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The attachment-forming effects of the first sexual relationship

Consequences of dissolution of the first sexual relationship in light of attachment theory

Introduction

Attachment theory is founded on the premise that early mother-infant relations provide a matrix for an individual's future relationships with other persons. While this thesis is now universally accepted, it seemed revolutionary in the 1940s and 1950s, in the face of the prevailing psychoanalytical paradigm represented by Melanie Klein, Anna Freud, and others who did not appreciate the significance of external reality in personality formation.

Research into attachment was initiated by John Bowlby, who was inspired by ethological studies concerning parental behaviors in mammals. The point of departure for his theory was observation of children separated from their mothers, who had difficulties bonding with a new caregiver. Obstacles to the formation of affectionate and happy relationships by children separated from the mother-figure were corroborated by Bowlby's student, Mary Ainsworth, who found that such children develop an insecure (avoidant or anxious-ambivalent) attachment style. This is important in that attachment styles are relatively stable, persist in adulthood, and become activated primarily in close (e.g., romantic) relationships (Hazan, Shaver, 1987).

Thus, attachment styles, which are largely shaped by the parents, determine the quality of romantic relationships. An individual who had a close and warm relationship with his or her parents is likely to seek a committed romantic relationship with a member of the opposite sex (Hazan, Shaver, 1987; Manlove, Wildsmith, Ikramullah, Terry-Humen, Schelar, 2012; Farahani, Cleland, Mehryar, 2011; Mmari, Kaggwa, Wagman, Gray, Wawer, Nalugoda, 2013). On the other hand, a satisfying romantic relationship may also to some degree compensate for attachment-related problems stemming from childhood. Naomi Moller, Christopher

McCarthy, and Rachel Fouladi (2002) examined earned attachment security and its relationship to coping resources and stress symptoms among college students following relationship breakup. Individuals reporting an insecure childhood attachment but current attachment security were found to be similar on measures of current distress and resources for coping to those with both current and childhood attachment security.

According to Cindy Hazan and Philip Shaver, there are many similarities between relationships with the mother-figure and with a romantic partner: the same neurohormonal mechanisms are responsible for emotional and behavioral dynamics, the types of individual differences observed in mother-infant relationships are akin to those found in romantic ones, and individual differences in the attachment behaviors of adults reflect their expectations and beliefs (pertaining to themselves and to intimate relationships) arising from their history of attachment experience (Hazan, Shaver, 1994).

Bowlby demonstrated the importance of the mother-infant relationship by examining the consequences of its disruption, which manifest themselves in disturbed responses, especially in the closest relationships. "Amongst these responses and processes and amongst forms of disturbance are, on the one hand, a tendency to make excessive demands on others and to be anxious and angry when they are not met, such as is present in dependent and hysterical personalities; and, on the other, a blockage in the capacity to make deep relationships" (Bowlby, 2007, p. 17).

In this paper, it is assumed that since the termination of the first close relationship with one's caregiver (usually mother) hampers the formation of a close attachment to other people, then perhaps also the dissolution of a significant romantic relationship may hinder the creation of a subsequent relationship. It is noteworthy that to date there have been no academic reports concerning the implications of dissolution of the first significant romantic relationship for the longevity of the next one. Thus, the question arises: do the factors which hinder the future formation of relations by a child following maternal separation may play a similar role in romantic relationships? In other words, does the breakup of the first significant romantic relationship create an obstacle preventing the formation of a new one?

Research shows that while matrimony remains one of the main goals in life among young people, the actual number of marriages has been on the decline. Therefore, future research should empirically verify to what extent this tendency results from prior emotional wounds or from the fact of having been abandoned (cheated, disappointed) by a previous partner. If this were the case, the "blockage in the capacity to make deep relationships" mentioned by Bowlby in reference to the mother-infant relationship would also be applicable to individuals disappointed by

their first romantic partner. To date, there have been no reports on the subject in the literature.

