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Running head: FEARFUL-AVOIDANT ATTACHMENT AND SEXUALITY

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#### Abstract

In this study, we investigated sexual outcomes in individuals presenting fearful-avoidant attachment, that is, those who have both high avoidant and anxious attachment tendencies (reluctant to engage in a close relationship and a dire need to be loved by others). A community sample of men and women (N = 600; 25–45 years) completed self-reported questionnaires related to attachment, sexuality, and control variables. Results showed that fearful avoidance is predictive of (a) more sexual partners in individuals during their lifetime and (b) greater sexual compliance. These effects were true for women as well as for men.

Keywords: attachment, avoidance, anxiety, fearful avoidance, sexuality

Fearful-Avoidant Attachment: A Specific Impact on Sexuality?

Attachment is a central feature of the regulation of emotions in romantic relationships (Feeney & Noller, 1990; Shaver & Mikulincer, 2002a). Sexuality, as one of the relational aspects implicated in intimacy and emotions in a couple relationship, is closely related to attachment (Birnbaum, Mikulincer, Szepsenwol, Shaver, & Mizrahi, 2014; Stefanou & McCabe, 2012). The goal of the study presented in this paper was to assess the extent to which fearful avoidance, an attachment tendency related to especially pronounced difficulties in the regulation of interpersonal emotions, is specifically related to negative sexual outcomes.

In his seminal work on human ties, Bowlby (1969, 1979) proposed considering attachment as a primary motivational system in humans, operating as early as infancy, the goal of which is to ensure protection against danger. When facing internal (e.g., physical discomfort or intense emotional arousal) or external "danger" (e.g., an unknown person), the child behaves toward her or his caregivers (such as by crying or increasing proximity) in such a way as to gain protection and regulate the negative emotions (such as fear or pain) associated with the perceived danger. As studies have shown (see Ainsworth, Bell, & Stayton, 1974; Ainsworth, Blehar, Waters, & Wall, 1978), interindividual differences may be observed as early as infancy in the way that attachment needs are experienced and expressed as a consequence of differences in the type of protection and reassurance the child receives from the caregivers. Although controversy remains as to whether these differences are stable at an intraindividual level during development, they may be observed at an interindividual level in adulthood and are described as "attachment tendencies," which vary along two dimensions: avoidance, related to discomfort with closeness, and anxiety, related to fear of rejection or desire for extreme closeness (Bartholomew & Horowitz, 1991; Feeney, 1994; Hazan & Shaver, 1987; Mikulincer & Shaver, 2016). Individuals low on the avoidance and anxiety

dimensions have "secure" tendencies, meaning that they are at ease with close and intimate relationships. On the other hand, individuals who are notably high on the avoidance dimension as a result of a felt insecurity in interpersonal relationships tend not to show their relational needs and not to trust others; they deactivate their attachment system so that their interpersonal needs are denied. Individuals who are notably high on the anxiety dimension tend to be on a permanent search for reassurance; they are in a state of persistent insecurity and, consequently, they hyperactivate the attachment system in order to increase the probability of being close to others (Hazan & Shaver, 1994; Mikulincer & Shaver, 2007; Shaver & Mikulincer, 2002a). Gender differences have often been mentioned in attachment tendencies; according to a meta-analysis of 100 studies, men show greater avoidant tendencies than women do at all ages, as well as lower anxiety tendencies, in particular during young adulthood (Del Giudice, 2011).

In romantic relationships, several relational negative consequences have been described for individuals with either high avoidance or high anxiety tendencies, that is, insecurity associated with close relationships: chronic marital dissatisfaction, higher rate of separation and divorce (especially in highly avoidant individuals), or, in contrast, difficulty in leaving a relationship even in a highly degraded situation (in highly anxious individuals; Banse, 2004; Birnbaum, Orr, Mikulincer, & Florian, 1997; Feeney, 1999, 2002; Mikulincer & Shaver, 2004; Shaver, Schachner, & Mikulincer, 2005). Sexuality has also been shown to be influenced by attachment tendencies (Davis, Shaver, & Vernon, 2004; Dunkley, Dang, Chang, & Gorzalka, 2016; Favez & Tissot, 2017), in addition to other factors, among which age (a decrease in sexual activities with aging) and relational status (being single or in a committed relationship) are prominent (Call, Sprecher, & Schwartz, 1995; Christopher & Kisler, 2004; Karraker, DeLamater, & Schwartz, 2011; Rao & DeMaris, 1995).

