

## Twins: Similarities, differences and individuality

Garro Maria  
University of Palermo, Italy

Salerno Alessandra  
University of Palermo, Italy

Cirami Federica  
University of Palermo, Italy

### Abstract

*This study aims at investigating the self-differentiating perceptions and the separation-individuation's process in emerging adulthood twins. A group of 40 Italian pairs of twins (21 couples dizygotic-DZ and 19 monozygotic-MZ) aged 20-30 years, were evaluated using the test of graphic projection Family Life Space (DSSVF) and through a specific questionnaire ad hoc constructed for this research. The research hypothesis focuses on Zazzo's test of parallel testimony and gives empirical evidence about the capacity of MZ Twins to use more internal resources of the couple than DZ Twins. This causes the split slowdown on identification. The data show that there are no differences between non-bisexual MZ and DZ couple. Moreover, there is a weaker reciprocal relation in the opposite sex DZ couple than in the others.*

**Keywords:** Monozygotic twins, Dizygotic twins, Separation-individuation process, social interaction, Italy

## **Introduction**

The emotional bond that unites the brothers, is sometimes able to survive over time but it is often complicated and ambivalent; Moreover, this kind of relationship is characterized by intense feelings sometimes in conflict with each other. This factor does not concern only the question about rivalry to winning the affection and attention of their parents, but also because the brothers are important parts of their emotional life (Rustin, 2010). In Addition, this relationship requires special attention in the case of twins, because they are siblings who have shared the uterus and that society persists in identifying two identical beings, underestimating the peculiarities of the individual. Stories, stereotypes, legends have in fact always surrounded the mystery of the twin pairs, as well as expectations of the intentions, magical creations of private languages and fantasies of having another individual self (Bank & Kahn, 1982; Schwiebert, 2005). Therefore, the intense closeness of the twins implies advantages and obstacles. The twin is able whether to provide protection against loneliness and comforting before the developmental tasks (Inspector, 2002), or to affect social relationships due to an excessive twinning that can be characterized by a frequent use of the so-called "twin-language". This issue causes a slowdown in the development of appropriate communication skills, or even a possible delay of identification that it is often encouraged by the attitude of the parents who enhance the identity of the couple (Engel, 1975; Zazzo, 1976; Schave, & Ciriello, 1983; Stanton, Thorpe, Thompson and Danby, 2012). The hyper-adaptation to be considered as twins urges them to understand that the physical separation of the unborn, which is realized at the birth's time, does not coincide with the psychological that can be realized after many years and, in some cases, may not be completed at all (Zazzo, 1960a ).

## **2. Monozygotic, dizygotic and Separation-Individuation process**

Zazzo (1960b, 1987) identified, at an early stage of twins' life, the existence of a state of fusion similar to what is created between the mother-child pair (Mahler, 1968). According to him, in particular, the condition can be detected through the indifference of the child towards incentive outcomes and through the inability to recognize the source of fulfillment of the intimate impulses. Concerning this issue, in the twins' relationship before the ego's affirmation, there is the 'we' affirmation, preceded by a nebula consisting of a universe of needs, desires and sensations, where the individual recognizes badly what "comes from him and what comes from the outside world" (Zazzo, 1960b, 58). A dyad perceived in the childhood, both in the case of the mother-child pair and the twins pair, as all-powerful and able to provide for any need.

However, the strong symmetry presented in the twin relationship is likely to become "the initial symbiosis as a sort of circle, closed in itself" (Zazzo, 1987 18); a merger sometimes destined to live a long time because, as Oliverio Ferraris states (1988), it is likely that the twin lives in a disturbed relationship with their mother, since this relationship is mediated constantly by the presence of the co-twin. Moreover, in this symbiosis "it can be realized a process of projective and introjective identification with the good and bad aspects of the co-twin that is recognized as a source of satisfaction and gratification" (Millet, 1995: 58). Otherwise, it is possible that the child having to acquire the concept of separation from the mother only through a dramatic process, can interpret the presence of the co-twin as a means through which to escape from the psychological birth or as an excuse to prolong the

