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Is Alexithymia Related to Individual Cultural Orientation? A Preliminary Study on Horizontal-Vertical Individualism-Collectivism in an Italian Sample

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Abstract

Introduction: Alexithymia, characterized by difficulties in identifying and describing feelings and externally oriented thinking, is conceptualized as a multidimensional construct of personal functioning and a transdiagnostic construct. There is a paucity of research on the link between cultural context, alexithymia, and health. Most studies were conducted in Western individualistic countries. The scientific community generally considers that a more Eastern and/or more collectivist cultural orientation (interdependence) explains higher levels of alexithymia. More specifically, higher interdependent self-construal has been associated with higher alexithymia, while higher independent self-construal has been associated with lower alexithymia. No study has investigated this topic in the Italian context or assessed individual cultural orientation distinguishing horizontal-vertical individualism-collectivism. This preliminary study aimed to fill this gap by exploring the relationship between alexithymia and individual cultural orientation in an Italian community sample. Moreover, anxious and depressive symptoms, psychological well-being, and quality of life were taken into account.

Methods: Participants (N = 80) were recruited from a region in southern Italy, with ages ranging from 18 to 79 years (M = 42.82; SD = 17.18). Participants completed the Toronto Alexithymia Scale (TAS-20), the Horizontal-Vertical Individualism-Collectivism Scale (INDCOL), and measures of emotional distress (depression [EDD] and anxiety [EDA]), psychological well-being (PWB), and quality of life (WHOQOL-BRIEF).

Results: No significant sex differences emerged for any measured variables. All alexithymia dimensions showed positive associations with anxious and depressive symptoms and negative associations with psychological well-being and quality of life. Contrary to findings in individualist cultures, no associations emerged between alexithymia and individualist orientation. Moreover, negative correlations were found between collectivist orientation (horizontal and vertical) and alexithymic traits, particularly difficulty identifying feelings.

Conclusion: Findings suggest the relationship between cultural orientation and alexithymia might depend on person-environment fit, whereby alignment between individual orientation and cultural values might promote emotional awareness. Given southern Italy's collectivistic culture, results support the "person-environment fit" and "personality-culture clash" concepts, highlighting the need to distinguish cultural and individual levels when examining cultural influences on emotional functioning. Limitations include cross-sectional design, small sample size, and gender imbalance. Future research should employ larger, gender-balanced, cross-cultural samples.

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1. Introduction

The concept of alexithymia was formulated by Sifneos in (1973). Alexithymia does not constitute a diagnostic category nor a discrete disorder, and its clinical relevance extends beyond "psychosomatic" conditions. It is conceptualized as a multidimensional construct of personal functioning and a transdiagnostic construct (e.g., Keefer et al., 2019; Parker et al., 2008; Sekely et al., 2018) that may contribute to the etiology and maintenance of numerous clinical conditions, encompassing both medical manifestations (Di Giuseppe & Conversano, 2022; Porcelli & Taylor, 2018) and psychological disorders, including anxiety, depressive, and personality disorders (Honkalampi et al., 2018), as well as addictive behaviors and feeding and eating disorders (Morie & Ridout, 2018). Contemporary research has established associations between alexithymia and Internet Addiction/Problematic Internet Use (Germani et al., 2023; Mahapatra & Sharma, 2018; Topino et al., 2021). Alexithymia, when associated to depressive and anxiety symptoms, is associated to an increased suicide risk (De Berardis et al., 2017). Moreover, alexithymia is related to attachment styles and trauma (Schimmenti & Caretti, 2018), impaired emotional intelligence and empathy (Grynberg et al., 2018), as well as emotion regulation strategies (Parker et al., 2001; Preece et al., 2023).

Research developed many methods and measures to evaluate alexithymia (Sekely et al., 2018). The 20-item Toronto Alexithymia Scale (TAS-20; Bagby et al., 1994a; Bagby et al., 1994b; Bagby et al., 2020; Taylor et al., 2003) is the most studied and utilized measure. TAS-20 showed good psychometric properties and it was translated in many languages (Bagby et al., 2020; Ryder et al., 2018; Taylor et al., 2003). A meta-analytic confirmatory factor analysis (Schroeders et al., 2022) found support for the original three factors model: difficulty in identifying feelings (DIF); difficulty in describing feelings to others (DDF); and externally oriented thinking (EOT). The total score (TAS-20-TS) can be used with a categorical approach to distinguish between non-alexithymic individuals, those with borderline scores, and alexithymic individuals. However, the dimensional approach is more widely recommended.

When alexithymia is assessed using a categorical approach, the average prevalence is around 10-15% in the general population and between 10% and 80% in highly heterogeneous clinical conditions, both medical and psychiatric. More specifically, average rates within the aforementioned range can be found in various classic "psychosomatic" conditions and in multifactorial, functional stress disorders; approximately between 15% and 55% in patients with anxiety disorders; between approximately 25% and 55% in patients with depressive disorders; and between 50% and 80% in various disorders of affective regulation, including PTSD, eating disorders, addictions, and dissociative disorders (e.g., Honkalampi et al., 2018; Li et al., 2015; Porcelli & Taylor, 2018).