First, we need to precisely define "the first significant romantic relationship," as opposed to, e.g., a childish infatuation. In the context of attachment theory, of particular importance are sensitivity and stability in mother-child relations, providing a sense of security in the event of distress. Ainsworth enumerates three functions of attachment relations: proximity maintenance, safe haven, and secure base. "This transference pattern corresponds to the attachment development stages discussed by Ainsworth. Obviously, the best object would be a person fulfilling these three functions at the same time (Fraley, Shaver 2008; Fraley et al. 2013)" (Plopa, 2008, p. 103). The above three elements also figure prominently in romantic attachment. Thus, the first significant romantic relationship can be characterized as one that is stable and offers a previously unknown sense of warmth and openness in relations with a partner perceived as providing protection and support (Mikulincer, Shaver, 2007).

An additional and important aspect of a romantic attachment is sexuality. "Love between man and woman in adult life differs from that between parents and children in that in an adult dyad both partners have a potentially similar status and power, and may be both objects of attachment and form attachments. Also the aspect of sex appeal comes into play. Thus, love between adults involves integration of attachment, care, and sexuality" (Plopa, 2008, p. 110). According to Mieczysław Plopa, "in the literature there are few works drawing on the idea of Hazan and Shaver on the role of the sexual behavioral system in the formation of close bonds in adult couples" (Plopa, 2008, p. 109).

In the mother-child relationship, biological factors are of paramount importance. While the mother can be replaced by another caregiver, it is common knowledge that caregivers are not usually attached to the child to the same degree as the biological mother. Indeed, the mother is attached to her child by a strong, biologically conditioned bond and maternal instinct. Also the child is equipped with a certain biological capacity involving the triggering of behaviors meant to induce close contacts with the parents (especially the mother) to enhance bonding.

These instinctive biological behaviors in mother-child relations are paralleled by romantic relationships, in which they are associated with sexuality. Thus, the question arises as to the significance of sexual intimacy, and especially the first sexual contact, in bonding between the partners. Does the dissolution of the first sexual relationship, similarly as in the case of maternal separation, hinder the formation of a new relationship? This paper addresses these issues with the aim of providing some preliminary answers.

The publications quoted in this work indicate that the more sexual partners an individual has had, the more difficult it is to successfully build a lasting romantic

relationship, especially in the case of women. This seems to support the attachment-forming effect of the first sexual relationship. Furthermore, other authors report negative psychological consequences caused by the breakup of a romantic relationship. Analysis of the association between mother-infant attachment and the first sexual relationship shows that both are strongly rooted in biology (drives). Therefore, the focus is on elucidating the effects of maternal and sexual drives, respectively, on relationship durability, as well as determining the implications of the imprinting process. Finally, the significance of touch in both types of relationships is discussed on the basis of, inter alia, Bowlby's observations and Harlow's classic study into primate development. All the evidence presented supports the hypothesis that the first sexual relation has an attachment-forming effect.

1. Negative consequences of dissolution of the first romantic relationship

Bowlby noted on many occasions that the termination of the mother-infant relationship gives rise to negative emotional states in the child involving protest, despair, depression, and general anxiety. Interestingly, it appears that individuals who have experienced a breakup with their romantic partner exhibit many similar symptoms. In what follows, I present the results of research demonstrating the adverse consequences of such a breakup. However, it should be borne in mind that many of the referenced studies did not ascertain whether the investigated romantic relationships were accompanied by sexual intimacy, and if so, whether they involved the first sexual intercourse.

Galena Rhoades, Scott Stanley and Howard Markman (2011) examined the impact of unmarried relationship breakup on psychological distress and life satisfaction among unmarried 18–35 year olds, of whom 36.5% had one or more breakups over a 20-month period. Experiencing a breakup was associated with an increase in psychological distress and a decline in life satisfaction. Similar results were reported by Miyashita Toshie and Saito Junko (2002) who examined adolescents' feelings and behaviors in the aftermath of the dissolution of a romantic relationship.

