

Attachment styles as predictors of empathy in nursing students

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Abstract

Previous studies have traced a relationship between the attachment styles of nurses working as in healthcare teams and their empathy which is an essential characteristic required of people concerned with managing relationships, supporting social events, and improving the of nurse-patient relationships. Since determining the effective variables in the quality of nurse-patient relationships in clinical settings is of paramount importance, current investigation is an effort to examine the relationship between attachment styles and empathy in nursing students. 260 university students (male = 130 and female = 130) were chosen as the sample of the study based upon specific inclusion criteria. All participants completed the Attachment Style Questionnaire (ASQ) and the Interpersonal Reactivity Index (IRI). Data was collected and analyzed using Pearson correlation coefficient and regression analysis with SPSS (v.18). The results showed that secure and insecure attachment styles have significant positive and negative correlation with empathy respectively. Based on the results of regression analysis, it was shown that secure attachment style is predicting 53% of the variance empathy variable, whereas insecure attachment styles are explaining up to 76% of the variance empathy variable collectively. The increase of attention to instructions that focus on empathetic relationships with patients and that are based upon the secure attachment style can result in positive changes in the area of nurse-patient relations and in increasing attention to medical ethics. Findings are consistent with prediction derived from attachment theory and add to our understanding of relationship between attachment styles with empathy in nursing students. The meaning and limitations of this study and suggestions for further research are also discussed.

Keywords: Attachment styles, Empathy, Personality, Nurses.

Introduction

Attachment theory was essentially conceptualized by Bowlby (1-3), who believed that attachment in infants is primarily a process of proximity seeking to a caring and protective caregiver (4). Attachment is defined as 'the tendency of human beings to make strong affectional bonds with special others'. Attachment theory describes two aspects of attachment reflecting comfort with closeness (comfort) and anxiety over relationships (anxiety) (5, 6). Individuals display forecasting models of cognitive-affective schema with high or

low comfort and high or low anxiety; thus, these two aspects describe four attachment styles. These attachment styles have been recognized as secure, fearful, preoccupied, and dismissing, the latter three assessed as insecure styles (7). Attachment styles of nursing students as caregivers, members of healthcare teams and future nurses are therefore considered to be a most important subject for studying.

Moreover, examination of attachment styles in nursing education and in nursing students as future

nurses can also offer valuable guidelines in order to provide mental health for nursing students. Attachment style is recognized as an influential component in individual performance and might be related to improved nurse-patient relationship and patient outcomes. The nurse-patient relationship may be affected by nurses' attachment styles and their reactions to patients' attachment styles; the attachment styles of the nurses can also play a critical role in the kind of relationship that they develop with others. Being aware of their own attachment styles and relational needs may help professional caregivers to be aware of their own contributions to their relationships with patients and to become more sensitively attuned to them (8). Nursing students encounter stress associated with academic demand, clinical placements, and financial constraints. Some researchers believe that secure attachment style may be a critical factor for better preparing nursing students for this demanding and stressful profession. One of the issues investigated in the present study is the examination of the relationship between attachment styles and empathy. The central notion is that empathy is nurtured in the early rearing environment in relation to the quality of the early attachment relationships with a primary caregiver (9, 10). Empathy has been defined in many ways, but it refers broadly to the reactions of an individual to the experiences of another (11). Empathy is commonly described as consisting of perspective taking, empathic concern, and personal distress (11, 12). Empathy is a basic capacity in individuals that contributes to the management of relationships, the supporting of communal activities, and group cohesion. This ability has an essential role in individuals' social life (13,14); in fact, empathy is the stimulating impetus of pro-social behaviours and those behaviours that lead to group cohesion (13-15). To appropriately express our empathy we need to possess social skills (13,16). Empathy is an individual's strong emotional response to others' emotional reactions (13,17,18). On the other hand, empathy is the essential component for successful interpersonal performance (13,19) and plays a key role in the nurse-patient relationship because it promotes an understanding of the patient's emotional status and perception, and helps the nurse to effectively share or participate in the patient's experience. The ability to identify and understand others' emotions and to communicate one's understanding of others' emotions effectively to them is particularly applicable to clinical encounters between nurse and patient. The focus of the present study is examination of the relationship between attachment styles and empathy. The purposes of the present study are: 1) examination of the likely relationship between secure attachment style and empathy and 2) examination of the

likely relationship between insecure attachment styles and empathy.