period of infancy, getting lost in the symbiosis twin (ibid.). The inevitable frustrations that prevail throughout the oedipal period enhance the inter-twin relations, because the proximity of the co-twin, good substitute of parents disappointing, relieves pain and anxiety generated by the process of separation from the parent (Joseph, 1961; Joseph, & Tabor, 1961). Therefore, the self-reference of the twins can create the basis for a closure to the outside world, something of an anomaly in relation to the normal processes of social regulation (Stewart, 2000); a splendid isolation that can incite the protagonists to create a special language called "autonomous" (Luria & Judovich, 1956) or "cryptophasy" (Zazzo, 1960b). It is a kind of secret language without correct syntactic forms and incomprehensible to those that do not belong to the couple (Wallace, 1989). Zazzo (1960b) identifies cryptophasy as a negative effect of the interaction of the twins, as it represents a real threat of closure to the social world. However, it is a form of communication which varies depending on the family structure. In the presence of other siblings, in fact, the twins tend to avoid their isolation (ibid.). Moreover, the family structure is important for those individuals, who belong to a small household, because they are the only beneficiaries of verbal attention of adults and this fact allows them a rapid language development (Oliverio Ferraris, 1988; Haworth, Davis and Plomin, 2012).

Different is the case of the twins, then they "urge" parents to contact them in a less direct way, with a reduced quantity of interactions compared to that realized with a single-born child. In this regard, Sandbank (1994) states that mothers often do not look at the twins in the face, rather they look at a fixed point between the two (ibid., 75). Added to this, there is the custom to leave the twins playing and communicate with each other. Although the twins are not totally isolated from the outside world, this behavior limits their ability to make progress in the use of language, because they learn and repeat each other's mistakes (Zazzo, 1987). This causes the risk of a developmental delay of social language. These dynamics, also, induce to a delayed psychological separation, for example, noticed by the inability of children to distinguish the self from the other (Zazzo, 1987). Thus, the plural form is used in different ways from the singular form that is particularly present in monozygotic twins, due to the strong similarity that cannot stand out from the co-twin. All this contributes to provoke the initial confusion about the twins and to accentuate the feelings of depersonalization that can be experienced even when their relatives and strangers addressing to them use the definition of "twins", avoiding to mention their names, thus remarking the couple-identity. In this regard, Zazzo (1987) claims that this does not exist without a distribution of roles, that is why he defines the twins as "gang in miniature" because of its autonomy. Moreover, referring to von Bracken (1934), Zazzo noted that the two major functions are the "management of private affairs" and the representation of the couple outside. Hence, the heritage of the name "Foreign Ministry" and "Home Office" was originated. It is a division that can remain stable over time or vary with age or circumstances, or even cannot be realized, because both functions are performed by the same twin (Oliverio Ferraris, 1988: 43). Thus, the division of roles allows the twins to fluctuate by a close mutual identification to an exaggerated independence.

Furthermore, it is not so easy to emancipate themselves from their co-twin (Cuhadaroglu, Cetin, Akdemir, & Akgul, 2012). Before that happens, it is necessary that the individual must construct their own mental image through the recognition of the self in the mirror. In the case of the monozygotic, it is not that simple because of the confusion that they make in recognizing their own images vis-a-vis the image of the other. That depends too on

the awareness about one's body schema. For this reason, if one asks a twin to show a specific part of their body, he/she will indicate the corresponding part in the twin's body, because of the physical resemblance. The conquest of one's identity from the so-called "over-couple" (Zazzo, 1977) can also present great obstacles because of parental attitudes translated to the inter-twin and capable of reducing the psychological differences of the parents of the twins. This limit is expressed through the attitude of giving the children similar names or enrolling them at the same class. The parents could be encouraged in the praxis of identification toward using an identical clothing for the twin like uniforms and overalls. This attitude gives features that they do not belong to the individual, filing all sorts of individual differences. The need of a differentiation from the twin can be achieved in a progressive manner. For example, through several attempts of separation, such as the choice of different friends, different models outside the family, in other words, or in simple words through the abandonment of old behaviors. These last possibilities are not provided in the case of low self-confidence. In fact, on the contrary, it can encourage the individual twin hanging on to a shared identity, with the intention of ensuring in the friendship group, for example, a place just like twins (Sandbank, 1994 191-192; Metneki, Domonkos Tarnoki, Tarnoki, Littvay, & Czeizel, 2011). At least, the presence of the co-twin, firstly perceived as a source of security, may appear as dangerous because it can obstruct their change (Oliverio Ferraris, 1988; Luck, Goldner and Knafo, 2010).

