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Associations between adult attachment style and health risk behaviors in an adult female primary care population

Kym R. Ahrens [a,*], Paul Ciechanowski [b], Wayne Katon [b]

[a] Department of Pediatrics, Seattle Children's Research Institute/University of Washington, Seattle, WA, United States
[b] Department of Psychiatry, University of Washington, Seattle, WA, United States

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ABSTRACT

Objective: To examine the relationship between adult attachment style and health risk behaviors among adult women in a primary care setting.
Methods: In this analysis of a population of women enrolled in a large health maintenance organization (N = 701), we examined the relationship between anxious and avoidant dimensions of adult attachment style and a variety of sexual, substance-related, and other health risk behaviors. After conducting descriptive statistics of the entire population, we determined the relationships between the two attachment dimensions and health behaviors using multiple regression analyses in which we controlled for demographic and socio-economic factors.
Results: After adjustment for covariates, the anxious dimension of attachment style was significantly associated with increased odds of self-report of having sex without knowing a partner's history, having multiple (≥2) male partners in the past year, and history of having a sexually transmitted infection (ORs [95% CIs] = 1.11 [1.03, 1.20], 1.23 [1.04, 1.45]; and 1.17 [1.05, 1.30], respectively). The avoidant attachment dimension was associated with increased odds of being a smoker and not reporting regular seatbelt use (ORs [95% CIs] = 1.15 [1.01, 1.30] and 1.16 [1.01, 1.33], respectively).
Conclusions: Both anxious and avoidant dimensions of attachment were associated with health risk behaviors in this study. This framework may be a useful tool to allow primary care clinicians to guide screening and intervention efforts.

Introduction

Attachment theory, originally developed by John Bowlby, posits that through early relationships with care-givers infants develop cognitive "working models" that persist across the life course regarding their ability to elicit care-giving behavior from others and others' responsiveness to their needs [1,2]. *Adult* attachment theory was later developed to describe the distinct patterns of interpersonal interactions that adolescents and adults display in romantic relationships [3–10]. Similar to infant attachment, "adult attachment style" is generally conceptualized as involving two dimensions which reflect an individual's views of self and others. The anxious dimension of adult attachment reflects a person's self-worth and their consequent degree of anxiety/vigilance concerning rejection and abandonment in relationships. Persons with high levels of attachment anxiety tend to have low self-esteem, seek emotional closeness, and rely heavily on others. In contrast, the avoidant dimension corresponds to one's degree of discomfort with closeness and dependency; persons with high levels of attachment avoidance tend to be reticent about forming intimate relationships [11]. Some researchers have also used other approaches, including a categorical approach in which the two attachment dimensions are broken into four, mutually exclusive categories. In this approach, persons who have high degrees of anxiety but not avoidance are labeled "preoccupied", persons with high degrees of avoidance but not anxiety are "dismissive", persons with high degrees of both anxiety and avoidance are "fearful", and persons who do not have high degrees of either anxiety or avoidance are "secure" [4].

In recent years, researchers have recognized the importance of a person's attachment style in the context of non-romantic relationships, including relationships with health care providers [12,13]. Maladaptive approaches to relationships have been linked to a variety of health-related outcomes. For example, persons who score high on the anxious attachment dimension (i.e., who are preoccupied and/or fearful in the categorical model) tend to have high rates of health care utilization and associated costs [14], and are more likely to report having physical symptoms [14–16] compared with those with other styles of attachment. In contrast, persons with high rates of avoidance (i.e., who are dismissive and/or fearful in the categorical model) have

* Corresponding author at: University of Washington, Department of Pediatrics, Seattle Children's Research Institute, 2001 8th Ave, Mailstop CW8-6, Seattle, WA 98121, United States. Tel.: +1 206 884 1031; fax: +1 206 884 7801.
E-mail address: kym.ahrens@seattlechildrens.org (K.R. Ahrens).

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trouble trusting health care providers [12,13], and as a consequence tend to be at higher risk of delaying care [17], missing health care appointments [18], and reporting poor adherence with preventive self-care recommendations in chronic disease [19–21]. In one study of diabetics, persons with an avoidant attachment style had an increased relative risk of dying in a 5-year period [22].