1.1 The role of socio-cultural factors on alexithymia

Results about the relationships between alexithymia and age/age set, sex/gender, level of education and socio-economic status (SES), are mixed. A meta-analysis found small sex/gender differences for TAS-20-TS with different patters: women reported higher DIF, while men showed higher DDF and EOT. In general, alexithymia levels tend to be higher among people with low SES and low level of education (Mendia et al., 2024; Ryder et al., 2018).

Referring to the role of culture, there is a paucity of research on the link between cultural context, alexithymia and health (Ryder et al., 2018). An initial study (Dion, 1996) conducted in Canada on a sample of students found that participants who reported Chinese as their first language exhibited higher mean scores for TAS-20-TS and across the three subscales compared to those whose mother tongue was English or other European languages. Subsequently, a study (Le et al., 2002) comparing alexithymia levels among three groups of university students – European Americans and Asian Americans attending a university in the US, and Malaysians attending a university in Malaysia – observed a higher mean level of TAS-20TS in the two Asian groups compared to the European American group. A second study published in the same article (Le et al., 2002) compared only an Asian American group and a European American group, confirming the findings of the first study. Another study (Lo, 2014) conducted in Canada among 214 university students found significantly higher mean levels of TAS-20-TS among Asian Canadians (East or Southeast Asian) compared to non-Asian Canadians (European and Remaining Ethnicities). The same group also reported higher levels of purity and order, that were correlated positively with alexithymia levels. More recently, a study (Huggins et al., 2023) recorded higher mean levels of TAS-20-TS, DIF, and EOT in a group of 29 Japanese adults compared to a group of 43 UK adults.

Studies on clinical samples (Dere et al., 2012; Ryder et al., 2008) found higher levels of alexithymia only on the EOT scale among Chinese compared to Euro-Canadian depressed outpatients. The authors explained this mean difference in EOT levels by referring to the greater importance in Chinese culture of social harmony, relationships, and contextual factors, with relatively less emphasis on individual emotional experience. A subsequent study (Dere et al., 2013) conducted in China on a clinical sample of 268 patients found a negative association between EOT and Euro-American values linked to modernization (as opposed to traditional Chinese cultural values). These two studies, taken together, suggest that more Eastern and collectivist cultural values lead to higher levels of EOT.

Broadly speaking, individualism (I) as a worldview that centralizes personal goals, uniqueness, and control while peripheralizing the social dimension, and collectivism (C) as a worldview that emphasizes common fate, shared goals, and collective values (Oyserman et al., 2002).

Both individualism (I) and collectivism (C) represent fundamental cultural dimensions warranting consideration (Schimmack et al., 2005). Beyond culture or country of origin or belonging and first language, the extent to which self-construal measured in terms of independent self and interdependent self (Singelis, 1994) was related to alexithymia levels has been investigated. One study (Konrath et al., 2011) with a sample of adults almost entirely Caucasian and born in the US – testing multiple regression models with independent self and interdependent self as independent variables and alexithymia dimensions as dependent variables – found negative relationships between total alexithymia, DIF and DDF and independent self, with medium effect sizes (β ranging from -.32 to -.42); a positive relationship between total alexithymia, DIF and DDF and interdependent self, with medium effect sizes (β ranging from .29 to .46). No significant relationship emerged between alexithymia and EOT. A second study (Konrath et al., 2011) conducted on a sample of students and community participants composed of Caucasian and Asian/Asian-American, found higher levels of TAS-20-TS, DIF, and EOT among Asians compared to Caucasians. This difference was also recorded regarding mean scores of interdependent self. The relationships between TAS-20, independent self and interdependent self, were similar to those of the first study. Specifically: negative relationship between total alexithymia, DIF, DDF, EOT and independent self, with low-medium effect sizes (β ranging from -.18 to -.32); positive relationship between total alexithymia, DIF and DDF and interdependent self, with low effect sizes (β ranging from .13 to .17). No significant relationship emerged between alexithymia and EOT.

Scientific community considers that a more Eastern and/or more collectivist cultural orientation (interdependence) explains higher levels of alexithymia and depressive conditions characterized by greater somatic symptoms (somatizations) than other populations, due to the tendency to express pain through the body, less psychological terms to describe emotions and feelings, as well as a greater propensity to pay attention to others' evaluations and seek approval from others and less to exploring one's internal world and sharing one's emotional experiences with others. Conversely, more Western and individualist cultural values would promote higher tendency to introspection, pay attention to one's own emotions and sharing them with others, express suffering by reporting psychological symptoms.

