# Original Article

# The Relationship between Attachment Styles and Empathy

Thanayot Sumalrot PhD¹, Ittipol Pinijvicha MSc¹, Sucheera Phattharayuttawat PhD¹, Thienchai Ngamthipwatthana MD¹, Soisuda Imaroonrak MSc¹, Natchaphon Auampradit MSc¹

Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

*Objective:* To investigate the relationships between attachment styles and empathy, and to examine the predictive power of attachment styles on empathy.

*Materials and Methods:* The Attachment Style Questionnaire along with the Basic Empathy Scale (Thai version) was used to measure attachment styles and empathy, consecutively. The sample consisted of 450 undergraduate students from Chulalongkorn University.

**Results:** Substantial correlations between attachment styles and empathy were found. Secure attachment positively related to affective and cognitive empathy, preoccupied attachment positively correlated with affective empathy, dismissing attachment negatively correlated with affective empathy, and fearful attachment negatively related to cognitive empathy. In terms of predictability, it was found that empathy could be predicted by attachment styles.

Conclusion: The results revealed different relations of attachment styles and empathy. This finding could be used for empathy development program.

Keywords: Attachment styles, Empathy

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To be successful at work, academic knowledge is not the only factor that plays a role. Maxwell(1) mentioned that empathy might be one of the factors that contributed to successfulness and happiness at work, especially for leaders. Leaders with empathetic skills were more likely to have good relationship with their colleagues who encouraged creativeness and precision in the decision-making process. According to Goleman<sup>(2)</sup>, empathy is a part of social awareness. An individual who has empathy is able to feel and understand emotions of others from verbal and nonverbal behavior. There are two components in empathy; affective or emotional empathy and cognitive empathy. Affective or emotional empathy is an ability to experience emotions of others while cognitive empathy is an ability to understand others' perspective and

#### Correspondence to:

Sumalrot T, Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University, 2 Prannok Road, Siriraj, Bangkoknoi, Bangkok 10700, Thailand.

Phone: +66-2-4194293-8, Fax: +66-2-4194298

E-mail: thanayot.sum@mahidol.edu

emotions by perceiving situation through others' frame of reference<sup>(3)</sup>. Previous research reported that a number of factors attributed to empathy such as genetics, brain functions, and psychosocial development, particularly, attachment styles<sup>(4)</sup>.

According to Bowlby<sup>(5)</sup>, attachment is an emotional bond that deeply connects one person to another. He studied children's interaction with their primary caregivers, mostly mothers and found that the children showed distress when separated from "attached figure". The children also exhibited demanding behavior in order to gain proximity to the attached figure. Bowlby explained that a person that the child is attached to is an individual with who a child feels safe, protected, and emotionally secure in times of need. When children are attached to someone, they will attempt to be in close proximity with their attachment figure. The children regard their attached person as a "safe haven" who could provide them with an emotional support and a sense of security. The attachment figure of the children provided the opportunities to explore their environment, learn, and achieve their goals.

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Additionally, children would exhibited "separation distress" when separated from the person who is their attachment figure<sup>(5-7)</sup>. The emotional bond between self and their attachment figure formed attachment styles early in life and remained across the life span. Bartholomew & Horowitz<sup>(8)</sup> classified adult attachment into four different styles that affect variety of behaviors, cognitive processes, and social interactions. The four attachment styles are secure attachment, preoccupied attachment, dismissing attachment, and fearful attachment.

Although there has been some research on the relationship between attachment and empathy<sup>(4,9,10)</sup>, there was no definite information regarding the relations of each attachment style to each component of empathy. Thus, this study intended to investigate how four styles of attachment related to the two components of empathy. It was hypothesized that attachment styles would be correlated to the two components of empathy differently. Moreover, it was also hypothesized that empathy could be predicted by attachment styles.

### **Materials and Methods**

#### **Participants**

Participants were 450 undergraduate students from Chulalongkorn University, with 185 (41.11%) males. The total of 112 participants were in their first year, 123 in their second year, 124 in their third year, 72 in their fourth year, 15 in their fifth year, and 4 participants were in the sixth year of study. Participants were proportionally allocated by faculty and gender into the study. Mean age of the sample was 19.81 years (SD=1.38).

