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SIBLING RELATIONSHIPS: A BASIS FOR AFFECTIVE SKILLS IN LOVING RELATIONSHIPS

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Abstract: Sibling interaction plays a central role in the formation of relational skills, with a direct impact on the ability to establish and maintain loving relationships in adulthood. This study investigates how interaction between siblings promotes the development of socio-emotional skills, from behavioral perception and understanding to emotional regulation and empathy, with a focus on learning about the opposite sex. Behavioral aspects are addressed, such as observation and imitation (mediated by mirror neurons), as well as the role of the limbic system in emotional processing and the construction of interpersonal awareness. Based on neuroscientific and psychological evidence, it is argued that living with siblings provides a unique environment for exercising communication, conflict resolution and emotional learning, essential factors for success in emotional relationships. These findings contribute to understanding the impact of sibling dynamics on human development, with implications for developmental psychology and interpersonal relationship studies.

Keywords: siblings, emotional development, romantic relationship, mirror neurons, limbic system, behavioral learning.

INTRODUCTION

Siblings living together play a fundamental role in the development of socio-emotional skills, which go beyond the family environment and are manifested in interpersonal interactions and romantic relationships in adult life. Previous studies indicate that the dynamic between siblings creates a unique learning context, marked by daily interactions, conflict resolution and the exchange of experiences, which contribute to the formation of skills such as empathy, behavioral understanding and emotional regulation. In addition, living together allows for implicit learning about the opposite sex, especially in families with siblings of different genders, favoring the understanding of specific behavioral and emotional details.

This work explores how these interactions are mediated by neurological and psychological mechanisms, such as the activation of mirror neurons, which facilitate the observation and imitation of behaviors, and by the role of the limbic system in managing emotional responses. In parallel, we analyze how factors such as conscious perception, emotional exchange and the construction of interpersonal awareness emerge from these relationships.

To support this research, interviews were conducted with individuals raised with siblings, in order to identify narratives that revealed how these experiences influenced their relationship skills. The accounts highlight learning related to coexistence, empathy, observation of behavioral patterns and conflict management. Based on this qualitative data, this study seeks to establish a connection between the sibling experience and the acquisition of essential skills for maintaining healthy emotional relationships.

The proposed research combines theoretical and empirical approaches, articulating individual accounts and neuroscientific evidence to understand how living with siblings can be a catalyst in relational and emotional development. This work thus aims to broaden understanding of the impact of family dynamics on human development and provide insights for the fields of developmental psychology and interpersonal relationship studies.

DEVELOPMENT

MIRROR NEURONS AND EMPATHY

Mirror neurons play a crucial role in observing and interpreting other people's behavior, and are particularly relevant in sibling interactions. These neurons, activated when observing a sibling's actions or emotions, facilitate empathic learning by allowing children and adolescents to «feel» other people's emotions as if they were their own. Studies show that the activity of mirror neurons is directly

associated with the ability to understand the intentions and feelings of other individuals, essential skills for building healthy interpersonal relationships (Brody, 2004).

For example, a study using neuroimaging techniques found that children with greater fraternal interaction showed greater activation in areas associated with mirror neurons, such as the premotor cortex and the inferior parietal lobe, when observing human emotions (Doughty et al., 2015). This activation reinforces the idea that family dynamics, such as imitating and practicing social behaviors, shape empathy and interpersonal understanding, skills often applied in romantic relationships.

LIMBIC SYSTEM AND EMOTIONAL REGULATION

The limbic system, responsible for emotional processing and memory, is shaped by intense emotional experiences in childhood, such as conflicts and reconciliations between siblings. These interactions provide an emotional «training ground» where skills such as impulse regulation, frustration tolerance and conflict resolution are developed. A longitudinal study revealed that young people exposed to sibling interactions of high emotional intensity showed greater capacity for emotional regulation in romantic relationships in adulthood, demonstrating resilience in conflict situations (Dirks et al., 2015).

