

*Composition and function of women's attachment network in adulthood**

Vincenzo Calvo[§], Arianna Palmieri[°], Marta Codato[‡], Ines Testoni^{*}, Marco Sambin[†]

Summary. *The aim of this study was to explore the female attachment network's composition and to investigate the types of relationships that fulfill women's attachment needs and the relative strength of attachment to different figures in different life situations. 251 adult women completed a modified version of the Attachment Network Questionnaire –Revised (ANQ-R). Adult women without a partner assigned the role of principal attachment figure to their best friend. About one third of the participants did not transfer attachment from a figure inside to a figure outside the family of origin. This percentage is higher for women without a partner (46.8%) than for those with a partner (19.1%). Only a minority of the adult women did not show a clear identifiable principal attachment figure. Within the attachment network of women with a partner, we found that the partner is very often the principal attachment figure. Understanding the attachment network of women and identifying the specific principal attachment figure, could be useful to plan psychological guidelines for the prevention and/or the treatment of intimate partner violence and trauma.*

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[§]Department of Philosophy, Sociology, Pedagogy and Applied Psychology (FISPPA)
University of Padova, via Venezia, 8 35131, Padova, Italy. E-mail:
vincenzo.calvo@unipd.it

[°]Department of Philosophy, Sociology, Pedagogy and Applied Psychology (FISPPA)
University of Padova, Italy. E-mail: arianna.palmieri@unipd.it

[‡]Department of Philosophy, Sociology, Pedagogy and Applied Psychology (FISPPA)
University of Padova, Italy. E-mail: marta.codato@unipd.it

^{*} Department of Philosophy, Sociology, Pedagogy and Applied Psychology (FISPPA)
University of Padova, Italy. E-mail: ines.testoni@unipd.it

[†]Department of Philosophy, Sociology, Pedagogy and Applied Psychology (FISPPA),
University of Padova, Italy. E-mail: marco.sambin@unipd.it

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Attachment theory (Bowlby, 1973, 1980, [1969] 1982) is considered a useful framework for understanding close and significant relationships across the life span. Internal working models of attachment are recognized as influencing interpersonal expectations, motivations, and behaviors in intimate relationships, inside and outside family boundaries.

Attachment theory may also represent a significant theoretical basis for conceptualizing close relationships among adolescents and adults, in order to understand factors that are connected with relationship violence. In this direction, Wekerle and Wolfe (1998) investigated the role of child maltreatment and attachment style in adolescent relationship violence and they found several significant gender differences in relationship risk factors of “offender” and “victim” experiences. For instance, avoidant attachment style emerged as a significant predictor of female abuse and victimization (Wekerle & Wolfe, 1998).

In general, a large body of research has emphasized the importance of the quality of attachment to mothers and fathers in childhood in normative and clinical samples (Calvo, Mazzeschi, Zennaro, & Lis, 2002; Cassidy & Shaver, 1999; Fava Vizziello & Calvo, 1997), and to romantic partners in adulthood (Feeney, 1999; Feeney & Noller, 1990; Fraley & Shaver, 2000; Hazan & Shaver, 1987; Owens, Crowell, Pan, & Treboux, 1995; Simpson, 1990) for a healthy and adaptive development of individuals.

To date, much less is known about the functions and the composition of the whole attachment network of individuals during adulthood and its influences on psychological adjustment and wellbeing. Moreover, there has also been relatively little research on gender differences in attachment and on the specificity of attachment networks in females during adulthood.

According to attachment theory, the functions of attachment bonds identified in infant-caregiver observations are also present in adults' committed close relationships (Ainsworth, 1989; Doherty & Feeney, 2004; Weiss, 1982, 1986). In this perspective, adults desire to be with their partners (proximity seeking), seek comfort from them in times of stress (safe haven), become distressed when they are unavailable (separation protest), and derive a sense of security and confidence from their relationships (secure base) (Doherty & Feeney, 2004).

Weiss (1991) identified other key properties of childhood attachments that also apply to some adult relationships. These features include the specificity of the attachment figure in terms of meeting attachment needs

and the persistence of attachment behavior even when the partner is unavailable or neglectful.

Based on these criteria, it has been argued that adult individuals can rely on different preferred attachment figures that fulfill their attachment needs and form a network of attachment bonds. The attachment network may differ in the variety of attachment figures reported by adults and the relative strength of attachment to them (Doherty & Feeney, 2004).

The present study focuses on the composition of attachment networks in adult women. The aim was to explore the composition of attachment networks in women and to investigate the types of relationships that fulfill attachment needs for women and the relative strength of attachment to different figures in different life situations.

Method

Participants

A group of 251 adult women participated in the study. This group was composed of volunteer female students that attended regularly a course of Family Counseling Techniques at the Faculty of Psychology of the University of Padua.