The Institutional Review Board of the Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand, had approved the present study (Si. 349/2014). Participants were informed about this research and asked to sign a written consent. Participation was voluntary. After given their consent, they were asked to answer a set of self-rating questionnaires. SPSS version 17 was used for data analysis.

#### Measures

Attachment Style Questionnaire<sup>(11)</sup> was developed by Orapun Parapob based on Albany Measure of Attachment Styles<sup>(12)</sup> and Relationship Style Questionnaire<sup>(13)</sup>. Attachment Style Questionnaire consisted of 38 items. The Attachment Style Questionnaire measures four attachment styles which are secure attachment (11 items), preoccupied

attachment (12 items), dismissing attachment (8 items), and fearful attachment (7 items). Every item is rated on a 7-point Likert scale, ranging from strongly disagree (-3) to strongly agree (3). The internal reliability (Cronbach's alpha) of this questionnaire was 0.761 and of each component ranged from 0.68 to 0.74 (Table 1), indicated an acceptable internal consistency reliability<sup>(14)</sup>.

Basic Empathy Scale (Thai version), originally developed by Jolliffe and Farrington<sup>(15)</sup> in English. The Thai version of the Basic Empathy Scale was translated by Suavansri<sup>(16)</sup> The Basic Empathy Scale consisted of 20 items that categorized empathy into 2 domains; affective empathy (11 items), and cognitive empathy (9 items). Every item is rated on a 5-point Likert scale, ranged from strongly disagree (1) to strongly agree (5). The internal reliability (Cronbach's alpha) of the two scales on the Basic Empathy Scale (Thai version) in the present study ranged from 0.68 to 0.80 (Table 1), which indicated an acceptable to good internal consistency reliability<sup>(14)</sup>.

# Data analysis

Statistical Package for Social Science [SPSS] version 17 was used to analyze the data. Descriptive statistics (frequency, percentage, means, and standard deviations) were employed to explained demographic data of the sample. Relationships between attachment styles and empathy were yielded using Pearson's product-moment correlation coefficients. Additionally, stepwise multiple regression was used to analyze the predictability of the attachment styles on empathy.

# Ethical consideration

This study has been ethically approved by Siriraj Institutional Review Board [SIRB], Faculty of Medicine, Siriraj Hospital, Mahidol University; Si. 349/2014

# Results

Table 1 presented mean scores, standard deviations, and correlations coefficients among the variables. The mean score of attachment styles were  $0.863 \, (SD=0.720)$  for secure attachment,  $0.506 \, (SD=0.765)$  for preoccupied attachment,  $0.742 \, (SD=0.869)$  for dismissing attachment, and  $-0.647 \, (SD=0.961)$  for fearful attachment style. The average score of empathy were  $3.620 \, (SD=0.397)$ , affective empathy was  $3.437 \, (SD=0.471)$ , and cognitive empathy was  $3.841 \, (SD=0.514)$ .

In terms of relationships between attachment

**Table 1.** Correlations, means, standard deviations, and internal consistency estimates among measures (n = 450)

	1	2	3	4	5	6	7	M	SD	Alpha
Attachment Styles										0.761
1.Secure Attachment	-							0.863	0.720	0.681
2.Preoccupied Attachment	0.271*	-						0.506	0.765	0.733
3.Dismissing Attachment	-0.057	0.028	-					0.742	0.869	0.747
4.Fearful Attachment	-0.217*	0.401*	0.382*	-				-0.647	0.961	0.713
5.Empathy	0.314*	0.235*	-0.132*	-0.134*	-			3.620	0.397	0.783
6.Affective Empathy	0.220*	0.315*	-0.211*	-0.017	0.833*	_		3.437	0.471	0.680
7.Cognitive Empathy	0.290*	0.065	-0.026	-0.231*	0.792*	0.322*	-	3.841	0.514	0.807

M = mean; SD = standard deviation; Alpha = Cronbach's Alpha coefficient.

styles and empathy, statistically significant relationships were found. Secure attachment style was positively associated with both components of empathy; affective (r = 0.22, p < 0.01) and cognitive empathy (r = 0.29, p < 0.01). Preoccupied attachment style was positively correlated with affective empathy (r = 0.32, p < 0.01). Dismissing attachment style was negatively correlated with affective empathy (r = -0.21, p < 0.01). Fearful attachment style was negatively correlated with cognitive empathy (r = -0.23, p < 0.01).