In individuals with secure tendencies, sexuality is indeed integrated in a pattern of positive representations in relating to others. As a consequence, secure individuals enjoy sexual activities and the intimacy associated with these activities (Butzer & Campbell, 2008; Feeney, Peterson, Gallois, & Terry, 2000; Rogers, Bidwell, & Wilson, 2005; Schachner & Shaver, 2004). On the other hand, insecurity is associated with several negative sexual outcomes: In particular, insecure individuals report lower sexual satisfaction, less sexual desire, fewer sexual activities, greater sexual promiscuity, and greater sexual compliance that is, they engage in sexual activities with a partner when they are solicited to do so, although they do not feel sexual desire (Davis et al., 2006; Gentzler & Kerns, 2004; Gillath & Schachner, 2006). More specifically, in individuals with high avoidant tendencies, sexuality is disconnected from emotions because these individuals try to avoid relational closeness to others. As a consequence, sexual activities may be accomplished without affection and tenderness (Beaulieu-Pelletier, Philippe, Lecours, & Couture, 2011; Bartholomew, Henderson, & Dutton, 2001); sexuality may even be completely avoided (Brassard, Shaver, & Lussier, 2007; Paul, McManus, & Hayes, 2000). In individuals with high anxiety tendencies, sexuality is used in the service of relational issues rather than being realized for itself. Highly anxious women thus tend to use sexuality to increase closeness to others, even in the absence of sexual desire, in order to ensure that they will not be rejected (Allen & Baucom; Birnbaum, Reis, Mikulincer, Gillath, & Orpaz, 2006; Impett & Peplau, 2002). On the other hand, highly anxious men tend to withdraw from dyadic sexuality, as they do not want to risk facing refusal of their solicitations (see Cooper et al., 2006, for a review on gender differences in sexual behavior in anxiously attached individuals).

According to theoretical models, avoidance and anxiety are orthogonal dimensions; four different combinations of low and high tendencies can thus be defined (Bartholomew & Horowitz, 1991; Shaver & Mikulincer, 2002a). Empirically, however, most individuals

(around 85-90%) are characterized according to the three combinations mentioned: low on both avoidance and anxiety dimensions, or high on only one of them; these combinations have also been referred to in the literature as attachment styles from a typological perspective (in this regard, the distribution of romantic attachment styles mirrors the distribution of attachment styles described in infancy and adulthood; Feeney & Noller, 1990; Hazan & Shaver, 1987). Because of its relative rarity, the fourth combination has attracted less interest, that is, being high on both avoidance and anxiety dimensions; studies have shown, however, that, from a clinical point of view, it is this configuration that presents the most psychological and relational risks and thus warrants scrutiny.

Studies on infancy and childhood first described situations in which a child, when facing stress, reacts with apparently incoherent behaviors that may be understood as simultaneous and contradictory anxiety and avoidance motivations; the child may show seemingly aimless behaviors, or is either overtly afraid of or aggressive toward the attachment figure (Solomon & George, 1999). This pattern of behaviors has been labeled "disorganized" attachment; it was hypothesized to derive from traumatic relational experiences with the attachment figure, as a consequence of which the child is constantly caught between deactivation (as the attachment figure cannot be a source of reassurance) and hyperactivation (the presence of the "frightening" figure constantly triggers attachment needs) of the attachment system (Lyons-Ruth & Jacobvitz, 2008). In adults, this configuration of both high avoidance and anxiety tendencies has been labeled fearful avoidance (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2016), a pattern in which individuals are reluctant to get close to others and at the same time have a strong desire to be close to them. Although there are theoretical controversies related to the specificity of this pattern (Shaver & Mikulincer, 2002b; Simpson & Rholes, 2002), results of empirical studies converge to show that individuals with such tendencies have the most severe form of difficulties in regulating

emotions in interpersonal relationships. Among relational outcomes, they have a more negative perception of others' support (Forsythe, Romano, Jensen, & Thorn, 2012; Reis, Curtis, & Reid, 2012) and less commitment and satisfaction in a couple relationship (Banse, 2004; Bookwala & Zdaniuk, 1998; Lowyck, Luyten, Demyttenaere, & Corveleyn, 2008; Pistole & Vocaturo, 1999); they are also more likely to show violence in their couple relationships (Bookwala, 2002; Kesner & McKenry, 1998). Moreover, fearful avoidance or disorganization has also been shown to be linked with borderline personality disorders or dissociative symptoms, both of which have negative consequences for the interpersonal skills of the individual (Carlson, Egeland, & Sroufe, 2009; Dutra, Bureau, Holmes, Lyubchik, & Lyons-Ruth, 2009).

To date, fearful avoidance has been far less studied than have separate avoidant or anxious tendencies regarding sexuality; as a consequence, little is known about the sexual functioning of fearful-avoidant individuals. As attachment tendencies are close to personality traits, the disturbances they induce tend to be permanent and generalized—that is, they tend to manifest themselves in any and all close relationships. Given that generalized sexual problems tend to be more treatment resistant (Leiblum & Rosen, 2000), it is all the more important to identify personality characteristics that may explain sexual difficulties.

