Italian version, Penzo *et alia*, 2011). Is a self-report questionnaire, structured in 32 items, with response options on a 7-points Likert scale, articulated in four subscales linked to affiliative humor style (e.g. "I laugh and joke a lot with my closest friends"; $\alpha = .79$), self-enhancing humor style (e.g. "If I am feeling depressed, I can usually cheer myself up with humor"; $\alpha = .67$), aggressive humor style (e.g. "If someone makes a mistake, I will often tease them about it"; $\alpha = .62$), and self-defeating humor style (e.g. "I let people laugh at me or make fun at my expense more than I should"; $\alpha = .68$).

Hope Scales (Snyder *et alia*, 1991; Snyder, Harris *et alia*, 1997; Italian translation). Is a self-report scale articulated in 12 items evaluable in Likert-type response scales from 1 (definitely false) to 8 points (definitely true). Four items were related to pathways (e.g. "I can think of many ways to get out of a jam"), four items were related to agency (e.g. "I energetically pursue my goals"), and the remaining four items were distracters.

Data Analysis

Statistical analyses were carried out applying *t*-tests, linear correlations, and linear regression using Statistical Package for Social Sciences (SPSS). In reference to hope, the two subscales (pathways and agency) were summed to create the "overall" hope score. Sex (male vs. female) and age-groups (adolescents vs. young adults) were considered as independent variables, whereas mean scores obtained on the four humor styles, "overall" hope score, pathways, and agency were considered as dependent variables.

RESULTS

Descriptive analyses showed that the sample was more inclined to use affiliative and self-enhancing humor styles than self-defeating and aggressive styles ($F_{(3,579)} = 671.76$, $p < .001$). Statistical analyses for sex showed significant differences for self-enhancing and aggressive humor styles. More specifically, males displayed higher levels than females both in self-enhancing ($t_{(580)} = 2.54$, $p = .01$) and aggressive humor styles ($t_{(580)} = 5.53$, $p < .001$) (see Table 1).

Differences for age-groups were found in aggressive and self-defeating humor styles. More specifically, adolescents showed higher levels in aggressive humor style than young adults while young adults obtained higher levels than adolescents in self-defeating humor style (see Table 2).

Descriptive analyses showed that our sample scored higher in agency ($M= 25.56$ $SD= 4.50$) than in pathways ($M= 23.92$ $SD= 4.19$) ($t_{(581)}= 3.91$ $p <.001$). Differences for sex were found in pathways; in detail, males ($M= 24.63$ $SD= 3.69$) obtained higher levels in pathways than females ($M= 23.47$ $SD= 4.44$) ($t_{(580)}= 3.27$ $p <.001$). Significant differences for age-groups emerged in relation to “overall” hope score and pathways: young adults expressed higher levels both in “overall” hope score and pathways than the others (see Table 3).

Table 1. Differences for sex in Humor styles ($N= 582$).

Humor styles	Males	Females	<i>t</i>	<i>p</i>
	<i>M (SD)</i>	<i>M (SD)</i>		
Affiliative	43.70 (8.10)	43.95 (7.70)	-.38	.70
Self-enhancing	34.96 (6.49)	33.34 (8.12)	2.54	.01
Aggressive	28.40 (7.05)	25.13 (6.89)	5.53	<.001
Self-defeating	28.46 (7.96)	28.56 (8.06)	-.13	.89

Table 2. Differences for age-groups in Humor styles ($N= 582$).

Humor styles	Group 1	Group 2	<i>t</i>	<i>p</i>
	<i>M (SD)</i>	<i>M (SD)</i>		
Affiliative	44.45 (7.45)	43.34 (8.16)	1.70	.09
Self-enhancing	34.60 (7.42)	33.42 (7.66)	1.88	.06
Aggressive	27.32 (7.03)	25.60 (7.12)	2.93	.003
Self-defeating	27.24 (8.11)	29.63 (7.77)	-3.62	<.001

Table 3. Differences for age-groups in Hope disposition ($N= 582$).

