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# Self-differentiation and parenting stress in adolescent mothers. An exploratory study

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**Introduction:** Adolescent motherhood, a phenomenon that has a strong social impact, is explored, focusing particularly on the mother's psychosocial development, parental role, skill, and parenting-related stress.

**Methods:** This study aims to analyze the connection between maternal selfdifferentiation in first-time mothers (aged between 15 and 20 years old) and parenting stress levels, including some moderating variables, such as dyadic adjustment, maternal self-esteem, and perceived social support.

**Results:** The analyses highlighted the following significant results: emotional cutoff and fusion with others are predictors of parenting stress ( $\beta = -0.38$ , p < 0.05, and  $\beta = 0.36$ , p = 0.05, respectively); emotional cutoff is also found to be a significant predictor of parent-child dysfunctional interaction ( $\beta = -0.42$ , p < 0.05), while fusion with others predicts a mother's perception of her child as difficult ( $\beta = 0.39$ , p < 0.05); a predictive effect of the positive self-worth on a mother's perception of having a difficult child is found ( $\beta = -0.37$ , p < 0.05); and a predictive effect of dyadic cohesion on a mother's perception of having a difficult child ( $\beta = -0.40$ , p < 0.05) is found.

**Discussion:** The results are discussed from a sociocultural perspective, and their implications on early motherhood, especially in Italy, are considered.

### KEYWORDS

adolescent motherhood, parenting stress, self-differentiation, adolescent families, adolescent parenting

## 1 Introduction

Adolescent motherhood represents a phenomenon that has a great social impact, and many governments are constantly concerned about its incidence and are trying to find effective ways to reduce it. Adolescent mothers, in fact, are at risk for low educational aspirations and outcomes and, as a result, could develop little or no workplace skills, which brings with it significant repercussions on economic independence and personal fulfillment (Tosto, 2014). Considering their emotional and psychological adaptation, they are often affected by a consistent tendency for depression and low self-esteem and are particularly vulnerable to the onset of postpartum depression relating to the often inadequate processes of both informal (Secco and Moffatt, 2003) and formal support (Letourneau et al., 2004), low self-esteem (Logsdon et al., 2005), poor parenting skills and functions (Birkeland et al., 2005), and poverty or low socio-economic status (Secco et al., 2007). In addition, all these conditions can be associated with a variety of medical disorders (such as low weight gain, anemia, and hypertension), which also increase the risk of fetal suffering and preterm and underweight births (Tosto, 2014).

Many of these difficulties of adaptation can be explained by the developmental processes of the adolescent mother. Indeed, becoming a mother too soon entails an overlap of multiple developmental challenges because the construction of their own identity and autonomy from parents is intertwined with the psycho-relational changes activated by motherhood, preventing each process from being adequately addressed (Tosto et al., 2015). The early transition to parenting, therefore, may interrupt regular growth, accelerating the acquisition of adult status and making the resolution of the specific developmental tasks of the two different life phases more complex (Di Vita et al., 2008; Bohr et al., 2011). The interweaving and lack of consequentiality of these changes can cause a "dual developmental crisis" (Sadler and Catrone, 1983), qualifying the event as para-normative and as a real "developmental asynchrony" (Bohr et al., 2011). In some cases, therefore, the "developmental role boundaries" could be confused (Obeidallah and Burton, 1998), hindering the adaptation to the mother's role and activating various psychological difficulties (such as depression, low self-esteem, unstable identity, and a poor definition of one's own relational and emotional autonomy; Tosto et al., 2015).

# 1.1 Adolescent motherhood and parenting stress

A construct that appears particularly useful for understanding the functions of adolescent mothers is that of parenting stress, which, according to Abidin (1990, 1992, 1995), defines the stress that derives from the dysfunctional behaviors of the parent and/or child. It exerts negative influences on both the quality of mother/child interaction, reducing the maternal ability to tune in to the child's needs, and the acquisition of the parental role, making adaptation to parenthood more complex. The stress experienced by the parent-child dyad, according to Abidin (1995), has three possible declinations, articulating the construct into three subdimensions. The first defines the level of stress experienced by practicing a parental role. In turn, the components through which it is articulated refer to an altered sense of parental competence, a precarious parental alliance with the other parent, the lack of social support, and the perception of an extensive restriction of one's living space, deriving from the fulfillment of a duty of care. The second, however, focuses on the stress that emerges from interacting with a child the parent perceives as not responding to their expectations and not reinforcing them in the parental role. In extreme situations, the parent can feel estranged from the child, and the bond is strongly threatened. The latter reflects the stress levels experienced by the parent-child system in relation to specific characteristics of the child. For example, if, in the first 18 months, the stress is attributed to early self-regulation processes, it subsequently links to the structuring of behavioral disorders or adaptation.

Research studies conducted in families with adolescent parents found that adolescent mothers struggled to take care of their children and experienced difficulties in adapting to their parental role, showing higher levels of stress than adults and, consequently, some difficulties in responding to the needs of their children (Brown et al., 1981; Brooks-Gunn and Furstenberg, 1986; Schellenbach et al., 1992; Passino et al., 1993; Sommer et al., 1993; Borkowski et al., 2007; Whitman et al., 2008; Huang et al., 2014). These studies report significantly high levels of parenting stress, even when controlling for the effect of ethnic or socioeconomic factors (Passino et al., 1993; Borkowski et al., 2007; Whitman et al., 2008). Maternal adaptation to parenting, however, is a complex process that involves multiple individual, relational, and contextual variables that can facilitate or hinder care practices (Tosto and Salerno, 2012).

