

**Normative and non-normative pattern in achievement of developmental tasks: sibling relationship quality and life satisfaction during emerging adulthood**

Lucia Ponti <sup>1</sup> & Martina Smorti <sup>2</sup>

<sup>1</sup> Department of Education, Languages, Intercultures, Literatures and Psychology,  
University of Florence

<sup>2</sup> Department of Surgical, Medical and Molecular Pathology and Critical Care  
Medicine, University of Pisa

Correspondence concerning this article should be addressed to Martina Smorti, Department of Surgical, Medical and Molecular Pathology and Critical Care Medicine, University of Pisa, Via Savi, 10, 56126, Pisa, Italy, Tel: +39 050 992370, Fax: + 39 ; fax +39 050993325; e-mail: [martina.smorti@unipi.it](mailto:martina.smorti@unipi.it)



## **Abstract**

The aims of the present study were to investigate whether twins and siblings close in age: 1) present a normative pattern in the achievement of residential, working and economic autonomy (the older sibling assumes a more adult role earlier than the younger, or twins assume an adult role at the same time); 2) differ in sibling relationship quality; and whether the normativity is linked 3) to the quality of sibling relationship and 4) to life satisfaction. A cross-sectional study on 145 emerging adults was conducted. Twins present a normative development pattern more frequently and a warmer sibling relationship than non-twin siblings. A normative development pattern is related to sibling relationships but not to the level of life satisfaction. In particular, normativity in residential conditions is linked with warmer sibling relationships, while non-normativity in economic conditions is linked to more rivalrous relationships. These data support the assumption that during emerging adulthood a normative development pattern is linked to a more positive sibling relationship.

**Keywords:** Emerging adulthood; developmental tasks, normative development pattern; sibling relationship quality; life satisfaction

**Running Head:** Developmental tasks in emerging adulthood siblings



## **Introduction**

Sibling relationships are one of the most enduring relationships in an individual's life, and they have a significant influence on human development throughout the entire life span (Cicirelli, 1996). Sibling relationships can be characterized by three main dimensions: warmth, defined as intimacy, affection, and emotional support; conflict, which refers to antagonism, struggle and arguments; and rivalry between siblings for parent's attention and affection (Deater-Deckard, Dunn, & Lussier, 2002; Noller, 2005). Rivalry among siblings is the result of social comparisons that siblings form with one another based on their perceived discrepant treatment by parents (Jensen, Whiteman, Fingerman, & Birditt, 2013; Kowal & Kramer 1997).

Siblings influence one another's development throughout life, including in emerging adulthood (Jensen et al., 2013; Sherman, Lansford & Volling, 2006; Ponti & Smorti, 2019), the life stage ranging from 20 to 30 years in which young people feel that they are no longer adolescents, but they are not yet fully independent adults (Arnett, 2000). Siblings' influence can be founded on social comparison. Some studies, based on the assumption of siblings' comparison orientation (Jensen et al., 2013; Shanahan, McHale, Crouter, & Osgood, 2008), have shown the tendency of youth to evaluate their abilities comparing themselves to their siblings (Jensen, Pond, & Padilla-Walker, 2015), revealing that this inclination to compare is higher in close-age dyads (Jensen et al., 2015). Moreover, young people with a higher tendency to compare themselves to their siblings have shown a greater emotional reaction to such comparisons, exhibiting more depressive symptoms (Jensen et al., 2015). The higher tendency to compare oneself to siblings is also related to a perceived warmer, but also a more conflictive, relationship with brother/sister (Jensen et al., 2015), in a sort of relational ambivalence (Mikulincer, Shaver, Bar-On, & Ein-Dor, 2010). Although the comparison among siblings may regard several abilities, during emerging adulthood it may be related to life transitions and developmental tasks, such as finding a job and establishing financial and residential independence. According to Jensen and colleagues (2015), in fact, each type of transition may create opportunities for young adults to feel "off time", which may cause added stress to



relationships. The perception to be on time or off time could be particularly relevant in the Italian context, where young people tend to prolong their education, delay entry into the job market, and delay moving out of their family homes once a stable job is found (Livi Bacci, 2008; Arnett, 2000).