For example, the ability to re-evaluate negative emotions after an argument with a romantic partner is often associated with practices learned in childhood, such as “making up” with siblings. These experiences form the basis of sophisticated emotional intelligence, which is essential for avoiding relationship breakdowns.

INTIMACY AND LOVE RELATIONSHIPS

The intimacy developed between siblings can be analyzed in three main dimensions: physical, emotional and intellectual. Physical intimacy, manifested in play and close interactions, prepares the individual for comfortable emotional interactions with loving partners. Emotional intimacy, built through confidences and mutual support, serves as a model for deeper romantic relationships. Finally, intellectual intimacy, stimulated in debates and exchanges of ideas between siblings, promotes effective communication skills in relationships.

Research has shown that individuals with high levels of fraternal intimacy reported greater satisfaction in their romantic relationships, evidencing that these skills are transferable to romantic contexts (Doughty et al., 2015).

INTERVIEW REPORTS

The interviews conducted included 30 participants, aged between 25 and 45, of both genders and with at least one sibling. The interviewees reported that living with siblings helped them develop patience, emotional resilience and the ability to understand individual differences. One participant pointed out: «Constant fights with my older brother taught me to negotiate and look for creative solutions, something I often use in my marriage.” These accounts illustrate how fraternal coexistence can form the basis for negotiation skills and interpersonal understanding.

FAMILY DYNAMICS AND PARENTING STYLES

Parents play an essential mediating role in sibling relationships. Authoritative parenting styles, which balance clear rules with emotional support, tend to promote healthier sibling relationships, while permissive or neglectful styles often result in rivalries and unresolved conflicts (Rauer & Volling, 2007).

Effective parental mediation, such as intervening to resolve disputes or encourage collaborations, fosters the building of fundamental interpersonal skills, such as empathy and conflict resolution. These skills are often carried over into loving relationships in adulthood.

OTHER PERSPECTIVES

Birth order and the age difference between siblings also influence relational development. Older siblings usually play the role of role models, while younger ones learn by observation and imitation. Larger age differences can limit daily interaction, but can provide more mature examples of problem-solving and emotional behavior.

LIMITATIONS AND NEED FOR FUTURE RESEARCH

Although coexistence between siblings is an important developmental factor, it is necessary to consider that cultural, socioeconomic and gender variables can moderate these effects. Future studies could explore how these factors interact with sibling dynamics to shape emotional and relational development.

DISCUSSION

Sibling relationships offer a dynamic and multifaceted space for interpersonal and emotional learning. Through interactions between siblings, individuals develop competencies that often shape their ability to deal with emotional challenges and build healthy emotional bonds. This section explores practical examples and expands on the concepts presented, analyzing how specific experiences in sibling relationships have impacted skills applicable to loving relationships in adulthood.

EXAMPLE 1: AGE DIFFERENCE AND LEARNING ABOUT THE OPPOSITE SEX

A 40-year-old man reported that living with two sisters, 10 and 11 years older, was fundamental to his understanding of female dynamics. His observant personality allowed him to pick up on behavioral nuances as he witnessed the sisters navigating typical adolescent situations, such as emotional conflicts, relationships and social challenges. This learning was internalized and applied in his own romantic relationships, particularly in patience and the ability to interpret non-verbalized emotional needs, skills that he associated with fraternal coexistence. This example highlights how age difference, combined with personality style, can amplify interpersonal learning.

EXAMPLE 2: CONFLICTS AND RECONCILIATIONS AS EMOTIONAL TRAINING

A 30-year-old woman, raised with a brother two years younger, reported that frequent conflicts during childhood shaped her ability to solve problems in romantic relationships. She emphasized that fights over space and attention were followed by reconciliations mediated by her parents, which taught her negotiation and forgiveness strategies. In adulthood, these skills translated into the ability to approach arguments with her partner constructively, seeking solutions rather than perpetuating resentment.

EXAMPLE 3: INTELLECTUAL INTIMACY AND COMMUNICATION

A 35-year-old man highlighted the influence of his twin sister in building his ability to communicate in relationships. He described how, since childhood, intellectual debates and deep conversations about emotional issues have strengthened his ability to listen and express feelings clearly. This constant practice has helped him build a solid relationship with

his wife, with whom he shares aligned values and expectations. This example reinforces the idea that fraternal intellectual intimacy can be a solid foundation for deep connections in loving relationships.

