

## Differentiation of Self in Adult Adoptees in Spain: The Role of Family Functioning, Adoption Communication, and Age at Placement

Jesús Oliver & Ana Berástegui

To cite this article: Jesús Oliver & Ana Berástegui (2023): Differentiation of Self in Adult Adoptees in Spain: The Role of Family Functioning, Adoption Communication, and Age at Placement, *Adoption Quarterly*, DOI: [10.1080/10926755.2023.2198516](https://doi.org/10.1080/10926755.2023.2198516)

To link to this article: <https://doi.org/10.1080/10926755.2023.2198516>



Published online: 20 Apr 2023.



Submit your article to this journal [↗](#)





View related articles [↗](#)



View Crossmark data [↗](#)



# Differentiation of Self in Adult Adoptees in Spain: The Role of Family Functioning, Adoption Communication, and Age at Placement

Jesús Oliver<sup>a</sup>  and Ana Berástegui<sup>a,b</sup> 

<sup>a</sup>Comillas Pontifical University, Madrid, Spain; <sup>b</sup>Instituto Universitario de la Familia, Comillas Pontifical University, Madrid, Spain

## ABSTRACT

This study analyzes differentiation of self in adult adoptees and its relationship with family functioning and adoption communication in the adoptive family and with some sociodemographic and adoption variables. Fifty domestic and intercountry adult adoptees completed a self-report including the Differentiation of Self Scale, the Family Adaptability and Cohesion Evaluation Scale-20Esp, the Adoption Communication Scale-Spanish, and a sociodemographic questionnaire. Results revealed significant relationships between differentiation of self and family functioning, adoption communication, and adoption variables. Family functioning predicted 27% of differentiation, and mother adoption communication explained 9%. Differentiation of self appears to be an interesting concept in studying adult adoptees' adjustment.

## ARTICLE HISTORY

Received 2 November 2021

Revised 25 October 2022

Accepted 19 January 2023

## KEYWORDS

Adult adoptee; differentiation of self; family functioning; adoption communication; age at adoption

During their adult lives, adoptees must face a series of normative challenges common to all adults, adopted or not, such as consolidating their identity, building intimate relationships, and leaving a legacy for future generations and society (Erikson, 1985). They must also face some non-normative tasks, which are specific to adoptees, such as coping with gaps in their identity and doubts about the commitment of others or reexperiencing adoption-related grief after becoming parents (Brodzinsky et al., 2011).

How adults cope with these challenges and the level of psychological adjustment they experience may be a good indicator of adoption success in transforming a threatened developmental trajectory into a normalized one during childhood and adolescence (Berástegui, 2005).

There is a growing interest in understanding adoption's impact on adult psychological adjustment (e.g., Corral et al., 2021; Grotevant et al., 2005; Martín & Corral, 2022; Melero & Sánchez-Sandoval, 2017; Sánchez-Sandoval & Melero, 2019; Storsbergen et al., 2010). In a recent meta-analysis, Corral et al. (2021) found that adult adoptees showed higher

rates of psychological maladjustment than their non-adopted peers, including hostility and anger, anxiety, depression, somatization, problem behavior, substance abuse, and psychiatric care. Neither gender nor age at the study's time or educational status significantly affected adjustment. In contrast, better outcomes were seen in domestic versus intercountry adoptees. Age at adoption and whether the child was younger or older than 12 months did not play a significant role in adult adoption adjustment, which is consistent with other meta-analyses about child and adolescent adjustment (Askeland et al., 2017; Juffer & van Ijzendoorn, 2005). All these studies suggest that pre-adoption adversity factors, such as time in an institution, may play a more decisive role in adoption adjustment than the age at adoption.

Considering the above, it could be interesting to understand adoption adjustment from a salutogenic perspective (Antonovsky, 1979, 1996; Suárez et al., 2021), highlighting that “adoption is not pathology” (Palacios, 2017). A variable that may be relevant in assessing the degree of psychological adjustment of adult adoptees is the differentiation of self.

Furthermore, beyond the adopted–nonadopted comparisons, it is essential to understand how family variables promote adoptees' resiliency (Palacios & Brodzinsky, 2010) as they emerge as mediating factors of the effects of adoptive status on adults' adjustment (Melero & Sánchez-Sandoval, 2017). It is thus of great interest to study how normative and non-normative adoptive family processes are implicated, such as family functioning and adoption communication (Myllyaho et al., 2019; Ranieri et al., 2022; Wahlberg et al., 2004). In Spain, at least two generations of adult adoptees coexist (Hoksbergen & Laak, 2005). The traditional closed generation, adopted during the second half of the twentieth century, is now in middle and late adulthood. This generation of adoptions that emerged later than in other European countries (Hoksbergen & Laak, 2005) has been associated with high rates of family satisfaction, low disruption rates, great social acceptance of the adoptive family as paradigm of the modern family and, in general, a positive and optimistic societal perspective on adoption (Berástegui, 2010; Berástegui & Gómez, 2015).

### ***Differentiation of self***

This construct, developed within the systemic approach, corresponds to psychological maturity and is linked to emotional self-regulation, identity development, and the ability to bond with others while remaining autonomous (Bowen, 1989, 1998; Kerr & Bowen, 1988). Differentiation of self is defined as the *intrapsychic* ability to distinguish emotional processes from cognitive processes and the *interpersonal* ability to maintain meaningful connections with others while functioning autonomously (Bowen, 1989, 1998; Kerr & Bowen, 1988).

According to Skowron and Friedlander (1998), differentiation of self has four dimensions: *I position* and *emotional reactivity* as intrapsychic dimensions and *fusion with others* and *emotional cutoff* as interpersonal dimensions. *I position* refers to a clearly defined sense of self and the ability to rationally stick to one's own convictions, even when under pressure from others to think or act differently. At the same time, *emotional reactivity* is the tendency to respond to environmental stimuli with automatic emotional responses, flooding, or emotional lability. At the interpersonal level, *fusion with others* is defined as the propensity to think, feel, and act like others; a constant need for approval; and the minimizing of one's convictions to avoid conflicts and disagreements. *Emotional cutoff* describes a tendency to avoid intimacy and maintain physical or emotional distance from others.

The fifth dimension of differentiation, identified by Oliver and Berástegui (2019) in Bowen's family systems theory, is *dominance over others*. This dimension refers to the tendency to adopt dogmatic positions, to tolerate differences of opinion poorly, and to put emotional pressure on others to adapt to their own interests.

Bowen stated that differentiation of self does not associate to gender, age, or educational level, which is confirmed by recent research (Borondo & Oliver, 2021; Dolz-del-Castellar & Oliver, 2021; Duch-Ceballos et al., 2021; Mozas-Alonso et al., 2022; Oliver & Berástegui, 2019). On the other hand, he postulated that the degree of differentiation achieved by a person is strongly related to family functioning, among other family-related variables.

Bowen also understood differentiation as an indicator of psychological adjustment and postulated that people with higher differentiation of self have lower trait anxiety, fewer physical and mental health problems, more secure attachment, and better family and marital functioning (Bowen, 1989, 1998; Kerr & Bowen, 1988).