Moreover, fearful avoidance has been theoretically related to trauma; as psychological trauma is an important predictor of sexual dysfunctions (Heiman & Heard-Davison, 2004; Zoldbrod, 2015), fearful avoidance might be one of the processes through which trauma exerts a permanent effect on the sexual life of the individual. The lack of knowledge on the sexuality of fearful-avoidant individuals calls for studies specifically dedicated to this topic.

The goal of this study was thus to explore the links between fearful avoidance and sexual behaviors, in particular with the main outcomes highlighted by previous studies on insecure attachment and sexuality. To this aim, we conducted a survey in a community

sample of adult women and men and proposed the following hypotheses: a model taking into account fearful avoidance (operationalized as a combination of anxiety and avoidance dimensions) and the dimensions of avoidance and anxiety taken separately will be adjusted to explain sexual outcomes, with in particular a negative association of fearful avoidance with sexual satisfaction, sexual desire, and sexual activities and a positive association with the number of sexual partners and the positive responses to sexual solicitations (H1); a model taking into account only avoidance and anxiety separately will be less adjusted to explain sexual outcomes (H2); and fearful avoidance will be specifically linked with higher sexual compliance among women, whereas it will be linked with lowered sexual activities among men (H3).

#### Method

## Sample

This study was part of a larger study on sexual desire and the couple relationship conducted at the University of [details omitted for double-blind reviewing]. A community sample of 600 participants took part in the study, comprising 300 women (mean age = 36.3 years, SD = 5.7) and 300 men (mean age = 36.0 years, SD = 5.5). Participants were recruited through a polling institute that randomly selected 10,000 addresses from a list of households in [details omitted for double-blind reviewing]. A letter was sent to make first contact and to briefly introduce the study: Specifically, we mentioned that its aim was to investigate the psychological and sociological factors linked to sexual desire and satisfaction. Other information included in the letter were the details of the investigators (names and institution), the details of the polling institute (name and address), the announcement of a phone call to come, and ethical considerations (in particular the engagement in confidentiality). People were then contacted by phone in order to assess whether they met the criteria for this study (25 to 45 years old and a native or fluent French speaker) and whether they were eligible

according to predefined quotas (so that the final sample comprised 50% men and 50% women with comparable ages). The age range was defined for feasibility purposes: We aimed to include individuals who were sexually active and who were likely to live in their own household so that they could be reached by the polling institute. We thus decided to make the lower age limit 25 years and the upper one 45 years, as interindividual variability tends to increase as individuals grow older. Among those who met the defined criteria (N = 3,821), 867 agreed to participate in the study and 600 participated effectively. Of these 600 participants, 246 women and 244 men were engaged in a relationship (150 women and 161 men were married, 96 women and 83 men were cohabiting), and 54 women and 56 men were singles. Participants reported the following sexual experiences: mutual masturbation (85.3% of women, 88.7% of men), receiving oral sex (90.7% and 95.3%, respectively), giving oral sex (90.0% and 94.7%, respectively), vaginal sex (91.3% and 92.0%, respectively), anal sex (59.0% and 60.0%, respectively), and group sex (14.0% and 24.7%, respectively). Their age at first sexual intercourse was 17.3 years for women (SD = 3.0) and 17.7 for men (SD = 3.9).

Participants received [details omitted for double-blind reviewing] compensation for their participation.

## Measures

Romantic attachment. Attachment tendencies were assessed with the Experiences in Close Relationships-Revised questionnaire (ECR-R; Fraley, Waller, & Brennan, 2000; French version: Favez, Tissot, Ghisletta, Golay, & Cairo Notari, 2016). This instrument consists of 36 items that assess the dimensions of anxiety (e.g., "I'm afraid that I will lose my partner's love") and avoidance in adults ("I find it difficult to allow myself to depend on romantic partners"). Participants were asked to rate each item by using 7-point rating scales (1 = strongly disagree to 7 = strongly agree). A total score is obtained for each dimension by computing the mean of the 18 items (some scores have to be reversed, as some items are

worded in the secure direction) related to avoidance ( $\alpha$  = .89 in women, .90 in men) and to anxiety ( $\alpha$  = .90 in women, .85 in men). The higher the scores, the higher avoidance and anxiety. Low scores on both dimensions indicate secure attachment. The ECR-R has shown excellent psychometric properties regarding reliability and regarding content and construct validity (Sibley, Fischer, & Liu, 2005; Sibley & Liu, 2004).

