

PERSONALITY IN ADOLESCENTS OF GENERAL AND CLINICAL SAMPLES

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Abstract

The main objective of the study was to analyze the differences between samples from general and clinical sample in personality prototypes (PRP), derived from the Millon Adolescent Clinical Inventory (MACI). The methodology included an analytical and observational design with a random, multi-stage, stratified and proportional cluster sampling in general sample ($n= 461$) and consecutive sampling of clinical sample ($n= 219$), in adolescents between 13 and 17 years of age. We found introvert, inhibited, doleful, forceful, oppositional, self-demeaning and borderline PRP in the clinical sample and dramatizing and conforming PRP in the general sample present a significantly higher mean. There is a relevant absence of significant differences in egotistic, submissive and unruly PRP. By sex, more significant differences in PRP are observed in the clinical sample. By age, a significant downward linear trend in the submissive and conforming PRP is observed, as well as an upward trend in the unruly and forceful PRP in the general sample. The clinician must be alert in the interpretation of the MACI PRP that do not differentiate between general and clinical samples.

KEY WORDS: *personality, adolescence, MACI.*

Resumen

El objetivo principal del estudio fue analizar las diferencias entre muestra general y clínica en los prototipos de personalidad (PRP) del "Inventario clínico para adolescentes de Millón" (MACI). La metodología incluyó un diseño observacional y analítico, utilizando un muestreo de participantes (13-17 años) aleatorio polietápico, estratificado y proporcional por conglomerados en muestra general ($n= 461$) y un muestreo consecutivo en muestra clínica ($n= 219$). Encontramos que los PRP introvertido, inhibido, pesimista, rudo, opositor, autopunitivo y límite presentan una media significativamente mayor en muestra clínica y los PRP histriónico y conformista en muestra general. Se observa ausencia de diferencias significativas en los PRP egocéntrico, sumiso y rebelde. En la variable sexo observamos más diferencias significativas de PRP en muestra clínica

que en la general y en la variable edad encontramos una tendencia lineal significativa descendente en los PRP sumiso o conformista y ascendente en los PRP rebelde y rudo en muestra general. El clínico debe estar alerta ante la interpretación de los PRP del MACI que no diferencian entre muestra general y clínica.

PALABRAS CLAVE: *personalidad, adolescencia, MACI.*

Introduction

Adolescence is a vital period of human growth and development, immersed in profound changes from a biological and psychosociological perspective, which extends between the ages of 10 and 19 (World Health Organization [WHO], 2020) and can be divided into early adolescence (10-13 years), middle (14-17 years) and late (18-21 years) (Allen & Waterman, 2019).

Personality construction is influenced by how adolescents face these changes (Rogers & Glendon, 2018), and it is important to pay attention to the configuration of the personality that allows both strengthening functional traits and preventing dysfunctional ones (Polek et al., 2018).

From an evolutionary perspective, personality develops from infancy to adult life. At the end of adolescence, personality tendencies or traits begin to be increasingly stable (Kongerslev et al., 2015), they have an important influence on the consolidation of adult personality and show changes throughout the entire life period (Specht, 2020). Personality prototypes (PRP) move along this same line which, according to the Millon Adolescent Clinical Inventory (MACI; Millon, 2004), represent trends that mark the foundations of future personality and reach a certain stability in adolescence (Vinet et al., 2014).

Studies with a large sample of the general and clinical sample reflect significant differences in means in most of the PRP. Clinical sample presented significantly higher mean scores than general sample in the introverted, inhibited, Doleful, Unruly, Forceful, oppositional, Self-demeaning, and borderline PRP, while general sample presented significantly higher scores than clinical sample in the Dramatizing, Egotistic PRP and Conforming. No differences by age were found in any of the prototypes when comparing age groups of 13-15 and 16-18 years (Vinet & Forns, 2006). Studies by the same authors (Vinet & Forns, 2008) that present a sample of general sample and another sample of clinic sample (that includes a sample linked to patients from mental health centers and minors in a situation of social maladjustment linked by judicial issues) reflected that the results move in the same previous dynamic. In both sexes the clinical sample presents a significantly higher mean in the Introverted, Inhibited, Doleful, Unruly, Forceful, Oppositional, Self-demeaning and Borderline PRP, while general sample presented significantly higher scores than the clinical sample in the PRP of Submissive, Dramatizing, Egotistic and Conforming personality.