Based on the comparison of sibling relationships, it has been hypothesized that the combination of both individual and sibling life transitions during emerging adulthood in terms of similarity may affect closeness and conflict perceived in the dyad (Jensen et al., 2018). Using data from a two-wave longitudinal study of young adults, Jensen and colleagues examined how perceptions of relationships with siblings changed over time and how those changes were associated with similarity/dissimilarity in life transitions (Jensen et al., 2018). Authors hypothesized that when both siblings move to the same life stage, they would report an increased closeness and reduced conflict, while the moving of one sibling to different life stages (while the other not) would be related to decreases in closeness and increases in conflict. Results support the assumption that life stage similarity was related to higher closeness and less conflict perceived among siblings (Jensen et al., 2018). Despite the relevance of this study, it must be noted that Jensen and colleagues considered the combination of both the individual and the sibling normative life transition during emerging adulthood in terms of similarity/ dissimilarity without taking into consideration the combination of both the birth order and the level of achievement of a development task. In fact, the offspring who move out from the parental home may be the younger, the older or the same age (twin) sibling, so that the effect of comparison may not be the same for the self- and other- evaluations. Although Jensen (Jensen et al., 2015; 2018), as well as other studies in this field (i.e. Whiteman, Mc Hale & Crouter, 2011), did not considered how twin relationships vary according to similarity (or dissimilarity) of life stages, being in the same life stage seems especially relevant in twins, given that they are the same age. In fact, twin relationships are distinctive from non-twin sibling relationships in that twins are constant companions to one another throughout their lives (Neyer, 2002; Nozaki, Fujisawa, Ando & Hasegawa, 2012; Mikkelsen, Myers & Hannawa, 2011). Due to the same age, genetic relatedness, and the amount of time twin siblings spend together growing up,



this bond is also more reciprocal and equitable in nature than the relationship between non-twin siblings, also in emerging adulthood (Neyer, 2002; Mikkelsen et al., 2011; Nozaki et al., 2012). Thus, we agree with Jensen (2018) that the combination of both the individual and the sibling life transition during emerging adulthood affects the perceived sibling relationship, but we state that birth order, age gap, and stage of life transition, which reflect the level of achievement of development tasks, should also be considered.

This study tries to take a picture of sibling relationship referring to development task during emerging adulthood. Specifically, it offers an empirical contribution considering that the combination of both the individual and the sibling levels of achievement of development tasks, taking into consideration the birth order and age gap, is linked with both the individual perception of sibling relationship and personal wellbeing, in terms of life satisfaction.

### **Developmental tasks and sibling relationships: the role of age gap and birth order**

Some studies, when analyzing the sibling relationship during the transition to adulthood, have focused on the timing of transition in relation to age gap. Because siblings are often at different stages on the pathway to adulthood, they may sometimes be similar “in life stage” with one another, and sometimes be dissimilar in assuming an adult role linked to leaving home, completing education, being employed, getting married, and childbearing (Shortt & Gottman, 1997; Conger & Little, 2010; Jensen et al., 2018). These conditions (similar vs. dissimilar) are influenced by age gap. Therefore, twin siblings are more probable to present a similar path in the level of achievement of developmental tasks, due to their lack of age difference, while non-twin siblings are more prone to a condition of dissimilarity. However, it is clear that dissimilarity in siblings’ life stage can represent a normative development pattern, depending on the combination of birth order and the achievement of developmental tasks, which contributes to the adult identity.

Thus, the normative development pattern occurs if, in non-twin siblings, the older is in an adult role that the younger one has not yet achieved, whereas in twin siblings, both components of the dyad



are in the same life stage (similarity according to Jensen). On the contrary, the non-normative development pattern occurs if the younger sibling is in an adult role and the older one is not, or if twin siblings are different in life stages (dissimilarity according to Jensen).

Despite the relevance of these aspects, to our knowledge, no study has investigated the quality of sibling relationships based on normativity or non-normativity of life stage, which reflects the level of achievement of developmental tasks of the dyad. Therefore, what happens in twin relationships when one twin is more autonomous than the other from a residential, economic and working perspective (i.e. he or she finds a job or moves away from home while the other does not)? Or what happens when, in a non-twin sibling relationship, the younger one is more independent than older one?

### **The present study**

This study could fill a gap in literature by exploring the following: 1) Do emerging adults, (twins and siblings close in age, age difference from 0 to 3 years), present a normative pattern in reaching residential, work and economic autonomy? 2) Do emerging adults (twins and sibling close in age) perceive a different quality of sibling relationship? 3) Do emerging adults in a normative (or non-normative) pattern with their siblings differ on the quality of sibling relationship? 4) Do emerging adults in a normative (or non-normative) pattern with their siblings differ on the level of life satisfaction?