## 1.1.1 The role of social support, dyadic adjustment, and maternal self-esteem

In line with these results, other studies highlight a significant connection between the psychosocial resources of the mother and her relationship with her partner (Richardson et al., 1995) and the cohabiting parents (Spencer et al., 2002); in addition, other researchers point out that the couple's functioning during the prepartum period is a predictive factor of such stress levels (Florsheim et al., 1999) and maternal behavior (Florsheim and Smith, 2005). Regarding maternal adaptation, referring particularly to an adolescent mother's self-esteem, it seems to play a role in determining her vulnerability to stress, whereby a stronger sense of self-esteem is associated with the perception of a significantly lower degree of stress (Colletta and Gregg, 1981). Parental stress, however, is strongly related, in prospective terms, to the cognitive readiness for parenting, which refers to the knowledge and preparatory attitudes to parenting. These variables, specifically, affect the level to which the mother perceives her role as stressful and the child as difficult to raise, altering the parental behavior and, consequently, the emotional and intellectual development of the child (Sommer et al., 1993; Miller et al., 1996).

Social support also has a significant impact on parental stress. This is not uniform, as it differs in relation to who provides it and is mediated by cultural variables. In fact, in their study of a group of Puerto Rican first-time adolescent mothers, Contreras et al. (1999) have shown that a grandmother's involvement in the care of the child reduces a mother's depressive symptoms and her parenting stress but only if the latter shows reduced levels of acculturation toward U.S. society. However, and consistent with what happens in other ethnic groups, a high level of acculturation is associated with a negative perception of the grandmother's involvement, which, by hindering the consolidation of a sense of self as a competent parent, compromises the adaptation to the parental role. The support received from the partner, however, even when the mother and her parents are living together, affects the stress of parenting and can increase the mother's psychological wellbeing. Perceived social support, especially if lower than expected by the young mother, however, not only is a "buffer variable" but also acts in correlation with high levels of parenting stress in influencing maternal depressive symptoms 6 months after childbirth and significantly altering the child's developmental processes 18 months later (Huang et al., 2014).

Few empirical studies have, however, related the developmental characteristics of the mother, defined in terms of an adequate completion of the identification process, with her ability to adapt to the parental function and, therefore, the stress that she could experience in the care of the child. Among the exceptions are Passino et al. (1993), who link parenting stress in adolescent mothers to age-specific dimensions, and Levine et al. (1984), who show that less mature mothers, from a psychological point of view, are also less sensitive.

# 1.2 Differentiation of the self and adolescent development

From a family systems perspective, Bowen (1966) identified the construct of differentiation of self as an individual developmental characteristic that identifies the capacity to gain balance between emotional and intellectual functioning without fusion. He indicated that a person's level of differentiation of self illustrates their capacity to distinguish feelings and thoughts in stressful situations. This emphasized the importance of control over the emotional process and underlined the importance of self-differentiation in regulating emotions (Skowron and Dendy, 2004). Moreover, fusion, emotional reactivity, and emotional cutoff are some ways families deal with the emotional forces in the family system, which are linked with the levels of differentiation of self in family members. Thus, although differentiation of self has been defined as an individual (intrapsychic) trait-like (stable) construct by Bowen (1979), it is thought to be the result of the emotional functioning and emotional patterns in the family, both across generations and in the family of origin, and it has direct consequences for the family system's patterns of interaction and affects parental functioning. According to Bowen (1979), indeed, a properly "differentiated parent" is characterized by lower emotional reactivity, a better ability to regulate emotions, the ability to think and make decisions under stress, and appearing at ease with their children while supporting their autonomy. Less differentiated mothers, by comparison, are more anxious and base their parenting style on intrusiveness, control, and overprotection, often adopting critical attitudes and emotional distancing that undermine children's selfesteem and confidence in their abilities (Lampis et al., 2020). Also, greater emotional reactivity and greater emotional cutoff distinguish mothers at higher risk (vs. lower risk) for child maltreatment (Skowron et al., 2010).

The processes of differentiation of self-begin in early childhood and continue through adolescence. In this period, in particular, fusional relationships with parental figures become less and less intense, while the process of family projection favors the emergence of the child's level of differentiation, which is determined by that of the parents and tends to be placed at the same level of the parental matrix (Bowen, 1979). In this process, parental figures and the family system as a whole play a determining role, promoting or hindering the child's transition to adulthood, particularly through the degree to which they support the younger generation in balancing its fusional and individuation processes (Kerr and Bowen, 1988). In less differentiated families, in fact, the developmental drive of adolescent children toward autonomy and separation is perceived as a threat to the integrity and stability of the system. Furthermore, the adequacy of this developmental path affects the wellbeing and adaptation of the adolescent, with particular reference to anxious manifestations and expressed symptoms as well as the ability to demonstrate age-appropriate autonomous behaviors, assume responsibilities, and experience a strong emotional bond with significant others (Bowen, 1979; Skowron and Schimdt, 2003; Knauth and Skowron, 2004).

## 1.3 Aims and hypotheses of the study

In line with these studies, it is presumed that because they are still defining their emotional and relational separation process from their family of origin, adolescent mothers have not yet achieved the personality characteristics needed to properly care for a child, and this process can significantly increase parenting stress levels. But, looking at the parent-child system from an ecological point of view, it is also true that all the effects exerted by the developmental characteristics of the mother are not the only ones, due to the role played by other variables. Maternal parenting, in fact, is a complex process that involves many other individual, relational, and contextual variables that facilitate or hinder the exercise of the parental role, and the mother's psychological resources seem to play a decisive role (Belsky, 1984). Specifically, in adolescent parenting (Schellenbach et al., 1992), the levels of support perceived by the family of origin constitute important aspects of maternal functioning, capable of effectively supporting her in the perception of herself as a competent parent, in building the bond with the child, as well as the possibility of investing in one's development and identification (Nath et al., 1991).