Some PRP have a counter-theoretical behavior (Submissive, Dramatizing, Egotistic and Conforming), where the averages obtained by adolescents from general sample are significantly higher than those obtained by adolescents from clinical sample (Saiz et al., 2015; Vinet, 20). It has been argued that the observed

pattern of inverse results could be due to cultural differences between Hispanic and US adolescents (Vinet, 2010). In addition, these PRP, with behavior contrary to what is expected by theory, tend to present inverse associations with various measures of psychopathology in the Latin American population (Vinet, 2010). According to this dimension, high scores do not seem to be measuring psychological maladjustment, but perhaps the absence of maladjustment in Latin American adolescents (Saiz *et al.*, 2015).

PRP have also been studied for their ability to characterize adolescents with psychological problems in a clinical context, including issues such as: childhood abuse, social maladjustment, drug use, depression, behavioral disorders, adjustment disorders or non-psychogenic seizures (López-Sánchez, 2021).

The studies analyzed on PRP in general and clinical sample make us think about the usefulness of research on this subject in our own cultural context, due to its sociological and undoubtedly clinical aspects.

The main objective of our research is to study the differences between a general sample and a clinical sample in each of the personality prototypes (PRP) derived from the Millon Adolescent Clinical Inventory (MACI; Millon, 2004).

Method

Participants

The general sample is made up of adolescents from second to fourth year of Compulsory Secondary Education of the autonomous community of Castilla y León (Spain). The general sample has 461 cases and clinical sample has 219 cases. The total sample collected includes 680 cases, 67.8% of general sample and 32.2% of clinical sample. We observed 50.9% of male cases and 49.1% female, with a mean age of 14.40 ($SD= 1.15$, $Mdn= 14$, semi-interquartile range=13-15). The sociodemographic data is shown in Table 1.

The comparison between clinical and general samples shows significant differences according to gender, with a higher proportion of male cases in clinical sample ($\chi^2_{[1, N= 680]}= 17.61$, $p<.000$) and absence of significant differences in average ranges in the age variable ($U= 46891$, $p= .121$).

Instrument

Millon Adolescent Clinical Inventory (MACI; Millon, 2004). The MACI is a questionnaire designed for adolescents, ages 13 to 19 years. Among the different sections of the measurement instrument (personality patterns, expressed concerns, and clinical syndromes), our study will only consider the analysis of the Introverted, Inhibited, Doleful, Submissive, Dramatizing, Egotistic, Unruly, Forceful, Conforming, Oppositional, Self-demeaning and Borderline Tendency personality patterns. This instrument was validated in a clinical sample of Spanish population, and in the personality pattern scales the reliability coefficients range between .69 and .90. The inventory presents adequacy in terms of empirical validity. Studies of adaptation of the MACI to different populations show that the psychometric

characteristics of the test are maintained in non-clinical populations, and that the internal consistency reaches acceptable levels in most of the scales (Vinet & Forns, 2006). The study of the reliability of the MACI in the Spanish non-clinical population presents adequate reliability values, and it confirms that with due precautions it can be used with adolescents in settings that are not necessarily clinical (Brock, 2015). Regarding its validity, various investigations have shown that the MACI has the capacity to discriminate between normal adolescents and those with psychological problems (Vinet & Alarcón, 2003). In our research for the contrast between general and clinical samples we will only use direct scores, not transformed by any criteria.

Table 1
Sociodemographic data in general and clinical samples

Variables	General sample		Clinical sample	
	<i>n</i>	%	<i>n</i>	%
Sex				
Male	209	45.3	137	62.6
Female	252	54.7	82	37.4
Total	461	100	219	100
Age (years)				
13	115	24.9	66	30.1
14	150	32.5	49	22.4
15	143	31.0	46	21.0
16-17	53	11.5	58	26.5
Total	461	100	219	100

Procedure

The sampling, derived from an epidemiological study of prevalence, has been multi-stage random, stratified and proportional by conglomerates. Proportionality respects the blocks of type of school (public/private) and the sociodemographic area (rural and urban). The clinical sample was recruited through consecutive sampling of adolescent patients, studying between the second and fourth years of ESO that attended in the first consultation in a Mental Health Unit in Castilla y León. The recruitment period was 18 months.