Method

Participants and Procedure

The target population in the present correlation-descriptive study included all nursing students inhabiting the dormitories of the Tehran University of Medical Sciences, and the population under investigation was a convenient sample of 260 university students (130 females, 130 males). All participants were asked to complete the Attachment Style Questionnaire (ASQ) and the Interpersonal Reactivity Index (IRI). After explaining the purposes of the study, the questionnaires were submitted to the participants. Overall 98% of the participants completed the questionnaires. Two psychological scales were translated into Persian language and every effort was made to ensure that the translated version conveyed both the literal and the comprehensible meanings in Persian. In order to examine the content validity the questionnaires were given to three PhD students of the Tehran University of Medical Sciences and afterwards the relevant comments were applied. There was no substantial change in the content of the items. To examine the test-retest reliability, 51 participants (31 females and 20 males) were asked to complete the questionnaires a second time, with a 12-day interval between measurements. Findings supported the content validity and test-retest reliability of the Persian versions of both questionnaires. Data was collected and analyzed using Pearson correlation coefficient and stepwise regression analysis with SPSS (v.18).

Measures

Attachment Style Questionnaire (ASQ):

Attachment style was determined by using a 40-item self-report measure of adult attachment dimensions and items scored on a six-point scale from 1 (totally disagree) to 6 (totally agree) and included five subscales derived from principal components analysis: confidence in themselves and others, discomfort with closeness, need for approval, preoccupation with relationships, and relationships as secondary (to achievement). Items in each subscale were summed to obtain the subscale score (score range = 1–126). High scores indicated greater attachment relationship problems. The five scales of the ASQ have been shown to have adequate internal consistency, with Cronbach's alpha ranging from 0.76 to 0.84 and 10-week retest reliability coefficients ranging from 0.67 to 0.78 (5). The confidence subscale is a general measure of the security of attachment. The need for approval and the preoccupation with

relationships subscales assess the anxiety (about abandonment) dimension of the attachment style, whereas the discomfort with closeness and the relationships as secondary subscales pertain primarily to avoidance (of intimacy) dimension of the attachment style. The scoring method used in this study was similar to the original design. Individuals scoring high on attachment-related anxiety endorsed statements such as “*I find that others are reluctant to get as close as I would like*” and “*It’s important to me that others like me*”. Individuals scoring high on attachment-related avoidance endorsed statements such as “*My relationships with others are generally superficial*” and “*Achieving things is more important than building relationships*”. The five subscales of the ASQ included: confidence (eight items) (e.g., “*I feel confident that other people will be there for me when I need them*”), discomfort with closeness (ten items) (e.g., “*I worry about people getting too close*”), need for approval (seven items) (e.g., “*It’s important to me that others like me*”), preoccupation with relationships (eight items) (e.g., “*I worry a lot about my relationships*”), and relationships as secondary (seven items) (e.g., “*Achieving things is more important than building relationships*”). Previous researchers have conducted their own factor analysis on the ASQ to determine the factor structure for their sample. The ASQ subscale scores have been used in other research studies and therefore were used for the purposes of the present study. The ASQ was selected because it possesses robust psychometric properties in terms of both validity and reliability (20). The psychometric properties of ASQ were verified with previous Iranian samples (21).

Interpersonal Reactivity Index (IRI)

The interpersonal reactivity index (IRI) is a multidimensional questionnaire of empathy (11). The IRI is a 28-item measure of general empathic tendencies that assesses both cognitive and emotional components of empathy. Items are evaluated on a 5-point Likert scale ranging from 0 (does not describe me well) to 4 (describes me very well). This scale yields four subscales, each including seven items. Items in each subscale are summed to obtain the subscale score (score range for each scale = 0–28), and a high score means higher perspective taking, fantasy, personal distress, and empathic concern respectively. Perspective taking (PT) assesses attempts to take into consideration the point of view of others (e.g., “*When I am upset at someone, I usually try to put myself in his shoes for a while*”). Fantasy (F) evaluates the propensity to identify with fictional characters (e.g., “*When I watch a good movie, I can very easily put myself in the place of a leading character*”). Personal distress (PD) assesses ‘self-oriented’ feelings and the tendency to feel anxious

when confronted with negative situations (e.g., “*Being in a tense emotional situation scares me*”). Empathic concern (EC) measures “other-oriented” feelings of sympathy and concern for unfortunate others (e.g., “*I often have delicate, concerned feelings for people less fortunate than me*”). The IRI was selected because it possesses robust psychometric properties in terms of both validity and reliability. The psychometric properties of IRI were established with previous Iranian samples (22).

Results

Table 1 indicates the statistics of the participants based on demographic variables. The mean age of the samples was 21.06 years, standard deviation 3.07 years. Participants were 260 students enrolled at the Tehran University of Medical Sciences. Of this total, 130 (50%) were female and 130 (50%) were male. The majority who completed the questionnaires were married (82.70%) and the educational level was bachelor (71.15%).