1.2 Critical issues and some gaps

Referring to the results of Ryder et al. (2008) and Dere et al. (2013), it should be noted that in both cases the majority of patients were depressed and that both DIF and DDF levels tend to be very high in these patient groups (Honkalampi et al., 2018). Therefore, in the first study, the absence of difference between Chinese and Euro-Canadians on these two subscales might be

related to depression. In the second study, it is possible that the relationship between DIF and DDF and cultural values did not emerge due to very high scores on both alexithymia scales, with limited distribution of scores.

The results of the study by Konrath et al. (2011) do not substantiate the conclusion that a heightened propensity toward interdependence is associated with elevated EOT scores. Furthermore, although independent and interdependent self-construal are frequently employed interchangeably with I and C, these constructs are not equivalent. The literature presents various measurement instruments for assessing independent self/I and interdependent self/C at the individual level. The Singelis scale (Singelis, 1994) comprises independent self and interdependent self dimensions. The Oyserman scale (Oyserman et al., 2002) is structured around individualism and collectivism constructs. Triandis' scale (1996) provides a more nuanced framework, distinguishing four orientations: vertical individualism (VI), characterized by the desire to achieve distinction and acquire status through individual competition; horizontal individualism (HI), which emphasizes the desire for uniqueness, distinctiveness from groups, and high self-reliance; vertical collectivism (VC), characterized by individuals who prioritize in-group integrity and support inter-group competition, even through submission to in-group authorities; and horizontal collectivism (HC), which reflects the desire to perceive oneself as similar to others and emphasizes shared goals, interdependence, and sociability without hierarchical submission to authority (Singelis et al., 1995; Triandis, 1995; Triandis & Gelfand, 1998). This multidimensional framework has received empirical support across diverse cultural contexts (see Germani et al., 2020).

Paquet and Kline (2009) demonstrated that Triandis's scale (1996) exhibited superior factorial structure, construct validity, and reliability relative to alternative measures. Notably, their study revealed that none of the 12 independence items from the Self-Construal Scale (Singelis, 1994) achieved statistical significance on their respective factor loadings. Furthermore, independent self-construal demonstrated a significant positive correlation of medium effect size with HI and the individualism dimension of Oyserman's scale (Oyserman et al., 2002), while showing no significant association with VI. Conversely, both HI and VI exhibited positive relationships with the individualism dimension of Oyserman's scale, with medium to large effect sizes. A comprehensive cross-cultural investigation revealed that independent self-construal displayed acceptable internal consistency in only a limited number of countries (Cheng et al., 2016). It is noteworthy that several items comprising the independent self construct – such as "I can talk openly with a person who I meet for the first time [...]", "Speaking up during a class (or a meeting) is not a problem for me", "I act the same way no matter who I am with", "I am the same person at home that I am at school", "I value being in good health above everything",

"Being able to take care of myself is a primary concern for me", and "Having a lively imagination is important to me" – appear to diverge considerably from core individualist traits. Rather, these items appear more closely aligned with well-being orientation, robust self-confidence, low social anxiety, and imaginative capacity. These characteristics may account for the observed relationship between independent self and lower alexithymia levels.

Moreover, when examining I and C, it is essential to recognize that these constructs can be analyzed both as characteristics of national culture as a whole (cultural level) and as individual beliefs regarding interpersonal relationships (individual level within a culture) (Triandis, 2001). I and C at the cultural level are conceptually and operationally distinct from I and C at the individual level (Oyserman et al., 2002; Schimmack et al., 2005; Triandis, 2001).

Consequently, the question arises: can we conclusively assert that elevated interdependent self/collectivism leads to heightened alexithymia? Similarly, can we affirm that high independent self/individualism confers protective effects against alexithymia?

Returning to the more general discussion of alexithymia, beyond its role in conditions of distress or illness, high levels of alexithymia could impair health, psychological well-being, and quality of life. A study (Mattila et al., 2009) conducted in Finland on a very large sample of the general population, aged between 30 and 97 years, found a strong relationship between the DIF subscale and the dimensions of health-related quality of life (HRQoL), even when controlling for the effects of depression, somatic diagnoses, functional capacity, and sociodemographic variables. Another more recent study (Gündoğmuş et al., 2023) investigated the relationship between the two constructs and instruments in a sample of university students who had not reported any physical or mental health problems. The results highlighted an inverse relationship between the DIF and DDF and HRQoL. A study (Di Trani et al., 2025) conducted in Italy among 50 women with Systemic Sclerosis found significant negative correlations, with medium-to-large effect sizes, between TAS-20 scores and all dimensions of The World Health Organization Quality of Life – Brief Version. Regarding psychological well-being (PWB; Ryff & Keyes, 1995), a study (Ziadni et al., 2017) on a community sample conducted in the US found negative relationships between TAS-20-TS and PWB. Few studies have investigated the relationship between alexithymia, quality of life, and psychological well-being in community samples, as well as between alexithymia and individual cultural orientation; none in the Italian context.

