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PERSONALITY AND ATTACHMENT TO FRIENDS

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Our study examines the relations of attachment and personality dimensions in young adults. Particular focus of the study is attachment to friends, a form of intimate relations that is less frequently represented in attachment research. For this purpose, modified Brennan's Inventory of Experience in Close Relations (Kamenov & Jelić, 2003) and NEO PI-R assessing five personality dimensions (Costa & McCrae, 1992) were administered to the sample of 352 university students. Results demonstrate a variety of relations between two dimensions of attachment to friends and personality traits, both at the domain and facet level. Anxious attachment to friends is primarily related to neuroticism, while avoidance in friendships is mainly characterized by lower results in two interpersonal domains, extraversion and agreeableness.

Keywords: attachment to friends, personality traits, five-factor model

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Being a comprehensive or "grand" theory in psychology, attachment theory as formulated by the Bowlby/Ainsworth research tradition offers a number of predictions about behavior in various domains and contexts as well as across the life span (Waters & Cummings, 2000).

One of the core ideas of the attachment theory is thus related to attachment behaviour in adulthood, proposing that individual differences in adult attachment behavior are reflec-

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... tions of the expectations people have formed about others and themselves on the basis of their early attachment experiences. Over repeated interactions with the caregiver early in childhood, the child develops a set of knowledge structures, or internal working models, representing those interactions and contributing to the regulation of the attachment behavioral system (Bowlby, 1969). Although attachment theory was originally designed to explain the emotional bond between infants and their caregivers, Bowlby (1979) believed that attachment is an important component of human experience "from the cradle to the grave" (p. 129) and that attachment relationships play a powerful role in adults' emotional life. Repeated patterns of interaction between infant and primary caregiver lead to the formation of internal working models, which in turn continue to shape subsequent close relationships throughout life (for a review, see Pietromonaco & Feldman Barett, 2000). Internal working models guide attachment strategies, reflected in cognition and behavior of the individual in close relationships with affectional bonds (Berlin & Cassidy, 1999). According to these theoretical predictions, friendship appears to be a close relationship where the initial attachment pattern with caregivers should be reflected. A number of studies have therefore examined the relations between early attachment experiences and various aspects of childhood friendly relations, such as the quality of friendships, friendship concept, peer competence and conflict resolution skills. These studies provided sound empirical evidence of a number of beneficial outcomes of secure attachment in friendship relations. Children who are securely attached report better friendship quality, more positive peer relations and higher social competence and conflict resolution skills (i.e. Benson et al., 2006; Contreras et al., 2000; Lieberman et al., 1999; Schneider et al., 2001; Weimer et al., 2004; Zimmerman, 2004). These outcomes may be due to better adjustment of securely attached individuals, showing ego resilience, lower anxiety and distress and better affect regulation in social situations (Kobak & Sceery, 1988). Friendship relations become even more important in the process of transferring attachment-related functions from parents as primary attachment figures in childhood to peers in early adulthood (Fraley & Davis, 1997). Friends thus form an important part of attachment networks in adulthood, along with family members and romantic partners (Trinke & Bartholomew, 1997; Doherty & Feeney, 2004). The best friend could be a primary attachment figure in the absence of a romantic partner in a long committed relationship, providing a source of trust and emotional support (Doherty & Feeney, 2004). For college-age participants best friendships could represent fully developed attachment

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... relationships serving all attachment functions (Fraley & Davis, 1997; Oswald & Clark, 2003). Empirical evidence suggests an even greater attachment security with best friends compared to romantic partners at college age (La Guardia et al., 2000).

Over the past three decades, attachment theory has also gained relevance in explaining the basic mechanisms of early personality development (for a review, see Mikulincer & Shaver, in press; Shaver & Mikulincer, in press). Attachment theorists propose that early attachment patterns, with their influence on emotion regulation, have the power of shaping personality development. Attachment experiences in infancy could therefore be important factors in the development of many personality features such as emotionality, sociability, curiosity, trust and cooperation. Moreover, early attachment could influence not only isolated traits, but the personality organization as well (Thompson 1999, 2000). Early secure attachment with the caregiver should result in a range of adaptive behavioral patterns later in life as reflected in the higher levels of emotional stability and positive emotionality as well as in the quantity and quality of interpersonal relations. On the other hand, insecure attachment patterns in childhood could lead to higher levels of neuroticism, which refers to the level of negative emotionality. These presumptions about the consequences of attachment experiences for personality have led some theorists to promote attachment theory as a broad theory of personality and personality development (e.g. Shaver & Mikulincer, 2002).