Numerous studies have found that individuals with greater differentiation of self have a healthier perception of family functioning, better partner adjustment and parenting styles, and a higher level of psychological adjustment (e.g., Castro-Dávila and Oliver, 2022; Dolz-del-Castellar & Oliver, 2021; Duch-Ceballos et al., 2021; Kim et al., 2015; Lampis et al., 2019; Mozas-Alonso et al., 2022; Oliver et al., 2022). Furthermore, it has been observed that differentiation is negatively linked to anxiety and avoidance of adult attachment. Emotional reactivity is the dimension most strongly related to anxiety, while emotional cutoff is the dimension most associated with avoidance (e.g., Borondo & Oliver, 2021; Hainlen et al., 2016; Rodrigues, 2016; Ross et al., 2016).

In the area of adoption, several studies have found that those adopted at older ages had greater emotional distance from others, a pattern similar to that of emotional cutting off (e.g., Dekker et al., 2017; Hawk & McCall,

2010). Moreover, Moore (2017) found that more differentiated transracial adult adoptees had a lower negative affect.

Despite the well-established link between differentiation and various positive psychological traits and family variables, only one study on differentiation of self in adoptees has been found (Moore, 2017).

### **Family functioning**

The adoptive family plays a fundamental role in correcting the disadvantaged trajectory of their adopted children (Brodzinsky & Pinderhughes, 2002; Palacios & Brodzinsky, 2010). However, studies that have analyzed the relationship between family dynamics and the adjustment of adoptees beyond the sociodemographic and family composition variables are still scarce (e.g., Balenzano et al., 2018; Ranieri et al., 2022; Sánchez-Sandoval et al., 2012).

Family functioning is a family variable related to the psychological adjustment of adult adoptees (Ranieri et al., 2022). According to the circumplex model (Olson et al., 1983), this comprises three dimensions: cohesion, adaptability, and communication.

Cohesion refers to the emotional bonding that family members have toward one another. This dimension comprises the following variables: *emotional bonding, boundaries, coalitions, time, space, friends, decision-making, interests, and recreation*.

Adaptability, meanwhile, refers to the ability of a family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress. This dimension includes the following variables: *leadership (control and discipline), negotiation styles, role relationships, and relationship rules*.

Although the original circumplex model maintained that cohesion and adaptability were related in a curvilinear manner with family functioning, with balanced levels of cohesion and adaptability indicating better family functioning, numerous studies applying the second and third versions of the Family Adaptability and Cohesion Scale (FACES II, Olson et al., 1982; FACES III, Olson et al., 1985) have revealed that these instruments linearly evaluate cohesion and adaptability, that is, the higher the score in these dimensions, the better the family functioning (e.g., Green et al., 1991; Olson, 1991).

Some studies have found that cohesion and adaptability in adoptive families are positively related to family communication and the psychological adjustment of adopted children and adolescents (e.g., Kohler et al., 2002; Ranieri et al., 2022; Sánchez-Sandoval et al., 2012). The longitudinal study by Levy-Shiff (2001) also observed that family climate as assessed by adoptees at the end of their adolescence predicted other adjustment measures such as adult self-concept and psychopathology.

Finally, communication involves the positive communication skills used in the family or couple system. This dimension includes *listening skills, speaking skills, self-disclosure, continuity tracking, respect, and regard*. According to the circumplex model, communication is a facilitating dimension for change in cohesion and family adaptability levels. In the case of adoptive families, family communication relates to a critical non-normative task: adoption communication.

### **Adoption communication**

According to Brodzinsky (2005), adoption communication refers to the exchange of adoption information and the sharing and supporting of adoption-related emotions. As this definition indicates, communication about adoption has to do not only with the content or information that is shared about the adoption but also with the relationship, that is, with the affective climate in which the adoption is discussed and with the degree of openness, warmth, and empathy shown by each member when exploring adoption-related issues (Brodzinsky, 2005; Watzlawick et al., 1981; Wrobel et al., 2003).

According to adoption communication theory (Brodzinsky, 2005; Wrobel et al., 2003), communicative openness can be conceived as a continuum. The different members of the adoptive triangle—adopted child, adoptive parents, and biological parents—may be located, depending on the degree of exploration of adoption-related issues.

Communication about adoption can occur at three levels: intrapersonal, intrafamily, and interfamily, in the case of structurally open adoptions (Brodzinsky, 2005). The degree of communication openness about adoption is determined by the circular relationships or reciprocal influence among the members of the adoptive triad (Brodzinsky, 2005; Watzlawick et al., 1981). In other words, each member influences the level of openness of the communication of the others with their communicative style, and vice versa. While all members influence each other, a developmental perspective assumes that the attitudes and behaviors of the parents create the initial communicative context that will promote or hinder the child's later openness (Brodzinsky, 2005).

Several studies have observed that better communication about adoption is associated with better psychological adjustment of adopted children and adolescents and with a greater attachment of adult adoptees to their adoptive parents (e.g., Aramburu Alegret et al., 2020; Brodzinsky, 2006; Farr et al., 2014; Hawkins et al., 2007; Levy-Shiff, 2001; Soares et al., 2017).

Furthermore, the relationship between better family functioning and better family communication in adoptive families has been observed (e.g., Kohler et al., 2002; Ranieri et al., 2022; Sánchez-Sandoval et al., 2012).

## **Study aims**

As can be seen from the above, although family functioning and communication about adoption may play a core role in the dynamics of adoptive families and the adjustment of adoptees during their childhood and adolescence (Ranieri et al., 2022), research on these variables during adulthood is still limited (Melero & Sánchez-Sandoval, 2017). Moreover, no study has been found evaluating the psychological adjustment of adopted adults through differentiation of self. Finally, to our knowledge, this is the first research studying the relationship between adoptive family dynamics and the differentiation of adult adoptees.

For these reasons, the main objective of this study was to analyze the relationship between the adoptive family dynamics and differentiation of self. The specific objectives were as follows:

1. To observe how sociodemographic and adoption variables are associated with adult adoptee differentiation of self and its dimensions. A negative relationship between differentiation and years in an institution and no relationship among differentiation, current age, and age at adoption is expected. Moreover, no gender differences and better differentiation in domestic than in intercountry adoptees is expected.
2. To explore the relationships among family functioning, adoption communication, and differentiation of the self. Positive relationships among adoption communication, family functioning, and differentiation of self are expected.
3. To ascertain the predictive power of family functioning and adoption communication regarding differentiation of self. Better family functioning and greater adoption communication predict greater differentiation of self.

## **Method**

### **Sample**

Convenience and snowball sampling was used to recruit participants. Inclusion criteria were being adopted, being older than 18 years of age, and having Spanish nationality. Ninety-eight participants accessed the online questionnaire and answered some items, but only 50 (51.02%) completed it. This could be due to the length of the questionnaire, the high number of studies about adoption in which some participants have taken part in, or the apprehension to face some topics about adoption.

The sample comprised 50 adult adoptees, 43 women (86%) and 7 men (14%). Ages ranged from 18 to 51, with a mean of 30.61 years ( $SD = 10.10$ ). Regarding adoption, 32 participants were domestic adoptees (64%)

and 18 were intercountry adoptees (36%). Of the latter, 7 participants are from China (14%), 3 from Colombia (6%), 2 from Romania (4%), and 1 each from Peru (2%), Guatemala (2%), Venezuela (2%), Costa Rica (2%), Russia (2%), and India (2%). The participants were adopted at ages between 0 and 7 years, and the mean age at adoption was 1.60 years ( $SD = 2.35$ ). All their sociodemographic characteristics are shown in [Table 1](#).