In line with these theoretical models, our study aims to verify the empirical validity of a model of parental stress in adolescent mothers, starting from the idea that parenting stress is connected with a level of maternal self-differentiation, dyadic adjustment, the mother's self-esteem, and perceived support.

Starting with these variables, the following hypotheses are made:

- The level of maternal self-differentiation, as the ability to regulate one's own emotional experiences and the separation-individuation process from others, especially from the family, is a developmental prerequisite for the parental role, affecting any stress experienced during parenting.
- The stress experienced by less differentiated mothers may also be influenced by some other factors, such as:
  - dyadic adjustment, as an indicator of the functioning of the relationship between the mother and her partner;
  - maternal self-esteem, as an indicator of her personal wellbeing; and
  - levels of perceived social support received from family, friends, and partners.

In summary, the study aims to analyze the level of parenting stress in a group of first-time mothers, aged between 15 and 20 years old, from Palermo (Italy). Specifically, the research focus is focused on the level of maternal self-differentiation and the ability to both regulate their own emotional experiences and modulate relational closeness and autonomy level in every significant relationship (Peixoto-Freitas et al., 2020). In other words, the aim is to explore the separation–individuation process from parents, as an independent variable, and its role before becoming parents and, after the birth of the child, in promoting good parenting skills.

## 2 Materials and methods

### 2.1 Subjects

The research involved 30 (medium- and late-) adolescent first-time mothers, all from Palermo and of Italian nationality. Attempting to reduce the variability of the data as much as possible, the following inclusion and exclusion criteria were used: mothers cohabiting with a partner, aged between 15 and 20, and with only one child, aged between 0 and 2.

They were recruited from various public and private facilities, such as pediatric clinics (n = 6), family centers (n = 3), social services and hospitals (obstetrics and gynecology of the Buccheri Hospital La Ferla Fatebenefratelli; n = 18), and some private associations (n = 3). The participants' ages varied from 15 to 20 years (average age = 18.3, SD = 1.764594), while their levels of education were medium-low (secondary school: 13.33%; n = 4; middle school: 50.33%, n = 16; primary school: 30%; n = 10). In terms of employment status, only 6.66% of the subjects were attending a higher education school (n = 2), as many were in full-time employment (as hairdressers or credit brokers; n = 2), after a period of maternity leave; the remaining 86.66% (n = 26) declared themselves housewives.

All our surveyed young mothers were in a stable relationship with a partner, who, except for two mothers, is also the father of their child. The average age of the partners/husbands was 23.43 years (SD = 2.737773). Their employment status, when reported, was precarious or irregular. Regarding their education degree, this was often not reported, despite being explicitly asked for.

Regarding their place of living, only 20% (n = 5) of couples lived with the family of origin of one partner, while 80% (n = 25) said that they lived separately from both families of origin. It is noted, however, that the participants come from cultural contexts in which families tend to maintain very close ties and the care of children tends to be shared and characterized by a female member of the extended family. This is also linked to the propensity of never leaving the neighborhood in which one is born and living in homes mostly bordering those of the families of origin and extended family members (grandparents, uncles, and cousins).

The children were between 2 and 30 months old (average age: 10.033 months; *SD* =8.045). Among these, 46.67% were females (n = 14, m = 11.79), while 53.33% were males (n = 16, m = 8.5). All children had typical development (see Table 1).

Although the research framework included various hypotheses and statistical analyses to be tested, it was not possible to obtain a large sample due to the difficulty in reaching this particular population in the Palermo area. These mothers live in an isolated socioeconomic context and are wary of those who do not belong to their environment. Furthermore, there were no social and health services aimed at their needs from which participants could be recruited. Other work in our country has been characterized by the same limitations, while studies conducted in other countries had larger samples. TABLE 1 Participants' (n = 30) sociodemographic characteristics.

Nationality	Italian			
Recruiting places	Pediatrics clinics: $n = 6$			
	Family centers: $n = 3$			
	Social services and hospitals: $n = 18$			
	Private associations: $n = 3$			
Age	Average = 18.30			
	SD = 1.76			
Level of education	Secondary school: 13.33%, $n = 4$			
	Middle school: 50.33%, $n = 16$			
	Primary school: 30%, $n = 10$			
Employment status	Higher education school: 6.66%; $n = 2$			
	Unemployed: 86.66%; <i>n</i> = 26			
Relationship status	Stable relationship with a partner (28 are also the children's fathers; average age $= 23.43$ )			
Place of living	20% ( $n = 5$ ) with the family of origin of one of the partners			
	80% ( $n = 25$ ) independent family unit			
Children	Average age: 10.03 months; <i>SD</i> =8.04, <i>F</i> = 46.67% ( <i>n</i> = 14); <i>M</i> = 53.33 ( <i>n</i> = 16)			

### 2.2 Measures

The parenting stress index-short form (PSI-SF): This 36-item self-report measures parenting stress or the relative stress in the parent-child relationship and identifies problem areas for parents with young children. More generally, this index is representative of the adaptation of the parent to their role while taking into account the family and contextual variables that affect parental abilities (Abidin, 1995). We administered the Italian version (edited by Guarino et al., 2008). Commonly used both in clinical and research contexts, it consists of three subscales or domains:

- Parental Distress (PD), which evaluates the extent to which parents feel competent, restricted, conflicted, supported, and/or depressed in their role as a parent; express even an altered sense of parental competence; a conflictual relationship with the other parent and a lack of social support; and the presence of depression.
- Parent-Child Dysfunctional Interaction (P-CDI), which evaluates the extent to which parents feel satisfied with their child and their interactions with them and how much the parent perceives the child as not meeting their expectations or unable to reinforce them in their role. A high score on this subscale may indicate dysfunctional parent-child interactions.
- Difficult Child (DC), which evaluates how a parent perceives their child and whether the child is easy or difficult to take care of and identifies problem areas (e.g., the temperament of the child, if younger than 18 months or behavioral patterns with older children).