Hope	Group 1	Group 2	<i>t</i>	<i>p</i>
	<i>M (SD)</i>	<i>M (SD)</i>		
Agency	25.52 (4.76)	24.59 (4.28)	-.181	.86
Pathways	24.68 (4.19)	23.26 (4.10)	4.14	<.001
Overall	49.21 (8.28)	47.85 (7.26)	2.10	.03

The analysis of linear correlations among humor styles and dispositional hope disclosed significant relationships both in male and female (see Table 4). Positive relationships were noted between affiliative and self-enhancing styles and “overall” hope and its two sub-dimensions, agency and pathways. Negative relationships were found between self-defeating humor style and agency and “overall” hope and its two sub-dimensions, agency and, only for males, pathways.

Moreover, significant relationships emerged also about age-groups (see table 5). Positive relationships were noted between affiliative and self-enhancing styles and “overall” hope and its two sub-dimensions, agency and pathways. For young adults only, negative relationships emerged between self-defeating humor style and “overall” hope and agency.

Analysis of linear regressions displayed that self-enhancing ($\beta= .325$, $t= 8.58$, $p <.001$), affiliative ($\beta= .248$, $t= 6.56$, $p <.001$), and, negatively, self-defeating humor

Table 4. Correlations among humor styles and hope for male and female.

	Males (n= 226)			Females (n= 356)		
	Agency	Pathways	Overall Hope	Agency	Pathways	Overall Hope
Affiliative humor style	.26**	.36**	.34**	.23**	.28**	.29**
Self-enhancing humor style	.26**	.26**	.29**	.29**	.42**	.39**
Aggressive humor style	-.02	-.006	-.02	-.09	-.07	-.09
Self-defeating humor style	-.21**	-.15*	-.21**	-.16**	-.05	-.12*

Notes: *= $p < .05$; **= $p < .001$.

Table 5. Correlations among humor styles and hope for age-groups.

	Group 1 (n= 271)			Group 2 (n= 311)		
	Agency	Pathways	Overall Hope	Agency	Pathways	Overall Hope
Affiliative humor style	.31**	.40**	.38**	.19**	.22**	.24**
Self-enhancing humor style	.34**	.41**	.40**	.21**	.33**	.31**
Aggressive humor style	-.10	-.01	-.06	-.06	-.06	-.06
Self-defeating humor style	-.11	-.07	-.10	-.25**	-.05	-.18**

Notes: *= $p < .05$; **= $p < .001$.

styles ($\beta = -.202, t = -5.46, p < .001$) influenced “overall” hope ($R = .472, R^2 = .22$) ($F_{(3,578)} = 55.29, p < .001$). More specifically, self-enhancing ($\beta = .246, t = 6.24, p < .001$), affiliative ($\beta = .205, t = 5.22, p < .001$), and, negatively, self-defeating humor styles ($\beta = -.222, t = -5.77, p < .001$) influenced agency ($R = .396, R^2 = .16; F_{(3,578)} = 35.78, p < .001$) and self-enhancing ($\beta = .337, t = 8.86, p < .001$), affiliative ($\beta = .239, t = 6.28, p < .001$), and, negatively, self-defeating ($\beta = -.135, t = -3.64, p < .001$) influenced pathways ($R = .460, R^2 = .21; F_{(3,578)} = 51.71, p < .001$).

DISCUSSION

The main contributions of present study could be summarize in four points: results confirmed sex differences in relation to aggressive humor style; study increased knowledge about age-groups differences in hope; correlation analysis confirmed positive relationship between positive humor styles and hope and negative relationships between self-defeating humor style and hope; and humor was a predictor of hope.

On the light of an inconsistent scenario provided by previous studies in relation to sex difference in humor styles, the present study gave a relevant confirmation about the inclination of male to use, more than females, aggressive humor style. So, results showed that males scored higher in aggressive style than female ones. In this sense, males reported a greater tendency than females to use aggressive forms of humor, such as sarcasm, ridicule, and “put-down” humor in order to improve one’s own personal image by harming the others through derision and teasing. This result was consistent with most of previous evidences (Bilge & Saltuk, 2007; Cassaretto & Martínez, 2009; Edwards & Martin, 2010; Falanga, De Caroli, & Sagone, 2014; Kazarian & Martin, 2004; Martin *et alia*, 2003; Penzo *et alia*, 2011; Pietrantonio & Dionigi, 2006; Sarouglou & Scariot, 2002; Sirigatti *et alia*, 2014; Yip & Martin, 2006) and could be read on the light of the general more inclination of males to engage in potentially maladaptive forms of humor than females (Cassaretto & Martínez, 2009; Kazarian & Martin, 2004; Martin & Kuiper, 1999; Martin *et alia*, 2003).