**Table 1.** Descriptive statistics for the sociodemographic variables of adult adoptees and adoptive families and adoptive process variables by type of adoption.

		Total sample	
		Mean	SD
Adult adoptees			
Current age		30.61	10.1
		<i>n</i>	%
Gender			
	Female	43	86%
	Male	7	14%
Level of education			
	Secondary	7	14%
	Vocational training	7	14%
	Higher secondary	11	22%
	University	25	50%
Residential independence			
	Living with parents	16	32%
	Independent	34	68%
Financially independent			
	No	24	48%
	Yes	26	52%
Current partner			
	No	20	40%
	Yes	30	60%
Own family			
	No	23	54%
	Yes	27	46%
Adoptive families		Mean	SD
Mother's current age		65.34	10.63
Father's current age		65.55	9.43
Mother's age at adoption		37.67	5.99
Father's age at adoption		39.05	5.83
		<i>n</i>	%
Current adop. family sit.			
	Two-parent	42	84%
	Single-parent	1	2%
	Reconstituted	7	14%
Number of siblings			
	No siblings	28	56.00%
	1 sibling	19	38.00%
	2 siblings	1	2.00%
	3 siblings	2	4.00%
Sibling position			
	Eldest	8	36.40%
	Middle	1	4.50%
	Younger	13	59.10%
Adoptive process		Mean	SD
Age at adoption		1.6	2.35
Years in institution		0.88	1.64

Note. Current age=age of the adoptee at the time of the study. Current partner=with or without partner at the time of the study. Own family=with or without own family at the time of the study. Current mother/father age=age of mother or father at the time of the study. Current adoptive family situations=type of adoptive family at the time of the study. Years in institution=years lived in an institution.

\* $p < .05$ .

\*\* $p < .01$ .



## **Instruments**

### ***Sociodemographic and adoption process questionnaire***

The questionnaire included questions about the sex, age, and educational level of the participants, their residential and financial independence, and their partner and family status at the time of the study. It also incorporated questions about the adoptee's country of origin, age at adoption, and the length of time they spent in an institution. Finally, questions about the type of adoptive family at the time of adoption and at the time of answering the questionnaire were included, covering the sex and age of the parents, their educational level, the number of biological and adopted siblings, and the position of the adult adoptee in the sibling hierarchy.

### ***Differentiation of Self Scale (DSS)***

Designed by Oliver and Berástegui (2019) and based on the Skowron and Friedlander (1998) scale, this scale assesses the differentiation of self in adults. It consists of 74 items, with six response options (from 1, *strongly disagree*, to 6, *strongly agree*), and five subscales: I Position (IP, 13 items), Emotional Reactivity (ER, 12 items), Fusion with Others (FO, 14 items), Dominance over Others (DO, 14 items), and Emotional Cutoff (EC, 21 items). The higher the IP, the greater the degree of differentiation. Conversely, the higher the score in ER, FO, DO, and EC, the lower the degree of differentiation.

Each subscale is computed by summing item scores and dividing the result by the number of items in the subscale. Scores on each subscale thus range from 1 to 6, with higher scores reflecting a greater level in that dimension. To compute the DSS-full scale score, the IP score and the reversed ER, FO, DO, and EC scores must be summed, and the result must be divided by 5. Scores on DSS-full scale score thus range from 1 to 6, with higher scores reflecting a greater level of differentiation.

The internal consistency indices (Cronbach's alpha) of the scale and subscales were high (Oliver & Berástegui, 2019): DSS = .93, ER = .89, IP = .86, FO = .90, DO = .89, and EC = .90. Exploratory factor analysis of the scale showed a five-factor structure, which explained 45% of the variance. The present study obtained the following internal consistency indices: DSS = .90, ER = .86, IP = .83, FO = .90, DO = .86, and EC = .87.

### ***Family Adaptability Cohesion Evaluation Scale-20Esp (FACES-20Esp)***

This abbreviated scale, culturally adapted to Spain by Martínez-Pampliega et al. (2006), is based on the Family Adaptability and Cohesion Scale II

(FACES II, Olson et al., 1982) and assesses two dimensions of family functioning: *cohesion* and *adaptability*. The scale comprises 20 items (10 on cohesion and 10 on adaptability), and five response options (from 1, *never or almost never*, to 5, *always or almost always*). Each subscale is computed by summing item scores and dividing the result by the number of items in the subscale.

In our study, adult adoptees were asked to assess the functioning of their adoptive family at the time of the study and, if they had become independent, when they lived in it.

The internal consistency indices (Cronbach's alpha) for the two dimensions were high (Martínez-Pampliega et al., 2006): cohesion = .89 and adaptability = .87. Martínez-Pampliega et al. (2011) conducted a confirmatory factor analysis supporting a model with two first-order factors and a second-order factor with adequate indices (*Comparative Fit Index* = 0.97; *Goodness of Fit Index* = 0.95; *Root Mean Square Error of Approximation* = 0.07).

In the present study, the following internal consistency indices were obtained: cohesion = .94 and adaptability = .96. The internal consistency index of the whole FACES-20Esp scale was equal to .97, and the correlation between both subscales was very high ( $r = .93$ ,  $p < .001$ ). However, this last result, similar to those obtained by Martínez-Pampliega et al. (2006, 2011), seems to indicate that FACES-20Esp is somewhat one-dimensional. Cohesion and adaptability scores were thus calculated separately in our study to preserve the richness of the circumplex model (Olson et al., 1983). However, to satisfy the parsimony principle and the assumption of non-multicollinearity of the multivariate tests, the total family functioning score was also calculated, equal to the mean of cohesion and adaptability.

### ***Adoption Communication Scale-Spanish (ACS-S)***

This scale is a Spanish adaptation of the Adoption Communication Scale (ACS; Grotevant et al., 2009), developed by Aramburu et al. (2015), and assesses the perception of adoptees regarding family communication about adoption. The scale consists of 28 items (14 each on communication with the mother and the father), with five response options (from 1, *strongly disagree*, to 5, *strongly agree*). Aramburu et al. (2015) stated that the total adoption communication score and the adoption communication with the mother and the father scores were calculated.

Although the instrument was validated with a sample of adolescent adoptees, various studies have used it with adult adoptee samples. Participants in the present study were asked to assess communication

about adoption in their adoptive family at the time of the study and, if they were independent, at the time they lived in it.

The internal consistency indices of the ACS-S scale applied to a sample of Spanish adolescent adoptees were high (Aramburu et al., 2015): ACS-S = .93; mother scale = .83; father scale = .89. Factor analysis of the ACS-S scale showed the existence of two factors, explaining 45.1% of the variance. In the present study, the internal consistency indices of the mother and father subscales were equal to .97.

### **Procedure**

This study was cross-sectional and correlational, and the participants were recruited by convenience and snowball sampling.

Numerous Spanish organizations related to the fields of adoption and family were initially contacted. The research was outlined, and an email was sent to interested entities with a letter of presentation of the study and a link to an e-survey so that they could disseminate the online questionnaire among their users, who were also offered the possibility of sending the questionnaire in printed form.