### **3. Method**

#### **3.1 Aims and Hypotheses**

The survey refers to the use of parallel testimonies related to the theory of Zazzo, that is, the judgment that the twins formulate on their own pair. Hence, the aim to deepen the knowledge about the process of separation-individuation and attitudes of family members regarding the twins originates. In particular, taking into account zygotic variables, age, sex, and the presence of other siblings, we expect to make greater use of the MZ compared to DZ, internal resources of the couple in according to the literature that identifies the attitude of the parents, the culture of reference, a strong contribution to the reinforcement of the positive aspects of identification in the couple and, at the same time, the risk of choking a natural rivalry (Leonard, 1961, Friedman, 2008).

#### **3.2 Participants**

The study has involved 40 pairs of twins - 21 dizygotic (DZ) and 19 monozygotic (MZ) – from the city of Palermo (Sicily), aged between 20 and 30 years ( $M = 25$ ), with high school and graduated education's level. The same participants have voluntarily taken part in the study and with a guarantee of anonymity.

#### **3.3 Instruments**

In this research, we employed the technique of graphic and symbolic Family Life Space (DSSVF-Mostwin, 1980) and a questionnaire ad hoc constructed for this purpose. The first tool is a projective technique, which is affected by the Lewin's field theory, and is based on the assumption that the behavior of an individual arises from the arrangement of psychologically relevant facts, localized in a living space.

In DSSVF the territory is located in the circle – present at the center of the sheet provided to the subject. It represents the family and the surrounding area. The questionnaire asks to the members of the family (or to the individual, in the cases of individual administration) a) situate themselves; b) place people considered important among relatives, friends and acquaintances, dead or alive; c) mark the institutions and events that have caused particular emotional tension; finally d) specify the type of relationship that exists between themselves and the others, using different types of traits

- » (good)
- » (so so)
- //-----» (poor)
- X-----» (conflicting)

Thus becomes possible to measure the degree of cohesion and consistency within the family, the structural configuration of the family, as well as changes in time with respect to one or more critical events.

In this study, the tool was used to investigate the type of relationship that ties the individual subject with the co-twin, the family and the affective context; in particular about the deliveries expected by the same, referring to the present time. The couple had to answer, using a single sheet of paper on which appeared a single circle (attached design).

The questionnaire was filled out individually by the members of the couple in order to get parallel testimonials (Zazzo, 1987). It consists of 34 open-ended questions through which we have obtained information regarding the family, the nature of the relationships that bind the twins to any other brothers and, again, the habits of the twin pair during the early stages of the life cycle and the current stage of young adults. Therefore, the areas of investigation concern the feelings and the dynamics within the family (relations with parents and any siblings), understanding and experiencing of twins experience (or trends as hyper-twins-relation (ipergemellarizzanti) or de-twins-relation (degemellizzanti), parents' sharing habits, spaces, friendships), current life (chosen course of study, profession, feelings).

### 3.4 Results

The DSSVF was carried out simultaneously by the couple using a single sheet. In most cases (30 subjects) the twin, who began the drawing, has set its own symbol inside the circle. 8 subjects placed themselves on the circumference that delimits the family's area and only 2 drawn outside the circle. In MZ pairs, the first to act has often been the co-twin recognized as "foreign minister". He / she takes the initiative because he / she is sure to enjoy the support of the other, who is generally more thoughtful and rational. In DZ pairs, the females started first, as shown below, it can be a decisive factor in social relations.