The hypothesis that early parenting experiences may be predictive for personality development is particularly important in light of the findings demonstrating substantial stability of attachment patterns from infancy to early adulthood, with attachment experiences thus playing a relatively consistent role in personality development over time (Allen et al., 2004; Waters et al., 2000). The notion of the relations between attachment experiences and personality has recently received some empirical support. Research findings reveal that attachment security in infancy is related to more positive outcomes related to the development of dependency, self-reliance, empathy and efficacy in childhood, while maladaptive attachment patterns are related to problems with anxiety and hostility (Weinfield et al., 1999). Positive influences of secure attachment are also evident in adult personality, as reflected in higher extraversion, conscientiousness and openness and lower neuroticism later in life (Hagekull & Bohlin, 2003; Reti et al., 2002). Existing empirical evidence thus lends support to the notion that basic personality dimensions should demonstrate theoretically meaningful relations with the attachment variables. A number of recent studies provided evidence in line with

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... some of these theoretical expectations. These studies used the five-factor model as a common personality taxonomy that has been dominating the literature on personality structure over the past two decades (Ozer & Reise, 1994; Funder, 2001).

Shaver and Brennan (1992) were the first to report the relations between five factors as defined by the NEO Personality Inventory and three attachment types proposed by Hazan and Shaver (1987): attachment security, anxiety-ambivalence and avoidance. Using the early version of NEO Personality Inventory (Costa & McCrae, 1985), this study confirmed a theoretically meaningful overlap between attachment styles and five personality dimensions. Low neuroticism and high extraversion were therefore the main personality features differentiating secure attachment style from the two insecure ones in this study. Recently, Noftle and Shaver (2006) reported the most comprehensive study to date of relations between personality and attachment. Their study offers a detailed summary of previous empirical findings on the relations between attachment and five personality dimensions. The main findings of this summary are that, in the majority of studies, attachment anxiety is moderately to strongly related to neuroticism, attachment avoidance is negatively related to extraversion while attachment security is mainly positively related to extraversion (Carver, 1997; Bakker et al., 2004). In previous studies, as summarized by Noftle and Shaver (2006), both attachment dimensions were generally unrelated to openness to experience.

Their own empirical study addressed some of the shortcomings found in previous research using a variety of inconsistent attachment measures or some earlier or less common measures of five factors. Noftle and Shaver (2006) included both domain-level and facet-level personality traits of the five--factor model as defined by the NEO PI-R (Costa & McCrae, 1992) and the dimensional measure of adult attachment proposed by Brennan et al. (1998). Their study found moderate positive relations of attachment anxiety with neuroticism and weak negative relations with conscientiousness. At the facet level, attachment anxiety was related to all facets of neuroticism, but particularly to depression, vulnerability and anxiety. Furthermore, attachment anxiety was negatively related to the assertiveness facet of extraversion and to all six facets of conscientiousness. Attachment avoidance has also demonstrated positive relations with neuroticism domain, but these correlations were lower in comparison to attachment anxiety. In particular, avoidance was positively related to depression, self-consciousness and vulnerability. Avoidance was negatively related to the other three domains, particularly to extraversion and conscientiousness, and, modestly, to openness. At the facet level, avoidance showed negative correlations with

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... most facets of extraversion and conscientiousness. In the case of openness, the relation was mainly due to the negative correlation with openness to feelings.

Comparable results were reported by subsequent studies as well (Marušić et al., 2006; Donnellan et al., 2008). The main findings of these studies supported the most notable relations of attachment anxiety with neuroticism and attachment avoidance with extraversion. Furthermore, both studies revealed that low agreeableness was significantly related to anxiety and avoidance.