We expected that twins and siblings close in age would present a normative pattern in the level of the achievement of developmental tasks more often than those in a non-normative pattern. We expected that twins perceived a more positive sibling relationship (defined by higher affection and lower conflict) compared to non-twin siblings, in line with literature (Mikkelsen et al., 2011; Nozaki et al., 2012). Moreover, we hypothesized that a non-normative pattern in the level of the achievement of developmental tasks is related to the perception of a sibling relationship characterized by high levels of conflict and rivalry, while a normative pattern in the level of



achievement of developmental tasks is related to a perceived sibling relationship characterized by high affection and low conflict. This hypothesis is based on research by Noller and colleagues (2008), who found that older siblings reported more negative reactions when outperformed by their younger siblings on activities that are important for them and closely related to their self-esteem (Noller, Conway, & Blakeley-Smith, 2008). Although we know that not all activities are relevant for the self and that the comparison among siblings leads to rivalry only for activities that are relevant for self-construction (Noller et al., 2008), we believe that in the Italian context, the tasks linked to residential, financial autonomy and working conditions assume an importance for how they impact in emerging adults' individual development (Smorti, Ponti & Cincidda, 2019). Moreover these tasks, being linked to the emancipation from parents and autonomy from family home, may have an impact on sibling relationship during this life stage. Thus, the comparison among siblings in non-normative conditions may, in our opinion, be linked to a worse sibling relationship quality. Finally, we hypothesized that a normative pattern in the level of the achievement of developmental tasks could be linked to higher life satisfaction compared to non-normative patterns. In fact, starting from the consideration that a comparison among siblings can affect the level of personal wellbeing (Jensen et al., 2015), it could be hypothesized that living in a situation of normativity with respect to an important figure, such as a sibling, could be reflected in a sense of general well-being with respect to one's living conditions.

## **Methods**

### **Participants and procedures**

A convenience sample of 145 emerging adults (46 males and 99 females) aged 20–30 years ( $M = 23.84$ ;  $SD = 3.08$ ), was recruited between November 2018 and January 2019 among university students (School of Psychology, Political Science and Law) in Pisa, a metropolitan area of Tuscany, a region in the center of Italy, and in a center for Italian twins. This research is part of a larger study on psychological well-being of emerging adults that was approved by the Committee on Bioethics



of the University of Pisa (Review No. 6/2018). In accordance with the ethical treatment of human participants of the Italian Psychological Association, participants were fully informed about the aim of the study, that their participation was voluntary, and that they could withdraw at any time without consequences. The inclusion criteria to participate in the survey were: age ranging from 20 to 30 years and having at least one brother or sister with three years or less age difference. Participants with more than one sibling were asked to indicate the brother or sister with the closest age gap. Twin participants were asked to answer the sibling questionnaire referring to their own twin. Sibling participants indicated that the sister/brother about whom they had chosen to respond was a biological sibling. Written informed consent was obtained before data collection. Consent was given by 100% of the participants. Participants were asked to anonymously complete a battery of questionnaires designed to gather information about personal, demographic and developmental task data (residential, working and economic autonomy), and to assess the quality of their sibling relationships and life satisfaction. After they agreed to participate, an email address was requested, and they consequently received a link to respond to questionnaires through a Google web-based platform that did not allow completion if data was missing. No monetary reward was given for participation.

Seventy-one percent of the participants came from central Italy, 11.7 % from northern Italy, and 24% from southern Italy. One hundred and ten (75.9%) were siblings, and 35 (24.1%) were twins. Of the siblings, 66 (45.5%) were females and 79 (54.5%) were males. Their age ranges were from 17 to 31 years ( $M = 23.81$ ;  $SD = 3.42$ ). The average age difference between participants and siblings was 1.71 years ( $SD = 1.18$ ).

## **Measure**

### *Sibling relationship quality*

The Italian version (Tani, Guarnieri, & Ingoglia, 2013) of the Adult Sibling Relationship Questionnaire (ASRQ; Stocker, Lanthier, & Furman, 1997) was used to assess the quality of sibling