**Sexual satisfaction.** Satisfaction with sexuality was assessed with one dimension of the Multidimensional Sexuality Questionnaire (MSQ; Snell, Fisher, & Walters, 1993). This questionnaire consists of 60 items assessing 12 dimensions on 5-point scales ( $0 = not \ at \ all \ characteristic \ of \ me$  to  $4 = very \ characteristic \ of \ me$ ), with five items per dimension. For our study, we selected the dimension of sexual satisfaction. A score of satisfaction is obtained by computing the mean of the five items ( $\alpha = .90$  in women, .89 in men). The other 11 dimensions are as follows: sexual esteem, sexual motivation, sexual assertiveness, sexual preoccupation, sexual anxiety, sexual depression, fear of sex, internal sexual control, external sexual control, sexual consciousness, and sexual monitoring. The MSQ has shown good reliability and construct validity (Snell et al., 1993).

Sexual desire. Sexual desire was assessed with the Sexual Desire Inventory (SDI; Spector, Carey, & Steinberg, 1996). This instrument consists of 14 items assessing two dimensions on 7- or 8-point scales with varying labels related to frequency (e.g., from 0 = not at all to  $7 = many \ times \ a \ day$ ) and intensity of desire (e.g., from  $0 = not \ desire$  to 8 = strong desire). For our study, we selected the nine items of the dimension of dyadic sexual desire (items related to the desire to have sexual activity with another person; e.g., "How strong is your desire to engage in sexual activity with a partner?"). A score of dyadic sexual desire ranging between 0 and 62 is obtained by summing the items ( $\alpha = .84$  in women, .82 in men). A higher score indicates a higher level of desire. The other dimension is related to solitary

sexual desire. The SDI has received good reliability and construct validity (Spector, 1992; Spector et al., 1996).

Ad hoc questionnaire. An ad hoc questionnaire was created to collect sociodemographic data, including age and relational status and data on sexual habits. Three questions were specifically devoted to sexual behaviors. Participants were asked to rate the frequency with which they have sexual activity with a partner in their current relationship, using a 9-point rating scale from 1 (*never*) to 9 (*more than once a day*), and the way they respond to sexual solicitations, using a 3-point rating scale from 1 (*I often refuse*) to 3 (*I often accept*). Participants who were not currently engaged in a relationship were asked to think of a previous relationship. An open question was used to ask about the number of partners they had during their lifetime.

## Procedure

After the participants were contacted by the polling institute and agreed to participate, an appointment was made at home with an interviewer, who collected the data. Some data pertaining to the larger study were collected through a face-to-face interview, and then the questionnaires were given to the participants to complete by themselves.

This study and its procedure were approved by the Ethical Committee of the Faculty of Psychology and Educational Sciences of the University of [details omitted for double-blind reviewing].

#### Results

## **Descriptive Statistics for the Study Variables**

A full set of descriptive statistics (including mean and standard deviation) was computed for all variables of the study (see Table 1). Mean scores for avoidance and anxiety

were both situated mid-scale; women were significantly more anxious than men, whereas there was no difference between men and women for avoidance.

## - Insert Table 1 about here -

Means for satisfaction and sexual desire trended toward the high end of the scales; men reported significantly higher desire than women did. Regarding sexual behavior, the mean for frequency of dyadic sex was located between "once a week" and "twice a week," the mean for women being significantly higher than the mean for men. The mean number of partners was 11, with no difference between men and women. Finally, men and women tended to positively accept sexual solicitations, acceptance being significantly higher in men.

Correlation analyses were then performed to test the bivariate links between variables. They allowed us to confirm the relevance of variables such as age and relational status as possible predictors of sexual variables. First, age was linked with lower sexual desire in women (r = -.14, p = .016) and with lower frequency of dyadic sexual activities in women (r = -.14, p = .016) and in men (r = -.13, p = .022). Second, regarding relational status, group comparisons (t tests) showed that in women, sexual satisfaction was higher in those in a committed relationship, t(298) = 3.16, p = .002, but the frequency of sexual activities, t(298) = 2.09, p = .037; the positive reactions to sexual solicitations, t(298) = 5.02, p < .001; and the number of partners, t(298) = 2.65, p = .010, were higher in single women. In men, the only difference was higher sexual satisfaction in men in a committed relationship, t(298) = 3.82, p < .001. Given these results, both age and relational status were used as control variables in subsequent analyses.

Zero-order correlations between attachment dimensions and sexual outcomes are presented in Table 2. Avoidance and anxiety were strongly positively correlated. High anxiety and avoidance were both linked with lower sexual satisfaction.

## - Insert Table 2 about here -

Higher avoidance was linked with lower desire, whereas anxiety was not linked with desire. Regarding sexual behaviors, neither attachment dimension was linked with the frequency of sexual activities. On the other hand, the number of partners was positively associated with higher anxiety tendencies, and the response to sexual solicitations was negatively associated with higher avoidance tendencies. These correlations were also computed separately for women and men; the results were the same, with two exceptions: the number of partners was linked with higher anxiety in men only (r = .14, p = .029) and was also linked with higher avoidance in men (r = .13, p = .038), and the response to sexual solicitations was linked with avoidance in women only (r = .14, p = .020).