The aim of the present study is primarily to extend the research on personality and attachment into a different cultural context. As Schneider et al. (2001) note, there is some cross-cultural evidence for the universality of implications attachment has in close relations, but the empirical evidence is yet inconclusive. For example, recent cross-cultural study of Bartholomew's four-category attachment model (Bartholomew & Horowitz, 1991) has not provided substantial empirical support for the universality of adult romantic attachment models across 62 cultures (Schmitt et al., 2004). Furthermore, our study aims to explore the generality of relations between attachment dimensions and personality in friendship, a type of attachment relations particularly important at college age (Fraley & Davis, 1997; La Guardia et al., 2000), but less frequently studied by attachment research. The purpose of this study is thus in line with the most recent recommendations for routine inclusion of personality variables in attachment studies that could promote integration of the two research traditions (Donnellan et al., 2008). The comparability of the findings with previous studies is enabled by the existence of validated translations of the most common measures of five personality dimensions and two attachment dimensions. A Croatian version of the NEO PI-R has proven to be a measure of the five factors comparable to the original (Marušić et al., 1996; McCrae et al., 1999). There is also a validated Croatian version of the Experiences in Close Relationships Inventory (Brennan et al., 1998), shortened and modified for measuring attachment in different types of close relationships (Kamenov & Jelić, 2003, 2005).

METHOD

Participants

The sample consisted of 352 students from the University of Zagreb. We included in this study students from different study groups – Psychology, Law, English Language, Engineering and Police College. Participants were 216 females and 136 males whose age ranged from 18 to 33 years, with a mean of 21.1 years. Most of the participants live in urban settings and are heterogeneous with respect to social class and parental educational background.

Measures and procedure

Respondents completed a set of questionnaires and provided information about their previous relationship experience and information related to their family of origin. After completing the background questions, the Experiences in Close Relationship Scale – Friendship version (Kamenov & Jelić, 2003) was administered, followed by the NEO PI-R (Costa & McCrae, 1992).

Experiences in Close Relationship Scale

The Experiences in Close Relationship Scale (Kamenov & Jelić, 2003) is a shortened version of the Experiences in Close Relationships Inventory (Brennan et al., 1998) retaining the same psychometric characteristics as the original scale (see Kamenov & Jelić, 2003 for details). The scale consists of 18 statements describing one's feelings, thoughts and behavior in close relationships. There are three versions of the scale, each referring to different type of close relationships - romantic relationship, friendship and family. In the Friendship version, which was administered in this study, participants assess the extent to which each item represents their own feelings, thoughts and behavior in relation to their friends in general. Their assessments are given on a 7-point scale, ranging from "strongly disagree" to "strongly agree". The scale consists of two subscales, measuring two attachment dimensions - anxiety and avoidance. Each subscale consists of 9 items, strongly correlating with the underlying factor. The two subscales are orthogonal (r = 0.08) and highly reliable (Cronbach alpha is 0.86 for Avoidance and 0.83 for Anxiety). According to their results on the two dimensions and the theoretical mean value on each dimension, participants can be categorized into one of the four attachment styles proposed by Bartholomew - secure, preoccupied, dismissing and fearful (Bartholomew & Horowitz, 1991; also see Kamenov & Jelić, 2003).

NEO PI-R

The NEO Personality Inventory (NEO-PI) by Costa and McCrae (1992) is the most widely used phrase-based inventory developed for the assessment of the five-factor model of personality. The 240-item inventory consists of the following five scales measuring five broad personality domains: Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A) and Conscientiousness (C). Each domain scale consists of 48 statements assigned to the six eight-item facet scales. These facets measure more specific traits defining each of the domains. Subjects respond to each statement on a 5-point scale, ranging from "strongly disagree" to "strongly agree".

The Cronbach alpha reliability coefficients for the N, E, O, A, and C scales obtained in the validation study of the Croatian translation of the instrument are 0.91, 0.88, 0.85, 0.88,

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... and 0.90 respectively, and thus are highly comparable to those reported for the original instrument (Marušić et al., 1996; Costa & McCrae, 1992; Caruso, 2000). The alpha reliabilities obtained in this sample are 0.91, 0.88, 0.90, 0.83 and 0.89 for N, E, O, A, and C domain scales respectively. Our study thus produced scores with adequate reliability for the NEO domain scales.

RESULTS

The pattern of gender differences observed in this study is in line with the previous findings both for attachment and personality dimensions (Table 1).