These subscales are combined to form a Total Stress score.

The subject must answer each item by circling the alternative that best reflects their opinion among five possible options. The raw scores of each subscale, obtained by adding the respective items, are converted into percentiles. The Total Stress raw score, derived by adding the three subscales' scores, is also converted into percentiles (based on *t*-values) and identifies the parenting-related stress level; the normal range is between the 16th and 84th percentiles, while scores between the 85th and 89th percentiles are considered high, and scores greater than the 90th percentile are considered clinically significant and further professional involvements may be indicated.

*The differentiation of self-inventory (DSI):* This multidimensional measure of differentiation focuses on adults and their significant relationships, including their current relationships with their family of origin. Based on Bowen's (1979) theory, Skowron and Friedlander (1998) first elaborated the DSI to assess emotional functioning, intimacy, and emotional autonomy. This study administered the 46-item Italian version (Lampis et al., 2017), consisting of four subscales (using a Likert scale divided into 6 intervals):

- Emotional Reactivity (ER), which includes 11 items to assess how the subject emotionally reacts to the events (e.g., "People said I am an overly emotional person"). For this subscale, scores are reversed-scored (higher levels mean lower emotional reactivity and a higher self-differentiation).
- I Position (IP), which includes 11 items to assess the self-differentiation level and the ability to think and act independently, even under pressure (e.g., "I feel quite settled under stress").
- Emotional Cutoff (EC), which includes 12 items to assess the fear of intimacy in a relationship and the use of defensive modalities against it (e.g., "I can express my feelings to the people I care").
- Fusion with Others (FO), which includes 12 items, to assess the subject's over involvement and over identification with parents (and others; e.g., "I think it's important to listen to my parents' opinions before making decisions").

The sum of the scores for each subscale requires some items must be reversed-scored. Subsequently, the scores obtained for each item of each scale are added and divided by the total number of statements in such a way as to obtain a score ranging from 1 to 6. The higher the score obtained by the subject, the higher the level of differentiation of their self. A similar procedure is repeated for the entire inventory.

The dyadic adjustment scale (DAS): A 32-item questionnaire, the DAS measures an individual's perceptions of their relationship with an intimate partner. First designed to assess the relationship quality of (married or cohabiting) couples (Spanier, 1976), in this study, the Italian version (edited by Gentili et al., 2002) was administered. The scale is divided into four subscales:

- Dyadic Satisfaction (10 items), which assesses the happiness or unhappiness of couples, the frequency of their quarrels, their pleasure of being together, and their attitude about separation.
- Dyadic Consent (13 items), which assesses the agreement/disagreement level between the partners regarding money, leisure, religion, friends, and other topics.

- Dyadic Cohesion (5 items), which assesses the amount of time spent together by sharing enjoyable activities.
- Emotional Expression (4 items), which assesses how partners express their feelings, love, and sexuality.

The total score, derived by adding the subscale scores, identifies the couple's marital satisfaction and the quality of the marriage or dyad. The raw scores, however, can be converted into *t*-values, allowing comparisons between the scores of each subscale and the total score.

The Rosenberg self-esteem scale (RSES) (Rosenberg, 1965): This self-report measure of global self-esteem is made up of 10 statements related to overall feelings of self-worth or selfacceptance. The items are answered on a 4-point scale, ranging from *strongly agree* to *strongly disagree*. Initially validated on a population of adolescents, this scale has also been used and validated for adults. Calculating the overall score requires Items 3, 5, 8, 9, and 10 to be reversed-scored. The Self-Esteem scale was validated in Italy by Prezza et al. (1997) on a sample of 1,217 people (492 males and 725 females).

The multidimensional scale of perceived social support (MSPSS): Developed by Zimet et al. (1988), this 12-item scale measures the perceived adequacy of social support from three dimensions, family, friends, and significant others (using a 5-point Likert scale: 0 = strongly disagree, 5 = strongly agree). We used the Italian version (Prezza and Principato, 2002), which references both general and emotional support.

## 2.3 Data analysis

PASW Statistics 18 (formerly SPSS Statistics) was used to determine the average scores and standard deviations of each measure and the respective subscales used.

The main hypotheses of the study were verified using statistical analyses:

- Simple linear regressions to verify the effects of the differentiation of self, as the independent variable, on parenting stress and its subdimensions as dependent variables and
- Simple linear regression to verify the possible direct effects of maternal self-esteem, dyadic adjustment, and perceived social support on maternal differentiation of self.

Hypothesizing the importance of the relational subdimensions of the differentiation of the self, it was finally verified whether the aspects relating to the emotional cut and interpersonal fusion specifically connected to the couple's relationship and the bond with the family of origin had, in turn, determination effects on parenting stress and its subdimensions. By adding the scores of specific items from the Emotional Cutoff and Fusion scales with others, the following variables were created: EC\_F, which sums the items that measure the propensity for emotional cutoff in the family of origin; EC\_P, which does the same but with the items relating to the partner; FO\_F, which collects the items that measure the fusional processes relating to the family of origin; and FO\_P, which measures this propensity with respect to the bond with the partner.