The cover letter limited participation to adoptees older than 18 years at the time of the survey, gave instructions on how to complete the questionnaire, and guaranteed the personal data privacy (Spanish law on the protection of personal data law and guarantee of digital rights, 3/2018). The letter also expressed gratitude for participating in the study and requested its dissemination.

On completion of the survey, data were entered into the SPSS 19.0 statistical package.

### **Data analysis**

First, descriptive analyses were carried out. Scale reliability was then examined using the Cronbach alpha coefficient. After checking the pertinent assumptions, the Mann-Whitney *U* test, Student *t* test, and analysis of variance were carried out to explore the association between the sociodemographic variables and the level of differentiation of self and its dimensions in adult adoptees (objective 1). Also, Pearson correlations were conducted to analyze the relationships between family functioning, adoption communication and differentiation of self (Objective 2). Finally, simple and stepwise multiple linear regressions were carried out to observe the predictive power of family functioning, adoption communication, and other variables regarding differentiation of self (objective 3).

**Table 2.** Correlation matrix between sociodemographic variables and differentiation of self of adult adoptees.

	DSS	ER	IP	FO	DO	EC
Adoptee's current age	.20	-.17	.27	-.10	-.01	-.15
Age at adoption	-.18	.09	.07	.07	.08	.47**
Years in institution	-.12	.02	.07	.11	.01	.37**

Note. DSS=differentiation of self total score; ER=emotional reactivity; IP=I position; FO=fusion with others; DO=dominance over others; EC=emotional cutoff. High scores on DSS and IP indicate a higher degree of differentiation; high scores in ER, FO, DO, and EC represent a lower degree of differentiation.

\* $p < .05$ .

\*\* $p < .01$ .

## Results

### **Objective 1. Association between sociodemographic and adoption variables and differentiation of self**

First, the associations of the sociodemographic and adoption variables with the differentiation of self of the adult adoptees were analyzed.

Significant differences were not observed in *differentiation of self* between men and women,  $U = 129.00$ ,  $z = -0.60$ ,  $p = .548$ ,  $r = .09$ ; participants with different educational levels,  $F(3, 46) = 0.70$ ,  $p = .560$ , *partial Eta*<sup>2</sup> = .04; or domestic and intercountry adoptees,  $t(48) = -0.47$ ,  $p = .640$ ,  $d = 0.02$ .

Furthermore, as Table 2 shows, it was not observed that *current age of adult adoptees* was related to *differentiation of self* of the adult adoptees. However, *age at adoption* and *years lived in an institution* were positively and rather strongly related to *emotional cutoff* subscale.

### **Objective 2. Relationship among family functioning, adoption communication, and differentiation of self**

Subsequently, the relationship between family functioning and adoption communication was analyzed. As Table 3 shows, *family functioning* and the dimensions of *cohesion* and *adaptability* were positively and strongly related to *adoption communication with the mother* and *the father*. Furthermore, strong positive relationships were observed between *communication with the mother* and *communication with the father*, and the contrast of means did not reveal significant differences between the two variables,  $t(90) = .76$ ,  $p = .446$ ,  $d = 0.16$ .

The next step was to analyze how family functioning and adoption communication was related to differentiation of self. As shown in Table 4, *family functioning* and the dimensions of *cohesion* and *adaptability* were positively associated with *differentiation* and negatively related to the subscales of *emotional reactivity*, *emotional cutoff*, *fusion with others*, and *dominance of others*. Finally, positive relationships were found between *communication about adoption with the mother* and *differentiation*, while

**Table 3.** Correlation matrix between family functioning and adoption communication.

	Family functioning	Cohesion	Adaptability	Communication with mother	Communication with father
Family functioning	–				
Cohesion	.98**	–			
Adaptability	.98**	.93**	–		
Communication with mother	.79**	.73**	.82**	–	
Communication with father	.68**	.63**	.69**	.76**	–

Note. Family functioning = family functioning total score; communication with mother = adoption communication with mother; communication with father = adoption communication with father.

\* $p < .05$ .

\*\* $p < .01$ .

**Table 4.** Correlation matrix of family functioning and adoption communication with differentiation of self.

	DSS	ER	IP	FO	DO	EC
Family functioning	.52**	-.49**	.21	-.31*	-.35*	-.46**
Cohesion	.51**	-.51**	.18	-.30*	-.34*	-.45**
Adaptability	.51**	-.46**	.23	-.30*	-.34*	-.46**
Communication with mother	.31*	-.18	.16	-.27	-.17	-.31*
Communication with father	.16	-.09	-.05	-.08	-.14	-.28

Note. DSS = differentiation of self total score; ER = emotional reactivity; IP = I position; FO = fusion with others; DO = dominance over others; EC = emotional cutoff; communication with mother = adoption communication with mother; communication with father = adoption communication with father.

\* $p < .05$ .

\*\* $p < .01$ .

the relationships with the subscale of *emotional cutoff* were negative. No relationships were found between *communication about adoption with the father* and *differentiation*.

### **Objective 3. Predictive power of family functioning and adoption communication regarding differentiation of self**

Finally, several regression analyses were carried out to identify the variables that best predict adult adoptee differentiation of self.

Before this, it was ascertained that assumptions of normality of errors, homoscedasticity, and independence of the residuals were met (Pardo & San Martín, 2010). Important multicollinearity problems were detected between the dimensions of *cohesion* and *adaptability* ( $r = .93$ ), between *communication about adoption with the mother* and *family functioning* ( $r = .79$ ), between *cohesion* ( $r = .73$ ) and *adaptability* ( $r = .82$ ), and between *age at adoption* and *years lived in an institution* ( $r = .81$ ).

*Family functioning*, rather than *cohesion* and *adaptability*, was used in most of the regressions to resolve these issues. In addition, due to the multicollinearity between *family functioning* and *communication about adoption with the mother*, it was decided to perform two simple linear regression analyses to test the extent to which each variable explained

*differentiation*. Likewise, *communication about adoption with mother* was excluded from the multiple linear regression analyses since its relationship with *differentiation* was less than that of *family functioning*. The same was done with *years lived in an institution* because its correlation coefficients with *differentiation* were lower than *age at adoption*.

First, the predictive power of family dynamics on *differentiation of self* was examined. For this, a simple regression analysis was carried out, which included *family functioning* as the predictor. It revealed that *family functioning* explained 27% of *differentiation*,  $R^2 = .27$ ,  $F(1, 48) = 17.76$ ,  $p < .001$ .

A second simple linear regression analysis was carried out, including *communication about adoption with the mother* as the predictor. The test showed that *communication about adoption with the mother* predicted 9% of *differentiation*,  $R^2 = .09$ ,  $F(1, 47) = 4.89$ ,  $p = .032$ .

Subsequently, the predictive power of the variables previously associated with the subscales of *emotional reactivity* and *emotional cutoff* was studied. For this purpose, a simple linear regression was carried out, which showed that *family functioning* explained 24% of *emotional reactivity*,  $R^2 = .24$ ,  $F(1, 48) = 15.44$ ,  $p < .001$ . Likewise, a stepwise multiple linear regression was carried out, with *emotional cutoff* as the criterion and *family functioning* and *age at adoption* as predictors. The predictor variables were seen to explain 42% of *emotional cutoff*,  $R^2 = .42$ ,  $F(1, 47) = 17.09$ ,  $p < .001$ ; specifically, the *age at adoption* explained 22% of *emotional cutoff* and *family functioning* increased the percentage of variance by 20%.

