

THE RELATIONSHIP BETWEEN SOCIAL SKILLS AND SOCIAL ANXIETY AND PERSONALITY STYLES/DISORDERS

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Abstract

The relationship between social skills and social anxiety has been addressed conceptually but studied little empirically. Scarcer still are the studies on the relationship between social skills and personality styles/disorders. This paper uses a sample of mostly university students to find possible relationships between social skills, on the one hand, and social anxiety and personality styles/disorders, on the other. The correlations of the total scores for the instruments of social skills and social anxiety were moderate-to-high and negative; that is, the lower the social skill, the greater the social anxiety, and vice versa. This same level of correlation was also obtained by analyzing the specific dimensions of each construct, which shows that there are shared aspects between social skills and social anxiety. Furthermore, the relationship between social skills and personality disorders varies depending on the specific personality style/disorder. Most correlations are negative, except for histrionic, narcissistic, obsessive-compulsive, and antisocial styles/disorders. These results provide support for a significant part of the interpersonal characteristics of each personality disorder.

KEY WORDS: *social skills, social anxiety, personality styles, personality disorders.*

Resumen

La relación entre las habilidades sociales (HHSS) y la ansiedad social (AS) ha sido planteada conceptualmente pero poco estudiada a nivel empírico. Más escasos son los trabajos sobre la relación entre las HHSS y los estilos/trastornos de la personalidad (TTPP). El presente trabajo pretende hallar las posibles relaciones entre las HHSS por una parte, y la AS y los estilos/TTPP, por la otra, en una muestra mayoritariamente de estudiantes universitarios. Las correlaciones de las puntuaciones totales de los instrumentos de HHSS y AS fueron de moderadas a altas e inversas, es decir, que a menor habilidad social mayor AS y viceversa. Se obtuvo también este mismo nivel de correlaciones al analizar las dimensiones específicas de cada variable, lo que muestra que hay aspectos que se comparten

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entre las HHSS y la AS. Por otra parte, las relaciones entre HHSS y TTPP varían según qué estilo/trastorno de personalidad. La mayoría de las correlaciones son inversas, excepto en el histriónico, narcisista, obsesivo compulsivo y antisocial. Estos resultados ofrecen apoyo a una parte de las características interpersonales de cada uno de los trastornos de la personalidad.

PALABRAS CLAVE: *habilidades sociales, ansiedad social, estilos de personalidad, trastornos de la personalidad.*

Introduction

Social skills (or "assertiveness" as it was known in the 1970s) and social anxiety are conceptually related constructs in Cognitive Behavioral Psychology. The initial supposition was that the term "social anxiety" reflected the subjective discomfort experienced in social situations, while the term "social skills" (or "assertiveness") reflected the behavioral component of social anxiety. Accordingly, some authors (e.g., Gambrill & Richey, 1975; van Dam-Bagen & Kraaimaat, 1999) concretized apprehension or subjective discomfort (social anxiety) as the *degree* of discomfort or anxiety felt in interpersonal situations (emotional aspect), with the realization of the behavioral aspect (lack of assertiveness) being focused mainly on the *frequency* of the behavior in interpersonal situations. In terms of clinical assessment, the first self-report measures focused on the "emotional component" of social anxiety, such as the Fear of Negative Evaluation (FNE) scale and the Social Avoidance and Distress Scale (SADS), developed jointly by Watson and Friend (1969), and the Discomfort/anxiety subscale of the Assertion Inventory (AI; Gambrill & Richey, 1975). The application of these self-reports picked before social phobia (or social anxiety disorder, SAD) was defined and included in the third version of the Diagnostic and statistical manual of mental disorders (DSM-III; APA, 1980). After that, the self-reports instruments used to measure social anxiety in adults were more closely adjusted to the concept of disorder as such, and among them we may mention the Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987), the Social Phobia and Anxiety Inventory (SPAI; Turner, Beidel, Dancu, & Stanley, 1989), the Social Phobia Scale (SPS; Mattick & Clarke, 1998), the Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1988, 1998), and the Social Phobia Inventory (SPIN; Connor et al., 2000). Recently, the Social Anxiety Questionnaire for Adults (SAQ-A30; Caballo et al., 2006; Caballo, Salazar, Arias, et al., 2010; Caballo, Salazar, Irurtia, et al., 2010; Caballo et al., 2012) has been developed and validated with Spanish and Latin American samples.

Regarding social skills, other self-report measures have been developed to assess the frequency of behavior, and among the best known are the Wolpe-Lazarus Assertiveness Scale (WLAS; Wolpe & Lazarus, 1966), the Rathus Assertiveness Schedule (RAS; Rathus, 1973), the College Self-Expression Scale (CSES; Galassi, DeLo, Galassi, & Bastien, 1974), the Response Probability Subscale of the Assertion Inventory (AI-RP; Gambrill & Richey, 1975), and the Adult Self-Expression Scale (ASES; Gay, Hollandsworth, Jr., & Galassi, 1975).

In view of the above, we would like to note that, although the literature suggests that the deficits in social skills (or lack of assertiveness) could be among

the causal factors of social anxiety, it could also be that people with social anxiety perform poorly in social situations (blocking or inhibiting social skills). This has probably been what has led to the inclusion of training in social skills as part of the treatment for social anxiety disorder (SAD) (*Society of Clinical Psychology, American Psychological Association, Division 12*, 2014a), although social anxiety and social skills are not part of the same construct nor have the same dimensions. At an empirical level, we have few data and, at best, we can say that social skills and social anxiety have a significant and moderate negative relationship in clinical samples (e.g., Lefrançois, Van Dijk, Bardel, Fradin, & El Massioui, 2011) and general ones (e.g., Caballo, 1993; Caballo, Olivares, López-Gollonet, Iurrtia, & Rosa, 2003), but also a weak relationship in this latter kind of sample (e.g., Chambless, Hunter, y Jackson, 1982; Hsu et al., 2012; Mokuolu, 2013). Specifically, Lefrançois et al. (2011) assessed 38 people with social anxiety using the LSAS and the RAS, and found a moderate relationship between assertiveness (RAS) and social anxiety (LSAS) ($r = -.60$; $p < .05$). Regarding general samples (including university ones), we found, for instance, that the work by Chambless et al. (1982) used the AI, SADS, and FNE scale to assess 112 university students, and reported a significant relationship between the Probability Response subscale of the AI and the SADS ($r = .24$; $p < .01$) and the FNE scale ($r = .33$; $p < .01$). Later, Caballo (1993) found a significant and moderate relationship ($p < .001$) between assertiveness (assessed through the RAS) and social anxiety (assessed through the FNE scale and the Multidimensional Social Expression Scale - Motor Part (*Escala multidimensional de expresión social - parte motora*, EMES-M) with 73 participants (mostly university students). Specifically, the relationship was $-.60$ between the RAS and the EMES and $-.44$ between the RAS and the FNE scale. In 2003, Caballo et al. also found negative and moderate significant relationships ($p < .01$) between assertiveness (measured with the CSES and the Response Probability subscale of the AI) and social phobia/anxiety (measured with the FNE, SPAI, LSAS, SPS, and SIAS) in 150 university students. Specifically, the relationship between the CSES and the social phobia subscale of the SPAI was $.57$, $-.61$ with the SIAS, $-.59$ with the LSAS-Anxiety, $-.58$ with the LSAS-Avoidance, $-.51$ with the FNE, and $-.49$ with the SADS. The relationship between the Response Probability subscales of the AI and the LSAS-Avoidance was $.61$, $.53$ with the SIAS, $.51$ with the LSAS-Anxiety, $.48$ with the SPAI-Social Phobia, $.45$ with the SADS, $.40$ with the FNE and $.33$ with the SPS, pointing again to a negative and moderate relationship between assertiveness and social anxiety.