# Fearful Avoidance as a Predictor of Sexuality

Analysis strategy. We used path analyses to investigate the links between fearful avoidance and sexuality. We specified a model (see Figure 1) with sexuality variables, namely, sexual satisfaction, sexual desire, response to sexual solicitations, frequency of sexual activities, and number of partners over the lifetime as endogenous variables regressed on attachment variables, namely, avoidance, anxiety, and fearful avoidance as exogenous variables. We centered avoidance and anxiety variables and created the fearful-avoidance variable by multiplying these centered variables. Then, in order to rule out any potential multicollinearity problems, we conducted five separate regression analyses with each of the five sexuality variables regressed on anxiety, avoidance, and a cross-product of anxiety and avoidance (i.e., fearful avoidance). Results of these five analyses showed that variance inflation factors for the cross-product of the centered variables of avoidance and anxiety ranged between 1.006 and 1.013, indicating that multicollinearity was not a concern in the analyses. Finally, we added age and current relationship status as covariates to control for their potential influence. Moreover, as gender differences in the links between attachment and

sexuality have been frequently reported, we used multigroup analyses and estimated the parameters separately for men and women. We tested our hypotheses by comparing nested models. All statistical analyses were performed with IBM SPSS 24 software and Mplus version 7. We referred to chi square, comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR) to assess the fit of the models. Models were estimated by using a maximum likelihood estimator.

First hypothesis (H1): Fearful avoidance is linked with sexual outcomes. In this first model (Model 1), the regression weights from fearful avoidance to the five sexuality variables were freely estimated for men and women. The fit indices for Model 1 indicated a good adjustment of the model,  $\chi^2 = 2.527$ , df = 2, p = .283, CFI = .999, SRMR = .009, RMSEA = .030, 90% confidence interval (CI) [.000, .122]. Indeed, the value of the chi square was nonsignificant. Moreover, according to the standard criteria proposed by Hu and Bentler (1999), the value of the CFI (above .95), the SRMR (below.05), and the RMSEA (below .05) all indicated an excellent fit of the model. Estimates show that higher fearful avoidance was linked with a higher number of partners in women ( $\beta = 0.16$ , p = .007) and with more positive responses to sexual solicitations in men ( $\beta = 0.12$ , p = .041).

Second hypothesis (H2): The adjustment of the model is worse without fearful avoidance. In the second model (Model 2), we fixed the regression weights from fearful avoidance to the five sexuality variables to 0 in both men and women. We used a likelihood ratio test to measure the chi-square difference between these models. A nonsignificant difference between models would indicate that Model 2 fit the data as well as Model 1 while being more parsimonious and thus that Model 2 should be preferred. This would indicate that the influence of fearful avoidance on sexuality is trivial.

The fit indices for this Model 2 were  $\chi^2 = 31.922$ , df = 12, p = .001, CFI = .968, SRMR = .026, and RMSEA = .074, 90% CI [.044, .106]. The likelihood ratio test comparing Model 1

and 2 yielded a chi-square difference of  $\chi^2 = 29.395$ , df = 10, p = .001, which indicated that constraining the regression weights of the paths linking fearful avoidance to sexuality to 0 in Model 2 resulted in a significant worsening of the fit of the model. This significant chi-square difference thus indicated that Model 1 should be preferred.

Third hypothesis (H3): There are gender differences in the links between fearful avoidance and sexuality. To test for gender differences, we compared Model 1 to another alternative model (Model 3), in which we fixed equality constraints on the regression weights from fearful avoidance to the five sexuality variables in men and women. Again, we used a likelihood ratio test to measure the chi-square difference between these models. A nonsignificant difference between models would indicate that Model 3 fit the data as well as Model 1 while being more parsimonious and thus that Model 3 should be preferred. This would indicate that the assumption of gender differences in the influence of fearful avoidance on sexuality should be rejected.

Results showed that the fit indices for Model 3 were  $\chi^2 = 8.939$ , df = 7, p = .257, CFI = .997, SRMR = .015, and RMSEA = .034, 90% CI [.000, .081]. The likelihood ratio test comparing Model 1 and 3 resulted in a chi-square difference of  $\chi^2 = 6.412$ , df = 5, p = .268. This nonsignificant chi-square difference thus indicated that Model 3 should be preferred.

# - Insert Table 3 about here -

Concerning parameter estimation (see Table 3), two of the five paths linking fearful avoidance and sexuality turned out to be significant for Model 3: Higher fearful avoidance was linked to a higher number of sexual partners over a lifetime and to a greater tendency to answer positively to sexual solicitations by others. The results also showed a tendency for the influence of fearful avoidance on sexual satisfaction, with higher fearful avoidance linked to

lower sexual satisfaction. Fearful avoidance was more weakly linked to frequency of sexual activities and sexual desire.