The coefficients of all regression analyses performed are shown in Table 5. According to the standardized regression coefficients, *family functioning* ( $\beta = .52$ ) is a better predictor of *differentiation of self* than *adoption communication with mother* ( $\beta = .30$ ). Furthermore, *age at adoption* ( $\beta = .45$ ) and *family functioning* ( $\beta = -.44$ ) similarly predict *emotional cutoff*.

**Table 5.** Regression coefficients.

Criterion	Predictors	Unstandardized	Standardized	<i>t</i>	<i>p</i>
		coefficients	coefficients		
		<i>B</i>	$\beta$		
1	DSS (Constant) Family functioning	3.03		12.61	<.001
		.29	.52	4.21	<.001
2	DSS (Constant) Communication with mother	3.57		16.85	<.001
		.14	.30	2.21	.032
3	ER (Constant) Family functioning	5.33		13.78	<.001
		-.44	.11	-3.93	<.001
4	EC (Constant) Age at adoption Family functioning	3.77		12.54	<.001
		.16	.45	4.11	<.001
		-.34	-.44	-4.04	<.001

Note. DSS=differentiation of self total score; ER=emotional reactivity; EC=emotional cutoff; Family functioning=family functioning total score; communication with mother=communication about adoption with mother; age at adoption=age at adoption.

## Discussion

First, the associations between the sociodemographic and adoption variables and the level of differentiation of self of the adult adoptees were analyzed. No associations were observed between *differentiation of self* and the sociodemographic variables, such as gender, age at the time of the study, or educational status, according to differentiation of self theory (Kerr & Bowen, 1988), research (Borondo & Oliver, 2021; Dolz-del-Castellar & Oliver, 2021; Duch-Ceballos et al., 2021; Mozas-Alonso et al., 2022; Oliver & Berástegui, 2019), and adoption literature (Corral et al., 2021).

On the other hand, it was observed that *age at adoption* and *years lived in an institution* were related to *emotional cutoff*. The link between adoption age and adjustment is not conclusive in different meta-analyses using an approach to age that focused on those younger or older than 12 months (Askeland et al., 2017; Corral et al., 2021; Juffer & van Ijzendoorn, 2005). Nevertheless, numerous studies have similarly observed that people adopted at an older age had greater emotional distance and less attachment to their adoptive parents (e.g., Dekker et al., 2017; Hawk & McCall, 2010; Howe & Feast, 2000). Similarly, the link between time in an institution, as a preadoption adversity factor, and maladjustment has also been considered. Finally, we found no differences between domestic and intercountry adoptees, contrasting with the meta-analysis conclusions (Corral et al., 2021).

These results show that late adoptees and those staying longer in institutions are more likely to become more emotionally isolated. Given the above, adoption authorities and professionals should continue to make every effort to reduce the pre-adoption period and time in an institution as far as possible, improve foster care methods, and guarantee early care and support for families with late adoptions. Given this, children could better recover from the adverse situations they experienced and develop more secure attachments after adoption, both with their parents and peers and with future partners as adults (Román & Palacios, 2011).

Second, the relationships between family functioning, adoption communication and differentiation of self were studied. On the one hand, *family functioning*, *cohesion*, and *adaptability* were strongly related to *communication about adoption with the mother* and *communication about adoption with the father*. Likewise, Sánchez-Sandoval et al. (2012) found that adoptive families who reported greater cohesion and adaptability were more affectionate and communicative.

These results appear to confirm that cohesion, adaptability, and adoption communication are closely related (Ranieri et al., 2022). Thus, it seems that more cohesive and flexible adoptive families communicate more about adoption and that families with more open adoption communication have



stronger emotional ties and are better able to change their functioning depending on the needs of the adoptee. Although family communication openness has increased lately, specific barriers and limitations persist (Martín & Corral, 2022). Some adoptive parents are afraid to talk about adoption, believing that doing so can cause their children to distance themselves from them, reject them, or have doubts about belonging (Howe & Feast, 2000). These fears seem unfounded, however, given the results obtained. What puts family cohesion and adaptability at risk is instead the absence of dialogue or inadequate adoption communication (Berástegui & Gómez, 2007).

Furthermore, it was found that *communication about adoption with the mother* and *communication about adoption with the father* were strongly related, without significant differences being found between them. Similarly, Aramburu et al. (2015) and Aramburu Alegret et al. (2020) found that adopted adolescents perceived communication about adoption with the mother and father concordantly. These results seem to show that adoptive mothers and fathers communicate similarly with their children about adoption. As consistency between parents is always desirable, families and adoption professionals should aim to ensure that both the mother and the father talk with their adopted children about adoption in an open, warm, and empathetic way.

Moreover, *family functioning, cohesion, adaptability, and communication about adoption with the mother* were related to *differentiation of self* and many of its dimensions. However, no relationships were observed between *communication about adoption with the father* and *differentiation*. Finally, *family functioning* and *communication about adoption with the mother* were found to predict *differentiation*, *family functioning* being a stronger predictor of *differentiation* (27%) than *mother's adoption communication* (9%). These data could indicate that the normative family dynamics may have a more prevalent role in adoptees' adjustment throughout life than adoption-related tasks such as adoption communication, although they are both closely related.

Moreover, *family functioning* explained *emotional reactivity*, and *family functioning* and *age at adoption* explained *emotional cutoff*. Numerous studies have similarly observed that people adopted at an older age had greater emotional distance and less attachment to their adoptive parents (e.g., Dekker et al., 2017; Hawk & McCall, 2010; Howe & Feast, 2000).

Several studies have also found relationships among *family dynamics, adoption communication, and the psychological adjustment* of adopted children, adolescents, and adults (e.g., Aramburu Alegret et al., 2020; Brodzinsky, 2006; Müller et al., 2002; Ranieri et al., 2022; Robinson et al., 2015; Rushton et al., 2013; Sánchez-Sandoval et al., 2012).



Although these results highlight the predictive value of both variables, it would be interesting to study whether adoption communication plays a mediator role between family functioning and differentiation, as results from Ranieri et al. (2022) may suggest.

These results appear to indicate that families who are more cohesive and adaptable and have more open communication about adoption favor the adjustment of adoptees, with effects that extend even into adult life.

From the perspective of pre- and post-adoption support services, it is essential that the importance of family cohesion and adaptability in the adjustment of their adopted children is stressed and that exceptional support is provided to families with children with worse psychological adjustment. Furthermore, communication about adoption is a normative challenge all adoptive parents must meet, even though it may generate some anxiety and uncertainty (Brodzinsky & Pinderhughes, 2002). Considering these results, adoptive parents must be fully aware of the vital role that communication about adoption plays in the psychological adjustment of their children. Pre- and post-adoption support services should thus continue to support greater openness in communication, for example, supporting processes such as grieving over infertility or possible losses, reflecting on why they are adopting, assimilating the similarities and the differences between being an adoptive and non-adoptive family, and accepting that their adopted child has a biological family and a previous history (Brodzinsky, 2005). Similarly, the authorities and professionals working in the field of adoption must continue to offer adoptive parents tools and services that can help them communicate about adoption-related issues with their children (Corral et al., 2016).