Although, only the first delivery had an alternate action, 5 couples have run the entire drawing in this manner because of the left-handedness of the partner. This fact confirms the remarking often common in twins (Zazzo, 1987).

The topological survey, related with significant relations with others (second delivery), shows that the relations converge almost exclusively, for each twin, on three people whose order is progressive: the co-twin, the parents (usually the mother) and the boyfriend, or



in his absence a close friend. In this way, it is obtained the presence of a tetrad which reveals valuable information about the emotional closeness of these people, focusing on the reciprocal influences.

Moreover, it must be underlined that in 19 drawings, each from a different MZ pairs, both twins are present in 7 drawings (37%), half of which scored the co-twin as the first significant person. Otherwise, there are only 10 drawings in which the co-twin does not appear. However, in 21 drawings of the DZ pairs, the pair is present in 7 designs, where the 28% co-twin scored the third important person and 21% as before. In 12 drawings, the co-twin does not appear. Finally, in all graphical representations, it emerges that twin relationship is more favorite than the relation with ordinary siblings, if there are any. In fact, brothers are not always drawn; they appear only in 9 drawings, even though they were 32 couples with siblings. However, the parents, even when dead, were represented and perceived as pin figures. Finally, the brothers are not always considered, a significant role is attributed to pets.

Therefore, in general the data, obtained through the administration of the two instruments, show the existence of a special bond that is not questioned. Even when the attempts are put in place for realizing their independence. In fact, in DSSVF the twins have divided the available space, embellished with diverse symbols to represent the desired elements required by the individual deliveries. However, they stress the uniqueness of their relationship and put in the second floor the relation with ordinary brothers who in many drawings did not find space. In addition, in their responses to the questionnaire arise the ambivalent nature of the Twin union. Indeed, it can be perceived as a source of pride or as a threat to identity development. Regarding to the importance of critical events, it is relevant. When one of the twins fail the school, it is understood as a result of physical separation. In case of parents' divorce, the parent who is considered the "cause" of the separation was not graphically represented. Finally, the death of a family member (parent or grandparent) is considered as well. The positive events are rather travelling, sports awards and weddings.

The represented institutions are school or college, probably because they offer the opportunity to share more experiences. While organizations are proposed in an abundance because they offer opportunities for interpersonal exchange since they are mostly religious, sportive and cultural associations.

We conclude that the type of relationship represented graphically tends to be positive and non-confrontational, probably because the twins have spontaneously given priority to affectively important elements (people, events, etc.).

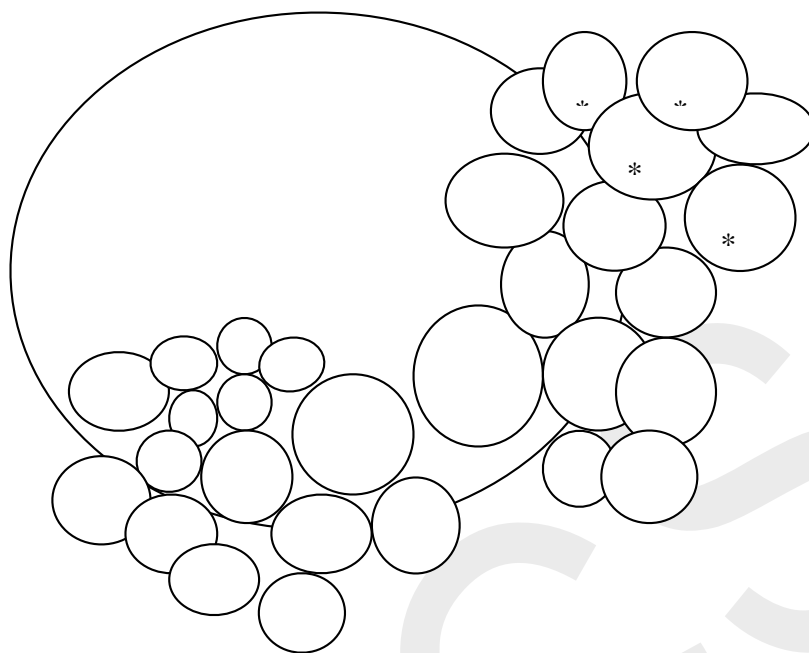


Fig. 1 MZ/MM, 20 years old.