TABLE 2 Subjects' average scores and standard deviations in this study.

Scales	Subj	ects	Scales	Subjects		Subjects	Sca	les	Subjects	Sca	les	Subjects		
	т	SD		т	SD		т	SD		т	SD		т	sd
ER	3.12	0.64	PD1	26.97 (percentile = 55)	6.28	DC	49.60	10.55	Self- esteem	29.90	3.88	MSPSS/O1	6.15	1.10
IP	3.89	0.92	P- CDI <sup>2</sup>	20.67 (percentile = 60)	6.90	EE	10.23	1.94				MSPSS/F2	5.90	1.17
EC	4.28	0.60	DC <sup>3</sup>	22.30 (percentile = 50)	5.77	DS	35.93	6.05				MSPSS/A3	4.43	1.72
FO	2.35	0.51	Total Stress <sup>4</sup>	69.93 (percentile = 55)	16.21	DCo	16.83	4.65				Total support	5.43	1.01
DSI	3.50	0.36				DA	112.60	19.28						

ER, Emotional Reactivity; IP, I Position; EC, Emotional Cutoff; FO, Fusion with Others; DSI, Differentiation of Self; PD, Parental Distress; P-CDI, Parent–Child Dysfunctional Interaction; DC, Difficult Child; DC, Dyadic Consent; EE, Emotional Expression; DS, Dyadic Satisfaction; DCo, Dyadic Cohesion; DA, Dyadic Adjustment; MSPSS/O1, support from significant others; MSPSS/F2, support from family; MSPSS/A3, support from friends.

TABLE 3 Skewness scores.

Scales	S <sub>k</sub>
DSI	-0.15
Total stress	1.80
Total support	-1.11
DA	-1.61
Self-esteem	-1.18

DSI, Differentiation of Self; DA, Dyadic Adjustment.

TABLE 4 The effects of the differentiation of self on parenting stress.

Independent variables	β	<i>p</i> -value	Dependent variables
X <sub>3</sub>	-0.38	< 0.05	Y
X <sub>3</sub>	-0.42	< 0.05	$Y_2$
$X_4$	0.36	0.05	Y
$X_4$	0.39	< 0.05	Y <sub>3</sub>

 $X_3$ , Emotional Cutoff;  $X_4$ , Fusion with Others; Y, total stress;  $Y_2$ , Parent–Child Dysfunctional Interaction;  $Y_3$ , Difficult Child.

## **3** Results

### 3.1 Preliminary analyses

The participants' average scores for each measure were summarized in Table 2. All study variables are normally distributed (see Table 3).

# 3.2 The effects of the prediction variables on parenting stress

## 3.2.1 The effects of the differentiation of self on parenting stress

A simple linear regression was used with differentiation of self as an independent variable (X) and parenting stress (Y) and the PSI-SF subscales, that is, PD ( $Y_1$ ), P-CDI ( $Y_2$ ), and DC ( $Y_3$ ). The hypnotized connections between the self-differentiation and

TABLE 5 The effects of the *ad hoc* variables on parenting stress.

Independent variables	β	<i>p</i> -value	Dependent variables
X <sub>8</sub>	0.43	< 0.05	Y
X <sub>8</sub>	0.47	< 0.05	Y <sub>3</sub>

 $X_8$ , FO\_P, items that measure the fusional processes relating to the partner; Y, total stress;  $Y_3$ , Difficult Child.

parenting stress (considering both the total scale score and the PD, P-CDI, and DC subscales) were not significant (p > 0.05). The same results were reported for the four models tested regarding the four DSI subscales (ER,  $X_1$ ; IP,  $X_2$ ; EC,  $X_3$ ; and FO,  $X_4$ ), although a significant connection was reported between  $X_3$  and Y and  $Y_2$  and  $X_4$  and Y and  $Y_3$ . Therefore, in summary, we can say that both the relational subdimensions of the self-differentiation are predictors of parenting stress for this group of participants (respectively,  $X_3$ :  $\beta = -0.38$ , p < 0.05;  $X_4$ :  $\beta = 0.36$ , p = 0.05; see Table 3). In addition,  $X_3$  has also been found to be a significant predictor of  $Y_2$  ( $\beta = -0.42$ , p < 0.05), while  $X_4$  predicts  $Y_3$  ( $\beta = 0.39$ , p < 0.05; see Table 4).

Four additional regression models were implemented for the *ad hoc* variables, identifying EC\_F ( $X_5$ ), EC\_P ( $X_6$ ), FO\_F ( $X_7$ ), and FO\_P ( $X_8$ ) as independent variables and total stress (Y) and the PSI-SF subscales, that is, PD ( $Y_1$ ), P-CDI ( $Y_2$ ), and DC ( $Y_3$ ), as dependent variables. Except for  $X_8$ , which had a strong effect on both Y and  $Y_3$ , the analyses did not report a significant association (see Table 5).