Table 2 indicates the statistics of the participants on the basis of their scores on attachment styles, and empathy. The mean of the confidence subscales, discomfort with closeness, relationships as secondary, need for approval and preoccupation with relationships was 30.20, 33.80, 15.14, 25.25 and 28.35 respectively. The mean of the perspective taking subscale, fantasy, personal distress and empathic concern was 26.30, 19.60, 14.80 and 24.80 respectively.

Table 3 indicates the Pearson product-moment correlations between measures of attachment styles and empathy. The results of the correlation showed that secure and insecure attachment styles had significant positive and negative correlation with empathy respectively (see Table 3). The highest positive correlation coefficient gained for confidence pertained to empathic concern ($r = 0.71, P < 0.01$) and the highest negative correlation coefficient gained for avoidant attachment style pertained to perspective taking ($r = -0.73, P < 0.01$) and for anxiety attachment style it pertained to empathic concern ($r = -0.73, P < 0.01$).

To investigate the unique contribution of secure and insecure attachment styles to empathy, regression analysis (stepwise) was performed. Secure attachment style made a unique and significant contribution, and accounted for 53% of the variance empathy variable ($F = 33.87, P < 0.01$) (see Table 4). Avoidant attachment style and anxiety attachment style (insecure attachment) made unique and significant contribution, together explaining up to 76% of the variance empathy variable ($F = 93.78, P < 0.01$) (see Table 4).

Discussion

The results of the present study indicated that secure attachment style has a positive relationship with empathy. This is consistent with the findings of previous studies (23-25) and can be interpreted on the basis of the following possibilities: according to Bartholomew and Horowitz (7) individuals who develop a positive model of other people as potentially available, supportive and worthy of acceptance and support can be categorized as possessing a secure attachment style. Individuals with a secure attachment style are supposed to have had early care giving experiences that were consistent, attentive and responsive, and they are liable to be most prosperous in forming supportive relationships with others.

Individuals with secure attachment style develop a sense of trust with caregivers who respond to them empathically and therefore develop the capacity to respond emotionally and empathically to others in later relationships. Research has shown that lack of a secure attachment with mother can result in aggressive and hostile behaviors in later years that are not conducive to empathic engagement (24). The results of previous studies indicated that the attachment history can predict medical students' specialty preferences. For example, students with a secure attachment history are more likely to choose specialties that require more interaction with patients (26).

A critical aspect in the developing of empathy during a nurse-patient encounter is effectively relating to the patient's experience. Nursing students need to imagine what it would feel like to be in the patient's position and to be able to relate the patient's condition to previous events in their own life.

The initial component of empathy in clinical settings is the ability of active listening to the patient. It helps eliminating mental distraction during nurse-patient relationship, and the nurse should be attentive while the patient is speaking. Eventually, nurse empathy fulfills the patient's need to be understood and will impact therapeutic effectiveness. There are similarities between the mother-child attachment and the nurse-patient relationship. The child needs mother's help and protection to survive dangerous situations, and therefore the attachment behavior (proximity seeking) intensifies when the child is in a stressful or painful situation. Similarly, patients have a natural tendency toward affiliation with a caring figure (the clinician or nurse) to maintain their health during a time of pain and suffering. Therefore, nurse-patient bonding is connected, though unconsciously, with the early attachment relationship.

Recent literature in nursing education and psychology has shown an increasing interest in the

application of attachment to improve the nurse-patient relationships in the clinical setting. The results of the present study indicated that insecure attachment styles have a negative relationship with empathy. This finding is consistent with the findings of previous researches (23-25, 27, 28) and can be interpreted on the basis of the following possibilities: the family environment early in life not only shapes the quality of later interpersonal relationships (29) but also nurtures the growth of the capacity for empathic engagement. Insecure attachment styles involve at least one negative working model (of self or others). Individuals with insecure attachment styles tend to experience more umbrage and to demonstrate more self-supportive avoidance of protective relationships. Individuals with this attachment style have a so-called 'fearful' attachment style and exhibit an intense distrust of others and view themselves as unlovable and unworthy of care (7, 8).

This negative working model of the world as arrogant and unlovable becomes an influential property of the child's cognitive schema, serving essentially as an unconscious motivational power that significantly influences the individual's interpersonal relationships and the capacity for empathic engagement (30). The results of previous studies indicated that attachment experiences can also influence the style of clinical practice in students. For example, clinical psychologists with an insecure attachment style who reported less empathic parental responses were more in need of support, and were more vulnerable to experience work-related stress such as job burnout, and were eventually susceptible to a variety of mental disorders (27).