One area that is understudied at present is the contribution of adult attachment style to engagement in risk behaviors for diseases commonly seen in the primary care setting [23–26]. An increased understanding of the psychosocial correlates of these health risk behaviors could allow clinicians to identify patients at risk of acquiring lifestyle-related disease earlier, in order to better tailor prevention efforts. There is both theoretical and empirical evidence to support the idea that attachment style and a variety of health-related behaviors may be linked. From a theoretical perspective, in 2001 Maunder and Hunter proposed a model which suggests that insecure attachment may result in an increased use of "external regulators of affect" in place of more healthy strategies, along with the above-described influences it has on behavior in close relationships. This results in increased risk of several behavioral "disease risk factors" such as substance use, dysfunctional eating behaviors, and risky sexual behaviors [27]. Empirically, Dube, Felitti and colleagues have documented strong associations between exposure to early adverse childhood experiences and a variety of health behaviors (e.g., risky sexual behaviors, smoking, and problematic alcohol use) in multiple birth cohorts [28]. The research cited in the previous paragraph, furthermore, provides preliminary evidence that maladaptive attachment style may be in the pathway which produces this increase risk, in that it documents a relationship between maladaptive relational styles and a variety of lifestyle-related disease states. Indeed, associations have been detected in some samples between the anxious attachment dimension and correlates of sexually transmitted infections (STIs) and unintended pregnancy, and substance-related disorders [29–40]. The avoidant attachment dimension has also been associated with a narrower, but important, array of health risk behaviors reflecting an avoidance of intimacy and/or use of external regulators of affect. These include having sex with casual/risky partners, and engaging in heavy alcohol use, smoking, and cocaine use [19,29–31,35,36,40–42].

Although this previous research clearly represents an important step toward understanding the contribution of attachment style to health risk behaviors, it is limited for several reasons. First, many of the above studies utilized samples that were small, specialized, or included participants within a narrow age range (e.g., adolescents and college students) [30–35,37–42]. In addition, many have generated conflicting results with respect to associations between avoidant attachment style and sexual and substance-related behaviors. Finally, these studies have tended to examine a narrow range of risk behaviors, contained almost exclusively in the sexual and substance-related dimensions. More research is therefore needed to understand the influences of attachment on health-related risk behaviors in primary care populations.

We sought to extend the above research by evaluating the association between anxious and avoidant dimensions of adult attachment style and risk behaviors for several of the most common causes of morbidity and mortality in the United States, using a sample of adult women enrolled in a health maintenance organization. We specifically sought to evaluate associations between attachment style and self-reported behavioral correlates of STIs, early/unintended pregnancy, substance use, cardiovascular disease, and injury in motor vehicle accidents (MVAs). We hypothesized that: 1.) the anxious dimension would be associated with increased odds of multiple risk behaviors occurring in the context of romantic/sexual relationships (i.e., of behaviors related to STI and unintended pregnancy risk) as well as increased odds of substance use, and 2.) the avoidant attachment dimension would be associated with increased odds of having had sex before knowing a partner's sexual history, substance-related risk behaviors, and behaviors influenced by a lack of engagement in preventive self-care such as those that relate to risk of cardiovascular disease (i.e. weight control and a lack of regular exercise) and to a lack of regular seatbelt use in motor vehicles.

Methods

Study population

Participants were adult female members of Group Health Cooperative, a large health maintenance organization (HMO) who were recruited as part of an NIMH-funded study which aimed to explore associations between health care utilization, perceived health status, prior childhood maltreatment, and functional disability among adult women in a primary care setting (N = 1225; age range 18 to 67 years) [43]. The present study involves data from the original wave of data collection (collected in 1995–96) and a follow up wave which took place three years later. In the follow-up wave, 1119 women from the original sample were contacted with an approach letter and a three-page questionnaire assessing the participant's attachment style; 701 (63%) returned the questionnaire. When characteristics of responders and non-responders in the follow-up wave were compared, participants who responded were slightly older, were more likely to be white, and had a slightly higher educational and income level (see Ciechanowski et al., 2002 for details) [14]; however the sample characteristics still closely reflected the characteristics of the HMO population and geographic area from which the sample was drawn. Participants received a $3 token of appreciation for participating in the follow-up wave. All procedures were approved by the Human Subjects Committees of the HMO and the University of Washington.

Variables

All outcomes were collected via self-report.

Attachment style

Two related instruments measuring attachment style were administered: the Relationship Scales Questionnaire (RSQ; 17-items) and the Relationship Questionnaire (RQ; 4-items). Both instruments are reliable and valid [4,44], and have been shown to be stable over periods of several years in adult populations [45–48]. Both questionnaires asked participants about their orientations in relationships in general (rather than using wording specific to romantic relationships; e.g., "I find it difficult to depend on other people.") For both scales, we coded the scales such that a higher (more positive) score was associated with increased levels of the dimension (i.e., higher levels of anxious or avoidant attachment features). Cronbach's alpha values in the present sample were 0.80, 0.64, and 0.86 for the RSQ, RQ, and all items from both questionnaires together, respectively. Based on a procedure recommended by the original authors of these instruments [49,50], RSQ and RQ results were combined for the present analyses by first computing continuous z-scored values for each of the 4 subscales of the individual questionnaires (i.e., secure, preoccupied, dismissive and fearful subscales), and then averaging these results. Anxious and avoidant attachment dimensions were then generated from the 4 subscales, also based on a procedure which developed by the original authors [51]. Since the final values for each attachment dimension were also z-scored, all odds ratios presented in the Results section reflect the relative increase in odds of a given outcome for every standard deviation change in attachment anxiety or avoidance.

Health risk behaviors

We evaluated a variety of self-report variables related to common causes of morbidity and mortality in the United States including risk of STI, early/unintended pregnancy, cardiovascular disease, and injury