At the beginning of the lessons, all the students were asked to take part in a validation study and were invited to complete anonymously a questionnaire on their attachment network (ANQ-R, Doherty & Feeney, 2004). From the total sample of 288 students who completed the questionnaire, we selected the 251 women (87%).

The mean age of female participants was 22.83 years ($SD = 3.72$; range: 20.41 – 54.84); 155 of them (61.8%) were with a romantic partner whereas 96 were not (38.2%). Mean age of the two groups (subjects with a partner vs. without a partner) was not statistically different ($t(249) = .86, p = .392$).

Measures

A modified version of the Attachment Network Questionnaire –Revised (ANQ-R, Doherty & Feeney, 2004) was administered to the participants. The ANQ-R is a self-report instrument designed to investigate the composition of the attachment network of the individuals and the strength of participant's attachment toward various attachment figures.

The ANQ-R measure, used in the present study, is composed of two parts. First, participants have to list all the people to whom they “feel a strong emotional tie, regardless of whether that tie is positive, negative or mixed” (Trinke & Bartholomew, 1997, p. 409) and note their relationship to each person. This first task ensures that the important people in participants’ lives are salient to them while they are completing the questionnaire.

Then participants had to answer 8 items, assessing the four attachment functions (proximity seeking, secure haven, separation protest and secure base). For each item, participants were asked to name up to five people who fulfill that function and to score the person’s importance with a rating scale, ranging from 1= “Not at all important” to 7 = “Extremely important”.

Following the methodology proposed, we derived several measures from the ANQ-R (Doherty & Feeney, 2004): number and characteristics of the preferred attachment figures; attachment strength and functions, and ranking position (i.e. primary attachment figure) for the five most frequently occurring figures of partner, mother, father, sibling, and best friend. Strength of attachment to each of the five principal figures was calculated by computing the total scores across the four functions and could range from 0 to 56, with higher scores indicating greater attachment strength. The use of total scores as an index of attachment strength is supported by previous studies (Doherty & Feeney, 2004; Feeney & Hohaus, 2001; Trinke & Bartholomew, 1997).

Statistical Analysis

Measures on attachment networks were analyzed qualitatively reporting descriptive statistics about the total group of participants and distinguishing two meaningful subgroups: women without a partner and women with a partner. When needed, differences between subgroups were verified with *t*-test analyses (independent-samples and paired-samples *t* tests).

Results

Reports of significant people. The principal aim of our analysis was to describe the composition and the main characteristics of the attachment networks of women attending a university course.

First, we analyzed the reports of “significant people” (Doherty & Feeney, 2004), i.e. persons to whom women felt a strong emotional tie. Women reported to have a mean number of relevant emotional ties of 8.82 ($SD = 2.74$), ranging from a minimum of 2 up to 17. They listed significantly more female ($M = 5.31$) than male people ($M = 3.51$) (*paired* $t(250) = 11.05, p < .001$). Significant people were chosen equally within family members ($M = 4.20$) and outside the family ($M = 4.12$).

When considering the “relational status” of participants (with or without a partner), we found significant mean differences in the reports of significant people. Although single women (without a partner) listed an equal number of significant others than women with a partner (M without a partner = 9.11, M with a partner = 8.64, *ns*), they acknowledged a greater number of emotional ties with people of the same gender (M without a partner = 5.98, M with a partner = 4.89, $t(249) = 4.00, p < .001$) and less ties with males (M without a partner = 3.14, M with a partner = 3.75, $t(249) = -3.09, p = .002$). There were no differences between the two subgroups in the number of significant people inside and outside the family.

Attachment strength. The multiplicity of persons who were reported to serve as attachment figures was investigated in terms of attachment strength, functions, and primary attachment figures. Strength of attachment to each of the five principal figures (partner, mother, father, sibling, and friend) was calculated. For the overall sample, mean scores revealed that participants reported strongest attachment to friends ($M = 35.50$), then mothers ($M = 33.86$), followed by partners ($M = 30.25$), fathers ($M = 20.79$), and siblings ($M = 17.08$). Table 1 shows total scores and scores on each attachment function for each attachment figure.

Table 1. Attachment strength and scores on each attachment function

	<i>Partner</i>	<i>Mother</i>	<i>Father</i>	<i>Sibling</i>	<i>Friend</i>
<i>Safe haven</i>	7.78	9.07	3.79	2.84	9.87
<i>Secure base</i>	6.55	11.43	8.67	5.35	8.17
<i>Proximity seeking</i>	8.18	5.67	3.08	3.88	10.44
<i>Separation protest</i>	7.75	7.69	5.25	5.00	7.02
<i>Attachment strength (total score)</i>	30.25	33.86	20.79	17.08	35.50

We analyzed the attachment strength according to the relational status of participants. As expected, there were significant differences in attachment strength for friends: women without a partner had greater attachment strength for friends than engaged woman (M without a partner = 41.23, M with a partner = 31.95, $t(249) = 4.91$, $p < .001$); on the other hand, there were no differences in family members between the two groups.