The fact that no relationship was observed between *communication about adoption with the father* and children's *differentiation of self* can be interpreted in two ways. On the one hand, it is possible that existing relationships were not found due to the limitations of the sample, such as the underrepresentation of adopted males. On the other hand, there may be some moderating variables, such as stronger attachment to mothers or weaker attachment to fathers, which attenuates the relationship between adoption communication with the father and psychological adjustment. The lack of studies analyzing the relationship between adoption communication with the father and the psychological adjustment of the adopted children prevents us from drawing any conclusions regarding the findings. Therefore, these results encourage us to explore the role that adoptive fathers play in adoption communication and suitable tools to enhance it.

The present study has certain limitations. First, it should be noted that the sample size was limited and that convenience and snowball sampling were used; therefore, the sample may not be representative of

the adult adoptive population in Spain. Second, adults who do not have or do not use the Internet and those less motivated to participate could have been excluded from the study because the questionnaire was primarily delivered online. Furthermore, although 98 individuals accessed the online questionnaire and answered some items, only 50 completed it. This elevated sample loss could be due to the length of the questionnaire, the number of studies collecting data about adult adoptees in Spain, or the possible reluctance to face some adoption-related issues, which may be biasing the sample. Third, it should be noted that adults no longer living with their adoptive families were asked to assess their adoptive families' functioning and adoption communication, which may have skewed their scores. Similarly, family dynamics and psychological adjustment were assessed through self-reports and from the perspective of adult adoptees. Fourth, the regression analyses on cross-sectional data do not allow for inferring causal relationships. Last, except for time in an institution, no relevant questions were included regarding the adoptee's personal history before adoption, despite the role they may play in their development.

Further research on the relationship between family dynamics and differentiation of self is needed with larger and more representative samples, including the perspective of other informants and incorporating questions about pre-adoption history. It would also be of great interest to carry out prospective longitudinal studies that allow causal relationships to be established among family dynamics, age at adoption, and the psychological adjustment of adult adoptees.

To conclude, the construct of differentiation of self is recommended for its use both in research and intervention with adult adoptees to address the psychological adjustment of adult adoptees from a salutogenic approach. According to Bowen, differentiation of self may be understood as the individual's way of resolving the emotional attachment toward their family of origin (Kerr & Bowen, 1988, p. 97). In this sense, differentiation of self is associated with individuals' ability to regulate their emotions, relate meaningfully to others, and function autonomously. Likewise, differentiation plays a fundamental role in developing personality and emotional maturity. Finally, this variable is affected by the quality of family relationships, the attained level of which tends to be transmitted from parents to children.

Including differentiation of self in clinical and research settings has important implications. It is a construct that enjoys extensive theoretical development and great empirical support, and therapeutic models, which could be applied to the field of adoption, have also been developed to modify it (Kerr & Bowen, 1988). Moreover, differentiation is an extremely interesting variable in assessing the psychological adjustment of adult

adoptees as it includes dimensions related to emotional self-regulation, identity development, social skills, and the ability to form attachments with others while also functioning autonomously. Therefore, we think that it would be necessary for adoption professionals that their therapeutic objectives include raising levels of differentiation of self in their users.

### Declaration of interest statement

On behalf of all authors, the corresponding author states that there is no conflict of interest.

### Ethics approval

Approval was obtained from the ethics committees of the University of Málaga and the Comillas Pontifical University. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

### ORCID

Jesús Oliver  <http://orcid.org/0000-0001-7659-0690>

Ana Berástegui  <http://orcid.org/0000-0002-8554-1791>

### References

- Antonovsky, A. (1979). *Health, stress and coping*. Jossey-Bass.
- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International*, 11(1), 11–18. <https://doi.org/10.1093/heapro/11.1.11>
- Aramburu Alegret, I., Pérez-Testor, C., Mercadal Rotger, J., Salamero Baró, M., Davins Pujols, M., Mirabent Junyent, V., Aznar Martínez, B., & Brodzinsky, D. (2020). Influence of communicative openness on the psychological adjustment of internationally adopted adolescents. *Journal of Research on Adolescence*, 30(S1), 226–237. <https://doi.org/10.1111/jora.12464>
- Aramburu, I., Salamero, M., Aznar, B., Pérez-Testor, C., Davins, M., Mirabent, V., & Brodzinsky, D. (2015). Preliminary validation of the Adoption Communication Scale in adopted adolescents. *Estudios de Psicología*, 36(3), 626–642. <https://doi.org/10.1080/02109395.2015.1078551>
- Askeland, K. G., Hysing, M., La Greca, A. M., Aarø, L. E., Tell, G. S., & Sivertsen, B. (2017). Mental health in internationally adopted adolescents: A meta-analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*, 56(3), 203–213.e1. <https://doi.org/10.1016/j.jaac.2016.12.009>
- Balenzano, C., Coppola, G., Cassibba, R., & Moro, G. (2018). Pre-adoption adversities and adoptees' outcomes: The protective role of post-adoption variables in an Italian experience of domestic open adoption. *Children and Youth Services Review*, 85, 307–318. <https://doi.org/10.1016/j.childyouth.2018.01.012>
- Berástegui, A. (2005). *La adaptación familiar en adopción internacional: una muestra de adoptados mayores de tres años en la Comunidad de Madrid*. Consejo Económico y Social, Comunidad de Madrid. <http://www.carm.es/ctra/cendoc/haddock/>