## 3.2.2 The effects of self-esteem on parenting stress

Three regression models were tested, identifying, respectively, self-esteem (*X*), self-deprecation (*X*<sub>1</sub>), and positive self-worth (*X*<sub>2</sub>) as independent variables and parenting stress (*Y*) and the PSI-SF subscales, that is, PD (*Y*<sub>1</sub>), P-CDI (*Y*<sub>2</sub>), and DC (*Y*<sub>3</sub>), as dependent variables. The predictive connections between self-esteem (and its subdimensions) and the PSI-SF were not significant (p > 0.05), nor were those between self-esteem, self-deprecation, positive selfworth, and PD, P-CDI, and DC (p > 0.05). However, a predictive

### TABLE 6 The effects of self-esteem on parenting stress.

Independent variables	β	<i>p</i> -value	Dependent variables
X <sub>2</sub>	-0.37	< 0.05	$Y_3$

X2, positive self-worth; Y2, Difficult Child.

TABLE 7 The effects of dyadic adjustment on parenting stress.

Independent variables	β	<i>p</i> -value	Dependent variables
X <sub>3</sub>	-0.40	< 0.05	Y <sub>3</sub>

X2, Dyadic Cohesion; Y3, Difficult Child.

effect of the positive self-worth subdimension on DC was found ( $\beta = -0.37$ , p < 0.05; see Table 6).

### 3.2.3 The effects of dyadic adjustment on parenting stress

Five regression models were tested, identifying the DAS subscales, that is, Dyadic Adjustment (*X*), Dyadic Satisfaction (*X*<sub>1</sub>), Dyadic Consent (*X*<sub>2</sub>), Dyadic Cohesion (*X*<sub>3</sub>), and Emotional Expression (*X*<sub>4</sub>), as independent variables and parenting stress (*Y*) and the PSI-SF subscales, that is, PD (*Y*<sub>1</sub>), P-CDI (*Y*<sub>2</sub>), and DC (*Y*<sub>3</sub>) as dependent variables. Except for *X*<sub>3</sub>'s effects on *Y*<sub>3</sub> ( $\beta = -0.40$ , *p* < 0.05), the regression analysis did not find a significant value (*p* > 0.05; see Table 7).

## 3.2.4 The effects of perceived social support on parenting stress

Finally, four regression models were tested, identifying the MSPSS Social Support scale scores (X) and its subscales, that is, Significant Others (X<sub>1</sub>), Family (X<sub>2</sub>), and Friends (X<sub>3</sub>), as independent variables and parenting stress (Y) and the PSI-SF subscales, that is, PD (Y<sub>1</sub>), P-CDI (Y<sub>2</sub>), and DC (Y<sub>3</sub>), as dependent variables. No significant associations were found for any of the examined variables (p > 0.05).

## 4 Discussion

From a descriptive point of view, the survey group shows a general level of self-differentiation that does not differ significantly from what is reported in other studies, which is also confirmed by the average scores obtained on the ER, IP, and EC subscales of the DSI (Skowron and Friedlander, 1998; Knauth and Skowron, 2004). The sense of self for the young participants, therefore, seems to be clearly defined, as well as their ability to act, think, and evaluate their life experiences independently and free from interpersonal pressures. The average score at the DSI FO subscale, conversely, was rather low, showing the presence of significant relational models oriented to fusion with others and, consequently, a reduction of the overall self-differentiation index. As expected, and in line with their developmental tasks (Goossens, 2006; McElhaney et al., 2009), our young mothers appear hyper-involved with their partners and hyper-identified with their parents. In line with these results, the

ER and interpersonal modalities (oriented to a "fusion" with the significant others) seem to confirm that the path of definition of their relational and emotional autonomy is not yet complete despite an early transition to parenthood. In other words, the mothers do not seem to have yet acquired the ability to independently regulate their internal states (Allen, 2008; Allen and Miga, 2010) or their balance of fusional and individuation movements, especially with respect to parental figures (Kerr and Bowen, 1988).

In addition, the research participants, unlike other studies (Schellenbach et al., 1992; Passino et al., 1993; Sommer et al., 1993; Miller et al., 1996), do not seem particularly burdened by exercising the parental role. The scores on PSI-SF and its subscales, in fact, are in line with those reported by the validation study sample, referring to both all subjects and a subsample of mothers with their children (aged between 1 month and 2 years and 11 months; Guarino et al., 2008). They are also in line with those reported by Spencer et al. (2002), who studied a group of adolescent mothers of the same age but who were living with their parents. The young mothers revealed good parenting competence, low levels of depression, and a good attachment to their children, whose care, moreover, does not seem to be made difficult by their temperamental characteristics. The mothers reported good self-esteem (Colletta et al., 1981; Unger and Wandersman, 1988) at levels that do not differ significantly from those reported by Prezza et al. (1997), who studied, in particular, housewives and women with a primary school education status. They also report very high levels of perceived social support from their partner, their family, and, generally, their network of friends, which are in line with those reported by Prezza and Principato (2002), although family and significant others (especially their partner) were the main supportive social resources; on the contrary, social support from friends was perceived as less significant.

As verified in another study (Skowron and Friedlander, 1998), our work confirms that the level of dyadic adjustment, as perceived and represented by the mothers, is predicted by maternal self-differentiation, and their ability to support relational intimacy is a predictive factor for couple satisfaction. With only two exceptions, the total and subscale scores measuring dyadic adjustment, however, were always below the cutoff identified by Spanier (1976). This means that the dyadic adjustment appears slightly compromised, especially regarding couple satisfaction and agreement within the couple; however, the dimensions related to affective expression and the quantity and quality of time spent together were not affected. The dimension requiring attention is dyadic satisfaction, in particular, because it significantly lowers the overall average score of the subjects. A lower perception of the quality of certain aspects of the bond with the partner, however, can be explained by referring to the recent transition to parenthood that many of these young couples are facing (Cowan and Cowan, 1992). These young mothers, however, appear hyper-involved with their partners, and this could imply an idealization of the marital bond and the development of high, unrealistic relational expectations that their partners may not satisfy.