More recently, Hsu et al. (2012) assessed 692 university students in four countries (USA, China, Korea, and Japan) using the SPAI and the Interpersonal Competence Questionnaire (ICQ; Buhrmester et al., 1988) which measure the sense of self-efficacy in interpersonal situations by means of three subscales: Initiation (self-introduction to people during the first meeting), Negative Assertion (rejecting a reasonable request from a mate), and Disclosure (sharing thoughts and feelings with other people). They found a moderate relationship between the initiation subscale of the ICQ and the SPAI ($r = .61$; $p < .01$) as well as between the Negative Assertion subscale of the ICQ and the SPAI ($r = .26$; $r = .28$; $p < .01$, respectively). Mokuolu (2013) assessed 925 students from six universities in Nigeria

with the Dating and Assertion Questionnaire (DAQ; Levenson & Gottman, 1978) and the FNE scale, finding a significant, albeit very low, relationship between the Assertiveness subscale of the DAQ and the FNE ($r = -.101$; $p < .05$), showing that the lower the assertiveness, the higher the fear of negative evaluation.

However, there is research with findings in the opposite direction by Rinehart (2003), who assessed 497 university students and formed two groups: one with social anxiety (G1) ($n = 20$) and the other without social anxiety (G2) ($n = 49$), based on the scores recorded in the SADS-R (a revised version of the SADS by Carmin, Gillock, Klocek, Shertzer, & Raja, 1999). When comparing the two groups, they found that the mean of the G1 was significantly higher than G2 ($p < .001$) regarding assertiveness measured with the CSES, and that the correlations between assertiveness and social anxiety were only significant in G2. The relationship between the CSES and the FNE-R scale was $-.493$ ($p < .01$), and between the CSES and the SADS-R it was $-.289$ ($p < .05$). These findings are striking, as we would expect any correlation between social anxiety and assertiveness in G2 to be mirrored in G1.

In sum, these findings contrast with those reported in works on assertiveness and social anxiety in adolescents and children, where, once again, the correlations are significant, ranging from low to moderate. For instance, Clark et al. (1994) assessed 223 adolescents aged between 12 and 18; 102 of them were a clinical sample and 121 a general one. They found a weak relationship between the Adolescent Assertion Expression Scale and the SPAI-Social phobia subscales, as well as with the total score of the SPAI ($r = -.29$; $r = -.27$; $p < .001$, respectively), suggesting that a higher level of anxiety corresponds to a lower level of assertiveness. More recently, in Spain, Piqueras, Olivares, and Hidalgo (2012) assessed 383 adolescents (53% female) between 14 and 17. Of these, 227 satisfied the criteria of the SADS, following the DSM-IV-TR (APA, 2000), and 156 did not. They used the Social Anxiety Screening Scale (*Escala para la detección de la ansiedad social*, EDAS; Olivares et al., 2004) and the RAS, among other self-report measures, and found moderate and significant relationships between the EDAS Discomfort subscale and the RAS ($r = -.65$) and also between the EDAS Avoidance subscale and the RAS ($r = -.63$), indicating that the higher the level of anxiety (and of avoidance behaviors), the lower the assertiveness level.

A little studied relationship is the one between social skills and personality styles/disorders. For instance, we have found a study, carried out in Spain with university students, which reported moderate relationships between assertiveness (assessed by means of the CSES and the AI-Response probability subscale) and the avoidant personality disorder (APD) (assessed by the Millon Clinical Multiaxial Inventory-II, MCMI-II; Millon, 1987). Specifically, the relationship between the CSES and the MCMI-II (APD) was $-.48$, and it was $.50$ between the AI-Response probability subscale and the MCMI-II (APD), meaning that subjects with an APD had assertiveness issues (Caballo et al., 2003).

Finally, in order to further clarify this issue, we turned to research on the assertiveness levels reported in patients with SAD or any personality disorder, and we specifically considered the scores proposed by Gambrill and Richey (1975) to identify high levels of Discomfort/anxiety (≥ 96) and Response probability (≥ 105) in

the AI. We found that in the studies with clinical samples, the means obtained in both subscales exceed those scores by a wide margin. For instance, Feske, Perry, Chambless, Renneberg, and Goldstein (1996) assessed 48 subjects with generalized social phobia (GSP) and found that 72.8% also satisfied the APD criteria, following the DSM-III-R, thereby composing two groups: G1 with GSP and APD, and G2 with GSP, but without APD. Their results show that both groups exceeded the cut-off points proposed by Gambrill and Richey, although G1 presented higher means than G2 on the two subscales of the AI (AI-Discomfort: $M_{G1}= 131.20$; $SD= 23.65$; $M_{G2}= 100.67$; $SD= 23.32$; AI-Response probability: $M_{G1}= 124.00$; $SD= 16.38$; $M_{G2}= 109.83$; $SD= 17.33$) and of the SPAI ($M_{G1}= 58.06$; $SD= 9.52$; $M_{G2}= 48.84$; $SD= 10.35$). Recently, Hayakawa (2009) reported that the mean obtained by 13 patients with borderline personality disorder (BPD) (pre-treatment measure) on the AI-Response probability subscale was 150.08 ($SD= 9.20$). Glinski and Page (2010) reported that the means found in 29 subjects with SAD, following the DSM-IV, clearly exceeded the cut-off points indicated by Gambrill and Richey. Specifically, the mean was 130.74 ($SD= 15.98$) on the Discomfort/anxiety subscale, while the Response probability subscale it was 130.05 ($SD=10.37$). These studies seem to indicate that a lack of assertiveness could be a significant problem among people with BPD, APD, and SAD, and it is no surprise that social skills training is part of the empirically validated treatment for these disorders (*Society of Clinical Psychology, American Psychological Association, Division 12, 2014a,b*).

The goal of this study was to present new tests on the relationship between social skills (assessed by four questionnaires, the SSQ-I, the RAS, the CSES, and the AI-Response probability subscale) and social anxiety (assessed by three questionnaires, the SAQ-A30, the LSAS-SR, and the AI-Discomfort/anxiety subscale) in the first place, and secondly with personality styles/disorders (assessed by the Exploratory Questionnaire of Personality [*Cuestionario exploratorio de personalidad-III, CEPER-III*]).

Method

Participants

The sample consisted of 537 participants with a mean age of 22.28 years ($SD= 6.70$), being made up of 407 females ($M= 21.99$ years, $SD= 5.93$) and 130 males ($M= 23.18$, $SD= 8.67$). They were mostly university students (95.16%). Of these, 67.41% were Psychology students, and 27.75% were students in other subjects. As regards the rest of the sample (4.84%), one was a psychologist, seven were workers with other university degrees, four were workers without university studies, two were pre-university students, and eight were undefined (e.g., jobless, retired, etc.) There were no data on four of the participants.