Results from stepwise regression analysis revealed secure attachment, in Model 1, explained 10% of variance and was significant (F (1,397) = 45.977, p < 0.001). Model 2, in which preoccupied attachment was added, explained significantly more variance (R<sup>2</sup> change = 0.035, F (1,396) = 16.063, p<0.001). The model explained 13% of the variance in empathy (Adjust  $R^2$  = 0.134). Model 3, in which fearful attachment was added, explained another 2.5% of variance and the increased was significant ( $R^2$  change = 0.025, F(1,395) = 12.004, p= 0.001). Model 3 explained 15.8% of the variance in empathy (Adjusted  $R^2 = 0.158$ ) and was significant (F(3,395) = 25.854, p < 0.001). Table 2 showed predictor variables that have been included in the model. Dismissing Attachment was excluded. The equation was Y = 68.261 + 2.256 (secure) + 2.963 (preoccupied) -1.515 (fearful).

# Discussion

# Attachment styles related to empathy differently

Secure style of attachment positively correlated with both components of empathy. The individual who has secured attachment tended to perceive an interpersonal situation without bias. They could express their emotions appropriately.

Additionally, they are comfortable with having a close relationship and good at maintaining long-term relationships<sup>(8)</sup>. Having secure attachment, an individual is able to pay attention to the feeling and circumstances that other people are experiencing. It can be assumed that a secured individual has been raised and showed appropriate empathic responses by an empathetic person. By receiving empathy consistently and continuously, they could learn, imitate, and behave in an empathetic way with others<sup>(17)</sup>. In this study, the secure attachment style was related to affective empathy and cognitive empathy. This finding is consistent with what found from studies by Corresponding Mark(18), Bischof-Kohler(19), Robinson<sup>(20)</sup> and Cassidy<sup>(21)</sup> which also found a positive relationship between secure attachment style and empathy.

Preoccupied attachment style and affective empathy were positively correlated (r = 0.32, p < 0.01). However, the relationship did not have a significant association with cognitive empathy (r = 0.07, p > 0.05). This finding showed consistency with results found by Trusty<sup>(22)</sup> and Wei<sup>(10)</sup>. A possible explanation of the result may be that individuals with preoccupied attachment style have previously experienced and occupied with one's own negative emotion. As a result, they can easily understand emotions and suffering of others. However, as they are more likely to be concerned with their own emotions and perspectives based on their point of view, it was more difficult to understand the thoughts of others<sup>(10,23-25)</sup>.

The significant negative relationship between dismissing attachment style and affective empathy was found in this study (r = -0.21, p < 0.01). However, there was no significant relationship between dismissing

<sup>\*</sup>p<0.01

**Table 2.** Summary of stepwise multiple regression analyses for attachment styles predicting students' empathy (n = 450)

Model	Predictor	Unstandardized Coefficients	pə:	Standardized Coefficients	R Square	Adjusted R Square	Std. Error of the	R Square Change
		В	Std. Error	Beta			Estimate	
1	(Constant)	69.785	0.572	3	0.104	0.102	7.348	0.104
2	Secure (Constant)	3.446 69.174	0.508 0.582	0.322**	0.139	0.134	7.212	0.035
	Secure	2.936	0.515	0.275**				
	Preoccupied	2.006	0.501	0.193**				
3	(Constant)	68.261	0.631		0.164	0.158	7.114	0.025
	Secure	2.256	0.544	0.211**				
	Preoccupied	2.963	0.566	0.285**				
	Fearful	-1.515	0.437	-0.187*				
*p = 0.001, **p < 0.001	**p<0.001							

style and cognitive empathy (r = -0.03, p > 0.05). Bartholomew & Horowitz<sup>(8)</sup> stated that individual with dismissive attachment perceived themselves as superior to others. They tended to use rationality to cope with situations. For this reason, individuals with this style of attachment were more likely to disregard others' emotions. This is consistent with an explanation about emotional distance teacher. Bennett & Nelson<sup>(26)</sup> stated that an ignoring teacher would create emotional distance. This decreased emotional empathy between themselves and students. Notably, significant relationship with cognitive empathy was not found. In this instance, cognitive empathy required more effort on taking other's perspective to understand situations and contexts, but the individual with dismissive attachment might regard other as having less cognitive ability<sup>(8)</sup>. Hence, they were less likely to be interested in other's perspective.