1.3 Aims

This preliminary study sought to examine the relationship between alexithymia and: a) anxious and depressive symptoms, psychological well-being, and quality of life; b) cultural orientation

measured at the individual level in terms of vertical and horizontal individualist-collectivist orientation, in an Italian community sample.

No specific hypotheses were formulated, as this exploratory study is the first conducted in Italy to investigate the relationship between alexithymia and cultural orientation. Moreover, this study is the first that explored the link between alexithymia levels and individual cultural orientation using the multidimensional model of horizontal and vertical individualism and collectivism.

2. Materials and Methods

Due to its preliminary nature, this study was not pre-registered. Its primary objective was to explore the association between alexithymia levels and cultural orientation, as operationalized through the multidimensional framework of horizontal and vertical individualism and collectivism.

2.1 Participants

In order to estimate the sample size, power analysis was carried-out using G*Power 3.1 (Faul et al., 2009). Three factors were considered: Pearson's $r = 0.3$ (medium affect size), $\alpha = 0.05$, and power = 0.80 were selected. Power analysis indicated that there was an 80% chance of correctly rejecting the null hypothesis that alexithymia variables were not associated with cultural orientation variables, with a sample of 84 participants.

In a cross-sectional design, participants were recruited using a convenience snowball sampling strategy. The recruitment process began with an initial set of accessible participants who then shared the study within their own networks, allowing for the inclusion of individuals across a wide age range and living in southern Italy. No participants were excluded from the study, as all respondents provided informed consent, were 18 years of age or older, and completed the questionnaire in its entirety.

The community sample was composed of 80 Italian participants (female = 77.5 %) recruited in an Italian region in southern Italy. The age ranging from 18 to 79 year (M = 42.82; SD = 17.18). There was not a significant difference for age by sex ($t_{(36.89)} = .99$; $p = .330$).

2.2 Procedures

The study was conducted in compliance with the guidelines reported in the Declaration of Helsinki. Approval by the Research Committee of the Giustino Fortunato University was obtained (Rif. 10/2025/psi-ag) on 21 May, 2025. An on line survey was administered to participants living in an Italian region in southern Italy. At the beginning of the survey, the study was described, and it was explained that participation was voluntary and anonymous, and confidentiality was ensured. No incentive reward was given. Informed written consent was obtained before participation.

2.3 Measures

Socio-demographic questions were administered to collect information on: age, sex, educational level, occupational status, and marital status.

The Toronto Alexithymia Scale (TAS-20) (Bagby et al., 2020; Bressi et al., 1996) is a self-report instrument comprising items assessed on a 5-point Likert scale (ranging from 1 = "strongly disagree" to 5 = "strongly agree"). The 20-item measure encompasses three subscales: DIF; DDF; EOT. Total scores (TAS-20-TS) range from 20 to 100, with higher scores indicating greater alexithymia severity. TAS-20 showed good psychometric properties (Bagby et al., 1994a, 1994b, 2020; Ryder et al., 2018; Schroeders et al., 2022; Taylor et al., 2003). The Italian version of the TAS-20 was administered (Bressi et al., 1996). Cronbach's alpha coefficients of original validation study (Bagby et al., 1994a) were: .81 for TAS-20 TS, .78 for DIF, .75 for DDF, and .66 for EOT. Cronbach's alpha coefficients of Italian validation study (Bressi et al., 1996) were: .75 for TAS-20 TS, .77 for DIF, .67 for DDF, and .52 for EOT.

The Horizontal and Vertical Individualism and Collectivism Scale (INDCOL) (Germani et al., 2020, 2021; Triandis & Gelfand, 1998), 16-item self-report version, was employed to assess HI, VI, HC, and VC at the individual level. Items are rated on a 9-point Likert scale ranging from "I totally disagree" (1) to "I totally agree" (9). Mean scores for each dimension range from 1 to 9, with elevated scores reflecting stronger endorsement of the corresponding cultural orientation. Studies found adequate internal consistency (Cronbach's alphas ranging from 0.61 to 0.84.) Specifically, Italian validated version showed Cronbach's alphas ranging from 0.67 to 0.75 (Germani et al., 2020) and ranging from .62 to .75 (Germani et al., 2021).

The PROMIS Emotional Distress – Depression (EDD) – Short Form (Pilkonis et al., 2011), DSM-5-TR Level 2 Scale for Adult (APA, 2013), is designed to measure the presence and severity of depressive symptoms in adults. It is a self-report instrument comprising 8 items rated on a 5-point Likert scale, ranging from 1 "never" to 5 "always", which assesses depressive symptomatology experienced during the past week. Higher scores indicate greater presence of depressive symptoms.