However, not all the subjects completed all the questionnaires. The entire sample answered the Social Anxiety Questionnaire for Adults (SAQ-A30), while the Social Skills Questionnaire-I (SSQ-I) and the Rathus Assertiveness Inventory (RAS) were answered by 421 participants ($M= 22.54$ years, $SD= 6.75$), of whom 322

were females ($M= 22.25$ years, $SD= 6.01$) and 99 males ($M= 23.49$, $SD= 8.70$). The Assertion Inventory (IA) was answered by 228 subjects, with a mean age of 21.62 years ($SD= 7.00$), of whom 170 were females ($M= 21.26$ years, $SD= 5.91$) and 50 were males ($M= 22.67$ years, $SD= 9.48$), and the College Self-Expression Scale (CSES) was completed by 117 participants, with a mean age of 21.53 ($SD= 6.82$), and consisted of 88 females ($M= 21.08$ years, $SD= 5.27$) and 29 males ($M= 22.93$ years, $SD= 10.19$). The Liebowitz Social Anxiety Scale-Self-Report version (LSAS-SR) was completed by 250 subjects ($M= 21.48$, $SD= 6.54$), of whom 188 were females ($M= 21.10$ years, $SD= 5.37$) and 62 males ($M= 22.61$, $SD= 9.19$). The Exploratory Questionnaire of Personality (*Cuestionario exploratorio de personalidad-III*, CEPER-III) was answered by 231 participants ($M=21.59$, $SD= 6.96$), of whom 172 were females ($M= 21.24$ years, $SD= 5.88$) and 59 were males ($M= 22.61$, $SD= 9.41$).

Instruments

The following self-report instruments were used in this study:

- *Social Skills Questionnaire (SSQ-I)* (*Cuestionario de habilidades sociales-I*, CHASO-I; Caballo, Salazar, Olivares, et al., 2014). The first version of the questionnaire included 116 items (plus two control items), although a new and shorter experimental version (79 items) was obtained and used here after the exploratory factor analysis (see Caballo et al., 2014). The new SSQ-I version assesses the following dimensions of social skills: 1. Speaking or performing in public/Interacting with people in authority (12 items), 2. Expressing positive feelings (13 items), 3. Refusing requests (6 items), 4. Interacting with persons I am attracted to (7 items), 5. Dancing or singing in public (2 items), 6. Disclosing information about oneself to close persons (4 items), 7. Asking an attendant or a stranger for something (3 items), 8. Expressing annoyance, disgust, or displeasure (9 items), 9. Expressing different opinions/Clarifying opinions (5 items), 10. Apologizing/Recognizing my own mistakes (8 items), 11. Interacting with strangers (8 items), and 12. Thanking for congratulations/ Arguing with salespeople (2 items). Each item is answered on a 5-point Likert scale from 1 ("Very uncharacteristic of me") to 5 ("Very characteristic of me"). No item was negatively formulated, so the total score and the dimensions score is the sum of all or part of the items, and the higher the score the greater the social skill. Caballo et al. (2014) reported a high reliability of this questionnaire (Cronbach's alpha was .97, and Guttman split-half reliability was .96).
- *Rathus Assertiveness Schedule (RAS)*; Rathus, 1973). This 30-item instrument was designed to measure assertiveness. Each item is answered from +3 "Very characteristic of me, extremely descriptive", to -3 "Very uncharacteristic of me, extremely nondescriptive", without including 0. There are 17 items that require inverting the sign, and then the items' scores are added up. A high positive score means high social skills, while a high negative score means the opposite. Caballo et al. (2014) carried out an exploratory factor analysis on the RAS, and found the following six factors: 1) Interacting with commercial firms,

- 2) Expressing annoyance or displeasure, 3) Defending my own position, 4) Interacting with others in an extroverted way, 5) Expressing feelings openly, and 6) Refusing requests. The literature reports a good test-retest reliability (from .76 to .83), split-half reliability ($r = .77$), and a moderate internal consistency (Cronbach's alpha from .73 to .86) (Beck & Heimberg, 1983; Heimberg & Harrison, 1980; Rathus, 1973; Vaal, 1975). In a recent study, Caballo et al. (2014) obtained adequate reliability (Cronbach's alpha was .82, and Guttman split-half reliability was .80).
- *Assertion Inventory* (AI; Gambrill & Richey, 1975). The AI is a 40-item inventory developed to gather three kinds of information regarding assertive behavior: a) degree of discomfort or anxiety when handling a variety of social situations, b) response probability of engaging in assertive behavior in these same social situations, and c) identification of situations in which the respondent would like to be more assertive. In the first two cases (a and b) a five-point Likert-type scale is used. To assess the Discomfort/Anxiety subscale, the options range from 1= "None" to 5= "Very much", and for the Response Probability subscale, the options range from 1= "Always do it" to 5= "Never do it". The higher the score, the higher the anxiety (Discomfort/Anxiety subscale) and the lower the assertiveness (Response probability subscale). Caballo et al. (2014) carried out an exploratory factor analysis on this last subscale (assertiveness), and found the following eight factors: 1) Expressing annoyance, disgust or displeasure, 2) Making requests to potential employers, 3) Giving and receiving compliments, requests and asking personal questions, 4) Resisting undesirable propositions, 5) Resisting consumer propositions, 6) Refusing requests involving my own property and asking for it to be returned, 7) Apologizing/Recognizing my own mistakes, and 8) Expressing different opinions/Clarifying opinions. The authors of the questionnaire found a test-retest reliability of .81 for the Response Probability subscale (Gambrill & Richey, 1975). Reports on this subscale in Spanish samples have found reasonable test-retest reliability ($r = .84$) and internal consistency (Cronbach's alpha= .88) (Carrasco et al., 1989; Casas-Anguera et al., 2014). A recent study by Caballo et al. (2014) obtained high reliability (Cronbach's alpha and Guttman split-half reliability) both on the Discomfort/anxiety subscale (Cronbach's alpha= .94; $r = .95$) and on the Response probability subscale (Cronbach's alpha= .90; $r = .93$).
 - *College Self Expression Scale* (CSES; Galassi et al., 1974). This scale contains 50 items using a five-point Likert-type scale from 0 ("Almost always or always") to 4 ("Never or rarely"). Twenty-nine items are worded so that they require reverse scoring. Scores on the 50 items are summed to yield a total score, with higher total scores indicating more assertion. Its psychometric properties have been considered as appropriate. Caballo et al. (2014) carried out an exploratory factor analysis on the CSES and found the following 11 factors: 1) Expressing annoyance, disgust, or displeasure, 2) Expressing positive feelings, 3) Speaking in public or in front of the class, 4) Defending personal preferences before my parents, 5) Giving compliments to friends, 6) Interacting with the opposite sex, 7) Defending my own rights before

friends/roommates, 8) Being careful not to hurt other people's feelings, 9) Making requests to close people, 10) Defending my consumer rights, and 11) Defending my own decisions before my parents. The test-retest reliability found varies between .89 and .90 (Galassi et al., 1974). The test-retest reliability found with a Spanish university sample was .87, and the internal consistency (Cronbach's alpha) was .89 (Caballo & Buena, 1988). In a recent study by Caballo et al. (2014) high reliability was obtained (Cronbach's alpha was .88, and Guttman split-half reliability was .90).