Experiences of trauma and depression resulting from romantic breakups were reported by Paul Boelen and Albert Reijntjes (2009), who examined negative cognitions in emotional problems following such events. The results showed that catastrophic misinterpretations about one's own reactions, global negative beliefs about the self, and cognitions reflecting self-blame were the strongest cognitive consequences of a breakup. This is consistent with the studies showing that posttraumatic stress symptoms and poor psychological well-being follow relationship dissolution (Chung, Hunt, 2014).

With respect to the subject matter of this paper, it should be noted that the pattern of attachment behavior described by Ainsworth is also valid for relationship breakups. For instance, Tara Collins and Omri Gillath (2012) investigated the connection between attachment styles and breakup strategies. Attachment anxiety was linked to strategies meant to keep open the option of getting back together, while attachment avoidance was linked to less direct breakup strategies. These results are in line with the work of Robert Weisskirch and Raquel Delevi (2012), who showed that attachment avoidance is associated with increased likelihood of technology use in relationship dissolution (Weisskirch, Delevi, 2012). In turn, Scott Madey and Lori Jilek (2012) found that more secure attachment was correlated with less apprehension about seeing the ex-partner, less blame assigned to the partner for breaking up, a lower likelihood of getting back into the relationship, and a readiness to start dating again.

Some studies suggest that the consequences of a breakup (as measured by the feeling of insecurity) are more severe for women than men. In a study conducted by Ann Ruvolo, Lisa Fabin, and Catherine Ruvolo (2001) individuals from 301 dating couples each rated their attachment characteristics. Five months later, 184 women and 138 men reported whether their relationships were intact or broken up and rated their attachment characteristics again. The results revealed that women became less secure after a breakup and more secure in the case of staying together. This indicates that maintaining a romantic relationship has a greater effect on the sense of security in women than in men.

2. Breakup with a sexual partner and difficulties with creating a new romantic relationship

Observed the behavior of children in orphanages and hospitals in the 1940s and 1950s, Bowlby was astonished by the fact that not everybody made the connection between a child's pain and the absence of the mother-figure. He noted that "at that time there was no agreement about the significance or relevance of these observations. Some challenged their validity; others recognised that the responses occurred but attributed them to almost anything but loss of mother-figure; yet others conceded that loss was a relevant variable but held that to mitigate its effects was not too difficult and that loss was therefore of less consequence for pathology than we supposed" (Bowlby, 2007, p. 17).

Living in the twenty-first century, many of us may be appalled at that lack of appreciation of what is now common knowledge. However, it seems that today the same may pertain to the significance of sexuality, and in particular the consequences of a breakup of the first sexual relationship. Indeed, previous sexual relationships are rarely mentioned among the causes of depression or reluctance to marry.

In the literature, there are no data concerning the consequences of dissolution of the first sexual relation. Nevertheless, some studies indicate that more previous partners made it more difficult to maintain subsequent romantic relationships. Hanna Liberska and Dorota Suwalska (2011) showed that the more romantic relations an individual has had in the past, the lower their satisfaction with the current relation. While Liberska and Suwalska did not specify how many of the romantic partners mentioned in the study were also sexual partners, in Western culture romantic relations are frequently accompanied by sexual intimacy, and so it may be safely assumed that this was often the case.

In turn, Amanda Maddox, Galena Rhoades, Elizabeth Allen, Scott Stanley, and Howard Markman (2013), who specifically focused on sexual relationships, evaluated predictors of extradyadic sexual involvement in a study group consisting of 933 unmarried individuals. Future extradyadic sexual involvement was significantly predicted by more previous sex partners.

There is a considerable body of research concerning cohabitation, which is living together in a sexually intimate relationship. Thus, from the methodological standpoint, reports on cohabitation concern romantic relationships with sexual involvement. The results consistently show that individuals who have cohabited with a greater number of partners prior to marriage enjoy lower marital satisfaction (Holman, Birch, Carroll, Doxey, Larson, Linford, 2001; Janicka, 2011; Rhoades, Stanley, Markman, 2009). For instance, Jay Teachman (2003) found that women who have had less romantic partners are at lower risk of marital dissolution.