All cases in the clinical and general samples have completed the Millon Adolescent Clinical Inventory. The type of sampling is the one defined in the participants section. The inclusion criteria in the study for the clinical sample and the general sample are to study between 2th and 4th year of ESO, reading ability, to accept participation in the study and the existence of informed consent. Not meeting any of the previous criteria was reason for exclusion from the study. In the case of the clinical sample, not having pharmacological treatment was also considered an inclusion criterion. The MACI can be performed in approximately 30 minutes. In the clinical sample, the MACI was implemented individually in the mental health consultation. In the general sample, the MACI was applied in the context of various complete classes, where each student answered the

measurement instrument individually. The research was approved by the Scientific Research Ethics Committee of the University Assistance Complex of Palencia.

Data analysis

Descriptive and exploratory statistics were used. Whenever it was necessary to study association or differences among measurements of the different variables, a significance level of $\alpha < .05$ was considered.

In order to study the significance of the differences between the personality profiles in general and clinical sample factorial analysis of variance models will be used and, when appropriate, the type I error will be controlled by means of the Bonferroni correction or the Games-Howell correction in the case of not being able to assume equal variances. In some analyses and to control the effect of some variables, the analysis of covariance was used. All analyses were performed on direct scores.

To study the significance of the differences between means in direct scores, Student's *t*-test (or Welch's *t*-test in the case of non-homogeneity of variances) was used. Cohen's *d* was used to assess the effect size.

In some analyses with qualitative variables to study association or independence between variables, the χ^2 test was used.

Results

As seen in Table 2 the personality prototypes (PRP) Introverted ($t_{[1, 680]} = 3.235$, $p = .001$), Inhibited ($t_{[1, 680]} = 2.762$, $p = .006$), Doleful ($t_{[1, 680]} = 4.175$, $p = .001$), Forceful ($t_{[1, 680]} = 4.391$, $p < .001$), Oppositional ($t_{[1, 680]} = 4.662$, $p < .001$), Self-demeaning ($t_{[1, 680]} = 3.450$, $p = .001$) and Borderline ($t_{[1, 680]} = 5.313$, $p < .001$) present a significantly higher mean in clinical sample than in general sample. In turn, the Dramatizing ($t_{[1, 680]} = 2.440$, $p = .015$) and Conforming ($t_{[1, 680]} = 4.213$, $p < .001$) PRP present a significantly higher mean in general sample than in clinical sample. The largest effect sizes for the differences are observed in the PRP Borderline ($d = .449$), Doleful ($d = .358$), Forceful ($d = .367$) and Oppositional ($d = .376$) in favour of the clinical sample and in the Conforming PRP ($d = .341$) in favour of the general sample.

Through factorial analysis (clinical/general sample) on each of the PRP, controlling the effect through ANCOVA of the covariates sex and age, the significant differences observed in Table 2 remain stable. Although the effect of the factor on the PRP remains unchanged after controlling for sex and age, we observed that in some cases the effect of the covariates is significant, so we proceed to analyse them separately using factorial analysis.

Table 2
Mean differences in personality prototypes between clinical and general sample