- *Social Anxiety Questionnaire for Adults* (SAQ-A30; Caballo, Salazar, Arias, et al., 2010; Caballo, Salazar, Irurtia, et al., 2010; 2012). This new self-report instrument for the assessment of social anxiety is composed of 30 items, which are rated on a 5-point scale, from 1= "Not at all or very slight level of unease, stress or nervousness" to 5= "Very high or extremely high level of unease, stress or nervousness". The SAQ-A30 assesses five social anxiety dimensions: 1) Speaking in public/Talking with people in authority, 2) Interactions with strangers, 3) Interactions with the opposite sex, 4) Assertive expression of annoyance, disgust or displeasure, and 5) Criticism and embarrassment. Each dimension consists of six items distributed randomly throughout the questionnaire. This 5-factor structure of the SAQ-A30 has proven to be solid and stable, explaining high percentages of accumulated variance (between 40.80% and 54.39%) in clinical and general samples. The levels of internal consistency (Cronbach's alpha) reported for the SAQ-A30 total score are high (from .88 to .93), and from moderate to high for the five dimensions (from .66 to .90). The Guttman split-half reliability reported regarding the SAQ-A30 total score is high (from .82 to .93) (Caballo, Salazar, Arias, et al., 2010; Caballo, Salazar, Irurtia, et al. 2010; Caballo et al., 2012; Salazar, 2013). This study recorded high reliability (Cronbach's alpha was .92 and Guttman split-half reliability was .94).
- *Liebowitz Social Anxiety Scale-Self-Report version* (LSAS-SR; Liebowitz, 1987). The LSAS-SR is a 24-item instrument that assesses fear or anxiety (Anxiety subscale) and avoidance frequency (Avoidance subscale) of specific social situations. Respondents are asked to rate fear or anxiety on a 4-point scale ranging from 0 (none) to 3 (severe), and avoidance on a 4-point scale ranging from 0 (never) to 3 (usually). The overall score is obtained by adding the subscale score for fear or anxiety and that for avoidance. A recent work by Caballo et al. (2013) obtained five factors for the Spanish version of the scale, explaining 52.32% of the variance. These five factors were: 1) Interactions with strangers, 2) Speaking in public/Interactions with people in authority, 3) Eating/drinking in front of other people, 4) Working/writing/talking by phone in front of other people, and 5) Assertive behaviors. This study used the total score of the scale, the anxiety and avoidance subscale scores, and the scores for the two first factors mentioned. Factor 3 and 4 were not considered for this study because they do not include situations of relevance to the Spanish population (see Caballo et al., 2010b, 2012), and nor was factor 5, because it included only two heterogeneous items. The Guttman split-half reliability of the LSAS-SR total score ranges from moderate to high (from .79 to .94)

(Salazar, 2013), and the levels of reported internal consistency (Cronbach's alpha) are adequate, ranging from .83 to .92 for the Anxiety subscale, from .84 to .91 for the Avoidance subscale, and from .86 to .95 for the total score (González et al., 1998; Salazar, 2013). This study obtained high reliability (Cronbach's alpha = .89, and Guttman split-half reliability = .90).

- *Exploratory Questionnaire of Personality* ("Cuestionario exploratorio de personalidad-III", CEPER-III; Caballo, Guillen, Salazar, & Irurtia, 2011). This self-report instrument is composed of 168 items assessing 14 personality styles: paranoid, schizoid, schizotypal, histrionic, narcissistic, antisocial, borderline, avoidant, dependent, obsessive-compulsive, passive-aggressive, sadistic, self-defeating, and depressive. Furthermore, it includes two items assessing sincerity. The first ten styles follow the DSM-5 criteria (APA, 2013), the passive-aggressive and depressive styles follow the DSM-IV criteria (APA, 1994), and the self-defeating and sadistic styles follow the DSM-III-R criteria (APA, 1987). Although the questionnaire's items follow the diagnostic criteria of personality disorders, the CEPER-III has been developed to assess personality styles. The response format is Likert-type, ranging from 1 = "Very uncharacteristic of me" to 7 = "Very characteristic of me". The internal consistency (Cronbach's alpha) obtained in a Spanish sample (Caballo et al., 2011) was .97 for the overall questionnaire, and from .76 to .89 for each one of the personality styles. Guttman split-half reliability was .93. This study obtained a high internal consistency for the overall questionnaire (Cronbach's alpha = .96).

Procedure

The questionnaires were collectively administered in classrooms at the universities of Granada, Murcia and Valladolid, and in groups for non-students. The questionnaires were answered anonymously to respect personal privacy. For technical reasons, the number of questionnaires administered varied throughout the study, so the time required to fill out the questionnaires also varied accordingly.

Statistical analysis

Correlational analyses (Pearson r) were performed among the different self-report measures included in the study. On the one hand, those assessing social skills (SSQ-I, RAS, AI-Response Probability, and CSES), and, on the other hand, those assessing social anxiety (SAQ-A30, LSAS-SR, and AI-Anxiety subscale) and the one which assessed personality styles/disorders (CEPER-III). In order to compute such analyses, the statistical program *Statistica* v. 12.0 (StatSoft, 2013) was used.

Results

Relationships between social skills and social anxiety

As can be seen in table 1, the relationships between global social skills, assessed through the overall score of the four social skills questionnaires (SSQ-I, RAS, AI-RP, and CSES), and global social anxiety, assessed through the overall score of the three social anxiety questionnaires (SAQ-A30, LSAS-SR, and AI-D/A) are negative (on three of the questionnaires) and their scores range from moderate to high, from $r = -.36$ to $r = -.61$ (correlations with the AI are positive because of that inventory's correction format, ranging from .31 to .50).

We subsequently focused on the relationships between the response classes (dimensions) of social skills (represented by most of the factors of the four social skills questionnaires) and the social anxiety dimensions (represented by the five subscales of the SAQ-A30, and the first two factors of the LSAS-SR obtained in the study by Caballo et al. [2013] and previously described in the Instruments section). The results show that the relationships between the factors (dimensions) of social skills questionnaires and the factors (dimensions) of social anxiety instruments with similar names are substantially higher than with the other factors. Thus, the social skills dimension of *Speaking or performing in public/Interacting with people in authority or with commercial firms* (SSQ-I-F1, RAS-F1, and CSES-F3) correlated with the social anxiety dimension of "Speaking in public/Talking with people in authority" (SAQ-A30, LSAS-SR), ranging from $r = -.46$ (RAS) through $r = -.52$ (SSQ-I) until $r = -.70$ (CSES) (the AI does not include that kind of social skill). The social skills dimension of *Interacting with persons I am attracted to/ opposite sex or with others in an extroverted way* (SSQ-I-F4, CSES-F6, and RAS-F4) correlated with the social anxiety dimension of "Interactions with the opposite sex" (SAQ-A30), ranging from $r = -.40$ (SSQ-I, CSES) to $r = -.47$ (RAS) (the AI also omit that kind of social skill). The social skills dimension of *Expressing annoyance, disgust, or displeasure* (SSQ-I-F8, RAS-F2, AI-RP-F1, and CSES-F1) correlated with the social anxiety dimension of "Assertive expression of annoyance, disgust or displeasure" (SAQ-A30), ranging from $r = -.25$ (SSQ-I, CSES), through $r = -.36$ (RAS) to $r = .42$ (the relationship was positive with the AI-RP because of this inventory's correction format). The social skills dimension of *Interacting with strangers* (SSQ-I, RAS) correlated with the social anxiety dimension of "Interactions with strangers" (SAQ-A30, LSAS-SR), ranging from $r = -.48$ (SSQ-I) to $r = -.54$ (SSQ-I). Other significant relationships between social skills and social anxiety are shown in table 1.