## **Discussion**

High avoidant or high anxious attachment tendencies have long been shown to be linked with several negative outcomes in romantic relationships, especially those regarding intimacy and sexuality (Dunkley et al., 2016; Mikulincer & Shaver, 2007, 2016). Although these insecure tendencies have most often been considered separately from each other, a specific pattern of fearful avoidance has been described in individuals who are reluctant to engage in close relationships (similar to avoidant individuals) and who at the same time have a dire need to be in contact with others and to be loved by them (similar to anxious individuals; Simpson & Rholes, 2002). To date, almost no study has specifically examined the link between fearful avoidance and sexuality. We proposed testing three hypotheses in the present study: First, a model taking into account fearful avoidance and the dimensions of avoidance and anxiety taken separately will be adjusted to explain sexual outcomes, with in particular a negative association of fearful avoidance with sexual satisfaction, sexual desire, and sexual activities and a positive association with the number of sexual partners and the positive responses to sexual solicitations; second, examining only avoidance and anxiety separately will lead to less adjusted results; third, fearful avoidance will be specifically linked with higher sexual compliance among women, whereas it will be linked with lowered sexual activities among men.

The results of path analyses confirmed our first hypothesis, although only partially: The model that included fearful avoidance, anxiety, and avoidance was adjusted to explain sexual outcomes and there were specific links between fearful avoidance and outcomes, but they were less numerous than expected. On the other hand, in accordance with our second hypothesis, taking into account only avoidance and anxiety separately led to a less adjusted

model. Finally, whereas gender differences have been described regarding the links between attachment insecurity and sexuality, in particular regarding anxiety (more anxious women tend to have more sexual promiscuity, while more anxious men tend to withdraw from dyadic sexual activities; see Cooper et al., 2006), our third hypothesis regarding gender was refuted. The model considering both genders equally thus showed the best adjustment and allowed us to highlight that higher fearful avoidance is linked with a higher number of partners over a lifetime on the one hand, and with a higher rate of positive response to sexual solicitations on the other. These results thus corroborate the relevance of considering fearful avoidance as a predictor of sexual outcomes. Moreover, they tend to show that fearful avoidance is an attachment tendency of its own, as advocated by others (Simpson & Rholes, 2002), and not only represents "more" avoidance or "more" anxiety; indeed, avoidance, anxiety, and fearful avoidance tended to be predictive of different outcomes (they were predictive of the same outcomes in a few instances only). On the other hand, fearful avoidance was linked with only two of the five outcomes that we assessed; to better understand the process linking fearful avoidance and sexuality, it is necessary to look in more detail at these two outcomes.

A higher number of partners and a higher tendency to respond positively to solicitations are close to the sexual behavior that has been described in more anxious women and have been explained in terms of "anxious compliance," that is, on the one hand, the tendency to use sex to increase proximity to others, and, on the other hand, the reluctance to refuse sexual solicitations out of fear of being rejected by others. In fearful-avoidant individuals, these links may thus be explained by the anxious side of fearful avoidance, although the second effect is more surprising for men; indeed, men have been repeatedly described as being more prone to initiate sex than women are (Baumeister, Catanese & Vohs, 2001), so that less attention has been paid to how men react when they are solicited. More research is needed to investigate the extent to which fearful-avoidant men are reluctant to initiate sexual activities and may stay

in a more "passive" position, waiting to be solicited; this aspect may nevertheless be explained by the avoidant side of fearful avoidance. Our results show thus that, even though fearful avoidance has been globally associated with a tendency to withdraw from social relationships, it may paradoxically be linked to increased sexual activities (even though it seems to be dissociated from sexual satisfaction, as, although only marginally, it is predictive of lower sexual satisfaction) through a specific combination of anxious necessity to be connected to others and the impossibility of feeling at ease in this connection.

An interesting parallel may be drawn between these results and the description that has been made of "out-of-control sexual behaviors," also referred to as "hypersexual behaviors" or "sex addictions." Out-of-control behaviors have been shown to be linked to problems in the regulation of emotions and, in particular, an inappropriate response to negative mood (Bancroft & Vukadinovic, 2004; Baumeister & Heatherton, 1996; Garofalo, Velotti, & Zavattini, 2016). For example, sexual contact may be initiated to meet emotional needs caused by depression or to distract oneself from depression-inducing thoughts. Similarly, the elevated anxiety felt in fearful avoidance may motivate the individual to increase closeness with a partner by using sexual activities, whereas the elevated avoidance tendency may almost simultaneously motivate the individual to break the bond with this partner (this would be specific to fearful avoidance, as anxiety in itself makes breaking up unlikely to happen), which is in turn followed by the search for a new partner. This endless alternation between approach and avoidance may result in apparently out-of-control sexual behaviors. This process is corroborated by previous studies that have shown that insecure attachment is related to a higher probability of compulsive sexual behaviors (Timberlake et al., 2016; Weinstein, Katz, Eberhardt, Cohen, & Lejoyeux, 2015). It is of note that one study took into account a "fearful" attachment style (Gilliland, Blue Star, Hansen, & Carpenter, 2015) but did not report a specific link with out-of-control sexual behaviors. Fearfulness was, however,