The above-mentioned results concern people who maintain a sexually intimate relationship and cohabit. However, many individuals are sexually involved even though they do not live with their partners. In particular, this is true of couples living apart together (LAT), that is, those who share sexual intimacy but reside at separate addresses.

Studies into human sexuality rarely give a separate treatment of couples who did not engage in premarital sex because they decided to wait until marriage. In Western culture, it is almost automatically assumed that dating couples who are planning their life together become sexually intimate after some time. Often the absence of premarital intercourse is not even considered an option. In contrast, Asian attitudes to human sexuality are very different, and so research devoted to populations in that part of the world typically controls for the sexual status of romantic relationships. For example Farideh Farahani, John Cleland, and Amir Mehryar (2011) studied premarital heterosexual relationships in Tehran on a group of 1,378 unmarried female college students with a mean age of 21. The results revealed that 52% had never had a boyfriend, 23% had had some form of sexual contact, while only 10% had had intercourse. The above study shows how rare premarital sex may be in non-Western cultures, especially among women.

Furthermore, it should be borne in mind that in some countries (especially those which adopted sharia law) such intercourse is punishable, even by death. Therefore, any references made to romantic relationships in other cultures should account for different approaches to sexuality.

In the Western literature, an exception to the rule is the work of Dean Busby, Jason Carroll, and Brian Willoughby who formulated the following research question: Is it better to test sexual compatibility as early as possible or show sexual restraint so that other areas of the relationship can develop? They explored this question on a sample of 2,035 married individuals by examining how soon they became sexually involved as a couple and how that timing was related to their current sexual quality, relationship communication, and satisfaction. It was found that sexual restraint was associated with better relationship outcomes, even when controlling for education, the number of sexual partners, religiosity, and relationship duration. The latest study by the same authors used a sample of 10,932 individuals in unmarried romantic relationships to test how four sexual-timing patterns (having sex prior to dating, initiating sex on the first date or shortly after, having sex after a few weeks of dating, sexual abstinence) were associated with relationship satisfaction, stability and communication in a dating relationship (Willoughby, Carroll, Busby, 2014). The authors reported that "waiting to initiate sexual intimacy in unmarried relationships was generally associated with positive outcomes. This effect was strongly moderated by relationship length, with individuals who reported early sexual initiation reporting lower outcomes in relationships of longer than two years" (Willoughby, Carroll, Busby, 2014, p. 52).

There is a growing body of research devoted to the great numbers of young, well-educated people who are reluctant to enter into a close romantic relationship and get married despite the fact that they often define marriage as one of their major goals in life, which seems to be a widespread trend in Western countries. Attachment theory makes their behavior more readily understandable: people who were deeply wounded by a previous romantic partner are not likely to trust another easily. This behavior corresponds to that of a child reunited with his or her mother after a period spent in a residential nursery: "on the one hand, 'an intense clinging to the mother' which can continue for weeks, months or years; on the other, 'a rejection of the mother as a love object, which may be temporary or permanent" (Bowlby, 2007, p. 17).

In accordance with attachment theory, after a certain period of time following maternal separation, children eventually initiate attachment behavior with respect to another person (caregiver, nurse, doctor). Nevertheless, in an institutional setting these adults have to care for many children, being unable to fully meet their emotional needs, and they also may rotate. Thus, even if some attachment behavior is initiated, it soon ends. According to Bowlby, in such situations children suffer again,

although the suffering gradually becomes less intense as their attachment to subsequent caregivers is weaker.

A similar mechanism, hampering openness to a new relationship, may be present in adults who have experienced dissolution of romantic relations. In addition, those adults often get involved with individuals who were similarly wounded in the sphere of romantic attachment. Thus, there is a risk that even if they sincerely and earnestly engage in a new relationship, they may be taken advantage of by their partners, especially if the latter are given to flirting.

3. The significance of touch in attachment theory

Physical contact is of paramount importance in developing mother-child attachment.