In brief, women with a partner reported strongest attachment to partners ($M = 48.99$), then mothers ($M = 33.11$), followed by best friends ($M = 31.95$), fathers ($M = 20.17$), and siblings ($M = 17.25$). Conversely single women reported strongest attachment to best friends ($M = 41.23$), then mothers ($M = 35.06$), followed by fathers ($M = 21.79$), and siblings ($M = 16.80$).

Primary attachment figures. Subsequently we classified the primary attachment figure of each participant, identifying the person with the greater attachment strength, i.e. the person with the highest total score across the four functions (Doherty & Feeney, 2004); in other words, the primary attachment figure was the figure on whom a participant relied most for attachment needs according to the ANQ-R.

For 36 participants (14.3%), the highest composite score was the same for two or more attachment figures. According to Doherty and Feeney (2004), these participants were judged not to have a primary attachment figure and excluded from the subsequent analyses. For the remaining 215 participants, several primary attachment figures were present (Table 2).

In a descending order of frequency, primary attachment figures for single women were best friends, mothers, siblings, and then fathers. For women with a partner, the primary attachment figures were in order partners, mothers, friends, siblings, and fathers.

Table 2. Percentages reporting different target as primary attachment figures

	Total group <i>n</i> = 215	Singles, participants without a partner <i>n</i> = 79	Engaged, participants with a partner <i>n</i> = 136
Partner	45.6%	n/a	72.1%
Mother	20.0%	34.2%	11.8%
Friend	20.9%	45.6%	6.6%
Sibling	5.6%	7.6%	4.4%
Father	3.3%	3.8%	2.9%

n/a = not applicable

Discussion

Attachment theory has emphasized the importance of close relationships across the lifespan for an adaptive and healthy life of individuals (Simonelli & Calvo, 2002). However, only few studies have addressed the issue of the composition and features of attachment networks during adulthood (Calvo, de Romano, & Battistella, 2008; Doherty & Feeney, 2004).

Doherty e Feeney (2004) were the first who assessed the structure of adults' attachment networks with a large sample of adults representing various ages and life situations. The results supported the preeminent role of attachment relationships with romantic partners in adulthood. According to the researchers, also relationships with mothers, fathers, siblings, friends, and even children, may meet the criteria used to define a "full-blown" attachment; moreover, they found that all these persons constituted the primary attachment figure for a relatively non-negligible number of individuals in adulthood.

Similar findings were replicated with respect to the attachment networks of young Italian adults (Calvo, de Romano, et al., 2008) and of marital couples (Calvo & Gattera, 2009).

In our study, we found that only a minority (14.3%) of the adult women that participated did not have a clear identifiable principal attachment

figure. In the attachment network of these individuals we could identify two main attachment figures with the same attachment strength and none of them may be qualified as “principal” attachment figure (usually these are the mother and another person outside the family, i.e. partner when present or best friend). This kind of network is relatively rare (Calvo, de Romano, et al., 2008; Doherty & Feeney, 2004) and it is more frequent in adolescence or in the beginning of adulthood. In our clinical experience, it is very likely that it uncovers a loyalty conflict.

To the best of our knowledge, this is the first study that concentrates its attention, even if at a preliminary level, on women’s attachment networks. Considering the composition of attachment networks in the light of gender differences may play a significant role for identifying protective or risk relational factors involved in gender violence.

The findings of this study confirmed that attachment networks of women with a partner and without a partner are not overlapping. In the former, the partner was very often (72.1%) the principal attachment figure and fulfilled most attachment functions and needs. In the latter, the role of the principal attachment figure was played often by the best friend (45.6%). In both cases, the principal attachment figure was found outside the boundaries of the family of origin. This is coherent with the literature that has documented the gradual transfer of attachment from parents to romantic partners (Feeney, 2004) or friends (Doherty & Feeney, 2004).

On the other hand, about one third of the participants (63 out of 215, 29.3%) did not transfer attachment from a figure inside to a figure outside the family of origin. This percentage was higher for women without a partner (37 out 79, 46.8%) than for those with a partner (26 out 136, 19.1%). A further research has highlighted that this condition may be a risk factor in adulthood and it is significantly correlated with anxiety, depressive symptoms and psychological distress (Calvo, Battistella, Vallese, & Tajariol, 2008).

Interestingly, women seemed to rely on mothers as a base for exploratory behavior, as shown by the highest scoring that mothers had in the secure base function result. In the field of attachment theory, providing a secure base has been identified as the central attachment need (Waters & Cummings, 2000); indeed, it was found that mothers were used most as a secure base across the adolescent and young adult life, more than fathers or peers and regardless of whether participants had romantic partners (Doyle, Lawford, & Markiewicz, 2009).

Future research could address the need to understand deeply the implications of the transference of primary attachment figures in the course

of development, focusing on normal and psychopathological processes, as in cases of familial abusive and violent contexts.

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