Personality prototype	Sample	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>p</i>	<i>d</i>
Introverse	Clinic	219	26.71 (11.49)	3.235 ^w	.001*	0.28
	General	461	23.81 (9.61)			
Inhibited	Clinic	219	25.38 (13.90)	2.762 ^w	.006*	0.24
	General	461	22.38 (11.62)			
Doleful	Clinic	219	17.35 (12.21)	4.175 ^w	< .001*	0.358
	General	461	13.36 (10.33)			
Submissive	Clinic	219	48.91 (10.92)	-0.499 ^w	.603	-0.042
	General	461	49.34 (9.71)			
Dramatizing	Clinic	219	35.08 (12.36)	-2.440 ^w	.015*	-0.216
	General	461	37.40 (9.77)			
Egotistic	Clinic	219	31.24 (11.47)	-0.858 ^w	.391	-0.073
	General	461	32.02 (10.27)			
Unruly	Clinic	219	29.31 (12.33)	1.746	.081	0.143
	General	461	27.59 (11.83)			
Forceful	Clinic	219	11.42 (7.52)	4.391 ^w	< .001*	0.367
	General	461	8.79 (6.83)			
Conforming	Clinic	219	44.01 (10.53)	-4.213	< .001*	-0.341
	General	461	47.45 (9.65)			
Oppositional	Clinic	219	25.46 (10.97)	4.662	< .001*	0.376
	General	461	21.43 (10.33)			
Self-demeaning	Clinic	219	26.53 (16.71)	3.450 ^w	.001*	0.294
	General	461	21.98 (14.59)			
Borderline	Clinic	219	16.60 (9.09)	5.313 ^w	< .001*	0.449
	General	461	12.78 (7.90)			

Notes: ^w Modified t-test using the Welch test approximation for non-homogeneity of variances. **p*<.05.

As can be seen in Table 3, male sex has a significantly higher mean than female in the PRP Dramatizing ($t_{[1, 461]} = 3.108$; $p = .002$), Unruly ($t_{[1, 461]} = 3.074$; $p = .002$) and Egotistic ($t_{[1, 461]} = 5.645$; $p < .001$) in the general sample and in Dramatizing PRP ($t_{[1, 219]} = 4.066$; $p < .001$) and Egotistic ($t_{[1, 219]} = 5.684$; $p < .001$) in clinical sample. Female sex presents a significantly higher mean than male in the Inhibited PRP ($t_{[1, 219]} = 4.062$; $p < .001$), Submissive ($t_{[1, 219]} = 2.865$; $p = .005$), Introverted ($t_{[1, 219]} = 3.129$; $p = .002$), Doleful ($t_{[1, 219]} = 4.175$; $p < .001$), Oppositional ($t_{[1, 219]} = 2.687$; $p = .008$) Self-demeaning ($t_{[1, 219]} = 4.309$; $p < .001$) and Borderline ($t_{[1, 219]} = 3.668$; $p < .001$) in the clinical sample, and in the Inhibited PRP ($t_{[1, 461]} = 2.635$; $p = .009$) and Submissive ($t_{[1, 461]} = 4.995$; $p < .001$) in the general sample.

It is observed that the greatest differences in means according to gender (larger effect size) are observed in the clinical sample, and in this sample the female sex more frequently presents a significantly higher mean than the male except in the histrionic and Egotistic PRP. The orientation of the differences based on sex is similar in the general or clinical sample (when there are differences in

favour of a certain sex, they tend to appear whether the sample is general or clinical).

Table 3
Differences in means according to sex in personality prototypes in general and clinical sample

Personality prototype	Sample	Sex	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>p</i>	<i>d</i>
Introverse	Clinical	M	137	24.87 (11.03)	-3.129	.002♀	-0.48
		F	82	29.79 (11.65)			
	General	M	209	23.44 (10.88)	-	.457	-0.06
		F	252	24.12 (8.43)			
Inhibited	Clinical	M	137	22.53 (12.72)	-4.062	< .001♀	-0.61
		F	82	30.15 (14.55)			
	General	M	209	20.83 (12.20)	-2.635	.009♀	-0.23
		F	252	23.67 (10.97)			
Doleful	Clinical	M	137	14.60 (10.26)	-	< .001♀	-0.66
		F	82	21.54 (13.80)			
	General	M	209	13.35 (10.90)	-0.007	.994	-0.01
		F	252	13.36 (8.64)			
Submissive	Clinical	M	137	47.30 (11.14)	-2.865	.005♀	-0.43
		F	82	51.60 (10.05)			
	General	M	209	47.15 (9.85)	-4.995	< .001♀	-0.4
		F	252	51.15 (9.25)			
Dramatizing	Clinical	M	137	37.62 (11.46)	4.066	< .001♂	0.632
		F	82	30.84 (12.71)			
	General	M	209	38.96 (10.35)	3.108 ^w	.002♂	0.265
		F	252	36.11 (9.09)			
Egotistic	Clinical	M	137	34.52(10.06)	5.864	< .001♂	0.819
		F	82	25.77 (11.65)			
	General	M	209	34.89 (10.64)	5.645	< .001♂	0.492
		F	252	29.69 (9.32)			
Unruly	Clinical	M	137	30.47 (11.23)	1.815	.071	0.258
		F	82	27.37 (13.82)			
	General	M	209	29.44 (11.75)	3.074	.002♂	0.28
		F	252	26.06 (11.69)			
Forceful	Clinical	M	137	12.05 (7.89)	1.598	.112	0.233
		F	82	10.38 (6.79)			
	General	M	209	9.34 (6.82)	1.589	.113	0.089
		F	252	8.33 (6.83)			
Conforming	Clinical	M	137	44.55 (9.98)	1.714	.088	0.249
		F	82	42.44 (12.28)			
	General	M	209	47.66 (9.40)	0.432	.666	0.038
		F	252	47.27 (9.86)			
Oppositional	Clinical	M	137	23.94 (10.25)	-2.687	.008♀	-
		F	82	28.00 (11.70)			
	General	M	209	21.86 (10.52)	0.821	.412	0.074
		F	252	21.07 (10.08)			