relationships. This scale is a self-report measure and consists of 43 items. Participants were asked to read every statement and indicate how each characterized his/her sibling relationship on a 5-point Likert-type scale from 1 (*nothing*) to 5 (*very much*). It includes 14 subscales regarding the quality of sibling relationships, which can be grouped in three macro-dimensions labelled as: Warmth (25 items, examples of items, “How much do you and this sibling try to cheer each other up when one of you is feeling down?”, “How much do you and this sibling think of each other as good friends?”), which includes all the subscales referring to positive characteristics (intimacy, affection, emotional support, instrumental support, knowledge, similarity, admiration, and acceptance); Conflict (12 items, examples of items, “How much do you and this sibling argue with each other?”, “How much do you and this sibling irritate each other?”), which refers to negative emotional characteristics of sibling relationships (dominance, competition, antagonism, and quarrelling); and Rivalry (6 items, examples of items, “Do you and this sibling think your mother supports one of you more?”, “Do you and this sibling think your father is closer to one of you?”), which refers to the perception of parents’ partiality in the treatment of each sibling (maternal rivalry and paternal rivalry). Macro-dimension scores are computed by the sum of the items that fall within each macro-dimension. In this sample, the alpha values of the ASRQ were .96, .85 and .94 for the Warmth, Conflict and Rivalry macro-dimensions, respectively.

#### *Residential, working and financial autonomy*

In order to determine the level of achievement of the developmental tasks, in terms of residential, working, and economic autonomy, both for participants and their siblings, a specific questionnaire was developed. Specifically, residential autonomy was measured by the following questions: “what is your living condition?” and “what is your brother’s/sister’s living condition?”, both rated on a 3-point Likert scale (1= at home with parents / with the family of origin; 2= out of the home of family of origin only for part of the week (example, off-site student); 3= out of the family home permanently). Working autonomy was assessed by the following questions: “what is your working



condition?” and “what is your brother’s/sister’s working condition?”, rated on a 3-point Likert scale (1= no job; 2 = occasional job; 3= stable and continuous job). Finally, economic autonomy was measured by the following questions: “How financially independent are you?” and “How financially independent is your brother/sister?”, rated on a 4-point Likert scale (1= Totally dependent on the parents / family of origin; 2= Partially dependent on the family of origin but on an ongoing basis (e.g. monthly financial aid); 3= Occasionally dependent on the family of origin (e.g. with financial help on special occasions or for extra expenses); 4= Totally independent of the family.

### *Satisfaction with life*

The Italian version (Di Fabio & Busoni 2009) of the *Satisfaction with Life Scale* (SWLS) (Diener, Emmons, Larsen, & Griffin 1985) was used to assess global life satisfaction. The SWLS was comprised of five items. Participants were asked to give their answers on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The score of the scale is computed by summing the score of each item. The internal consistency coefficient (Cronbach’s alpha) was .84 for this sample.

### **Data analysis**

In order to explore whether emerging adult twins and siblings close in age (0-3 years) present a normative pattern in reaching residential, work and economic autonomy, three chi square tests were conducted between variable groups (twins and siblings) and three indices of normative patterns for residential, work and economic autonomy. These indices were calculated using the procedure described below.

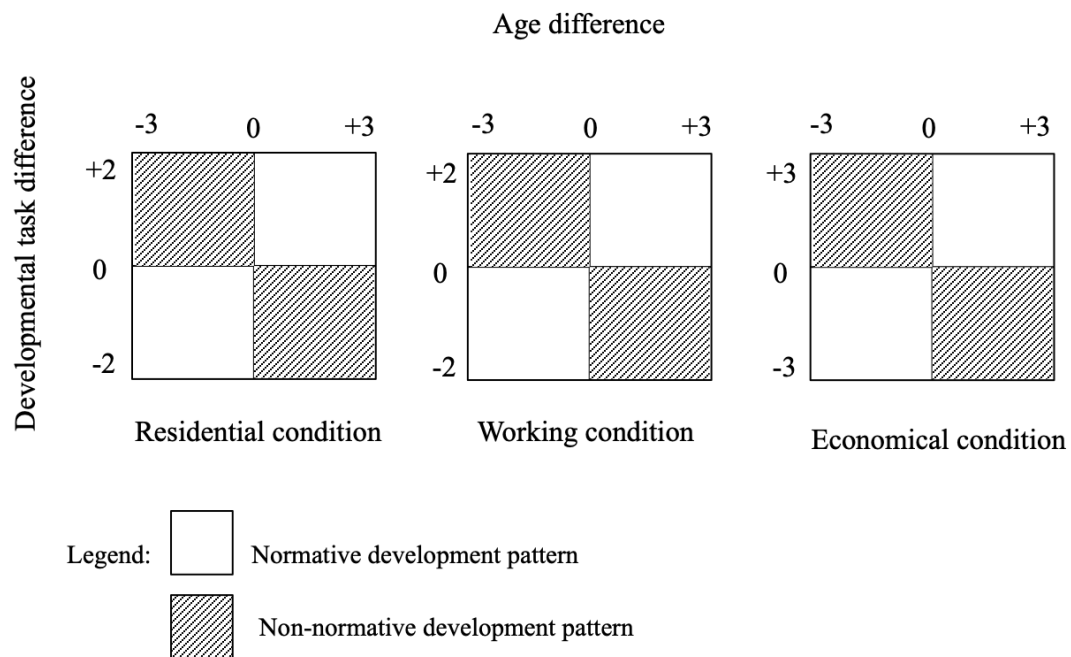
First, we created an age difference variable subtracting the age of the sibling from the age of the respondent, thereby obtaining a continuous variable from -3 (respondent younger than sibling) to +3 (respondent older than sibling), with twin = 0.