There was a statistically significant negative relationship between fearful attachment style and cognitive empathy (r = -0.23, p < 0.01). However, there was no significant relationship between fearful attachment style and affective empathy. Bartholomew & Horowitz<sup>(8)</sup> explained that individuals with fearful attachment were likely to lack self-confidence. They may feel worthless and unable to trust others. As a result, they were more likely to avoid having a close relationship although needing to rely on others. They wanted to protect themselves from being rejected. Thus, individuals with this style of attachment are the most introverted, submissive and also difficult to understand situations from other's view.

# Empathy could be predicted by attachment style

Results from stepwise multiple regression analysis revealed that attachment style variables (secure, preoccupied, and fearful style) could predict empathy. Attachment explained 16.4% variance of empathy ( $R^2 = 0.164$ , Adjusted  $R^2 = 0.158$ ). The strongest predictor was preoccupied attachment which positively related to affective empathy (Beta = 0.285, p < 0.001). The preoccupied attached individuals are those who previously experienced distress situations. Thus, they were able to feel other's feelings<sup>(10)</sup>. An ability to feel and understand emotions is the core element of empathy. In lines with preoccupied style, the secured attachment is also an influential predictor of empathy (Beta = 0.211, p < 0.001). Individual who has secured attachment has appropriate emotional expression and awareness<sup>(8)</sup> and positively associated with empathy. Lastly, fearful attachment predicted less empathy (Beta = -0.187, p = 0.001). Bartholomew & Horowitz<sup>(8)</sup> stated that a person who has a fearful attachment style perceived both self and others as untrustworthy. Therefore they tended to misinterpret situations fearfully and unable to build close relationships with others.

An understanding of the relationship between attachment styles and empathy can be used as basic information for a parenting plan to promote empathy. Although this study revealed some beneficial fundamental information to develop such plans but there are also limitations. Firstly, this research is a cross-sectional study which focused particularly on the relationship between attachment styles and empathy. Therefore the cause-effect conclusion of these variables could not be drawn. Future research may look into these variables by using other forms of design and analysis or experimental design in order to gain more understanding about the causal relationship between attachment and empathy. Secondly, this research only focused on the relationship between empathy and psycho-social factor based on attachment theory. This theory partially accounted for empathy. Future research may examine other variables related to psycho-social perspective. This would probably point out other factors that relate to empathy such as selfawareness, self-compassion, and parenting styles. Finally, the sample was recruited from only one academic institution. Generalization of the findings from this study is limited.

#### Conclusion

The present research revealed that attachment styles, one of the many psychosocial factors, related to each component of empathy differently. Secure attachment positively related to both affective and cognitive empathy. Attachment styles predicted empathy. According to the attachment perspective, appropriate interpersonal interaction is a foundation of secure attachment<sup>(27)</sup>, results from this study could be used as a guideline for empathy development program.

#### What is already known on this topic?

Secure attachment was positively related to empathy. A higher level of secure attachment indicated a higher level of empathy.

# What this study adds?

Each style of attachment associated with empathy differently. The style of attachment related to

empathy but in a different way.