measured as a single-item self-reported attachment type and not as a continuous measure, as was the case in our study; this difference in the assessment of attachment may explain why we were able to highlight more detailed results. Finally, it is all the more interesting to note that our results were observed while we controlled for age and relational status; the links between fearful avoidance and sexuality are true, whatever the age or gender of the person.

These results, if they are confirmed by further studies, have clinical implications. As mentioned, trauma is at the core of the disorganized or fearful-avoidant attachment constellation; this may imply that specific sexual outcomes, such as is the case for the number of partners in this study, may indeed be linked with traumatic experiences. Working on "unresolved trauma" may thus be a path to resolve sexual difficulties, even if the trauma is not itself related to sexuality but more generally to relationships with significant others in the close environment. It also means that an individual with an apparent active and busy sexual life may by this means be trying to hide negative emotions and be struggling with them.

Therapies oriented toward attachment needs, such as the Emotionally-Focused Couple
Therapy, may thus be especially indicated to enhance the sexual life of individuals with fearful-avoidant tendencies (Johnson, Lafontaine, & Dalgleish, 2012).

In view of exploring this topic further, the strengths and limitations of the present study need to be mentioned and suggestions made for subsequent research strategies. One of the strengths of this study is that it involved a community sample randomly selected so that a certain external validity of the data was ensured. Regarding the limitations, first, studies with a longitudinal design are warranted to allow a better understanding of the links between attachment tendencies and sexual outcomes, especially to test the possible causal relationship between variables. Second, an important limitation is the fact that the data were exclusively collected through self-reported questionnaires, so that the possibility of bias due to commonmethod variance cannot be excluded. Additional methods such as interviews would allow one

to overcome this limitation, and they will be necessary to explore and understand the sexuality of individuals with fearful-avoidance tendencies in more depth. Finally, a dimensional perspective rather than a categorical one was adopted in this study. The primacy of a categorical versus a dimensional approach and the use of a self-reported questionnaire are hotly debated in the attachment literature; nevertheless, sufficient evidence is available to suggest that the dimensional strategy is relevant (for a review, see Mikulincer & Shaver, 2007). Taking a dimensional perspective has a consequence regarding the way fearful avoidance may be conceptualized: either as "type of personality," meaning that there are fearful-avoidant individuals who are different in nature from other individuals, or as one dimension of personality among others, present in any and all individuals at a more or less pronounced degree. Studies may yield different results, as is the case between the Gilliland et al. study (2015) and our study. Moreover, clinical work will be different if the therapist aims at changing the personality of the patient, or aims at lowering the expression of one dimension while relying on other more functional dimensions of personality (such as flexibility). Further theoretical elaboration and empirical data are, however, still needed to clarify the exact status of fearful avoidance.

In conclusion, this study shows that fearful avoidance is linked with sexual outcomes. These links are specific: Fearful avoidance cannot be understood only as "more avoidance" or "more anxiety," but has to be considered as an attachment working model of its own. More studies are now needed to better understand the processes underlying sexuality in individuals with fearful-avoidant tendencies and the reason that fearful avoidance is linked with the two particular outcomes: number of partners and responses to sexual solicitations.

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Table 1

Means (Standard Deviations) for Study Variables

		All	Women	Men	t-Test	Effect size
Variable	Potential range	(N = 600)	(N = 300)	(N = 300)	(df = 598)	Cohen's d
ECR-R						
Avoidance	1–7	2.6 (0.9)	2.6 (1.0)	2.5 (0.9)	0.92	0.08
Anxiety	1–7	3.2 (1.1)	3.3 (1.2)	3.1 (0.9)	2.43*	0.20
MSQ						
Satisfaction	0–4	3.3 (1.1)	3.3 (1.1)	3.2 (1.0)	1.15	0.09
SDI						
Dyadic desire	0–62	40.4 (9.8)	37.6 (10.2)	43.1 (8.5)	-7.20***	0.59
Sexual behavior						
Frequency of dyadic sex	1–9	5.6 (1.8)	5.8 (1.8)	5.5 (1.8)	2.41*	0.20
Number of partners	-	11.1 (11.1)	10.2 (10.0)	11.8 (12.0)	-1.52 <sup>a</sup>	0.13
Reaction to sexual	1–3	2.8 (0.5)	2.7 (0.6)	2.9 (0.3)	-5.12***	0.42
solicitations						

Note. ECR-R = Experiences in Close Relationships-Revised; MSQ = Multidimensional Sexuality

Questionnaire; SDI = Sexual Desire Inventory.