- Berástegui, A. (2010). Adopción internacional: ¿solidaridad con la infancia o reproducción asistida? *Revista de Psicología, Ciències de L'Educació i de L'Esport*, 27, 15–38. <https://raco.cat/index.php/Aloma/article/view/216934>.
- Berástegui, A., & Gómez, B. (2007). *Esta es tu historia. Identidad y comunicación sobre los orígenes en adopción*. Universidad Pontificia Comillas.
- Berástegui, A., & Gómez, B. (2015). Adopción internacional: de dónde venimos, a dónde vamos. *Índice*, 63, 35–37. <http://www.revistaindice.com/numero63/p35.pdf>
- Borondo, I., & Oliver, J. (2021). La diferenciación del self y su relación con el apego adulto y la autoestima. *Mosaico*, 77, 8–18.
- Bowen, M. (1989). *La terapia familiar en la práctica clínica. Vols. 1 y 2*. Desclée de Brouwer.
- Bowen, M. (1998). *De la familia al individuo: La diferenciación del sí mismo en el sistema familiar*. Paidós.
- Brodzinsky, D. M., Schechter, M., & Henig, R. M. (2011). *Soy adoptado. La Vivencia de la Adopción a lo Largo de la Vida*. Grupo 5.
- Brodzinsky, D. (2006). Family structural openness and communication openness as predictors in the adjustment of adopted children. *Adoption Quarterly*, 9(4), 1–18. [https://doi.org/10.1300/J145v09n04\\_01](https://doi.org/10.1300/J145v09n04_01)
- Brodzinsky, D. M. (2005). Reconceptualizing openness in adoption: Implications for theory, research and practice. In J. Palacios & D. M. Brodzinsky (Eds.), *Psychological issues in adoption: Research and practice* (pp. 145–166). Praeger.
- Brodzinsky, D. M., & Pinderhughes, E. E. (2002). Parenting and child development in adoptive families. In M. Bornstein (Ed.), *Handbook of parenting: Vol. I. Children and parenting* (pp. 279–311). Lawrence Erlbaum Associates.
- Castro-Dávila, C., & Oliver, J. (2022). La relación entre la diferenciación del self, las habilidades sociales y la asistencia a psicoterapia en una muestra de adultos españoles. *Terapia Psicológica*, 40(3), 347–365. <https://doi.org/10.4067/s0718-48082022000300347>
- Corral, S., Herrero, M., Martín, N., Gordejuela, A., & Herrero-Fernández, D. (2021). Psychological adjustment in adult adoptees: A meta-analysis. *Psicothema*, 33(4), 527–535. <https://doi.org/10.7334/psicothema2021.98>
- Corral, S., Urrutia, E., Sanz, M., Ochoa de Alda, I., Cormenzana, S., & Martínez, A. (2016). *Hablando de los orígenes en adopción. Un programa de intervención para padres y madres*. Universidad de Deusto.
- Dekker, M. C., Tieman, W., Vinke, A. G., van der Ende, J., Verhulst, F. C., & Juffer, F. (2017). Mental health problems of Dutch young adult domestic adoptees compared to non-adopted peers and international adoptees. *International Social Work*, 60(5), 1201–1217. <https://doi.org/10.1177/0020872816651699>
- Dolz-del-Castellar, B., & Oliver, J. (2021). Relationship between family functioning, differentiation of self and anxiety in Spanish young adults. *Plos One*, 16(3), e0246875. <https://doi.org/10.1371/journal.pone.0246875>
- Duch-Ceballos, C., Oliver, J., & Skowron, E. (2021). Differentiation of self and its relationship with emotional self-regulation and anxiety in a Spanish sample. *The American Journal of Family Therapy*, 49(5), 517–533. <https://doi.org/10.1080/01926187.2020.1841039>
- Erikson, E. H. (1985). *El ciclo vital completado*. Paidós.
- Farr, R. H., Grant-Marsney, H. A., & Grotevant, H. D. (2014). Adoptees' contact with birth parents in emerging adulthood: The role of adoption communication and attachment to adoptive parents. *Family Process*, 53(4), 656–671. <https://doi.org/10.1111/famp.12069>
- Green, R. G., Harris, R. N., Forte, J. A., & Robinson, M. (1991). Evaluating FACES III and the Circumplex Model: 2,440 families. *Family Process*, 30(1), 55–73. <https://doi.org/10.1111/j.1545-5300.1991.00055.x>

- Grotevant, H. D., Perry, Y. V., & McRoy, R. G. (2005). Openness in adoption: Outcomes for adolescents within their adoptive kinship networks. In J. Palacios & D. M. Brodzinsky (Eds.), *Psychological issues in adoption: Research and practice* (pp. 167–186). Praeger.
- Grotevant, H. D., Rueter, M., Wrobel, G. M., & Von Korff, L. (2009). *Summary of wave 3 methods. Adoptive families: Outcomes for young adults*. [https://www.umass.edu/ruddchair/sites/default/files/w3\\_summary\\_of\\_methods\\_042509\\_final.pdf](https://www.umass.edu/ruddchair/sites/default/files/w3_summary_of_methods_042509_final.pdf)
- Hainlen, R. L., Jankowski, P. J., Paine, D. R., & Sandage, S. J. (2016). Adult attachment and well-being: Dimensions of differentiation of self as mediators. *Contemporary Family Therapy*, 38(2), 172–183. <https://doi.org/10.1007/s10591-015-9359-1>
- Hawk, B., & McCall, R. B. (2010). CBCL behavior problems of post-institutionalized international adoptees. *Clinical Child and Family Psychology Review*, 13(2), 199–211. <https://doi.org/10.1007/s10567-010-0068-x>
- Hawkins, A., Beckett, C., Rutter, M., Castle, J., Groothues, C., Kreppner, J., Stevens, S., & Sonuga-Barke, E. (2007). Communicative openness about adoption and interest in contact in a sample of domestic and intercountry adolescent adoptees. *Adoption Quarterly*, 10(3–4), 131–156. <https://doi.org/10.1080/10926750802163220>
- Hoksbergen, R., & Laak, J. (2005). Changing attitudes of adoptive parents in Northern European countries. In D. M. Brodzinsky & J. Palacios (Eds.), *Psychological Issues in adoption: Research and practice* (pp. 27–46). Praeger.
- Howe, D., & Feast, J. (2000). *Adoption, search and reunion: The long term experience of adopted adults*. The Children's Society.
- Juffer, F., & van Ijzendoorn, M. H. (2005). Behavior problems and mental health referrals of international adoptees: A meta-analysis. *JAMA*, 293(20), 2501–2515. <https://doi.org/10.1001/jama.293.20.2501>
- Kerr, M. E., & Bowen, M. (1988). *Family evaluation*. Norton.
- Kim, H., Prouty, A. M., Smith, D. B., Ko, M., Wetchler, J. I., & Oh, J. (2015). Differentiation and healthy family functioning of Koreans in South Korea, South Koreans in the United States, and White Americans. *Journal of Marital and Family Therapy*, 41(1), 72–85. <https://doi.org/10.1111/jmft.12049>
- Kohler, J. K., Grotevant, H. D., & McRoy, R. G. (2002). Adopted adolescents' preoccupation with adoption: The impact on adoptive family relationships. *Journal of Marriage and Family*, 64(1), 93–104. <https://doi.org/10.1111/j.1741-3737.2002.00093.x>
- Lampis, J., Cataudella, S., Agus, M., Busonera, A., & Skowron, E. A. (2019). Differentiation of self and dyadic adjustment in couple relationships: A dyadic analysis using the actor-partner interdependence model. *Family Process*, 58(3), 698–715. <https://doi.org/10.1111/famp.12370>
- Levy-Shiff, R. (2001). Psychological adjustment of adoptees in adulthood: Family environment and adoption-related correlates. *International Journal of Behavioral Development*, 25(2), 97–104. <https://doi.org/10.1080/01650250042000131>
- Martín, N., & Corral, S. (2022). Search and communication about origins in internationally adopted young adults in Spain: A phenomenological perspective. *Journal of Family Issues*, 43(6), 1628–1649. <https://doi.org/10.1177/0192513X211029257>
- Martínez-Pampliega, A., Iraurgi, I., & Sanz, M. (2011). Validez estructural del FACES-20Esp: Versión española de 20 ítems de la Escala de Evaluación de la Cohesión y la Adaptabilidad Familiar. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, 1(29), 147–165. [http://www.aidep.org/03\\_ridep/R29/r29art8.pdf](http://www.aidep.org/03_ridep/R29/r29art8.pdf)
- Martínez-Pampliega, A., Iraurgi, I., Galíndez, E., & Sanz, M. (2006). Family Adaptability and Cohesion Evaluation Scale (FACES): desarrollo de una versión de 20 ítems en español. *International Journal of Clinical and Health Psychology*, 6(2), 317–338.