Conversely, the following are the social skills dimensions that hardly presented significant relationships with social anxiety, either at a general level (assessed by the overall score of the three questionnaires) or at a dimensional level (assessed by the dimensions of the SAQ-A30, and the LSAS-SR), and are not therefore included in table 1: "Disclosing information about myself to close persons" (SSQ-I), "Apologizing/Recognizing my own mistakes" (SSQ-I), "Thanking for congratulations/Arguing with salespeople" (SSQ-I), "Defending my own position" (RAS), "Resisting undesirable propositions" (AI), "Resisting consumer propositions" (AI), "Refusing requests involving my own property and asking for it

Table 1
Relationships between social skills and social anxiety

Social Skills Questionnaire (SSQ-I)	Social anxiety questionnaires and some of their factors											
	SAQ-A30						LSAS-SR					
	F1	F2	F3	F4	F5	Total	F1	F2	F3	F4	Total	AI Dis/Anx.
F1. Speaking or performing in public/interacting with people in authority	-.28	-.23	-.52	-.21	-.36	-.43	-.36	-.62	-.50	-.48	-.52	-.38
F2. Expressing positive feelings	-.02	.03	.00	.11*	-.17	-.03	-.20*	-.14	-.16	-.27**	-.23**	-.22*
F3. Refusing requests	-.10*	-.30	-.19	-.03	-.22	-.23	-.13	-.23**	-.27**	-.23**	-.26**	-.28**
F4. Interacting with persons I am attracted to	-.40	-.08	-.22	.11*	-.25	-.28	-.28	-.29	-.30	-.36	-.35	-.23*
F8. Expressing annoyance, disgust, or displeasure	-.18	-.25	-.27	-.06	-.17	-.27	-.32	-.35	-.40	-.27**	-.36	-.32**
F9. Expressing different opinions/Clarifying opinions	-.10*	-.12*	-.18	.02	-.28	-.18	-.18*	-.21*	-.23**	-.24**	-.25**	-.23*
F11. Interacting with strangers	-.31	-.15**	-.27	-.16	-.48	-.39	-.54	-.36	-.44	-.46	-.48	-.30**
SSQ-I total score (12 factors)	-.28	-.21	-.34	-.12*	-.39	-.36	-.46	-.50	-.51	-.55	-.56	-.39
Rathus Assertiveness Schedule (RAS)												
F1. Interacting with commercial firms	-.29	-.34	-.46	-.28	-.38	-.45	-.42	-.51	-.53	-.52	-.56	-.42
F2. Expressing annoyance or displeasure	-.18	-.36	-.29	-.14**	-.13**	-.28	-.17	-.40	-.32	-.20*	-.28**	-.34
F4. Interacting with others in an extroverted way	-.47	-.28	-.47	-.28	-.49	-.53	-.48	-.45	-.49	-.47	-.51	-.39
F5. Expressing feelings openly	-.13**	-.18	-.11*	-.05	-.17	-.18	-.14	-.21*	-.17*	-.23**	-.21*	-.28**
F6. Refusing requests	-.23	-.40	-.34	-.25	-.32	-.38	-.31	-.42	-.47	-.42	-.47	-.49
RAS global score	-.41	-.45	-.52	-.29	-.48	-.56	-.47	-.59	-.59	-.54	-.61	-.52
Assertion Inventory (AI) – Response probability												
F1. Expressing annoyance, disgust or displeasure	.25	.42	.29	.20**	.27	.34	.30	.22**	.29	.28	.30	.44
F2. Making requests to potential employers	.27	.23	.23	.25	.22**	.33	.28	.25	.30	.37	.35	.38
F3. Giving and receiving compliments, requests and asking personal questions	.24	.18**	.12	.17*	.22**	.21**	.23**	.15*	.20**	.24	.23**	.35
F7. Apologizing/Recognizing my own mistakes	.22**	.23	.15*	.20**	.27	.25	.32	.13*	.29	.35	.34	.38
F8. Expressing different opinions/Clarifying opinions	.18**	.31	.26	.25	.19**	.29	.24	.26	.31	.23	.29	.33
AI-Response probability total score	.31	.37	.24**	.25	.27	.36	.30	.22**	.31	.36	.35	.50
College Self-Expression Scale (CSES)												
F1. Expressing annoyance, disgust, or displeasure	-.31	-.25**	-.28**	-.12	-.44	-.35	-.40	-.25**	-.38	-.33	-.37	-.33
F2. Expressing positive feelings	-.25**	-.14	-.20*	-.30	-.25**	-.25**	-.17	-.15	-.20*	-.33	-.28**	-.20*
F3. Speaking in public or in front of the class	-.34	-.29**	-.70	-.36	-.55	-.57	-.39	-.55	-.49	-.38	-.47	-.39
F6. Interacting with the opposite sex	-.40	-.09	-.30**	-.21*	-.33	-.34	-.32	-.17	-.20**	-.27**	-.28**	-.20*
F8. Being careful not to hurt other people's feelings	-.23*	-.28**	-.24*	-.30	-.27**	-.34	-.13	-.17	-.22*	-.26**	-.25**	-.22*
F9. Making requests to close people	-.10	-.25**	-.12	-.13	-.33	-.21*	-.23*	-.06	-.16	-.24*	-.20*	-.21*
F10. Defending my consumer rights	-.24*	-.35	-.33	-.05	-.28**	-.30**	-.04	-.33	-.19*	-.13	-.17	-.28**
CSES total score	-.40	-.40	-.48	-.31	-.59	-.54	-.46	-.42	-.51	-.54	-.55	-.53

Factors are: F1= Interactions with strangers, F2= Speaking in public/talking with people in authority, Anx.= Anxiety subscale; Avoid= Avoidance subscale; Dis/Anx.= Discomfort/Anxiety subscale. All the correlations are statistically significant with $p < .001$, except ** $p < .01$, and * $p < .05$; those underlined are not significant and those in bold refer to correlations between the total scores of questionnaires or between dimensions with the same name. Due to the correction format, correlations with the AI head in the opposite direction to all the other questionnaires.

to be returned" (AI), "Defending personal preferences before my parents" (CSES), "Giving compliments to friends" (CSES), "Defending my own rights before friends/roommates" (CSES), and "Defending my own decisions before my parents" (CSES).