The PROMIS Emotional Distress – Anxiety (EDA) – Short Form (Pilkonis et al., 2011), DSM-5-TR Level 2 Scale for Adult (APA, 2013), is designed to measure the presence and severity of anxious symptoms in adults. It is a self-report instrument comprising 7 items rated on a 5-point Likert scale, ranging from 1 "never" to 5 "always", which assesses anxious symptomatology experienced during the past week. Higher scores indicate greater presence of anxious symptoms.

The Psychological Well-Being Scale (PWB) 18-item version (Ryff & Keyes, 1995; Ruini et al., 2003) is a self-report instrument with responses rated on a 7-point Likert scale, ranging from 1

"strongly agree" to 7 "strongly disagree". The scale comprises six dimensions: Self-Acceptance, Positive Relations With Others, Autonomy, Environmental Mastery, Purpose in Life, Personal Growth, and the total score (PWB-TS). Higher scores indicate greater presence of the measured dimension. Cronbach's alpha coefficients of the original validation study (18-item version) (Ryff & Keyes, 1995) ranging from .33 to .56.

The World Health Organization Quality of Life – Brief Version – (WHOQOL-BRIEF; The WHOQOL Group, 1998) Italian Version (De Girolamo et al., 2000) is a self-report instrument comprising 26 items rated on a 5-point Likert scale. The instrument distinguishes four domains: Physical, Psychological, Social relationships, and Environment, as well as a total score (TS). Cronbach's alpha coefficients of the original validation study (The WHOQOL Group, 1998) ranging from .66 to .82. Cronbach's alpha coefficients of the Italian validation study (De Girolamo et al., 2000) ranging from .65 to .80.

2.4 Data analysis

Descriptive statistics were carried-out for socio-demographic variables (sex, level of education, employment status, and marital status). Internal consistency and confident interval at 95% (CI 95%) was evaluated through the computation of Cronbach's alpha coefficients. Alpha values ranging from .65 to .80 are conventionally regarded as "adequate" for measurement instruments employed in human dimensions research (Vaske et al., 2016). Welch's independent samples t-test was employed to examine sex differences (independent variable) – as it is robust to unequal group sizes – across the dependent variables: age, TAS-20, INDCOL, EDD, EDA, PWB, and WHOQOL-BRIEF. To examine associations between alexithymia and age, INDCOL, EDD, EDA, PWB, and WHOQOL-BRIEF, Pearson product-moment correlations were computed. Effect sizes for correlation coefficients were interpreted according to Cohen's (1992) guidelines, whereby coefficients of .10, .30, and .50 correspond to small, medium, and large effect sizes, respectively. Statistical significance was established at p-value < 0.05. Given the exploratory and preliminary nature of this research, we elected not to apply a Bonferroni correction to avoid overly increasing the risk of Type II errors (false negatives). Our primary goal was to identify potential associations and generate hypotheses for future confirmatory studies, rather than providing definitive evidence. Applying a conservative correction at this stage might have masked subtle but theoretically relevant patterns in the data.

3. Results

In Table 1 are reported the socio-demographic information of the sample.

Table 1.

Descriptive statistics of socio-demographic variables

Socio-Demographic Variables	*N*	%
Gender		
Female	62	77.5
Male	18	22.5
Level of education		
Elementary/Eight grade	5	6.3
Secondary	46	57.5
Bachelor's degree	8	10.0
Master's degree	21	26.3
Employment status		
Student	12	15.0
Unemployed	2	2.5
Homemaker	6	7.5
Having paid employment	44	55.0
Self-employed professionals	5	6.3
Retired	11	13.8
Marital status		
Unmarried	32	40.0
Cohabiting or married	44	55.0
Widowed	4	5.0

Cronbach's α coefficients and corresponding 95% confidence intervals (CI) for each dimension of the questionnaires employed were reported in Table 2. Internal consistency was adequate for all dimensions, with the exception of two PWB dimensions: the CIs of Cronbach's α values for Environmental Mastery and Purpose in Life did not fall within the range considered adequate

Table 2.

Internal consistency of main study variables

				a (95 % CI)			
TAS-20	.87 [.82, .91] DIF	.85 [.79, .90] DDF	.79 [.71, .85] EOT	.92 [.89, .94] TAS-20-TS			
INDCOL-16	.60 [.43, .72] HI	.75 [.65, .83] VI	.78 [.68, .85] HC	.73 [.62, .82] VC			
EDD	.95 [.93, .96]						
EDA	.93 [.90, .95]						
PWB-18	.72 [.58, .81] Self-Acceptance	.51 [.29, .67] Positive Relations	.49 [.26, .65] Autonomy	.53 [.32, .68] Environmental Mastery	.11 [-.29, .40] Purpose in Life	.38 [.11, .59] Personal Growth	.79 [.71, .85] PWB-TS
WHOQOL-BRIEF	.76 [.67, .83] Physical	.84 [.79, .89] Psychological	.65 [.50, .77] Social Relationships	.75 [.66, .83] Environment	.91 [.88, .94] WHOQOL-BRIEF-TS		

There were significant negative correlations between age and DIF (r = -.36, p < .05), DDF (r = -.26, p < .05), and TAS-20-TS (r = -.32, p < .05). No significant difference for the dimensions of the TAS-20, INDCOL, EDD, EDA, PWB, and WHOQOL-BRIEF by sex emerged (**Table 3**).