	М	SD		M	SD	t	p
Anxiety	27.23	10.15	M F	24.78 28.73	9.41 10.32	-3.59	0.000
Avoidance	21.13	9.18	M F	23.79 19.38	9.22 8.69	4.51	0.001
Neuroticism	89.42	21.84	M F	80.62 94.28	17.69 22.43	-5.54	0.001
Extraversion	114.54	19.51	M F	112.79 115.63	17.58 20.52	-1.22	0.224
Openness	118.84	21.16	M F	112.16 122.37	20.93 20.48	-4.08	0.001
Agreeableness	108.40	16.87	M F	107.27 109.02	16.16 17.25	-0.85	0.396
Conscientiousness	121.74	21.69	M F	123.06 121.07	21.53 21.80	0.76	0.451

Note: degrees of freedom are ranging from 294 to 340

↑ TABLE 1 Means and standard deviations of anxiety and avoidance scales and personality domain scales for the whole sample and for males and females separately; results of t-tests between genders

Females scored higher than males on anxiety dimension of the attachment measure, a finding that has only limited support in the literature (Picardi et al., 2005; Marušić et al., 2006). However, the obtained gender difference in attachment anxiety is in line with the cross-culturally supported finding that females score higher on general anxiety (Feingold, 1994). Males scored higher than females on avoidance dimension, a finding that was already obtained in our previous studies (Kamenov & Jelić, 2005; Marušić et al., 2006). Having in mind that avoidance reflects experience of discomfort caused by closeness and addiction to others, these gender differences could be the result of a need for higher autonomy and independence in our male participants, which is a well known and widely documented gender difference (Cross et al., 2000; Cross & Madson, 1997; Caldwell & Peplau, 1982; Davidson & Duber-

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... man, 1982). Females also scored higher on neuroticism and openness dimensions of personality, supporting findings from both the cross-cultural research (Costa et al., 2001) and Croatian validation of the NEO PI-R (Marušić & Bratko, 1998).

Due to the observed gender differences in both the attachment and personality dimensions and to the frequently reported gender differences in friendship (e.g. Saferstein et al., 2005), further data analyses were performed separately for males and females. Correlations of attachment dimensions and personality domains for both genders are presented in Table 2.

	ANX	AV	N	E	O	A	С
						F	emales
ANX	-		0.513**	-0.066	0.047	-0.173*	-0.153
AV		-	0.044	-0.455**	-0.309**	-0.232**	-0.019
N	0.451*	* 0.164	-	-0.305**	0.090	-0.055	-0.356**
E	-0.047	-0.446**	-0.410**	-	0.409**	-0.016	0.045
O	-0.106	-0.148	0.056	0.261**	-	0.006	-0.242**
A	-0.149	-0.282**	-0.051	0.077	0.082	-	0.019
C	-0.056	-0.059	-0.450**	0.239*	0.040	0.113	_
	Males						

^{*}p<0.01; **p<0.05 (Note: females above diagonale, males below.)

• TABLE 2 Correlations of anxiety and avoidance in friendships with personality domains for males and females

Correlations between scale scores on attachment and personality dimensions reveal some universal patterns regardless of gender. In both samples attachment anxiety is moderately correlated with neuroticism, indicating that anxious attachment to friends is related to the overall disposition to experiencing negative emotions and distress. Attachment anxiety is also weakly negatively correlated with agreeableness for females. Attachment avoidance is for both genders primarily related to lower levels of extraversion followed by low agreeableness. In the female sample, avoidance also shows a negative correlation with openness to experience. Correlations between factor scores replicated these findings, except the correlation between avoidance and agreeableness, which was not found.

The results in Table 3, showing the facet scale correlations, provide better insight in particular personality traits that are relevant for explaining the relationship between attachment to friends and each personality dimension. The correlation of attachment anxiety with neuroticism obtained at the domain level is thus reflected in moderately positive correlations of anxiety with almost all of the neuroticism facets for both genders. The only exception is the non-significant correlation between anxiety and impulsiveness for males. Furthermore, an-

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→ TABLE 3 Correlations of anxiety and avoidance dimensions in friendships with facet scales of the NEO PI-R for males and females

xiety in males negatively correlated with actions and values in the openness domain, while it was positively correlated with aesthetics for females. Males who show more anxiety in attachment to friends are more trustful in their interpersonal relations and show more order in their behavior, while anxious females are less competent, self-disciplined and deliberate.