Second, we created a developmental task difference variable subtracting the condition of the sibling from the condition of the respondent. We thus obtained a continuous score ranging from -2 to +2 for residential and working conditions and -3 to +3 for economic situation with negative scores referring to the respondent's condition as less autonomous compared to the condition of the sibling, and positive scores referring to the respondent's condition as more autonomous compared to the condition of the sibling, with the same condition = 0. From the crossing of these two variables we collocated participants in conditions of normativity or non-normativity. In other words, we obtained a categorical variable (normative vs. non-normative) in which to place the participants. For example, the normative group for residential condition was composed by: a) participants who, compared to their siblings, presented an age difference range from 1 to +3 (respondent older) and a developmental task difference range from 1 to +2 (respondent's residential condition is more autonomous); b) participants who, compared to sibling, have age difference of 0 (twins) and developmental task difference of 0 (i.e., twins with the same residential condition); c) participants who, compared to their siblings, present an age difference range from -3 to -1 (respondent younger) and a developmental task difference range from -2 to -1 (respondent's residential condition is less autonomous compared to the residential condition of the sibling).

On the contrary, the non-normative group was composed by: a) participants who presented, compared to sibling, an age difference range from -3 to -1 (respondent younger) and a developmental task difference range from +2 to 1 (respondent's residential condition is more autonomous compared to the residential condition of the sibling); b) participants who, compared to sibling, have an age difference of 0 (twins) and developmental task difference other than 0 (i.e., a twin is more or less autonomous compared to the residential condition of the other twin); c) participants who present an age difference range from 1 to +3 (respondent older than sibling) and a developmental task difference range from -1 to -2 (respondent's residential condition is less autonomous compared to the residential condition of the sibling). The same procedure was adopted to place participants for the other two conditions (see Figure 1).





**Figure 1.** Collocation of participants in condition of normativity or non-normativity pattern of development

In particular, the “normative group” is composed by participants with the same age as their siblings (twins) and the same residential/working/economic conditions; or participants older than their siblings and a greater residential/working/economic autonomy; or participants younger than their siblings and a lower residential/working/economic autonomy. The “non-normative group” is composed by participants with the same age as their siblings (twins) and different residential/working/economic conditions; or participants older than their siblings and lower or same residential/working/economic conditions; or participants younger than their siblings and greater or same residential/working/economic conditions. Table 1 reports in italics the distribution of sample in the three conditions.

Moreover, in order to explore whether emerging adult twins and siblings close in age differ in the quality of sibling relationship, a Hotelling’s  $T^2$  multivariate test was carried out by inserting the



sibling condition (twins and siblings) as an independent variable and the three macro-dimensions of the quality of sibling relationship (Warmth, Conflict, and Rivalry) as dependent variables.

To verify whether the dyads of siblings in a normative (or non-normative) pattern differ in the quality of sibling relationship, three Hotelling's  $T^2$  multivariate analyses were conducted for residential, work and economic autonomy, respectively, inserting the normative and non-normative groups as independent variables and the three macro-dimensions of the quality of sibling relationship (Warmth, Conflict, and Rivalry) as dependent variables. Finally, we conducted ANOVA tests to reveal differences in levels of life satisfaction between normative and non-normative dyads.

## Results

Chi square test showed significant differences between twins and siblings for residential ( $\chi^2(1) = 28.89$ ,  $p = .000$ ), working ( $\chi^2(1) = 10.52$ ,  $p = .001$ ) and economic ( $\chi^2(1) = 6.56$ ,  $p = .010$ ) conditions. In particular, twins presented a normative pattern in residential/working/economic conditions more frequently than non-twin siblings. Table 1 reports the frequencies of residential, working and economic conditions, both for twin and non-twin siblings.