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# **Potential conflicts of interest**

None

#### References

- 1. Maxwell JC. Everyone communicates, few connect: What the most effective people do differently. Tennessee: Thomas Nelson; 2010.
- 2. Goleman D, Boyatzis RE, McKee A. The new leaders: Transforming the art of leadership into the science of results.London: Time Warner; 2002.
- 3. Rogers K, Dziobek I, Hassenstab J, Wolf OT, Convit A. Who cares? Revisiting empathy in Asperger syndrome. J Autism Dev Disord 2007; 37:709-15.
- 4. Yu G, Wang Y, Liu C. Improving public service quality from a developmental perspective: empathy, attachment, and gender differences. Publ Person Manag 2012; 41:9-20.
- 5. Bowlby J. Attachment and loss. Vol 1. Loss. New York: Basic Books; 1969.
- Salter Ainsworth MD. Attachments and other affectional bonds across the life cycle. Parkes CM, Stevenson-Hinde J, Marris P, editors. Attachment across the life cycle. London: Routledge; 1991:33-51.
- 7. Hazan C, Shaver PR. Attachment as an organizational framework for research on close relationships. PsycholInq 1994; 5:1-22.
- 8. Bartholomew K, Horowitz LM. Attachment styles among young adults: a test of a four-category model. J PersSocPsychol 1991; 61:226-44.
- 9. Jonason PK, Krause L. The emotional deficits associated with the Dark Triad traits: cognitive empathy, affective empathy, and alexithymia. Pers Individ Dif 2013; 55:532-7.
- 10. Wei M, Liao KY, Ku TY, Shaffer PA. Attachment, self-compassion, empathy, and subjective well-being among college students and community adults. J Pers 2011; 79:191-221.
- 11. Parapob O. Attachment styles and causal attribution of one's own behaviors versus others' behaviors in negative situations [thesis]. Bangkok:

- Chulalongkorn University; 2003.
- 12. Albarracin D, Johnson BT, Zanna MP. The handbook of attitudes. New York: Psychology Press; 2005.
- 13. Griffin D, Bartholomew K. Models of the self and other: fundamental dimensions underlying measures of adult attachment. J Pers Soc Psychol. 1994; 67:430-45.
- 14. Gliem JA, Gliem RR. Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest research-to practice conference in adult, continuing, and community education. Columbus, OH: The Ohio State University; 2003.
- 15. Jolliffe D, Farrington DP. Development and validation of the Basic Empathy Scale. J Adolesc 2006; 29:589-611.
- 16. Suavansri P. The influences of empathy and problem characteristics of the person in need on prosocial behavior of undergraduate students [senior project]. Bangkok: Chulalongkorn University; 2008.
- Kestenbaum R, Farber EA, Sroufe LA. Individual differences in empathy among preschoolers: relation to attachment history. New Dir Child Dev 1989; 51-64.
- van der Mark IL, van IJzendoorn MH, Bakermans-Kranenburg MJ. Development of empathy in girls during the second year of life: Associations with parenting, attachment, and temperament. Soc Dev 2002; 11:451-68.
- 19. Bischof-Kohler D. Empathie, prosoziales Verhalten und Bindungsqualitat bei Zweijahrigen [Empathy,

- prosocial behavior and attachment in two-year olds]. Psychologie in Erziehung und Unterricht (PEU) 2000; 47:142-58.
- 20. Robinson JL, Zahn-Waxler C, Emde RN. Patterns of development in early empathic behavior: Environmental and child constitutional influences. Soc Dev 1994; 3:125-46.
- Cassidy J, Shaver PR, editors. Handbook of attachment: theory, research, and clinical applications. 2nd ed. New York: Guilford Press; 2008.
- Trusty J, Ng KM, Watts RE. Model of effects of adult attachment on emotional empathy of counseling students. J Counsel Dev 2005; 83:66-77.
- 23. Britton PC, Fuendeling JM. The relations among varieties of adult attachment and the components of empathy. J Soc Psychol 2005; 145:519-30.
- 24. Joireman JA, Needham TL, Cummings AL. Relationships between dimensions of attachment and empathy. N Am J Psychol 2002; 4:63-80.
- Mikulincer M, Gillath O, Halevy V, Avihou N, Avidan S, Eshkoli N. Attachment theory and reactions to others' needs: evidence that activation of the sense of attachment security promotes empathic responses. J Pers Soc Psychol 2001;81:1205-24.
- 26. Bennett S, Nelson JK. Adult attachment in clinical social work: practice, research, and policy. New York: Springer; 2011.
- 27. Hazan C, Shaver P. Romantic love conceptualized as an attachment process. J Pers Soc Psychol 1987; 52:511-24.