NEO-PI-R scale	Anxiety Males Female		Avoidance Males Femal	
Neuroticism N1: Anxiety N2: Angry Hostility N3: Depression N4: Self-Consciousness N5: Impulsiveness	0.438**	0.390**	0.149	0.060
	0.466**	0.314**	0.206*	0.051
	0.305**	0.417**	0.212*	0.206**
	0.517**	0.476**	0.126	0.008
	0.114	0.334**	-0.106	-0.214**
N6: Vulnerability Extraversion E1: Warmth E2: Gregariousness E3: Assertiveness E4: Activity E5: Excitement-Seeking E6: Positive Emotion	0.233* 0.191 -0.126 -0.085 0.065 -0.018 -0.151	-0.068 -0.088 -0.060 0.008 0.064 -0.114	0.138 -0.478** -0.456** -0.201* 0.041 -0.160 -0.374**	0.051 -0.552** -0.402** -0.236** -0.044 -0.190** -0.371**
Openness O1: Fantasy O2: Aesthetics O3: Feelings O4: Actions O5: Ideas O6: Values	-0.019	0.022	-0.224*	-0.297**
	0.019	0.214**	-0.080	-0.116
	0.176	0.135	-0.237*	-0.373**
	-0.303**	-0.177	-0.109	-0.139
	-0.084	0.051	0.071	-0.177
	-0.300**	-0.103	-0.126	-0.204**
Agreeableness A1: Trust A2: Straightforwardness A3: Altruism A4: Compliance A5: Modesty A6: Tender-Mindedness	-0.244*	-0.083	-0.442**	-0.459**
	-0.172	-0.173	-0.039	-0.049
	-0.012	-0.136	-0.255**	-0.291**
	0.029	-0.107	-0.036	-0.131
	-0.156	-0.080	-0.009	0.151*
	0.109	-0.067	-0.297**	-0.220**
Conscientiousness C1: Competence C2: Order C3: Dutifulness C4: Achievement Striving C5: Self-Discipline C6: Deliberation	0.042	-0.224**	-0.034	-0.187**
	0.330**	0.033	0.088	0.029
	0.157	-0.076	0.026	-0.029
	-0.158	-0.072	-0.121	-0.023
	-0.076	-0.217**	0.000	0.071
	0.077	-0.151*	0.185	-0.003

^{*}p<0.01; **p<0.05

The negative relationship between avoidance and extraversion is clearly shown on the facet level as well. Avoidant males and females both reported extraversion traits such as

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TABLE 4
Multiple regressions of the dimensions of attachment to friends on the five personality domains for males and females (multiple correlations and β coefficients for five personality domains)

lower warmth, gregariousness and assertiveness. Furthermore, they had lower levels of positive emotion, while avoidant females were less prone to seeking excitement. Avoidant males and females were also more depressive and less open to fantasy and feelings. They also showed lower levels of trust, altruism and tender-mindedness in their interpersonal relations. In addition, avoidant females were less impulsive and competent, less open to values and more modest.

In order to determine how well the results in two attachment dimensions could be predicted by dimensions of the five-factor model, we carried out multiple regression analyses for both genders. The results of multiple regressions for the NEO domain scales are summarized in Table 4.

	Anxiety		Avoidance		
	Males	Females	Males	Females	
	β	β	β	β	
Neuroticism	0.639**	0.556**	0.008	-0.104	
Extraversion	0.230	0.117	-0.438**	-0.426**	
Openness	-0.199	-0.043	-0.017	-0.124	
Agreeableness	-0.140	-0.141	-0.256*	-0.218**	
Conscientiousness	0.200	0.032	0.079	-0.067	
R ²	0.308**	0.295**	0.267**	0.279**	

^{*}p<0.01; **p<0.05

Regression analyses yielded significant multiple correlations between both attachment dimensions and personality for males and females. All four multiple correlations fell within the similar range of values, indicating that personality dimensions contribute significantly, but modestly to the explanation of variance in attachment dimensions. The same set of predictors in both males and females contributed to the observed multiple correlations. As indicated by the patterns of bivariate correlations, attachment anxiety was primarily predicted by the high level of neuroticism, while low extraversion and low agreeableness significantly contributed to the prediction of attachment avoidance.