LEGEND- The type of affective nature of the two boys is emphasized by the choice of symbols: all circles to score themselves (in white), the other (numbered) and events (numbers with asterisk). For both, the co-twin was represented as a first important reference (1 dx and sx). The style, centrifugal and dense type, detects the presence of two psychological worlds that share many elements and symbols. This excessive closeness has even prevented the inclusion of the lines which indicate the quality of relationships (for the most part positive) that combines the represented elements. In fact, this is the meaning, for which a legend has been inserted in the original design. It is interesting 'the absence of detectable symbol through which the natural father is depicted. Then, he is identified as a cause of marital separation. The rich and dense nature of the twins' relationship has allowed the achievement of things such as the purchase of the bike (5\*sx) and the machine (4 dx) thanks to the sharing of their savings, or winning sports (Taekwondo) respectively 7 \* sx and 6DX, achieved by mutual emotional support.

Furthermore, at the completion of the questionnaire, it was possible to detect significant trends regarding the issue of family's relationships. Unlike the result of Family Life Space, they relate equal importance attached by the individual subjects to the relationship with the co-twin and one interwoven with another brother (16% MZ and 41% DZ). In addition, in the opinions of those involved parents have adopted the same educational styles without creating differences between the twins and the other children (66% MZ and 58% DZ) Then, in the remaining 34% of MZ and 42% DZ we detect some preferences manifested by their parents or by only one of them, or by the order of ordinary parentage compared to one's brother. Moreover, there is also the possibility that parents have received the twins as self-sufficient, reducing the time of treatment and promoting self-reliance (twins help each other and we almost never asked for help from parents).

A twin said: “unlike my sister, MZ 26 years; I and my sister, are self-managed, establishing the rules between each other and we were very strict if one did not respect them, MZ 23 years old). As if the twins were able automatically to compensate the deficiencies relationship with their parents (Valente Tower, & Testa, 2012).

Finally, some favoritism manifested by the parents against one of the twins is highlighted (Do you think that your parents nurture particular preference for one member of your pair twin?); a given bias, the survey by the actors involved in the survey is attributed partially to the nature or genre of the chosen one (I'm the only female, DZ 30 years).

The area of twins' features refers to the importance attributed to the presence of the co-twin (Surely it is better to have a twin, even if Siamese, because you're never alone, I can count on her without delay, MZ 22 years. There is a very deep complicity: we are sisters but there is also a maternal protective feeling that unites us, MZ 22 years old); However, this kind of relationship can create addiction, as evidenced by some research which shows that MZ female twins are especially not only more dependents but also more submissive to the co-twin in each age group (Trias, 2006). At the same time, in relation to the “ipergemellizante” trend of the parents or of other parties discomfort is expressed, especially in relation to the constant comparisons with each other (58% MZ and 29% DZ), (However, It bothers me because one of us is injured , DZ 23 years, I get angry because my personality is suppressed, MZ 29 years old); On the contrary, only 5% of 17% of MZ and DZ say that they liked the comparison.

So 74% of MZ and 77% DZ tend to stand out, to be themselves, because he/she recognizes the importance of individuality and the weight of excessive physical resemblance (I want to be myself, because I have only recently been liberated from a sense of dependency on her, DZ 24 years old). 19% of MZ and DZ 7%, want to look like the twin only in some aspects such as the character or the performance at the university.