In psychology, it was long thought that the child's attachment to the mother is founded on the fact that she provides for his or her basic needs, such as hunger, thirst, and pain avoidance. In his classical experiments involving maternally separated baby monkeys, Harry Harlow showed that one of such needs is contact comfort (children have a fundamental need for contact with something soft and comfortable). In his experiments, baby monkeys would rather cling to a surrogate cloth mother rather than one made of bare wire mesh, even though it was the latter that provided nourishment. In one experimental setup, immediately after nursing on the wire mother baby monkeys ran to the cloth mother, and generally spent with her far more time. Harlow also reported that monkeys which were able to make bodily contact with their own, biological mothers developed best. In turn, monkeys raised only on the wire mother (and thus unable to enjoy soft contact) exhibited developmental abnormalities. In the case of humans, the adverse consequences of touch deprivation for psychomotor development were reported, inter alia, by Rene Spitz.

Some children placed in orphanages and foster care, many of whom are affected by a disrupted attachment process, exhibit "emotional stickiness" manifesting itself in an excessive and non-selective tendency to make physical contact with other people. Such children are inclined to embrace persons with whom they are not closely connected emotionally. In turn, children with a secure attachment style are reluctant to make contact with strangers; they tend to embrace only their significant others with touch fulfilling a bonding role. Thus, a similar mechanism may be hypothesized to occur in adults who have experienced numerous erotic relationships. While such individuals do not shun sexually-related behaviors (from innocent touch to sexual intercourse), those behaviors probably do not carry attachment implications for them.

On the threshold of sexual life, people who intend to build a warm and supportive sexual relationship are at risk of abuse: they take sexual behaviors very seriously and tend to attribute the same attitude to others, in accordance with the defense mechanism of projection. However, what one partner regards as significant may be only treated as a simple response to an attractive stimulus by the other. For instance, the sight of an attractive woman may provoke a man to touch her as a prelude to subsequent sexual behaviors devoid of the higher feelings of affiliation, love, and respect. Extreme cases of such behavior have been depicted in literature in the characters of "fatal" men or women – very attractive and appealing people who have no intention to commit to a long-term relationship or marriage. They are uninhibited in their seductive or erotic behaviors, but at the same time do not provide any sense of security and soon leave their partners to initiate a new relationship.

The question arises as to the meaning of touch for people in a romantic relationship. According to Hazan and Shaver, it signifies mutual support. Similarly as it is the case in child-mother relations, in a situation of distress partners seek touch, whether of affectionate (as between mother and child) or sexual nature.

The fact that touch may be either affectionate or sexual (or somewhere in between), gives rise to a number of methodological issues as it is difficult to determine at which point an affectionate relationship turns into a sexual one. For the sake of simplicity, it is often assumed that sexual relations are defined by the presence of intercourse, but in many cases other forms of intimate activity seem to be equally intense. Therefore, speaking of the first sexual experiences, we usually have in mind those which were accompanied by strong emotions, either disagreeable pleasurable, which lead to significant memories. What is meant here is sexual experiences which produced new conditioned responses by associating certain situations with emotions and related physiological reactions.

In sexual contacts (especially the initial ones), of great importance is to what extent the partners are psychologically invested in the relationship and to what extent they treat it merely as an opportunity to release sexual tension. Kazimierz Imieliński defined several qualitative levels of sexual satisfaction, in which the first one corresponds to release of sexual tension, while the highest one transcends this need. "A sexual contact is an experience which enriches a human being and imparts a previously unknown meaning. The reduction of a sexual need is of secondary importance. This presents a paradox: erotic love develops on the basis of a sexual need and intensifies it, requiring the release of sexual tension. At the same time, the nature of this phenomenon is different: the presence of the lover and the pleasure of contact with him or her are stronger than, e.g., the lack of release of sexual tension" (Imieliński, 1985, p. 34-35).

The fact that sexuality may have an attachment-forming effect has been noted in many works in the field of sexology, also in light of the evolutionary perspective. One of the objectives of evolution is to bring partners together with a view to initiating sexual activity, and finally conception, ensuring the survival of the species. However, in the case of many species, including Homo sapiens, reproductive success does not merely imply producing progeny, but also making sure that the progeny will reach sexual maturity, which is more likely if strong bonds exist between the parents, and not only between the parents and children.