Relationships between social skills and personality styles/disorders

As can be seen in table 2, the relationships between global social skill, assessed by the overall score of social skills questionnaires (SSQ-I, RAS, AI-RP, and CSES), and the personality styles/disorders (CEPER-III) vary greatly depending on the specific style/disorder. The social skills correlations with most of the personality styles are negative, except for the following personality styles/disorders: histrionic (all the correlations are positive but not with the AI because of its correction format), narcissistic (most of the correlations are positive), obsessive-compulsive (lack of significant relationships), and antisocial (a mixture of positive and negative relationships). The histrionic style, for instance, is positively and significantly related to almost all the measures of social skills, at both a global and a dimensional level. Conversely, an avoidant personality style is negatively and significantly related to almost all the social skills measures at both a global and a dimensional level (in the case of the AI the correlations are positive because of its correction format). The relationships between all the other personality styles and social skills vary considerably. For instance, the obsessive-compulsive style has no significant relationship with social skills, either globally or with any of their dimensions (except for a low and negative relationship with "Dancing or singing in public"), while the antisocial style's relationships are positive with some social skills dimensions, and negative with other ones. The paranoid style is negatively and significantly related both with the global social skill as with most of its dimensions. The same occurs with the schizoid and dependent styles. In the case of the borderline and schizotypal styles, although most of their relationships with social skills are negative, many of them do not reach statistical significance. The same occurs with the passive-aggressive, self-defeating, depressive, and sadistic styles.

There are also some social skills dimensions that are not significantly related to any personality style (and do not appear, therefore, in table 2). These dimensions are "Thanking for congratulations/Arguing with salespeople" (SSQ-I), "Making requests to potential employers" (AI), "Resisting consumer propositions" (AI), "Refusing requests involving my own property and asking for it to be returned" (AI), "Giving compliments to friends" (CSES), "Defending my own rights before friends/roommates" (CSES), "Defending my consumer rights" (CSES), and "Defending my own decisions before my parents" (CSES).

Table 2
Relationships between social skills and personality styles/disorders

Social skills questionnaires and some of their factors	Personality styles/disorders (CEPER-III)													
	Para- noid	Schi zoid	Schi typal	Anti- social	Bord erline	Histri onic	Narci ssist	Avoi dance	Depe nden	Obs. comp	Passiv Aggre	Self- def	Depr essiv	Sadis tic
Social Skills Questionnaire (SSQ-I)														
F1. Speaking or performing in public/interacting with people in authority	-.16	-.10	-.02	.01	-.11	.38	.27	-.51	-.33	.02	-.05	.04	-.11	.01
F2. Expressing positive feelings	-.17	-.35	-.05	-.20	-.15	.21	-.02	-.21	-.04	.08	-.20	.00	-.07	-.10
F3. Refusing requests	.10	.01	-.07	.08	-.06	.07	.15	-.31	-.39	.05	-.15	-.23	-.21	-.06
F4. Interacting with persons I am attracted to	-.28	-.30	-.11	-.03	-.16	.35	.19	-.36	-.15	-.14	-.10	-.12	-.18	-.22
F5. Dancing or singing in public	-.17	-.24	-.15	.01	-.10	.47	.08	-.39	-.20	-.20	-.12	-.13	-.21	-.16
F6. Disclosing information about oneself to close persons	-.10	-.27	-.00	.08	.05	.37	.13	-.21	-.02	-.07	.06	-.02	-.09	-.05
F7. Asking an attendant or a stranger for something	-.26	-.11	-.20	-.22	-.17	.23	-.03	-.26	-.17	.07	-.26	-.17	-.16	-.22
F8. Expressing annoyance, disgust, or displeasure	-.10	-.01	-.05	.13	-.02	.26	.17	-.43	-.33	.02	-.08	-.14	-.16	.15
F9. Expressing different opinions/Clarifying opinions	-.05	-.05	.12	.24	.07	.38	.28	-.34	-.20	.00	.08	.01	-.04	.00
F10. Apologizing/Recognizing my own mistakes	-.24	-.30	-.14	-.31	-.22	.21	-.03	-.11	-.01	.07	-.25	-.05	-.00	-.36
F11. Interacting with strangers	-.22	-.33	-.11	-.01	-.18	.49	.21	-.56	-.30	.00	-.14	-.14	-.22	-.09
SSQ-I total score (12 factors)	-.25	-.32	-.10	-.04	-.15	.49	.25	-.54	-.30	.01	-.17	-.07	-.17	-.11
Rathus Assertivness Schedule (RAS)														
F1. Interacting with commercial firms	-.41	-.15	-.22	-.06	-.28	.13	.11	-.47	-.50	.10	-.29	-.22	-.29	-.14
F2. Expressing annoyance or displeasure	-.05	.12	.01	.15	-.03	.15	.09	-.29	-.20	.01	-.12	.00	-.08	.17
F3. Defending my own position	.20	.15	.21	-.32	.16	.21	.35	-.06	-.15	.07	.20	.15	-.02	.23
F4. Interacting with others in an extroverted way	-.30	-.18	-.14	.01	-.23	.23	.14	-.65	-.43	.00	-.24	-.16	-.28	-.02
F5. Expressing feelings openly	-.26	-.32	-.22	.10	-.20	.26	.13	-.27	-.22	-.02	.10	-.18	.16	-.22
F6. Refusing requests	-.08	.08	-.15	.19	-.09	.08	.08	-.45	-.48	.04	-.13	-.21	-.26	.07
RAS total score	-.28	-.10	-.18	.11	-.23	.29	.21	-.65	-.58	.05	-.23	-.21	-.32	.01
Assertion Inventory (AI) - Response probability														
F1. Expressing annoyance, disgust or displeasure	.21	.19	.08	-.00	.18	-.11	-.05	-.41	-.39	.10	.16	.19	.35	-.01
F3. Giving and receiving compliments, requests and asking personal questions	.19	.20	.05	-.03	.14	-.26	.02	.23	.13	.07	.11	.08	.12	.14
F7. Apologizing/recognizing my own mistakes	.24	.22	.09	.18	.24	-.20	.01	.27	.17	-.03	.19	.09	.17	.20
IA-Response Probability total score	.23	.14	.07	.08	.20	-.11	.02	-.28	-.29	.02	.19	.14	.17	.15
College Self-Expression Scale (CSES)														
F1. Expressing annoyance, disgust, or displeasure	-.19	-.31	-.05	.03	-.25	.32	.13	-.48	-.38	.10	-.21	-.19	-.33	-.19
F2. Expressing positive feelings	-.24	-.29	.06	-.09	-.07	.31	.11	-.21	-.10	.00	-.05	.07	-.01	-.13
F3. Speaking in public or in front of the class	-.12	.02	.13	.01	-.07	.31	.27	-.51	-.27	.00	-.04	.04	-.07	.00
F6. Interacting with the opposite sex	-.30	-.13	-.05	.04	-.16	.14	.07	-.41	-.30	.05	-.10	-.23	-.22	-.07
F8. Being careful not to hurt other people's feelings	-.19	-.03	-.10	.14	-.11	.05	.08	-.40	-.47	-.03	-.28	-.26	-.25	-.01
F9. Making requests to close people	-.23	-.33	-.14	-.08	-.16	.15	-.00	-.40	-.28	-.07	-.22	-.20	-.35	-.20
CSES total score	-.29	-.29	-.09	-.02	-.27	.34	.15	-.62	-.43	.04	-.31	-.24	-.34	-.19

Notes: CEPER-III= Cuestionario exploratorio de personalidad-III (Exploratory Questionnaire of Personality). Correlations with ps .001 are in bold, ps .01 in italics, and ps .05 underlined; none of the other correlations is significant. Due to the correction format, correlations with the AI head in the opposite direction to all the other questionnaires.