**Table 1.** Distribution of normative and non-normative developmental pattern for sibling couple (twins, non-twins, and total) in residential, working, and economic condition

	Normative pattern		Non-normative pattern	
	N	%	N	%
<b>Residential condition</b>				
Twins	27	77.1%	8	22.9%
Non-twins sibling	29	26.4%	81	73.6%
<i>Total</i>	56	38.6%	89	61.4%
<b>Working condition</b>				
Twins	25	71.4%	10	28.6%
Non-twins sibling	44	40.0%	66	60.0%
<i>Total</i>	69	47.6%	76	52.4%
<b>Economic condition</b>				
Twins	22	62.9%	13	37.1%



Non-twins sibling	42	38.2%	68	61.8%
<i>Total</i>	<i>64</i>	<i>44.1%</i>	<i>81</i>	<i>55.9%</i>

The Hotelling's  $T^2$  multivariate test aimed to explore whether the difference in the quality of sibling relationship between twins and siblings was significant ( $T^2 = 51.19$ ,  $p = .000$ ). In particular, subsequent univariate analyses of variance (ANOVAs) for each dependent variable showed that siblings and twins differ only for the Warmth dimension. Specifically, post-hoc Bonferroni-corrected pairwise comparisons revealed that twins reported a relationship characterized by higher levels of warmth than siblings. In table 2 descriptive statistics and ANOVA results are reported.

**Table 2.** Means and standard deviations of the twins and siblings on the level of the quality of sibling relationship

	Twins		Sibling		<i>DF</i>	<i>F</i>	<i>p</i>	$\eta^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Warmth (ASRQ)	102.94	14.41	77.37	20.66	3,141	46.31	.000	.25
Conflict (ASRQ)	24.89	6.13	25.87	8.22	3,141	.428	.514	.00
Rivalry (ASRQ)	9.57	5.30	10.60	6.01	1,143	.821	.366	.01

Referring to the three Hotelling's  $T^2$  multivariate test conducted to explore whether the dyads of siblings in a normative (or non-normative) pattern differ in the quality of sibling relationship, descriptive statistics and ANOVA results are reported in table 3. The first analysis, carried out with groups of residential autonomy (normative and non-normative), showed a significant difference by group ( $T^2 = 9.15$ ,  $p = .032$ ). Subsequent univariate analyses of variance (ANOVAs) for each dependent variable revealed that the only significant difference by group was for the Warmth variable. In particular, post-hoc Bonferroni-corrected pairwise comparisons revealed that the



normative group reports higher levels of warmth in their sibling relationships than the non-normative group.

Moreover, to verify if the dyad of siblings in a normative or non-normative pattern differs in levels of life satisfaction, ANOVA tests revealed no-significant differences by group for residential autonomy ( $F(1, 143) = 1.57, p = .213$ ), working autonomy ( $F(1, 143) = .08, p = .783$ ), and economic autonomy ( $F(1, 143) = .392, p = .532$ ).

[illegible]



Warmth (ASRQ)	86.96	24.65	80.42	19.35	3,141	3.21	.075	.02
Conflict (ASRQ)	25.68	7.68	25.59	7.87	3,141	.005	.945	.00
Rivalry (ASRQ)	9.75	4.76	10.89	6.66	3,141	1.38	.242	.01
Life satisfaction	22.09	7.06	22.37	5.19	1,143	.076	.783	.00
<b>Economic condition</b>								
Warmth (ASRQ)	86.50	22.92	81.21	21.47	3,141	2.05	.155	.01
Conflict (ASRQ)	24.58	6.91	26.63	8.31	3,141	2.14	.146	.02
Rivalry (ASRQ)	8.63	3.38	11.72	6.95	3,141	10.7	.001	.07
Life satisfaction	22.59	6.54	21.95	5.81	1,143	.392	.532	.00

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## Discussion

The present study on sibling relationships during emerging adulthood was based on three main considerations: first, that comparison among siblings may be linked to fraternal relationship quality, especially in close-in-age dyads (Jensen et al., 2018); second, that comparison among siblings affects personal wellbeing (Jensen et al., 2015); third, that sibling relationship quality during emerging adulthood is affected by the combination of both the individual and the sister/brother level of achievement of developmental task (Jensen et al., 2018), taking in consideration birth order and age gap.