Attachment styles may be a beneficial construct for examining the factors affecting adjustment and treatment response of patients. Previous researches showed that insecure attachment styles were characterized by increased utilization of medical services. More recently, both nursing schools and the nursing literature authors are beginning to explore the role of attachment style and empathy in nursing education as a means to improve the nurse-patient relationship in clinical settings. Preoccupied attachment style can be viewed as a negative self model and positive other model. Preoccupied attachment style reflects feelings of being unlovable and unworthy of love about self, but positive views of others (31).

Several studies carried out in the field of nursing have suggested that attachment style has a critical impact on other important variables such as empathy. Improving the quality of the nurse-patient relationship and reducing stress in clinical settings is one reason that secure attachment style and empathy have been identified as a characteristic of effective nursing performance. Dismissive attachment is a combination of high self-esteem and

negative views of others. Dismissive individuals give great importance to autonomy and deny defensively the need for others and interpersonal relationships (8). Insecure attachment styles may lead to ineffectual help-seeking behavior, which can in turn reduce potential social support to buffer stress. Enhancing empathy skills in nursing students may help to cope with the cumbersome demands of the healthcare environment, which can be stressful and boring and can eventually lead to burnout in nurses.

Attachment theory suggests that individuals with insecure attachment style may have problems in interpersonal relationships and other domains of life. The results of the studies indicated that individuals with insecure attachment styles are more likely to lack social skills (32). Specifically, individuals with insecure attachment styles have been reported to have behavior problems, emotional difficulties, social incompetence (33), aggression (34), disability, depression, catastrophizing (35) and interpersonal dispositions, and have been described as introverted, cold, and emotionally inexpressive (36).

Empathy and secure attachment style in nurses and their ability to manage their emotions and understand those of their patients may potentially facilitate the nurse-patient relationship among nursing students.

This study has significant implication for nursing students because nursing education may be more successful if nurse educators understand the attachment style of their students. This type of positive classroom environment will be beneficial for nursing students. Nursing students who have secure attachment style are going to experience less difficulty in the clinical environment and are eventually going to launch positive relationships with patients and healthcare. Further research may be required to examine the relationship of attachment style and empathy with regard to nurse personalities.

The present study needs to be replicated in different populations and needs more empirical support. In the meantime, the findings of the study should be interpreted with caution. Furthermore, the cross-sectional design of the study and participants (i.e., a group of university students) exerts some limitations on the generalization of the findings. Finally, the problems and limitations on the use of self-reporting instruments should not be overlooked.

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Table 1. Demographic data of the nursing students

Demographic Variables	Number (percent)
Sex: male/female	130/130 (50/50)
Marital status: married/single	45/215 (17.30/82.70)
Educational level: bachelor	185 (71.15)
Educational level: master	75 (28.85)

Table 2. Subscales of the attachment style and empathy

Variable	Mean (SD)
Cconfidence scale	30.20(5.75)
Discomfort with closeness	33.80(6.37)
Relationships as secondary	15.14(5.56)
Need for approval	20.25(5.70)
Preoccupation with relationships	28.35(6.27)
Perspective taking	26.30(4.47)
Fantasy	19.60(5.70)
Personal distress	14.80(4.45)
Empathic concern	24.80(4.80)

Table 3. Pearson product-moment correlations between subscales of attachment styles and empathy

Variable	1	2	3	4	5	6	7
1. ASQ confidence scale (secure attachment)	-						
2. Avoidant attachment style (insecure attachment)	-0.43	-					
3. Anxiety attachment style (insecure attachment)	-0.48	0.42	-				
4. Perspective taking	0.62	-0.73	-0.58	-			
5. Fantasy	0.58	-0.65	-0.64	0.32	-		
6. Personal distress	0.68	-0.72	-0.68	0.37	0.42	-	
7. Empathic concern	0.71	-0.67	-0.73	0.34	0.39	0.33	-

Note: All these coefficients were significant at $p < 0.01$.

Table 4. Regression analysis for empathy

	Predicting Variable	Adj.R2	df	F	SE	B	β	t
Enter	ASQ confidence scale (secure attachment)	0.53	259	33.87	0.270	0.56	0.47	3.87
Step 1	Avoidant attachment style (insecure attachment)	0.68	258	110.5	0.282	0.75	0.36	4.70
Step 2	Avoidant attachment style (insecure attachment) Anxiety attachment style (insecure attachment)	0.76	257	93.78	0.198	0.34	0.15	2.33

Note: All these coefficients were significant at $P < 0.01$.

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