Personality prototype	Sample	Sex	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>p</i>	<i>d</i>
Self-demeaning	Clinical	M	137	22.72 (14.51)	-4.309 ^w	< .001♀	-
		F	82	32.90 (28.22)			
	General	M	209	21.04 (14.64)	-1.26	.208	-0.11
		F	252	22.76 (14.78)			
Borderline	Clinical	M	137	14.89 (8.20)	-3.668	< .001♀	-0.53
		F	82	19.43 (9.82)			
	General	M	209	12.09 (8.10)	-1.728	.085	-0.15
		F	252	13.36 (7.69)			

Notes: M= male; F= female. ^w *t*-test modified by the Welch test approximation due to lack of homogeneity of variances. Significant differences have been marked with a male (♂) or female (♀) symbol depending on whether the score is higher for a given gender.

Regarding age, a factorial analysis of the age factor was performed on each of the PRP in direct scores, and in multiple comparisons (different ages) the type I error was controlled by means of the Bonferroni correction or the Games-Howell correction when not homogeneous variances are assumed.

No significant differences were observed according to age in the clinical sample.

In the general sample, significant differences ($p < .05$) were observed according to age in the prototypes Introverted (14 > 15 years), Submissive (13 > 14, 15 and 16-17 years), Unruly (13 < 14, 15 and 16-17 years), Forceful (13 < 14, 15 and 16-17 years), Conforming (13 > 14, 15 and 16-17 years), Oppositional (13 < 14) and Borderline (13 < 14), as can be seen in Table 4.

Table 4

Mean differences in personality prototypes as a function of age in general sample

Personality prototype	<i>n</i>	Age	<i>M</i>	<i>DT</i>	<i>F</i>	<i>p</i>	Post-hoc (Bonferroni correction)	<i>p</i>
Introverse	115	13	23.94	8.77	3.13	.025	14 > 15	.016
	150	14	25.52	9.58				
	143	15	22.15	10.2				
	53	16+17	23.19	9.22				
Inhibited	115	13	23.69	10.47	3.015	.03	-	-
	150	14	23.84	11.24				
	143	15	20.46	12.39				
	53	16+17	20.62	12.24				
Doleful	115	13	11.65	9.41	2.316	.075	-	-
	150	14	14.91	11.19				
	143	15	12.92	9.79				
	53	16+17	13.83	10.79				
Submissive	115	13	52.63	8.93	7.047	< .001	13 > 14	.024
	150	14	49.23	9.77			13 > 15	< .001
	143	15	47.46	9.64			13 > 16+17	.009