Based on previous literature and expanding on Jensen's studies (2015; 2018), we hypothesized that, in dyads close in age, the combination of birth order and both individual and sibling levels of achievement of developmental tasks be related to fraternal relationship quality and personal life satisfaction, *depending on* the normative (or not normative) pattern. In accordance with Arnett (2000), we investigated the three main developmental tasks relating to residential, work, and economic autonomy. Moreover, given that most previous studies on emerging adult siblings (including Jensen's) focused only on non-twin dyads, we chose to include twins in addition to siblings, in order to verify potential differences in results.



In reference to the first two aims, our results showed that twins present a normative pattern in reaching residential, work and economic autonomy more often than siblings close in age, and that twins report a warmer sibling relationship than non-twin siblings. Although it is arguable that the twins, because of the lack of age difference and the amount of time spent together, are in the same life stage (in a normative pattern), it was also reasonable to expect that in non-twin sibling dyads, the older was located in an adult role that the younger one did not have (and *vice versa*) in the same normative pattern. Our results, which partially disconfirm our expectations, can in any case find an explanation. The higher grade of normative pattern among twins, referring to the similarity of life stage and the level of the achievement of developmental tasks, can be linked to the higher levels of warmth in twin compared to non-twin relationships, as our results have highlighted. Higher levels of sibling affection, in line with literature, seem to indicate an extreme closeness that fosters prolonged, mutual dependence (Ainslie, 1985; Penninkilampi-Kerola, Moilanen, & Kaprio, 2005), which can be an obstacle to the building of personal individuality and interfere with individual emancipation from the co-twin (Cuhadaroglu Cetin, Akdemir, & Akgul, 2012). Otherwise it is possible that the higher grade of normative patterns among twins is due to the fact, that, having the same age, they are more prone to be similar in developmental tasks. It is also possible that our results depend on the criteria used for non-normative patterns, given that it includes not only participants older than their siblings and with lower residential/working/economic autonomy conditions (or *vice versa*), but also participants older (or younger) than their siblings and *with the same* residential/working/economic conditions, or participants *with the same* age as their siblings and different residential/ working/ economic conditions. Thus, it is possible that siblings close in age are in the same residential/ working/ economic condition with a “delay syndrome” typical of Italian emerging adults (Livi Bacci, 2008).

The third aim of this study was to analyze if the dyads of siblings in a normative (or non-normative) pattern differ in quality of sibling relationship. Results showed that siblings who live a normative development pattern referring to residential autonomy had a more positive relationship,



characterized by greater levels of warmth, intimacy, affection, support, admiration, and acceptance. On the contrary, non-normativity on economic autonomy is reflected in higher levels of rivalry perceived in the sibling relationship. Overall, our findings confirm the relevant role that the combination of birth order and both the individual and sibling level of developmental task in terms of normativity (or non-normativity) has on sibling relationship quality. Specifically, normativity in residential condition among siblings seems linked with a warm relationship. It is possible that in twin relationships, which, as stated previously, are highly reciprocal and equitable (Mikkelsen et al., 2011; Nozaki et al., 2012), being in the same residential life stage may produce positive connections in terms of affection and warmth. At the same time, in non-twin dyads, the higher residential independence of older compared to younger siblings may allow them to have a more mature and respectful relationship, as revealed in previous studies characterized by high levels of affection (Lindell, Campione-Barr, & Greer, 2014; Whiteman et al., 2011).

A non-normative pattern in economic condition is linked with a higher level of rivalry perceived in the sibling relationship. In other words, if the younger sibling is more economically independent than the older one (and *vice versa*, if the older sibling is more financially dependent from the family of origin than the younger one), this seems to be strictly linked to the level of rivalry. It is interesting that non-normativity is linked to rivalry, but not conflict, among siblings. Rivalry is strictly linked to the perception of higher influence and more privileges obtained in the family (Bedford, Volling, & Avioli, 2000). Given that, as previous stated, rivalry refers to competition between siblings for parent's attention and affection, it is possible that in emerging adulthood the comparison between siblings on financial independence from family could reflect the perception of different parental support for personal life choices. For instance, the family of origin may support the older offspring (*i.e.*, in case of university attendance out of province), sustaining the costs of housing, but not equally sustain the younger one if he or she, moving out of the family home, is working. In this case, the perception of differential treatment by parents may affect rivalry, because it may be experienced as a reflection of parental preferences toward the older sibling, in terms of



expectation and attitudes. In other words, economic independence, during emerging adulthood, could go beyond the monetary aspect, and reflect a deeper aspect of the relationship not only with the sibling but also with the parents. In line with Jensen and colleagues (2017), it must be noted that in adulthood, differences based on parental monetary support are more apparent than parental emotional support. Moreover, offspring are more sensitive to tangible support, such as financial and practical support, than intangible support (Jensen, Whiteman, Rand, & Fingerman, 2017).