4. The instinctive background of mother-child and sexual relations

Imprinting

Konrad Lorenz, the Austrian zoologist and ornithologist, provided a detailed account of imprinting, a process of learning a species-specific behavioral pattern at a particular life stage (a critical period which lasts only several hours in some species). Lorenz famously described imprinting in graylag geese; however, the mechanism is common to nidifugous birds and gregarious mammals (especially those following the mother). Imprinting is a special type of conditioning which also seems relevant to many kinds of mother-child and romantic bonds.

While typical imprinting does not occur in humans, some of its constituent elements can be identified. Kazimierz Imieliński defined sexual imprinting separately for animals and humans: he main difference between the former and latter type of sexual imprinting is that in the former of importance is the critical segment on the coordinate axis of the first strong sexual experience (Imieliński 1985). However, given the fact that in humans the first sexual experiences in a partner relationship usually fall on early maturity and that the body of observations for humans is scant, it is difficult to ascertain whether and to what extent these imprinting mechanisms differ (Imieliński, 1985). It is also noteworthy that 30 years after that publication the issue of sexual imprinting in humans has yet to be elucidated.

According to Imieliński, in animals the biological imperative requires that sexual activity be carried out during a particular period, while in humans it implies fast and very effective learning in situations characterized by very strong tension and emotional experience. According to him, this can explain the fact that we sometimes observe a lifespan preference for the type of sexual partner resembling the partner of the first erotic experience or a preference for certain situational elements that accompanied that experience (Imieliński, 1985).

In analysis of sexual imprinting, of particular note are two issues: one concerns a preference for those sexual stimuli that were present in the first sexual experience. According to the most eminent Polish psychiatrist, Antoni Kępiński,

(1992), the first sexual experiences are more enduring, while the sexual life of a mature person may reflect an imprinting of the earliest erotic experience. "In the sexual life of every person one can easily detect some consistently repeating patterns, which implies that in search of the new, one retraces the old paths. New partners often resemble previous ones, especially from one's youth; the same words and tricks are used in courtship, and also one's behavior during intercourse itself follows a certain stereotype. Thus, in sexual life, one seeks a future being attached to the past, perhaps to a greater extent than in other spheres of life" (Kępiński, 1992, p. 32).

The other important issue is whether and to what extent humans exhibit the "following behavior," typical of animals. If the first sexual contacts are akin to imprinting, then they should trigger a response of following. The question arises as to how this response would manifest itself in humans. It seems that in addition to the aforementioned preferences for stimuli resembling the first sexual experiences, it would involve longing for the first sexual partner and the desire to be with him or her. Such behaviors would imply that the first sexual relation is a unique event in the life of an individual. This appears to be corroborated by a longitudinal study of Abigail Haydon, Amy Herring, and Carolyn Halpern (2014). Longitudinal consistency, who found that people remembered the exact time and place of their first sexual intercourse. Furthermore, Nancy Kalish reported that relationships with "old flames" reestablished after years of separation were relatively enduring (more so than average relationships) when such reunions involved people who had been romantically involved during adolescence or early adulthood, before the age of 30 (Kalish, 2005). Kalish attributed that finding to the fact that those couples shared past history, but it is also likely that those relationships were successful because they involved the first significant romantic relations both in the sexual sphere (the first intercourse) and in the emotional sphere (closeness, affection), which could be elucidated through further research.

It should be noted that certain feelings, such as longing, cannot be fully subsumed under the notion of imprinting; they rather accompany the latter. Moreover, they are more typical of women rather than men. Nevertheless, the issue of sexual imprinting in humans (and its role in forming an attachment to the first sexual partner) still remains unexplored.

References:

Alexander, M., Garda, L., Kanade, S., Jeebhoy, S., Ganatra, B. (2006). Romance and sex: Pre-marital partnership formation among women and men. *Reproductive Health Matters*, 14 (28), pp. 144-155.

Barkan, S. (2006). Religiosity and premarital sex in adulthood. *Journal for the Scientific Study of Religion*, 3 (45), pp. 407-417.