Based on Bowen's theoretical model (Lampis et al., 2020), the adolescent self-differentiation level is linked to self-esteem, and in line with this, our results verify the ability to both tolerate interpersonal intimacy and modulate affectivity. Therefore, mothers with higher self-esteem are also more differentiated and show better relational functioning. Maternal self-esteem is also associated with social support perceived by mothers, and these results were expected and confirmed by Prezza et al. (1997). These results are in line with those of other empirical research that highlights the central influence of the level of differentiation of self on the psychological adaptation of the adolescent, where lower levels are predictive of depression, anxiety (Skowron and Friedlander, 1998; Knauth and Skowron, 2004), social anxiety (Peleg-Popko, 2002), and physiological symptoms (Skowron and Friedlander, 1998; Skowron, 2000). Knauth and Skowron (2004), however, verified a more complex model, highlighting the existence of a mediation relationship between levels of differentiation, anxiety, and symptoms manifested, whereby a higher degree of identification attenuates the impact of chronic anxiety on symptomatic development.

As hypothesized, the present study is, first, aimed at establishing whether the level of maternal self-differentiation could be a predictor of the effectiveness of a young mother's adaptation to her early parental role. Second, it is aimed at exploring whether the presence of other maternal individual and socio-relational characteristics, such as the couple's relationship, social support, and self-esteem, could have a significant impact on parenting stress. These associations were hypothesized based on Belsky's (1984) theorizations on the determinants of parenting and subsequent adaptations specifically formulated to analyze adolescent parenting (Nath et al., 1991; Schellenbach et al., 1992). These models take the mother's characteristics and the quality of the support provided by the reference network of the mother-child system as key variables and postulate that social support influences parenting both directly and indirectly, strengthening the psychological resources available to the mother to adaptively carry out her parental function.

The small number of surveyed participants has not made it possible to adequately deepen the knowledge of the possible moderating and mediating correlations among these variables and then find results with a high margin of safety. However, the implemented analyses found some noteworthy empirical evidence.

Specifically, it is noted that the relational dimension of the level of maternal self-differentiation, unlike the intrapsychic one, impacts the processes of adaptation to the parental role, but in a different way for the two aspects in which it is articulated. Consistent with what has been hypothesized, in fact, the ability to regulate the individuation-separation process and tolerate intimacy appears to reduce parenting stress and predicts a positive maternal perception of the child, strengthening the mother's parental role. Establishing that the bond with the child is adequately constituted reduces the risk of abusive and/or dismissive parenting styles. Nevertheless, the ability to not make relational interruptions is not anchored to a specific relationship, so the ability to regulate intimacy with neither their partner nor their parents can act as an adaptation to the parental role and on the attachment to the child, while the effect is limited to this dimension in its entirety. These results confirm the key role of maternal characteristics in promoting the adaptation to parental challenges and are in line with what was expected and formulated based on the literature on adolescent parenting (Nath et al., 1991; Schellenbach et al., 1992).

Interpersonal fusional processes, however, can act on parenting stress but in a way that is opposite to what is expected. Indeed, mothers with a greater propensity to adopt adhesive strategies in regulating interpersonal distance have lower levels of parenting stress and a better (and positive) perception of the child's temperament and behavioral adaptation. This predictive connection is anchored to the hyper-involvement of the young mothers with their partners, while hyper-identification (even at a high level) with parental figures, however consistent, has no significant effect on their ability to cope with the stresses of caregiving. Although apparently contradictory, the reported results could highlight, for these subjects, the importance of being part of an all-encompassing couple relationship, in which thoughts and emotions focus exclusively on their partner, their closeness, and their emotional availability to the point of influencing the perception of the child and the ability to take care of them. Moreover, these findings can explain the importance of those "fusional movements" activated by motherhood both during pregnancy and in the first months of the child's life (Mahler et al., 1975), which are then added to the adhesive tendencies of adolescence. In line with this, during the developmental phase of the mother-child system, the ability to live intimately with a significant other and the tendency to reduce the interpersonal distance (up to a hyper-involving bond) can promote the dyadic dynamics, allowing the mother to form a bond with her child, have a more positive perception of the bond, and perceive parenting processes as less burdensome.

Our results from this survey group also highlight the perception that mothers have of the characteristics of their children, as stress is lower when there are higher levels of self-recognition and better connection with their partner. These latest findings confirm, albeit to a limited extent, the conclusions of other studies. Regarding maternal self-esteem, in fact, the present study highlights how the maternal capacity to cope with parenting stress is associated with both an early transition to parenthood (Colletta and Gregg, 1981) and a reduction in the stress experienced during parenting (Saisto et al., 2008; Trute et al., 2008). Regarding the couple's relationship, however, the quality of dyadic adjustment emerges as a factor capable of significantly affecting all domains of parental stress (Saisto et al., 2008; Trute et al., 2008).

Surprisingly, no direct effects have been reported for social support and its influence on parenting stress. These findings disconfirm the central role attributed to social support in the literature on the topic (Nath et al., 1991), but we hypothesize that they can be explained based on the characteristics of the study participants. These adolescent mothers, in fact, live with their partners and are housewives, meaning that they are primary caregivers for their children. They are also characterized by a good level of self-differentiation and good self-esteem, therefore possessing sufficient psychological resources to adapt to the parental role.