Discussion

This study has addressed the relationships between social skills (assessed by the SSQ-I, the RAS, the AI-RP, and the CSES), and social anxiety (assessed by the SAQ-A30, the LSAS-SR, and the AI-RP), on the one hand, and between social skills (assessed by the same questionnaires as before), and personality styles/disorders (assessed by the CEPER-III), on the other. The relationship between social skills and social anxiety seems clear and constant (e.g., Caballo, 1993; Caballo et al., 2003; Chambless et al., 1982; Lefrançois et al., 2011; Hsu et al., 2012; Mokuolu, 2013), and not only in the adult population, but also in children and adolescents (e.g., Clark et al., 1994; Piqueras et al., 2012). In fact, some questionnaires use the same social situations to assess both social anxiety and social skills, as does the AI (Gambrill & Richey, 1975). This study again found a negative and moderate relationship between these two constructs. The correlations have ranged from $-.36$ to $-.61$ (with the AI correlations being positive due to the scale's scoring instructions), again supporting the unequivocal (and inverse) relationship between social anxiety and social skills; that is, the higher the social skills, the lower the social anxiety, and vice versa. The most accurate explanation may be that high social anxiety hinders the expression of social skills, making people behave more awkwardly in social situations. A greater lack of social skills may also lead to increased anxiety in persons facing social situations. In both cases, there would be a vicious circle, in which higher social anxiety could inhibit the proper expression of social skills, which in turn would increase anxiety, and this would further inhibit the proper expression of social skills. On the other hand, the frequent use of social skills training as part of the treatment programs of social anxiety (e.g., Albano & DiBartolo, 2007; Caballo, 1997; Caballo, Salazar, Garrido, & Iruña, 2012; *Society of Clinical Psychology, American Psychological Association, Division 12*, 2014a; Turner, Beidel, Cooley, Woody, & Messer, 1994; Wagner, Pereira, & Oliveira) also supports that relationship.

Certain results that may be of special interest are the relationships between social skills and social anxiety dimensions. In other words, although social skills and social anxiety are significantly related at a general level, does the same apply when it comes to the similar dimensions of both constructs? First of all, although the names of the dimensions of social skills and social anxiety may be similar, some of their component items may not bear a close resemblance. This is especially true of the dimensions of social skills, where it is difficult for all the items that compose a dimension to be unitary, i.e., measuring only aspects of that dimension. Secondly, there are major differences in correlations depending on the specific dimensions. Thus, for instance, the social anxiety dimension "Interactions with the opposite sex" (assessed only by the SAQ-A30, because the LSAS-SR does not include that dimension) has moderate relationships (from $r = -.40$ to $r = -.47$) with its social skills counterpart from the questionnaires that include such a dimension (SSQ-I, RAS, and CSES). The same applies to the social anxiety dimensions of "Speaking in public/Talking with people in authority" ($r = -.46$ to $r = -.70$), and "Interactions with strangers" ($r = -.48$ to $r = -.54$). This might indicate that the situations that inform these three dimensions are similar for both social anxiety and social skills. Given

that the correlations obtained between the two subscales of the AI (Response Probability and Discomfort/Anxiety) and the social situations measuring both subscales are exactly the same, we would hazard that this correlation level ($r = .50$) between social skills and social anxiety is what would be expected, but it could be lower when some of the situations composing each one of the two constructs is different. This is what seems to happen in the dimension of "Expressing annoyance, disgust, or displeasure", where relationships range from $r = -.25$ to $r = .42$ (positive relationship with the AI because of its corrections format). We should like to note that this dimension is one that is most frequently found on social skills questionnaires and that the correlations, in that dimension, between the four self-report measures of social skills used in this study were significantly higher than those found among overall social anxiety and social skills, ranging from $r = .47$ to $r = .57$ (Caballo et al., 2014).

Regarding the social anxiety dimension of "Criticism and embarrassment", it does not seem to have a clear correspondence in the field of social skills, although it is probably partly present in global skills behavior or in some of its dimensions, such as "Speaking in public" or "Being careful not to hurt other people's feelings". Feeling embarrassed could be present, at least as a possibility, in almost all social situations, but the probability of its occurrence might be remote in most situations.

Finally, we found that some social skills dimensions have very few significant relationships with social anxiety, such as "Disclosing information about oneself to close persons" (SSQ-I), "Apologizing/Recognizing my own mistakes" (SSQ-I), "Thanking for congratulations/Arguing with salespeople" (SSQ-I), "Defending my own position" (RAS), "Resisting undesirable propositions" (AI), "Resisting consumer propositions" (AI), "Refusing requests involving my own property and asking for it to be returned" (AI), "Defending personal preferences before my parents" (CSES), "Giving compliments to friends" (CSES), "Defending my own rights before friends/roommates" (CSES), and "Defending my own decisions before my parents" (CSES), which might not have correspondent dimensions in the social anxiety field, or the number of items making up the scale might be very low (one or two items). This is one issue that should be further investigated.

In sum, based on the findings obtained in this study on the relationships between social anxiety and social skills, we could say that, in general, a moderate and negative relationship between the two constructs seems clear and could be around $.50$. Regarding their specific dimensions, we find a somewhat lower relationship between similar dimensions (which is to be expected considering that each dimension has fewer items), but always statistically significant ($p < .001$). Given these data, it would seem logical to include social skills training as a standard technique for the treatment of social anxiety, particularly when the person suffering it has difficulties in several social anxiety dimensions (e.g., on three or more dimensions of the SAQ-A30), although the empirical evidence for the appropriateness of the inclusion of social skills training is contradictory, with several studies supporting it (e.g., Olivares, Olivares-Olivares, & Macià, 2014; Wagner, et al., 2014), while others do not (e.g., Stravynski et al., 2000).