 $<sup>^{</sup>a}df = 528.$ 

<sup>\*\*\*</sup>*p* < .001. \**p* < .05.

		1	2	3	4	5	6	7
1.	Avoidance							
2.	Anxiety	.412**	_					
3.	Number of partners	.039	.093*	_				
4.	Response to solicitations	122**	.003	.045	_			
5.	Sexual satisfaction	389**	224**	043	.321**			
6.	Sexual desire	201**	023	.130**	.361**	.265**		
7.	Frequency of sexual activities	057	.080	.089*	.304**	.447**	.250**	_

Note. Correlations based on raw scores.

<sup>\*</sup>*p* < .05. \*\**p* < .01.

Table 3  $Regression \ Coefficients \ Linking \ Attachment \ Tendencies \ to \ Sexual \ Outcomes \ for \ Model \ 3 \ (N=600)$ 

	Number of partners		Response to		Sexual sati	Sexual satisfaction		Sexual desire		Frequency of sexual	
			solicitations						activ	ities	
	b	β	b	β	ь	β	b	β	b	β	
Women $(n = 300)$											
Avoidance	1.07	.07	-0.14**	21**	-0.43***	37***	3.10***	30***	-0.17	09	
Anxiety	1.64*	.13*	0.08*	.14*	-0.05	05	1.47**	.17**	0.22*	.14*	
Fearful avoidance	1.62*	.13*	0.04**	.08**	$-0.07^{\dagger}$	07 <sup>†</sup>	-0.06	01	0.11	.07	
Men $(n = 300)$											
Avoidance	-0.22	.00	-0.02	06	-0.41***	38***	-1.64**	18**	-0.25*	13*	
Anxiety	6.21 <sup>†</sup>	.12†	-0.01	04	-0.15*	14*	0.24	.03	0.15	.07	
Fearful avoidance	1.62*	.03*	0.04**	.14**	- $0.07^{\dagger}$	$06^{\dagger}$	-0.06	01	0.11	.05	

<sup>\*\*\*</sup>p < .001. \*\*p < .01. \*p < .05. †p < .10.

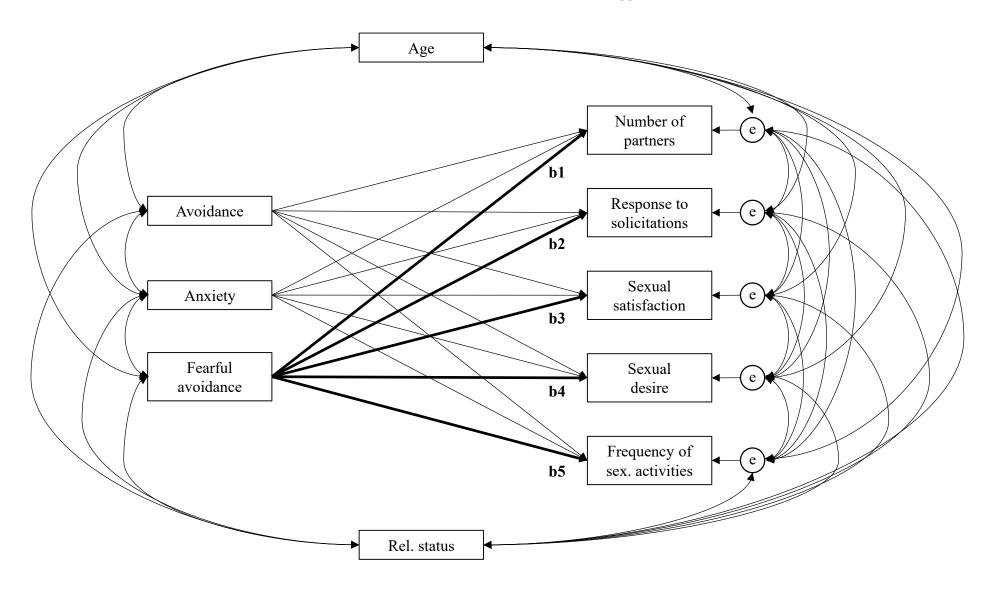


Figure 1. Paths modeling the influence of anxiety, avoidance, and fearful avoidance on sexuality, with age and relational status as control variables. This model was tested separately in two groups: men and women. Nested models: Model 1: All parameters are freely estimated in both men and women. Model 2: b1, b2, b3, b4, and b5 equal 0 in both men and women. All other parameters freely estimated. Model 3: b1, b2, b3, b4, and b5 constrained to be equivalent in men and women. All other parameters freely estimated. Rel. = relational; sex. = sexual.