## 5 Conclusion

The present work tried to shed light on a phenomenon of great social impact, adolescent motherhood, commonly overlooked in our country, despite the social, economic, and psychological difficulties that these young mothers and their children tend to face in their life courses, according to the literature on the subject (Secco and Moffatt, 2003; Birkeland et al., 2005; Tosto, 2014). The study, in particular, aimed to deepen the impact of a

developmental characteristic of the adolescents, the differentiation of self, on adapting to their parental role, and despite the small size of the investigation group, it allowed us to draw some promising conclusions, in particular regarding the influence of the relational dimension of self-differentiation on total stress and some of its aspects. The results, in fact, highlight that although their separation/individuation process was not complete, the adolescent mothers could experience normative levels of parenting stress, which, in turn, promoted their ability to care for their children and, therefore, could protect their development.

More generally, however, because other research has highlighted the developmental difficulties experienced by the children of adolescent mothers (Tosto, 2014), stressing the primary need for social policies and taking more responsibility for the phenomenon, with its psychosocial and economic implications, is necessary. If properly trained, social and health workers, in fact, would have a central role in supporting the complex transitions of these family systems and enhancing and amplifying the few resources they often have (Erfina et al., 2019).

The hypothesis of a peculiarity in the characteristics of population development to which this study refers, however, should not be overlooked in the probability that the normative developmental models theorized and empirically verified for Italian adolescents (and, more generally, for Western adolescents) are not suitable when trying to understand and explain their trajectories and any characteristics of adaptation and maladaptation. In a context in which adolescent development follows an alternative path, in fact, an early transition to parenthood could be configured not as a risky phenomenon but as the normative expression of another way to continue their life cycle or as the normative expression of another way to continue one's path of growth. This could indicate the possible presence of a sociocultural peculiarity, which accounts for a tendency to become a parent that may appear anticipated, if not observed, within family dynamics and inside a sociocultural context in which it could be the only expression (Lerner and Galambos, 1998).

## 6 Limitations and future directions

This study has several limitations and leaves a number of issues open. The most obvious limitation of the research is represented by the low number of participants included in the survey group, an aspect that we have previously focused on. This motivates us to design new empirical investigations, in which a more complex model of predictions can be tested using a much larger survey group. This group could also be divided into specific subgroups, depending on the age of the subjects, which could consider the different developmental processes of the adolescent phases and how they could influence the observed processes. It would also be appropriate to compare these groups with groups of adult mothers, paired for cultural and sociodemographic characteristics, to understand whether what is highlighted for young mothers reflects specific development characteristics or is peculiar to adapting to life contexts in which the critical aspects that surround and influence the mother-child system are particularly stressful. These processes, moreover, could be evaluated by verifying linear regression models in which sociodemographic variables were entered and tested as covariates.

A further limitation is represented by the Differentiation Self Inventory (DSI) (Skowron and Schimdt, 2003), which has not been developed to evaluate the functioning of adolescent subjects. However, its use was preferred to other measures specifically formulated for adolescents (Knauth and Skowron, 2004) due to the presence of an Italian validation (Lampis et al., 2017) because it seems more appropriate for grasping an individual's functioning within romantic relationships, an aspect that characterizes the target population, differentiating it from that of adolescents with typical development.

A final limitation of the study is found in the lack of direct observation (and then assessment) of the parental behaviors, which, when considered with the adaptation of the caregiver to the parental role, would allow greater clarity on the dynamics of the mother–child dyad, highlighting any critical aspects that, although not perceived by the mother, could manifest themselves in the interaction with the child.

Finally, there is an opportunity to extend empirical analysis to the behavioral characteristics and functioning of the child to verify, beyond what the mother experiences, how an early transition to parenthood can expose the child to developmental risks. However, other research has amply highlighted the difficulties of adaptation (in the short and long term) experienced by the children of adolescent mothers (Tosto, 2014), supporting the importance and need to implement educational intervention programs that improve parenting skills and promote the child's developmental path as well (Tosto et al., 2015).

According to an ecological approach to the study of the mother-child system, there is a need to analyze its dynamics in the light of the processes that involve the relational and environmental context in which it is inserted. For this reason, further empirical work should be aimed at capturing the processes of *co-parenting* and their influence on the stress experienced by both caregivers and the impact exerted on the parental behavior and adaptation of the child. In addition, in other cultural contexts, early parenting is also characterized by the spread of shared care practices between the younger generation and grandparents, which exerts multiple impacts on the stress experienced by young mothers in caring for their children, their perception of themselves as competent parents, and the development of the child (Moore and Brooks-Gunn, 2002).

The conclusions of drawn from this research should acknowledge the high impact of its sociocultural context (Palermo), as well as highlight both the aspects of similarity and the presence of any specificities. More precisely, it would be interesting to analyze how much and in what terms the older generation, with particular reference to female figures, is involved in the processes of childcare in a context in which early parenting is expected and "handed down" from generation to generation. Of particular interest, however, is also the fate that these young mothers are facing. The stress connected to fulfilling the parental function, in fact, is permanently maintained at mild levels even when the number of children brought into the world increases and the little ones grow. The question is, Does it become more complex and burdensome for the maternal figure to then adapt to the challenges of parenthood?

## Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

## **Ethics statement**

The studies involving humans were approved by the Bioethics Committee of the University of Palermo. The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required from the participants or the participants' legal guardians/next of kin in accordance with the national legislation and institutional requirements.

## Author contributions

AS: Conceptualization, Data curation, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing, Validation. MT: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Validation, Writing – original draft, Writing – review & editing. IR: Data curation, Methodology, Supervision, Writing – review & editing. AM: Conceptualization, Data curation, Methodology, Supervision, Writing – review & editing, Validation.

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## **Conflict of interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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