Interestingly, no differences have been found in levels of sibling rivalry among non-normative pattern dyads regarding residential autonomy. The different result of rivalry in non-normative pattern dyads regarding residential and financial autonomy may be due to the significance that these developmental tasks assume for Italian emerging adults. In fact, given that, according to Noller (Noller et al., 2008), comparison among siblings leads to rivalry only for activities that are relevant to self-construction, it is arguable that financial autonomy assumes a greater relevance compared to residential. In line with studies showing that Italian culture promotes interdependence and family obligations (Piumatti, Garro, Pipitone & Di Vita, 2016) and encourages young people to remain in the parental home (Inguglia, Ingoglia, Liga, Coco, & Lo Cricchio, 2015), our findings seem to confirm that residential autonomy assumes a lower relevance for Italian emerging adults.

Moreover, no differences emerged in sibling relationships linked to normative patterns of working condition. Although it might be surprising that the normativity of the working condition is not linked with sibling relationships, given the relevance of work autonomy during transition to adulthood, especially in the Italian context, which has the highest level of unemployment in Europe (Schwartz, Tanner & Syed, 2016), it is possible that in the sample analyzed, made up of university students, the working condition is less relevant for a comparison among siblings compared to residential and economic conditions.

Finally, concerning the fourth aim, results did not highlight significant differences in the level of perceived life satisfaction in relation to the normativity or non-normativity with siblings on the level of achievement of developmental tasks. We expected that normativity would be linked to life



satisfaction in line with previous studies on personal wellbeing. However, we did not find confirmation of our hypothesis on life satisfaction. Thus, it is possible to argue that other variables may have a greater impact on life satisfaction, such as the achievement of other self-relevance goals, and / or the quality of intimate and close relationships, including romantic relationships (Ponti & Smorti, 2019).

There are some limitations to the present study. First, we explored the level of achievement of the siblings' developmental tasks by asking the participants about the residential, working and economic situations of their siblings. Despite the fact that these are objective and non-subjective evaluations, it would be desirable to obtain this information from the siblings of the participants.

A second limitation concerns the cross-selection design that does not allow us to fully understand the causal relationship between the presence of a normative or a non-normative pattern development and the quality of sibling relationships. Therefore, it is difficult to know if a warmer sibling relationship can favor greater normativity in the level of achievement of the developmental tasks of emerging adulthood.

Third, we assumed that developmental tasks are a relevant factor for comparison of the personal situation with one's own sister/brother. However, we did not explore the level of self-relevance for each developmental task, meaning we are not able to understand if the non-normativity may occur in non-relevant activity.

Another limitation is that gender influences were not explored. In literature, gender influence is an important moderator for the analysis of sibling relationships. In future research, it would be interesting to analyze this in dyads close in age. In particular, we could investigate the difference in the relationship between sister-sister, brother-brother and sister-brother dyads, to observe whether the general hypothesis is confirmed. Specifically, it would be interesting to analyze whether the effect of a normative pattern on twin and sibling relationships vary in same-gender or different-gender dyads.



Finally, due the small size of the sample of twins, we cannot determine whether normativity or non-normativity conditions differ in twin and non-twin siblings. Considering the specific relationship that characterizes twin siblings, it would be interesting to analyze whether the relationship between normativity and non-normativity is linked differently to the quality of sibling relationship, taking into consideration dyads of twins and non-twins.

Despite these limitations, the present study does expand on prior research on the transition to adulthood, exploring, in a group of emerging adults, the normativity between twins and siblings close in age and the level of achievement of the three main tasks of this age. Moreover, our results highlight interesting differences in the quality of the sibling relationships related to the presence or not of a normative development pattern, especially regarding financial independence, suggesting that these aspects should continue to be studied. The fact that perception of different parental financial support may be linked to the level of sibling rivalry could have a clinical relevance. Given that parental financial support may reflect parental support of an offspring's choices, it is possible that siblings may take on a sibling's identity, in terms of successes and failures, as favored or obstructed by parental attitudes.

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