Bowlby J. (2007). Przywiązanie. Warszawa: Wydawnictwo Naukowe PWN.

- Busby, D., Carroll, J., Willoughby, B. (2011). Compatibility or restraint? The effects of sexual timing on marriage relationship. *Journal of Marriage Psychology*, 24, pp. 744-766.
- Bermudez, M., Buela-Casal, G., Teva, I. (2011). Type of sexual contact and precoital sexual experience in Spanish adolescents. *Universitas Psychologica*, 2 (10), pp. 411-421.
- Boelen, P., Reijntjes, A. (2009). Negative cognitions in emotional problems following romantic relationship break-ups, Stress and Health. *Journal of the International Society for the Investigation of Stress*, 1 (25), pp. 11-19.
- Borusiak, L. (2013). Love, sex, and partnership. Russian Social Science Review, 1 (54), pp. 4-39.
- Brassard, A., Peloquin, K., Dupuy, E., Wright, J., Shaver, P. (2012). Romantic attachment insecurity predicts dissatisfaction in couples seeking marital therapy. *Journal of Sex and Marital Therapy*, 3 (38), pp. 245-262.
- Chung, M., Hunt, L. (2014). Posttraumatic stress symptoms and well-being following relationship dissolution: Past trauma, alexithymia, suppression. *Psychiatric Quarterly*, 2 (85), pp. 176-198.
- Capitaine, M., Rodgers, R., Chabrol, H. (2011). Unwanted sexual experiences, depressive symptoms and disordered eating among college students. *Eating Behaviors*, 1(12), pp. 86-89.
- Cohen, L., Shotland, R. (1996). Timing of first sexual intercourse in a relationship: expactations, experiences, and perceptions of others. *The Journal of Sex Research*, 4(33), pp. 291-299.
- Collins, T., Gillath, O. (2012). Attachment, breakup strategies, and associated outcomes: The effects of security enhancement on the selection of breakup strategies. *Journal of Research in Personality*, 46, pp. 210-222.
- Farahani, F., Cleland J., Mehryar A. (2011). Female college students in Tehran. *International Perspectives on Sexual & Reproductive Health*, 1 (37), pp. 30-39.
- Gapik, L. (1984). Psychospołeczne aspekty zachowania seksualnego, (w:) Seksuologia społeczna, K. Imieliński (red.), (s. 270-312), Warszawa: Państwowe Wydawnictwo Naukowe.
- Haydon, A., Herring, A., Halpern, C. (2014). Longitudinal consistency in self-reported age of first vaginal intercourse among young adults. *Journal of Sex Research*, 1 (51), pp. 97-106.
- Hazan, C., Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, pp. 511-524.
- Hazan, C., Shaver, P. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5, pp. 1-22.