Table 3

Welch's independent sample t-test indices, mean and standard deviation by sex (males vs. females) for all the measured variables

	Female (n=62)		Male (n=18)		$t_{(df)}$	p
	M	SD	M	SD		
DIF	16.52	7.12	13.89	7.18	1.37 (27.49)	.182
DDF	12.18	5.56	12.39	5.90	-0.14 (26.39)	.893
EOT	16.76	6.64	15.28	5.64	0.94 (31.98)	.354
TAS-TS	45.45	17.12	41.56	15.76	0.95 (29.67)	.373
HI	7.67	1.10	7.36	0.97	1.14 (30.85)	.261
VI	4.86	1.87	5.71	1.72	-1.80 (29.69)	.082
HC	7.73	1.20	7.01	1.30	1.86 (26.02)	.074
VC	7.09	1.61	7.11	1.34	-0.05 (32.63)	.961
EDD	18.79	8.14	14.94	7.80	1.82 (28.65)	.079
EDA	18.71	7.40	15.67	8.14	1.42 (25.70)	.167
Self-Acceptance	14.97	4.24	15.61	4.46	-0.54 (26.57)	.591
Positive Relations With Others	15.84	4.23	15.11	4.00	0.67 (29.02)	.508
Autonomy	16.35	3.63	16.55	3.35	-0.22 (29.67)	.828
Environmental Mastery	13.55	3.74	15.00	4.40	-1.27 (24.56)	.216
Purpose in Life	13.03	3.23	13.55	3.85	-0.52 (24.38)	.604
Personal Growth	16.63	3.54	16.83	3.65	-0.21 (26.99)	.835
PWB-TS	90.37	14.02	92.67	19.18	-0.47 (22.53)	.641
Physical	14.72	2.72	15.52	2.50	-1.18 (29.80)	.248
Psychological	14.25	3.04	14.81	2.71	-0.76 (30.54)	.453
Social Relationships	14.06	3.54	13.70	4.01	0.34 (25.20)	.733
Environment	13.61	2.62	14.08	2.77	-0.64 (26.51)	.526
WHOQOL-BRIEF-TS	56.64	10.33	58.12	9.81	-0.56 (28.87)	.582

All the dimensions and the total score of the TAS-20 were significantly and positively associated with both anxiety and depressive symptoms. While, they were significantly and negatively associated with all the PWB dimensions and the WHOQOL-BRIEF dimensions (Table 4).

Table 4.

Persons' correlations between TAS-20, EDD, EDA, PWB, and WHOQOL-BRIEF

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. DIF	-	.72*	.58*	.89*	.60*	.49*	-.46*	-.49*	-.47*	-.57*	.11	-.31*	-.57*	-.51*	-.55*	-.41*	-.35*	-.53*
2. DDF		-	.64*	.89*	.44*	.32*	-.42*	-.49*	-.49*	-.41*	-.06	-.42*	-.56*	-.43*	-.43*	-.39*	-.28*	-.45*
3. EOT			-	.84*	.46*	.27*	-.42*	-.26*	-.38*	-.35*	-.08	-.43*	-.49*	-.47*	-.42*	-.31*	-.36*	-.45*
4. TAS-TS				-	.58*	.42*	-.50*	-.47*	-.51*	-.52*	.04	-.44*	-.61*	-.54*	-.54*	-.43*	-.38*	-.55*
5. EDD					-	.82*	-.53*	-.31*	-.40*	-.57*	.13	-.31*	-.52*	-.55*	-.72*	-.55*	-.45*	-.67*
6. EDA						-	-.44*	-.31*	-.30*	-.47*	.15	-.25*	-.43*	-.45*	-.63*	-.46*	-.40*	-.57*
7. Self-A							-	.54*	.50*	.62*	.09	.51*	.84*	.49*	.61*	.44*	.36*	.56*
8. PosRel								-	.30*	.50*	.11	.44*	.75*	.36*	.36*	.45*	.24*	.42*
9. Auton									-	.45*	.03	.28*	.64*	.39*	.44*	.42*	.33*	.47*
10. Env.M.										-	-.17	.39*	.72*	.43*	.59*	.47*	.31*	.53*
11. PL											-	.15	.27*	.09	-.09	-.01	.06	.01
12. PG												-	.69*	.24*	.32*	.13	.28	.27*
13. PWB-TS													-	.51*	.58*	.49*	.40*	.58*
14. Phys														-	.72*	.59*	.67*	.86*
15. Psych															-	.70*	.60*	.89*
16. SocRel																-	.54*	.86*
17. Env																	-	.81*
18. WHOQOL-BRIEF-TS																		-

Note. * *p*-value < .05; Self-Acc = Self-Acceptance; Pos. Rel. = Positive Relations With Others; Auton = Autonomy; Env. M. = Environmental Mastery; PL = Purpose in Life; PG = Personal Growth; Phys = Physical; Psyc = Psychological; SocRel = Social Relationships; Env = Environment.