Therefore, from the analysis of the received responses, we understand the tendency of the parents or of the same twins to strengthen the couple's relationship in the past years through the continuous sharing of the bed (42% of 57% of MZ and DZ) or even difficult times (Have you slept in the same crib or bed? Have you attended the same classes or schools? whether yes, until what age?). A bond is reinforced by the choice of parents to enroll them in the same class (79% of 67% of MZ and DZ), to call them by the nickname of "The Twins" or, as is often the case, when fathers (11%) exchange names (Have never exchanged yours names? If yes, who runs into this error?). The names, assigned at birth, play a very important role in the process of “ipergemellizzazione”, capable to empowering the twin's initial confusion or feelings of depersonalization. In fact, 58% of MZ claim to be the victim of such exchange even in adulthood because of their similar names, or phonetic similarity. This is also the basis for the creation of secret language (cryptophasy) in their childhood. It is used by 16% of MZ and 14% of DZ, but just for fun. The limited use of this mode of communication has been dictated by the custom of a more use of the gaze communication whose meaning is more incomprehensible for the outsiders. The gaze of understanding that creates complicity, or a simple gesture or a word that acts as a whole speech (28% MZ).

Some of the features identified in twins (What do you like to do with your sister? And alone? - Before making a decision, is usually to seek the opinion of your sister?) are related to



disadvantageous aspects (It is difficult to have a private life beside a person who knows you so well, MZ 19; with my sister I shared every minute of life, but I'm afraid of posting, 23 DZ; you live in symbiosis and it is difficult to identify yourself within this pair or determine the boundaries, MZ, 26 years). However, there are positive aspects as well (There's a lot of complicity, we understand better each other because we live the same experiences related to our same age, DZ, 24 years).

The answers to the questions provided for the division of roles report that 28% of DZ and 48% of MZ and DZ, actually in the couple, have always held different roles (Over the years we reversed our role .. before I was attacking and he was defender, now we are two midfielders, DZ 29 years old). In particular, in female and male twins' pairs, it is the female that averagely seems to dominate the male, doing simultaneously both functions of the 'foreign minister' and 'the minister of the interior' (she is pure energy, I often thought, 24 years DZ).

The last item of the questionnaire, which invited people to reflect on their status as a twin (How does it feel to have a twin?). The subjects involved in the investigation have unanimously suggested the inability of person born as single to be able to really understand the value and uniqueness of the twin bond (I do not know consciously what I feel. I know only that in one occasion when I lively discuss with my parents which spoke ill of my sister, I said, "Remember he is not my brother. .. is my twin! ", 30 DZ, and 'it was as if I had split and was coming off a person who will take my place when I'm gone, who will replace me when the need arises (such one does not imagine.) If one has the batteries charged, one takes care of the other, so the forces will never be lost, until it's all over, MZ, 22 years).

#### **4. Discussion**

In general, the data obtained through the administration of the two instruments show the existence of a special bond that twins did not question even when the two brothers put in place efforts for the realization of their independence. In fact, in DSSVF, the twins have divided the available space, embellished with diverse symbols to represent the required elements by the individual deliveries. Moreover, in this way, they stress the uniqueness of their relationship and relegate to the second position the ordinary brothers who in many designs did not find space. Then, in their responses to the questionnaire arise the ambivalent nature of the Twin union. Indeed, it can be perceived as a source of pride or as menace to identity development. These are behaviors put in place by monozygotic and by dizygotic's siblings of the same-sex.

The bond that twins created since intrauterine life, where they risk their own safety because of the presence of the other (Voracek, & Haubner, 2008), is sometimes so intense. That provokes the expulsion of an individual identity because of the strong feeling of dependency, complicity and mutual assistance that develops over the years (Watzlawik, & Clodius, 2011). In particular, monozygotic pairs have a very strong couple identity capable of closing to the social space through the use of specific behavioral rules, such as the signs and gestures that come with the intention of not being understood by strangers. The twins strive generally against this situation in adolescence stage in which they keep standing away from the other to emphasize their differences. A path that does not occur without obstacles, because for the achievement of individuality, it is necessary to divide the unification of the pair and

then to find other two separate persons. This ambiguity produces intense feelings, because strict models or extreme ways of relating may restrain the attempt to go beyond the only known way to confront with others and redefine the relationship (Macdonald, 2002). In this sense, it is possible to read the habit of the twins to write down, for example, one inside and the other outside the circle. Supporting the hypothesis of the complementarities of the couple, there is the tendency of married twins to draw themselves within the circle, as if they underline the need to defend the status recognized within the family of origin before the marriage.