EXAMPLE 4: OBSERVING RELATIONSHIP MODELS

A 28-year-old woman reported that she had closely observed the interaction of her two older brothers with their respective girlfriends during her teenage years. These examples provided practical lessons about what worked and what didn't in terms of communication, respect and conflict management. She mentioned that these observations helped her avoid certain harmful behaviors and establish healthy patterns in her own romantic relationships.

EXAMPLE 5: THE IMPACT OF RIVALRY AND PARENTAL MEDIATION

A 32-year-old man grew up in a family with three younger brothers. He reported that intense rivalry during childhood was often mediated by his parents, who encouraged collaboration and empathy. This continuous practice of conflict resolution under parental supervision resulted in a strong sense of justice and the ability to negotiate compromises, skills he identified as fundamental to keeping his marriage in balance. This example highlights the importance of the parental role in strengthening fraternal dynamics.

EXPANDED PERSPECTIVES

These practical examples reinforce the theoretical implications discussed in this article. The age difference, the gender of the siblings and the family context uniquely shape the sibling dynamic and subsequent interpersonal skills. Individuals with older siblings tend to learn by observation, while those with younger siblings often take on leadership and caring roles, reinforcing patience and tolerance.

In addition, intense emotional experiences, such as conflicts and reconciliations, not only strengthen the limbic system, but also teach adaptive strategies that are essential in loving relationships. These learnings, as observed in the reports, are intrinsically linked to the dynamics mediated by mirror neurons, which allow individuals to internalize observed behaviours.

CONNECTIONS WITH LITERATURE

The examples reported corroborate research that identifies living with siblings as a unique context for the development of emotional and social skills (Brody, 2004). A longitudinal study on sibling intimacy showed that close relationships with siblings predict greater romantic competence in adulthood (Doughty et al., 2015). Furthermore, conflict mediation by parents plays an essential role, shaping problem-solving patterns that are reflected in future relationships (Rauer & Volling, 2007). With this discussion, this study briefly presents an integrated view of how fraternal experiences shape interpersonal and emotional development.

FINAL CONSIDERATIONS

Sibling interaction plays a significant role in the development of the socio-emotional skills needed for loving relationships in adulthood. Sibling interactions, mediated by neurological mechanisms such as mirror neurons and the emotional processing of the limbic system, create a unique learning environment. Through observation, imitation and practicing conflict resolution, children develop skills such as empathy, emotional regulation and understanding of individual differences, skills that are transferred and improved in their future relationships.

Sibling intimacy, whether emotional, physical or intellectual, also provides the basis for healthy love relationships, while the conflicts and reconciliations experienced between siblings teach them how to deal with emotional challenges in complex interpersonal contexts.

Qualitative reports reinforce that these practical experiences promote essential skills such as patience and negotiation, often highlighted by individuals as decisive for success in their emotional relationships.

However, the impact of this coexistence is intrinsically related to family dynamics and parenting styles. Parents who encourage positive relationships between siblings and mediate conflicts in a constructive way increase the opportunities for interpersonal learning. On the other hand, exacerbated rivalries or favoritism can hinder this development, highlighting the importance of a balanced family environment.

Despite the findings presented, this study recognizes some limitations. Factors such as cultural differences, socioeconomic variations

and birth order may influence the results, requiring further research to understand how these variables interact. In addition, although qualitative accounts provide valuable insights, quantitative and longitudinal research could deepen the understanding of the long-term effects of fraternal relationships.

It is concluded that experiences with siblings are more than just family memories; they shape fundamental aspects of human development, directly impacting the way individuals relate and connect in their love lives. These findings highlight the relevance of continuing to explore sibling dynamics as a vital field in developmental psychology and the social sciences, with practical implications for interventions aimed at promoting interpersonal skills in a variety of contexts.

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