Significant and negative associations between HC and DIF, DDF and TAS-20 total score emerged, with small and medium effect sizes. Also, VC was significantly and negatively associated to DIF with small effect size. None significant association for alexithymia with HI and VI (Table 5).

Table 5.

Correlations between INDCOL and TAS-20

	DIF	DDF	EOT	TAS-20-TS
HI	.15	.00	.04	.08
VI	-.04	.06	.13	.05
HC	-.31*	-.26*	-.15	-.28*
VC	-.26*	-.20	-.06	-.20

*$p < .05$

4. Discussion

This preliminary study aimed to explore the relationship between alexithymia and individual cultural orientation measured with the model of Singelis and colleagues (1995) and Triandis and Gelfand (1998), which distinguishes the horizontal and vertical dimensions of individualism and collectivism. In the community sample composed of Italians residing in a southern region, of different ages, sex, education levels, employment statuses, and marital statuses, no relationship emerged between alexithymia and individualism; however, negative correlations emerged between horizontal collectivism and difficulties in identifying and describing feelings, and between vertical collectivism and difficulty identifying feelings. Furthermore, all dimensions of the TAS-20 showed positive relationships with anxious and depressive symptomatology, and negative relationships with psychological well-being and quality of life.

No significant differences emerged between males and females in any of the measured variables. In the literature, there is a tendency for greater anxious and/or depressive symptomatology in females (Kayrouz et al., 2025; Salk et al., 2017), while for psychological well-being, specific differences emerge by dimension (Matud et al., 2019). Studies with the WHOQOL have documented lower QoL in women (Skevington et al., 2024). Regarding alexithymia, the meta-analysis by Mendia et al. (2024) reported small effect sizes for sex/gender differences. Our study may have limited power to detect such effects.

Regarding age, the results suggest that difficulties in identifying and describing feelings tend to decrease with age. The findings of studies available in the literature (Ryder et al., 2018) on the

association between alexithymia and age are contradictory; in some cases, alexithymia decreases as age increases, in others the trend is the opposite, and in still others, no association is found between the two variables. The results of this study are consistent with recent longitudinal studies that have documented a decrease in alexithymia from adolescence to adulthood (Karukivi et al., 2022; Kekkonen et al., 2021), suggesting a process of emotional maturation, and may also reflect cohort effects due to sociocultural changes. Regarding this latter aspect, they might suggest that in the Italian context, over the years, socio-cultural changes have led the population toward a lower emotional competence.

This study confirms the close relationship between difficulties in identifying and describing one's emotions and depressive and anxious symptomatology (Honkalampi et al., 2018), as well as with externally oriented thinking.

Negative correlations emerged between all dimensions of alexithymia and all dimensions of psychological well-being (except for purpose in life) and quality of life, with medium or large effect sizes. The difficulty in contacting, processing, and representing one's emotions prevents the development of an integrated understanding of one's self and the ability to make autonomous decisions, making individuals more dependent on external references. Alexithymia compromises adaptive coping strategies, reduces the introspective reflection necessary for personal development, and impairs interpersonal emotional communication. The absence of a relationship with purpose in life may be explained by the inadequate internal consistency of this PWB dimension.

Mattila et al. (2009) confirmed that alexithymia was associated with every dimension of quality of life, not only psychosocial but also physical domains. Alexithymia is associated with poor awareness of bodily signals and a tendency toward somatization, which contribute to reduced perception of physical health. Alexithymic individuals report greater psychological distress, depressive and anxious symptoms, which reduce perceived quality of life.

Alexithymia shows robust negative associations with both eudaimonic well-being (Ryff's PWB) and quality of life (WHOQOL). This pattern suggests that alexithymia represents a transversal vulnerability factor that compromises human well-being at multiple levels, emphasizing the importance of considering it as a significant risk factor for overall well-being, not limited to clinical psychopathology or medical psychology, psychosomatics, or consultation-liaison psychiatry.

The main result to discuss is the absence of significant associations between alexithymia and individualist orientation, which is inconsistent with Konrath et al. (2011). While in their study negative relationships emerged between independent self and DIF, DDF, and TAS-TS, in our

study the dimensions of individualism (HI and VI) did not correlate with alexithymia. Thus, personal characteristics such as preferring independence from others, having one's own identity distinct from others, relying on oneself, and doing one's own thing, do not appear to be related to (or facilitate) a greater or better ability to identify one's sensations and emotions at the bodily level and find words to name and share them with others. This difference can be explained in various ways. The two instruments appear to measure only partially overlapping constructs. Moreover, the Singelis (1994) scale has shown low internal consistency and poor factorial validity in several studies (Cheng et al., 2016; Paquet & Kline, 2009).