Personality prototype	<i>n</i>	Age	<i>M</i>	<i>DT</i>	<i>F</i>	<i>p</i>	Post-hoc (Bonferroni correction)	<i>p</i>
	53	16+17	47.58	9.71				
Dramatizing	115	13	36.2	9.35	2.083	.102	-	-
	150	14	36.71	8.73				
	143	15	38.97	10.7				
	53	16+17	37.75	10.53				
Egotistic	115	13	30.37	9.41	2.179	.09	-	-
	150	14	31.75	9.9				
	143	15	33.6	10.96				
	53	16+17	32.15	10.78				
Unruly	115	13	22.99	10.15	8.664	< .001	13<14 13<15 13<16+17	.001 ^{GH} <.001 ^{GH} -0.008 ^{GH}
	150	14	28.21	11.58				
	143	15	29.8	11.76				
	53	16+17	29.89	13.52				
Forceful	115	13	6.74	6.19	4.998	.002	13<14	.027
	150	14	9.13	6.82				
	143	15	9.62	6.93				
	53	16+17	10.06	7.19				
Conforming	115	13	50.41	8.81	5.508	.001	13>14	.002
	150	14	46.13	10.3				
	143	15	47.2	8.73				
	53	16+17	45.42	10.59				
Oppositional	115	13	19.14	9.64	2.923	.034	13<14	.038
	150	14	22.63	11.21				
	143	15	21.48	9.45				
	53	16+17	22.83	10.91				
Self-demeaning	115	13	20.21	13.6	1.678	.171	-	-
	150	14	23.95	15.85				
	143	15	21.13	13.37				
	53	16+17	22.57	15.76				
Borderline	115	13	10.8	7.25	4.129	.007	13<14	.006 ^{GH}
	150	14	14.01	8.56				
	143	15	12.64	7.15				
	53	16+17	14	8.51				

Note: ^{GH}Games-Howell (instead of the Bonferroni correction for multiple post hoc comparisons, the Games-Howell correction was used as it did not assume equal variances).

In this context of the differences by age in general sample we made trend comparisons using a polynomial contrast, and we observed that the relationship between age and the Submissive ($p= .001$), Unruly ($p< .001$), Conforming ($p= .004$) and Forceful ($p= .003$) is linear. A downward linear trend is observed in the Submissive and Conforming prototypes and an upward trend in the Unruly and Forceful prototypes.

Discussion

Our study observes that the Introverted, Inhibited, Doleful, Forceful, Oppositional, Self-demeaning and Borderline PRP have a significantly higher mean in clinical sample than in general sample, and Dramatizing and Conforming PRP have a significantly higher mean in general sample. The expected hypothesis that the mean values of all PRP in general sample will be lower than those observed in clinical sample is only significantly fulfilled in the previously described PRP, and even operates in the opposite direction in the Dramatizing and Conforming PRP, with no differences being observed in the PRP Egotistic, Submissive and Unruly.

Studies carried out in Latin America observe similar results in the field of PRP, which present higher scores in clinical sample than in general sample. These studies include the most Unruly PRP in clinical sample as a differential element, which is consistent with our analysis where we observed a borderline significance. Regarding the significant differences in favour of general sample in Latin America, the results are similar to those we have observed in the Dramatizing and Conforming PRP. However these Latin American studies also observe significant differences in general sample in favour of Submissive and Egotistic PRP, which are also observed in our analysis as a trend, but without significant differences (Vinet & Forns, 2008; Vinet, 2010).

It has been observed that some personality scales have a counter-theoretical behaviour (Submissive, Dramatizing, Egotistic and Conforming), where the averages obtained by adolescents from general sample are significantly higher than those obtained by adolescents from clinical sample (Hofstede et al., 2010; Saiz et al, 2015; Vinet, 2010). It has been argued that the pattern of inverse results observed could be due to cultural differences between Hispanic and American adolescents (Vinet, 2010) and we can conclude that these differences are also observed in our sample of the Spanish sample, which would be closer to the Latin American sample. It has been reflected on the issue that very extreme scores in the PRP (that present higher scores in general sample than in clinic one) could be associated with relevant problems, but high scores could be positively associated in cultures that imply greater collectivism, with potentially healthy and socially desirable traits in the cultural context of the adolescents studied (Vinet & Forns, 2006).