- Holman, T., Birch, P., Carroll, J., Doxey, C., Larson, J., Linford, S. (2001). *Premarital prediction of marital quality and breakup. Research theory and practice*. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Imieliński, K. (1985). *Człowiek i seks*. Warszawa: Instytut Wydawniczy Związków Zawodowych.
- Imieliński, K. (1986). Zarys seksuologii i seksiatrii. Warszawa: Państwowy Zakład Wydawnictw Lekarskich.
- Janicka, I. (2011). Satisfaction with marriage in the case of prenuptially cohabitating and non-cohabitating couples, (w:) H. Liberska (red.), Relations in marriage and family: Genesis, Quality and Development (s. 51-65). Bydgoszcz: Wydawnictwo UKW.
- Juroszek, W. (2011). Psychologiczne konsekwencje przedmałżeńskiego współżycia seksualnego. Kwartalnik Naukowy Fides et Ratio, 3(7), s. 17-27.
- Juroszek, W. (2012). Seksualność a przywiązanie. Family Forum, 2, s. 117-128.
- Kalish, N. (2005). Lost & found lovers: Facts and fantasies of rekindled romances. Lincoln: iUniverse.
- Kępiński, A. (1992). Z psychopatologii życia seksualnego. Kraków: Wydawnictwo Sagittarius.
- Krzysteczko, H. (2000). *Pomoc w dojrzewaniu do miłości, małżeństwa i rodziny*. Katowice: Wydawnictwo Powiernik Rodzin.
- Liberska, H., Suwalska, D. (2011). Znaczenie przywiązania dla funkcjonowania młodych dorosłych w związkach intymnych, (w:) H. Liberska, A. Malina (red.), Wybrane problemy współczesnych małżeństw i rodzin. (s. 69-86), Warszawa: Difin.
- Madey, S., Jilek, L. (2012). Attachment style and dissolution romantic relationships: Breaking up is hard to do, or is it? *Individual Differences Research*, 4 (10), pp. 202-210.
- Maddox, S., Rhoades, G., Allen, E., Stanley, S., Markman, H. (2013). Predictors of extradyadic sexual involvement in unmarried opposite-sex relationships. *Journal of Sex Research*, 6 (50), pp. 598-610.
- Manlove, J., Wildsmith, E., Ikramullah, E., Terry-Humen, E., Schelar, E. (2012). Family environments and the relationship context of first adolescence sex: Correlates of first sex in a casual versus steady relationship. *Social Science Research*, 4 (41), pp. 861-875.
- Mikulincer, M., Shaver P. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Mmari, K., Kaggwa, E., Wagman, J., Gray, R., Wawer, M., Nalugoda, F. (2013). Risk and protective correlates of young women's first sexual experiences in Rakai, Uganda. *International Perspectives on Sexual & Reproductive Health*, 3 (39), pp. 153-162.
- Moller, N., McCarthy, C., Fouladi, R. (2002). Earned attachment security: Its relationship to coping resouces and stress symptoms among college students

- following relationship breakup. *Journal of College Student Development*, 2 (43), pp. 213-230.
- Plopa, M. (2008). *Psychologia rodziny. Teoria i badania*. Kraków: Oficyna Wydawnicza Impuls.
- Regnerus, M. (2012). Mating market dynamics, sex-ratio imbalances and their consequences. *Society*, 6 (49), pp. 500-506.
- Rhoades, G., Stanley, S., Markman, J. (2009). Pre-engagement cohabitation and gender asymmetry in marital commitment. *Journal of Family Psychology*, 4 (20), pp. 553-560.
- Rhoades, G., Kamp, D., Atkins, D., Stanley, S., Markman, H. (2011). Breaking up is hard to do: The impact of unmarried relationship dissolution on mental health and life satisfaction. *Journal of Family Psychology*, 25, pp. 366-374.
- Ruvolo, A., Fabin, L. Ruvolo, C. (2001). Relationship experiences and change in attachment characteristics of young adults: The role of relationship breakups and conflict avoidance, *Personal Relationships*, 3 (8), pp. 265-281.
- Santhya, K., Acharya, R., Jejeebhoy, S., Ram, U. (2011). Timing of first sex before marriage and its correlates; evidence from India. *Culture, Sex and Sexuality*, 3 (13), pp. 327-341.
- Sprecher, S. (2013). Attachment style and sexual permissiveness: The moderating role of gender. *Personality and Individual Differences*, 4 (55), pp. 428-432.
- Stein, J., Golding, J., Siegel, J., Burman, M., Sorenson, S. (1988). *Long-term psychological sequence of child sexual abuse*, In: G. Wyatt, G. Powell (eds), *Lasting effects of sexual abuse*. London: Sage Publications.
- Toshie, M., Junku, S. (2002). *Adolescent's feeling and behaviors after the dissolution of romantic relationships and availability to response*. Bulletin of Joetsu University of Education, nr 1 (22), pp. 231-245.
- Weisskirch, R., Delevi, R. (2012). *Technology use, attachment styles and gender roles in relationship dissolution*. Cyberpsychology, Behavior, and Social Networking, 9 (15), pp. 486-490.
- Willoughby, B., Carroll. J., Busby, D. (2014). Differing relationships outcomes when sex happens before, on or after fir first dates. *Journal of Sex Research*, 51, pp. 52-61.