Another explanation concerns the different culture of the participants. Konrath et al. (2011) collected data in the US (an individualist country), while our participants reside in southern Italy, an area with a more collectivist culture (Hofstede et al., 2010; Minkov et al., 2017; Minkov & Kaasa, 2022). In our sample, negative relationships emerged between collectivist orientation and alexithymia. Significant negative correlations were found between HC and both DIF and DDF, and between VC and DIF. The greater the importance given to interdependence and collaboration, the lower the difficulty in identifying and describing one's emotions. Perhaps it is the matching between cultural and individual levels that facilitates access to one's emotions and their cognitive processing.

This interpretation is consistent with a study (Caldwell-Harris & Ayçiçegi, 2006) that compared students in Boston and Istanbul: in the US sample, collectivism scores were correlated with psychopathology, while in the Turkish sample, allocentrism was associated with healthier personality. Similarly, Burton et al. (2021) found that neuroticism levels were positively correlated with individualism and negatively with collectivism only in Italian university students and not in American ones. These studies support the concepts of "person-environment fit" (Triandis, 2000) and "personality-culture clash" (Caldwell-Harris & Ayçiçegi, 2006), namely that the matching or mismatching between individual cultural orientation and prevalent culture promotes or hinders individual psychological adjustment.

5. Limitations

This preliminary study employed a cross-sectional design, which does not allow for the establishment of causal relationships. The observed correlations could be bidirectional not only from a statistical perspective, and third variables may influence them. Longitudinal studies are necessary to clarify causal directions. The use of self-report questionnaires did not allow for control of social desirability bias and shared method variance among measures. Additionally, the inadequate internal consistency observed for two PWB dimensions (Environmental Mastery and Purpose in Life) may have affected the reliability of findings related to these constructs. The sample size, although adequate for correlational analyses in preliminary studies, limits the

reliability of results as well as statistical power for more complex analyses (e.g., mediation/moderation models), which were consequently not employed. Moreover, given the sample size of 80, correlations may lack stability (Schönbrodt & Perugini, 2013). To ensure stable estimates, a minimum of 250 participants is recommended; therefore, future research should aim to meet or exceed this threshold. The gender imbalance, despite being controlled for in statistical analyses, reduces the generalizability of findings to the male population, and data collection from a community sample in a single Italian region limits generalizability to the broader Italian context.

6. Clinical implications

These findings have important implications for clinical practice in Mediterranean contexts. Clinicians working with individuals from collectivistic backgrounds should consider that interventions promoting emotional awareness may be more effective when they acknowledge and integrate cultural values emphasizing interdependence and social connection. Assessment of person-environment fit between individual cultural orientation and environmental context may help identify individuals at risk for alexithymic difficulties. Furthermore, the robust associations between alexithymia and both psychological symptoms and well-being underscore the importance of addressing emotional processing difficulties in psychological interventions, regardless of presenting problems.

7. Conclusions

In this preliminary study conducted on a community sample of Italians residing in southern Italy, no relationship emerged between alexithymia and individualist cultural orientation, whereas it appears that the greater the collectivist individual orientation, the lower the difficulties in identifying and describing one's emotions and feelings. Given that other studies conducted in more individualistic cultural contexts have suggested that interdependence (collectivism) generally exposes individuals to greater alexithymic difficulties, the hypothesis is that higher or lower alexithymia may be partially explained by the matching or mismatching between environmental culture and personal cultural orientation. These findings may have implications for understanding emotional functioning across Mediterranean countries, where collectivistic values often coexist with individualistic modernization trends. Another important finding is that the higher the levels of difficulty in processing one's emotions, including externally oriented thinking, the greater the anxious and particularly depressive symptoms, and the lower the psychological well-being and quality of life. Future research should further investigate these preliminary findings and test the discussed hypotheses using larger, gender-balanced samples

with cross-cultural designs that account for age effects. Importantly, when examining cultural influences, it is essential to distinguish between cultural-level and individual-level constructs.

Ethical approval

The study was conducted in compliance with the guidelines reported in the Declaration of Helsinki. Approval by the Research Committee of the Giustino Fortunato University was obtained (Rif. 10/2025/psi-ag) on 21 May 2025.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Authors' Contribution

AG: Conceptualization, Data curation, Investigation, Formal analysis, Methodology, Resources, Visualization, Project administration, Resources, Supervision, Writing – original draft, Writing – review & editing; AS: Data curation, Investigation, Resources, Visualization, Writing – review & editing; EM: Resources, Writing – review & editing; RDLP: Methodology, Validation; Resources, Writing – review & editing.

Conflict of interest statement

The authors declare no conflicts of interest.

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AI Disclosure Statement

The authors declare no use of AI.

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