To differentiate societies and countries according to their culture, the dimension of individualism-collectivism has been proposed (Hofstede et al., 2010). This dimension is a cultural issue that implies the predominance of individual objectives over group ones (individualism), versus the dependence of people with respect to their belonging groups (collectivism). The personal characteristics related to collectivism such as expression of affections, sociability, dependence on the peer group, respect for the rules and for the group to which they belong, are reflected in higher direct scores in Latin American adolescents in general population compared to clinic population in the scales of personality patterns linked to social interaction (Submissive, Dramatizing, Egotistic and Conforming) (Vinet et al., 2014). Some research suggests that collectivism is higher in many cultures of Asia,

Africa and Latin America, and that individualism is higher in North America and in Northern and Western Europe (Triandis, 2001).

Within the framework of our research objective, we can also reflect on differences based on sex. Reviewing the scientific literature in general population studies, differences were observed in which male sex was significantly more Dramatizing, Egotistic, Unruly and Forceful compared to female sex; while the latter was significantly more Inhibited, Submissive and Self-demeaning (Vinet & Alarcón, 2003). This study coincides with our analysis in that in male sex in general population, a higher mean is observed in the Dramatizing, Egotistic and Unruly PRP; while female sex presents a higher mean in the Inhibited and Submissive PRP. Our research has not observed significant differences in the general sample in the Forceful PRP in favour of male sex, nor in the Self-demeaning PRP in favour of female sex, although the results move in that direction in a non-significant way.

Studies in the general Spanish population converge with our results in that males in the community sample have a significantly higher mean in Dramatizing, Egotistic and Unruly PRP and females in inhibited and submissive PRP (Brock, 2015). However, this last study observed significant differences in the general sample that we did not observe, where the Introverted, Doleful, Self-demeaning and Borderline PRP had higher scores in females. However, our analysis moves in the same direction, although not significantly. It is possible that the differences found may be attributable to the sampling procedure (random or convenience) and the size of the sample.

Comparing the clinical sample with the general one, a greater number of significant differences according to sex in the different PRPs in the clinical sample are observed. The observation of other samples in the Latin American population moves in a similar direction (Vinet & Forns, 2006).

We finish this third objective with references to age. In the clinical sample, we did not observe significant differences in means according to age in any of the PRP; while in our sample of the general population, a downward linear trend is observed in the Submissive and Conforming PRP, as well as an upward trend in the Unruly and Forceful PRP. Other studies in Latin America in the general population did not find differences by age in any of the prototypes when comparing the age groups of 13-15 and 16-18 years (Vinet & Forns, 2006). It is possible that this absence of differences is due to the fact that in our case we have not grouped the ages in the same way.

We end this study by pointing out its strengths, its implications, limitations and prospective.

The prototypes or personality profiles represent tendencies within an evolutionary period that marks the foundations of the future personality and it is possible that these tendencies, when they present high scores in the measurement instruments, are close to personality disorders. Adult personality disorder has been observed to have its onset in adolescence (Sharp, Vanwoerden et al., 2018; Sharp & Wall, 2018), and it has even been considered that it could be diagnosed in childhood (Tyrer, 2020); although this last statement is difficult to accept if we consider that personality disorders are stable patterns of behaviour throughout life (Caballo, 2010). In parallel, it has been observed that the recognition and

management of personality problems at the earliest possible age and stage of development has become an important clinical task (Chanen & Thompson, 2019). It is clear that in order to know personality alterations, first thing is to study and to assess them from a dimensional perspective (Caballo, 2013), focusing on the knowledge of personality styles or tendencies (Caballo et al., 2011), and paying attention to the configuration of the personality that allows strengthening functional traits and preventing dysfunctional ones (Polek et al., 2018). Our study focuses on these personality traits and the results observed may represent a state of alert for the clinician when we observe that certain PRP present higher mean scores in general samples than in clinic samples, and may be more representative of normality than dysfunctionality. These are interesting results when a clinician interprets high scores in each of the PRP of the MACI, allowing differentiating those that have a problematic potential from those that do not and act therapeutically accordingly.

Regarding the limitations, we observed that the clinical sample only represents a global outpatient sample and it is therefore not representative of all clinical samples. It seems necessary to see if the differences we have found are reproducible in other samples.

Regarding our recommendations, we consider that it would be interesting to replicate our study in other cultural contexts, specific mental disorders, academic performance difficulties or vulnerable communities.

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