Moreover, the choice to place themselves within the circle suggests the desire to recreate the twin dyad. Also, the enveloping circle is perceived as capable of defending against dangers and transmits the need of protection (Cigoli, 1992: 67). In general, the "passive" twin groped to get away from the union of twins. Sometimes, he/she perceives the union as a suffocating "vice". However, it is an attitude that should not be understood as a claim to independence, because if he/she escapes from the twin pair, it is even true that he/she will form another pair with the marriage (Zazzo, 1960).

Therefore, the processes, in which family members, teachers or friends relate to the twins, are crucial. In fact, the help of a good self-definition goes through social interactions, linguistic messages and learning contexts where often unpleasant comparisons take place. That involves incitement to rivalry, sometimes dictated by the twins with the intention to highlight their differences (Benelli, 2011). The twins, physically identical, are not psychologically identical (Zazzo, 1987 IX) ... they are uniquely individual.

## References

- Bank, S., & Kahn, M. D. (1982). *The sibling bond*. New York: Basic Books.
- Benelli, B. (2011). Gemelli si nasce o si diventa?. *Psicologia Contemporanea*, 224, 6-11.
- Cigoli, V. (1992). *L'anziano, la malattia, l'intreccio generazionale*. Milano: Franco Angeli.
- Cuhadaroglu, Cetin F., Akdemir, D., & Akgul, S. (2012). Differential Experiences and Separation-Individuation in Adolescent Twins. *Adolescent Psychiatry*, 2, 52-60. doi: 10.2174/2210676611202010052
- Del Miglio, C.(1995). *Il sè gemellare*. Milano: Borla.
- Engel, G. (1975). The death of a twin: Mourning and anniversary reactions: Fragments of 10 years of self-analysis. *The International Journal of Psychoanalysis*, 56, 23-40.
- Fortuna, K., Goldner, I., Knafo, A. (2010).Twin relationships: A comparison across monozygotic twins, dizygotic twins, and nontwin siblings in early childhood. *Family Science*, 1, 3-4: 205-211.  
doi: 10.1080/19424620.2010.569367.
- Friedman, J.A. (2008). *Emotionally Healthy Twins: a new philosophy for parenting two unique children*. Cambridge:da Capo Press.
- Gilli, G., Greco, O., Regalia, C. & Banzatti, C. (1990). *Il Disegno Simbolico dello Spazio di Vita Familiare*. Milano: Vita e Pensiero.
- Haworth C.M.A., Davis, O.S.P. & Plomin, R. (2012). Twins Early Development Study (TEDS): A Genetically Sensitive Investigation of Cognitive and Behavioral Development From Childhood to Young Adulthood. *Twin Research and Human Genetics*, 16, 1: 117-125. doi: 10.1017/thg.2012.91
- Joseph, ED.(1961).The psychology of twins. *Journal American Psychoanalytic Association*, 9,158-166. doi: 10.1177/000306516100900112
- Joseph, ED, & Tabor, JH. (1961). The simultaneous analysis of a pair of identical twins and the twinning reaction. *The Psychoanalytic Study of the Child*,17, 275-299.
- Leonard, MR. (1961). Problems in identification and ego development in twins. *The Psychoanalytic Study of the Child*,16, 300-20.
- Lurija, A. R., & Judovich, F. Ja.(1956). *Reč i razvitie psichičeskich processov rebënkor*. Mosca: Academia sc. ped. R.S.F.S.R.
- Mahler, M.S. (1968). *On Human Symbiosis and the Vicissitudes of Individuation*. with M. Furer. NY:International Universities Press.