We also explored the relationships between social skills and personality styles/disorders. The literature in this regard is extremely scarce, and we found few studies linking these variables (e.g., Caballo et al., 2003), particularly when considering all the personality disorders included in the DSM-IV (APA, 1994), or the DSM-5 (APA, 2013). The results obtained in this study show that the personality style/disorder more closely related (negatively) with social skills disorder is the avoidant personality style/disorder, which is to be expected when we consider that it is basically the same disorder as the generalized social phobia included in the DSM-IV-TR (APA, 2000). Considering the relationships between social anxiety and social skills found in this study, the expected correlations should be .50 or more, as already noted above. That is indeed what we have found regarding three of the four social skills questionnaires used in the study, supporting similar data found in previous research (Caballo et al., 2003). In this latter research, the avoidant personality disorder (APD), assessed by the Millon Clinical Multiaxial Inventory (MCMI-II; Millon, 1987), correlated moderately with the social skills assessed by the AI ($r = .50$), and the CSES ($r = -.48$). Furthermore, the avoidant personality style/disorder not only has significant negative correlations with the overall social skills, but it is also significantly correlated ($p < .001$) with their different dimensions, such as speaking or performing in public/Interacting with people in authority, interacting with persons I am attracted to/opposite sex or with others in an extroverted way, expressing annoyance, disgust, or displeasure, or interacting with strangers, indicating that the APD and generalized social phobia could be similar disorders with the same dimensional structure (Caballo, Salazar, Arias, et al., 2010; Caballo, Salazar, Irurtia, et al., 2012). Furthermore, cognitive-behavioral treatment programs for both disorders are very similar, regularly including training in social skills in APD treatment (e.g., Alden, Mellings, & Ryder, 2009).

Another personality style/disorder that is significantly and negatively related with social skills is the dependent personality style/disorder, which shares symptoms with the avoidant style/disorder, and is specifically characterized as unassertive, with specific problems in the dimensions of expressing annoyance, disgust, or displeasure, interacting with commercial firms, interacting with strangers, or being careful not to hurt other people's feelings. The results here support this characteristic of unassertiveness in the dependent style/disorder and in the fear of upsetting or losing the support of other people (e.g., by means of expressing negative feelings or refusing requests). By contrast, this style/disorder does not seem to have any issues with the expression of positive feelings, apologizing or recognizing one's own mistakes, or behaviors that strengthen interpersonal ties.

The schizoid personality style/disorder also stands out for its negative relationships with social skills, both globally and, particularly, in interactive dimensions that involve the expression of feelings, such as expressing positive feelings, apologizing and recognizing one's own mistakes, as response classes whose deficit characterizes the disorder. It would seem clear what kinds of skills are deficient in this style/disorder. Conversely, other low interaction behaviors that have nothing to do with the expression of feelings do not appear to relate to this

style/disorder and, therefore, would not appear to be a problem for individuals with this kind of personality (e. g., refusing requests, speaking in public, asking something to an attendant or to a stranger, expressing different opinions, clarifying opinions, and resisting undesirable or consumer propositions).

The paranoid personality style/disorder has significant and negative relationships with overall social skills and in the dimensions of interacting with people one is attracted to/opposite sex, interacting with commercial firms, apologizing, admitting mistakes, interacting with strangers, and interacting with others in an extroverted way. Considering the pervasive distrust of others involved in the paranoid personality style/disorder and his/her perspective that other people are the ones who cause them problems (and not the other way round), the way of inadequately interacting in social situations seems consistent. In the same vein, such people would have fewer problems when rejecting requests or expressing different opinions to others, thereby avoiding imagined harm from other people.

The borderline personality style/disorder has significant and negative relationships with social skills globally, although these relationships are weak. Regarding dimensions, it seems that the most problematic areas are apologizing, recognizing one's own mistakes, interacting with commercial firms and strangers, and some aspects of expressing annoyance, disgust or displeasure, with these findings being consistent with the characteristics of the style/disorder. The standard therapy of choice for a borderline personality disorder (dialectical behavior therapy) involves a module for social skills training and teaches the patient certain facets of social skills (Linehan, 1993; *Society of Clinical Psychology, American Psychological Association, Division 12*, 2014b). The relationships found in this study may help to better select the most useful types of social skills for patients with borderline personality style/disorder.

The antisocial personality style/disorder has no significant relationships with social skills globally, which is to be expected given the aggressiveness and lack of empathy shown by these subjects. However, regarding dimensions, there are certain significant relationships, which may be negative or positive depending on the kind of behavior, and could reflect the aforementioned features. For example, these subjects find it difficult to apologize or recognize their own mistakes (negative relationships), but seem to be more skilled when expressing different opinions or defending their own position (positive relationships), with this behavior being consistent with the specific features of the disorder.

The schizotypal personality style/disorder mainly reveals negative relationships with social skills globally and dimensionally, although these relationships are often weak. People with this style/disorder are not characterized by high social skills, but a larger sample than the one used here would be needed to draw clearer conclusions about this style/disorder.

The obsessive-compulsive personality style/disorder has no significant positive or negative relationships with social skills, at either a global or dimensional level, except for a weak and negative relationship with the dimension of "Dancing or singing in public". The goals of this style/disorder are not particularly social, so this would not entail much suffering in this area, except that at some point there is

need for interpersonal relationships to meet their targets (usually academic or work).

There are other styles/disorders that have significant and positive relationships with social skills. As we might expect, the style/disorder with the highest positive relationships globally is the histrionic one, characterized by social behavior that is extroverted and, therefore, conducive to the development of social skills. This is also supported by the significant and positive relationships between this style/disorder and almost all the specific dimensions of social skills. For instance, speaking in public, interacting with persons one is attracted to, dancing or singing in public, interacting with strangers, expressing positive feelings, and disclosing information about oneself to close persons are all social skills classes with which the histrionic style/disorder is comfortable. Such a style is the most "social" style/disorder among those addressed here, and the many positive relationships with social skills, at both a global and dimensional level, support that social facet of their behavior.

Another personality style/disorder with positive relationships with social skills is the narcissistic personality style/disorder, although only a few of these relationships reach statistical significance. This style/disorder can deploy social skills to achieve one's goals and involve others in one's own interests, but they may sometimes be aggressive and coercive to do so (their highest correlations with the RAS, in which some of the items appear to be assessing aggressive rather than assertive behaviors, could support this). Dimensions such as speaking in public, interacting with persons one is attracted to/opposite sex, expressing different opinions, and defending one's own position mostly characterize the narcissistic personality in this study. In any case, after the histrionic personality, the narcissistic one would be the style/disorder with the more positive and significant relationships with social skills.

Finally, the four personality styles/disorders not included in the DSM-5 (passive-aggressive, self-defeating, depressive, and sadistic) all have negative relationships (although few are statistically significant) with social skills at a global and dimensional level, pointing to general problems of social skills (passive-aggressive, self-defeating, and depressive), or to problems in more specific dimensions (sadistic).

To conclude, we might say, first of all, that the results obtained here on the significant relationships between social anxiety and social skills support them empirically both at a global level (overall scores of the questionnaires) and a dimensional one (behavior classes of both constructs with similar names). It is not surprising that some questionnaires seek to assess both constructs using the same social situations. Secondly, regarding the relationships between personality styles/disorders and social skills, we found very few studies in the literature that addressed this topic. This study makes a modest contribution in this direction. The data obtained indicate that most personality styles/disorders are negatively related to social skills, except for the histrionic personality (with numerous positive relationships at a global and dimensional level) and the narcissistic one (to a lesser degree). In general, we might say that the results obtained on the relationships between personality styles/disorders and social skills agree with the interpersonal

characteristics of each one of them, adding more empirical information to the field of personality styles/disorders, so in need of this kind of research (e.g., Ruiz, Salazar, & Caballo, 2012).

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