Moreover, the present study confirmed results pointed out by Sarouglou and Scariot (2002) and underlined a tendency of males, also in our context, to use more than females

humor as coping strategy and find humorous points of view in stressing situations. Although this result didn't allow to reach definitively conclusions, in consideration that the males of our sample scored higher than the females in pathways, evidence provided also by Ciarrocchi and Deneke (2006), these results could be read in terms of a male profile characterized, apart from the use of aggressive humor, also by greater inclination than females to find strategies to solve problems, conceptualizing one or more ways (including humorous ones) to reach desired goals.

In reference to age-group differences, adolescents expressed higher levels of aggressive humor style than young adults; in this sense, they were generally highly likely to use humor to disparage, ridicule, or manipulate others than adolescents are (see Martin *et alia*, 2003). Unlike Martin's study but in line with Italian studies (Falanga, De Caroli, & Sagone, 2014; Sirigatti *et alia* 2014) no differences for age-groups were found in relation to the affiliative style. The last result displayed consistent evidences in Italian samples, in this sense, it is possible hypothesize cultural differences for age-groups in inclination to use humor styles. Future research carried out with older and younger participants could verify this trend.

In front of paucity of research regarding age-groups differences in hope, present study provided evidences on differences between adolescents and young adults in Italian context. In detail, adolescents scored higher than young adults in "overall" hope and in pathways; in this sense, adolescents showed higher ability to conceptualize one or more ways to reach desired goals than young adults.

Correlations analysis confirmed the first hypothesis and displayed positive relationships between affiliative (especially for males and adolescents) and self-enhancing (especially for females and adolescents) humor styles and hope ("overall" score and its dimensions) (first hypothesis). It meant that the more the students were inclined to tell jokes, humorous stories, and witticisms in order to amuse the others, the more they were able to pursue goals and individuate one or more ways to achieve them. Additionally, the more the students tended to use humor as coping strategy the more they perceived themselves as motivated to initiate and sustain actions toward goal achievement and able to discover ways to arrive at desired goals.

Furthermore, self-defeating style was negatively related to "overall" hope and agency dimensions only in young adults (second hypothesis). It indicated that the more the young adults tended to excessively amuse the others at one's own expense the less they were motivated to achieve personal goals.

The direction of these relationships was highlighted by linear regressions analyses and confirmed that positive humor styles were predictors of hope and its dimensions while self-defeating style negatively influenced hope (third hypothesis).

The main limits of this study regarded the paucity of sample that didn't allow us generalizability of outcomes and cross-cultural comparisons. In addition, generally, self-report scales, used in present study, were subject to limitations such as, for example, social desirability, limits in introspective ability and in interpretation of the questions. Moreover, previous researches suggested that humor may have different and peculiar forms of expression in different socio-cultural contexts (Sirigatti *et alia*, 2014). Although Authors defined these differences as a limit, this aspect could explain differences among outcomes provided by researches carried out in different socio-cultural context.

The relationships between positive humor styles and hope suggested that, especially in developmental age, promoting the use of humor to amuse the others, facilitating interpersonal relationships, and to enhance themselves could improve the ability to

pursuit goals and find ways to achieve them. In this sense, specific trainings aimed to the development and improvement the use of positive humor styles could be considered a functional strategy in order to increase the perceived ability to achieve personal goals in developmental age. Future research could verify effectiveness of training based on improvement of positive humor styles on development of hope.

Future research could deepen the relationships between examined dimensions and other psychological topics such as resilience and locus of control. Moreover, future study could analyse the role of cultural differences in humor and hope and could contribute to clarify reasons of differences in sex and age-groups emerged in literature.

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