- Macdonald, A. M.(2002). Bereavement in Twin Relationships: An Exploration of Themes from a Study of Twinship. *Twin Research* ,5, 218–226. doi:10.1375/twin.5.3.218
- Metneki, J., Domonkos Tarnoki, A., Tarnoki, D. L., Littvay, L., & Czeizel, A. (2011). Psychosexual Study of Communist Era Hungarian Twins. *Twin Research and Human Genetics*, 14, 144–149. DOI 10.1375/twin.14.2.144. doi:10.1375/twin.14.2.144
- Oliverio Ferraris, A. (1988). *I gemelli. Uguaglianza e diversità di chi nasce insieme*. Firenze: Giunti.
- Pector, E.A. (2002). Twin death and mourning worldwide: a review of the literature. *Twin Research and Human Genetics*, 5, 196–205. doi:10.1375/136905202320227853
- Penninkilampi-Kerola, V. (2005). Co-twin dependence, social interactions, and academic achievement: A population-based study. *Journal of Social and Personal Relationships*, 22, 519-541, doi: 10.1177/0265407505054521
- Rustin, M. (2010). Il ruolo dei fratelli nello sviluppo psicologico. In A. Gibba Marsoni e E. Quagliata, "L'amore tra fratelli, rivalità e gelosia, i gemelli: affrontare le difficoltà". Roma: Astrolabio.
- Sandbank, A. (1994). *Twins and family*. Arrows Books, London (tr.it. Manuale a uso di genitori di gemelli. dalla nascita all'adolescenza e oltre. Milano: Cortina, 2000)
- Schave, B., & Ciriello, J. (1983). *Identity and intimacy in twins*. New York: Praeger.
- Schwiebert, V. L. (2005). Twin Loss: Implications for Counselors Working with Surviving Twins. *Journal of Counseling & Development*, 83, 1, 21–28.
- Siemon, M. (1980). The separation-individuation process in adult twins. *American Journal of Psychotherapy*, 34, 387-400.
- Stanton, S., Thorpe, K., Thompson, C. & Danby, S. (2012). To separate or not to separate? Parental decision-making regarding the separation of twins in the early years of schooling. *Journal of Early Childhood Research*, 10, 2:196-208. doi:10.1177/1476718X11430076.
- Stewart, E.A. (2000). Towards the social analysis of twinship. *The British Journal of Sociology*,51, 719–737. doi:10.1080/00071310020015343
- Trias, T. (2006). Inter-twin and parent-twin relationships and mental health. A study of twins from adolescence to young adulthood. *Acta Universitatis Ouluensis D 893*, retrieved from [www.hercules.ouli.fi](http://www.hercules.ouli.fi).
- Von Bracken, H. (1934). Mutual intimacy in twins. Types of Social structure in pairs of identical and fraternal twins. *Journal of Personality*, 2, 293–309. Article first published online: 28 APR 2006. doi:10.1111/j.1467-6494.1934.tb02106.x

- Valente Torre, L., & Testa, S. (2012). Assessing intelligence in children: A research study on twins using the K-ABC. *Bollettino di Psicologia Applicata*, 263, 3-15.
- Voracek, M., & Haubner, T. (2008). Twin-Singleton Differences in Intelligence: A Meta - Analysis. *Psychological Reports*, 102, 951-962. doi: 10.2466/pr0.102.3.951-962
- Wallace M. (1989). *Le gemelle che non parlavano*. Adelphi, Milano.
- Watzlawik, M., & Clodius, S. (2011). Interpersonal identity development in different groups of siblings: A longitudinal study. *European Psychologist*, 16,43-47. doi:10.1027/1016-9040/a000030
- Zazzo, R. (1960a). *Les Jumeaux, le couple et la personne. Tome première. L'individuation Somatique*. Paris: Universitaires de France.
- Zazzo, R. (1960b). *Les Jumeaux, le couple et la personne. Tome deuxième. L'individuation Psychologique*. Paris: Universitaires de France.
- Zazzo, R. (1976). The twin condition and the couple effects on personality development. *Acta geneticae medicae et gemellologiae*, 25,343-52.
- Zazzo, R. (1977). Image speculaire et image anti-speculaire. Experience su la construction de l'image de soi. *Enfance*, 2, 220-230. doi: org/10.3406/enfan.1977.2644
- Zazzo, R. (1987). (trad. it). *Il paradosso dei gemelli*. La Nuova Italia, Firenze.