- Melero, S., & Sánchez-Sandoval, Y. (2017). Mental health and psychological adjustment in adults who were adopted during their childhood: A systematic review. *Children and Youth Services Review*, 77, 188–196. <https://doi.org/10.1016/j.childyouth.2017.05.006>
- Moore, R. M. (2017). *Differentiation and emotional well-being of transracial adoptees* [Doctoral dissertation, Purdue University] <https://docs.lib.purdue.edu/dissertations/AAI10274570/>
- Mozas-Alonso, M., Oliver, J., & Berástegui, A. (2022). Differentiation of self and its relationship with marital satisfaction and parenting styles in a Spanish sample of adolescents' parents. *Plos One.*, 17(3), e0265436. <https://doi.org/10.1371/journal.pone.0265436>
- Müller, U., Gibbs, P., & Ariely, S. G. (2002). Predictors of psychological functioning and adoption experience in adults searching for their birthparents. *Adoption Quarterly*, 5(3), 25–53. [https://doi.org/10.1300/J145v05n03\\_03](https://doi.org/10.1300/J145v05n03_03)
- Myllyaho, T., Siira, V., Wahlberg, K.-E., Hakko, H., Läksy, K., Roisko, R., Niemelä, M., & Räsänen, S. (2019). Interaction of genetic vulnerability to schizophrenia and family functioning in adopted-away offspring of mothers with schizophrenia. *Psychiatry Research*, 278, 205–212. <https://doi.org/10.1016/j.psychres.2019.06.017>
- Oliver, J., & Berástegui, A. (2019). La Escala de Diferenciación del Self (EDS): desarrollo y validación inicial. *Revista Mosaico*, 72, 100–119. <https://repositorio.comillas.edu/xmlui/handle/11531/36773>
- Oliver, J., Jódar, R., Berástegui, A., Skowron, E. A., Friedlander, M., & Schmitt, T. (2022). Psychometric study of the differentiation of self scale-revised in a sample of Spanish adults. *Current Psychology*, Advance online publication. <https://doi.org/10.1007/s12144-022-02929-y>
- Olson, D. H. (1991). Commentary: Three-dimensional (3-D) circumplex model and revised scoring of FACES. *Family Process*, 30(1), 74–79. <https://doi.org/10.1111/j.1545-5300.1991.00074.x>
- Olson, D. H., Russell, C. S., & Sprenkle, D. H. (1983). Circumplex model of marital and family systems: VI. Theoretical update. *Family Process*, 22(1), 69–83. <https://doi.org/10.1111/j.1545-5300.1983.00069.x>
- Olson, H. D., Portner, J., & Bell, R. Q. (1982). *FACES II*. University of Minnesota.
- Olson, H. D., Portner, J., & Lavee, Y. (1985). *FACES III*. University of Minnesota.
- Palacios, J. (2017). Adopción no es patología. *Clínica Contemporánea*, 8(2), E12–10. <https://doi.org/10.5093/cc2017a9>
- Palacios, J., & Brodzinsky, D. M. (2010). Adoption research: Trends, topics, outcomes. *International Journal of Behavioral Development*, 34(3), 270–284. <https://doi.org/10.1177/0165025410362837>
- Pardo, A., & San Martín, R. (2010). *Análisis de datos en ciencias sociales y de la Salud II*. Síntesis.
- Ranieri, S., Ferrari, L., Rosnati, R., Danioni, V., Canzi, E., & Miller, L. (2022). The mediating role of adoption communication openness between family functioning and the adjustment of adopted adolescents: A multi-informant approach. *Journal of Family Communication*, 22(3), 193–207. <https://doi.org/10.1080/15267431.2022.2095388>
- Robinson, C. B., McGuinness, T. M., Azuero, A., & Pallansch, L. (2015). Problem behaviors of children adopted from the former Soviet Union. *Journal of Child and Adolescent Psychiatric Nursing : Official Publication of the Association of Child and Adolescent Psychiatric Nurses, Inc*, 28(1), 14–22. <https://doi.org/10.1111/jcap.12098>
- Rodrigues, A. (2016). *Exploring the relationships among attachment, emotion regulation, differentiation of self, negative problem orientation, self-esteem, worry and generalized anxiety* [Doctoral dissertation, University of Toronto]. <https://tspace.library.utoronto.ca/handle/1807/73159>



- Román, M., & Palacios, J. (2011). Separación, pérdida y nuevas vinculaciones: el apego en la adopción. *Acción Psicológica*, 8(2), 99–111. <https://doi.org/10.5944/ap.8.2.446>
- Ross, A. S., Hinshaw, A. B., & Murdock, N. L. (2016). Integrating the relational matrix: Attachment style, differentiation of self, triangulation, and experiential avoidance. *Contemporary Family Therapy*, 38(4), 400–411. <https://doi.org/10.1007/s10591-016-9395-5>
- Rushton, A., Grant, M., Feast, J., & Simmonds, J. (2013). The British Chinese adoption study: Orphanage care, adoption and mid-life outcomes. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 54(11), 1215–1222. <https://doi.org/10.1111/jcpp.12088>
- Sánchez-Sandoval, Y., & Melero, S. (2019). Psychological adjustment in Spanish young adult domestic adoptees: Mental health and licit substance consumption. *American Journal of Orthopsychiatry*, 89(6), 640–653. <https://doi.org/10.1037/ort0000324>
- Sánchez-Sandoval, Y., León, E., & Román, M. (2012). Adaptación familiar de niños y niñas adoptados internacionalmente. *Anales de Psicología*, 28(2), 558–566. <https://doi.org/10.6018/analesps.28.2.128711>
- Skowron, E. A., & Friedlander, M. L. (1998). The differentiation of self inventory: Development and initial validation. *Journal of Counseling Psychology*, 45(3), 235–246. <https://doi.org/10.1037/0022-0167.45.3.235>
- Soares, J., Barbosa-Ducharne, M., Palacios, J., & Pacheco, A. (2017). Adopted children's emotion regulation: The role of parental attitudes and communication about adoption. *Psicothema*, 29(1), 49–54. <https://doi.org/10.7334/psicothema2016.71>
- Storsbergen, H. E., Juffer, F., van Son, M. J. M., & Hart, H. (2010). Internationally adopted adults who did not suffer severe early deprivation: The role of appraisal of adoption. *Children and Youth Services Review*, 32(2), 191–197. <https://doi.org/10.1016/j.chilyouth.2009.08.015>
- Suárez, O., Ruiz-Cantero, M. T., Cassetti, V., Cofiño, R., & Álvarez-Dardet, C. (2021). Salutogenic interventions and health effects: A scoping review of the literature. *Gaceta Sanitaria*, 35(5), 488–494. <https://doi.org/10.1016/j.gaceta.2019.12.002>
- Wahlberg, K.-E., Wynne, L. C., Hakko, H., Läksy, K., Moring, J., Miettunen, J., & Tienari, P. (2004). Interaction of genetic risk and adoptive parent communication deviance: longitudinal prediction of adoptee psychiatric disorders. *Psychological Medicine*, 34(8), 1531–1541. <https://doi.org/10.1017/S0033291704002661>
- Watzlawick, P., Bavelas, J. B., & Jackson, D. D. (1981). *Teoría de la comunicación humana*. Herder.
- Wrobel, G. M., Kohler, J. K., Grotevant, H. D., & McRoy, R. G. (2003). The family adoption communication (FAC) model: Identifying pathways of adoption-related communication. *Adoption Quarterly*, 7(2), 53–84. [https://doi.org/10.1300/J145v07n02\\_04](https://doi.org/10.1300/J145v07n02_04)