DISCUSSION

The results of our study provide further support to the body of research documenting significant relations between core personality traits and attachment dimensions in close relationships, extending previous empirical evidence to the area of friendly relations. The main finding of our study is that attachment anxiety and avoidance show conceptually meaningful relations with two major personality domains, neuroticism and

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extraversion. The relationship of attachment anxiety with NEO PI-R neuroticism domain and facets has been well documented for partner relations (Shaver & Brennan, 1992; Noftle & Shaver 2006; Marušić et al., 2006). Our study provides evidence for the generality of this finding for the domain of friendship relations as well. The robustness of this relationship across the domains of close bonds reveals a significant conceptual overlap of the two constructs particularly evident on a facet-level, where generalized anxiety represents one of the traits in the broad domain of neuroticism. However, attachment anxiety significantly correlates not only with the generalized anxiety, but with all other aspects of neuroticism in the female sample and all but one (impulsiveness) in the male sample. This indicates that attachment anxiety is closely related to the general tendency of experiencing negative emotions across a variety of situations and settings and is in line with the conceptualization of attachment anxiety as the negative model of self (Bartholomew, 1990).

Attachment anxiety is weakly correlated with low domain agreeableness for females and with several facets from the domains of openness and conscientiousness for both genders. Males who are more anxious in friendly relations are less open to a variety in behavior and less liberal in their values. They are also prone to displaying orderly behavior in their daily functioning. Females with higher attachment anxiety are slightly more open to aesthetic feelings, a finding with no explicit theoretical background or previous empirical support. Anxious females also report being less competent, less self--disciplined and less deliberate in their behavior. The negative relationship of domain or facet-level conscientiousness and attachment anxiety is supported by previous research as well, indicating that individuals who experience more anxiety in their close relationships are less conscientious, organized and deliberate in their daily functioning (Griffin & Bartholomew, 1994; Noftle & Shaver 2006; Marušić et al., 2006).

The most notable personality characteristic of individuals with an avoidant attachment style in our study is their lower extraversion. This relation makes theoretical sense in that individuals who are generally less prone to establishing and maintaining a range of social relations are those who are more avoidant in their close relationships. The facet-level relation is primarily reflected in lower warmth and gregariousness of avoidant individuals, followed by their lower assertiveness and less positive emotions. Our findings for friendship thus expand the previous findings that less extraverted people are more avoidant in their attachment to romantic partners (Shaver & Brennan, 1992; Noftle & Shaver, 2006; Marušić et al.,

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... 2006). As proposed by the attachment theory, developmental origins of these relations could be attributed to the early attachment experiences. Some evidence suggests that secure attachment in young children is related to more competence in close relationships such as with friends and school staff, although the evidence for longer-term association is modest (Thompson, 1999).

Avoidance is also meaningfully related to agreeableness, another interpersonal dimension in the five-factor model. Research summary provided by Noftle and Shaver (2006) indicates that this relationship was supported by all of the studies analyzed, so our study makes no exception. Both avoidant males and females in our sample were slightly less agreeable, indicating their lower capacity for quality interpersonal relations. In particular, they showed lower trust and altruism and were less tender-minded when relating to others, in line with previous findings (Marušić et al., 2006; Noftle & Shaver, 2006). In sum, individuals who display more tough-minded and distrusting behavior in a variety of interpersonal contacts also seek less intimacy and involvement in their close relations with partners or friends. Recent behavioral studies are in line with this pattern, revealing that avoidant attachment is strongly related to less altruistic behavior in various settings (Gillath et al., 2005). Furthermore, our results for female sample support a finding reported by Noftle and Shaver (2006) that modesty in interpersonal relations could be related to a more avoidant pattern of attachment in close bonds.

Avoidant males are also characterized by lower openness to experience, particularly to lower openness to fantasy and to feelings. Developmental research suggests that secure attachment is related to a more emotionally open conversation between mother and child, with more frequent verbal references to feelings (Laible & Thompson, 2000). Such interactions foster advanced understanding of emotions in preschool children (Ontai & Thompson, 2002). The developmental history of securely attached individuals could therefore promote openness to feelings, because feelings were more frequently elaborated in their communication with mother during infancy. The opposite could be expected for insecurely attached individuals, whose history of less elaborated maternal discourse related to emotions could result in a lower openness to feelings in adulthood.

Avoidant attachment to friends is generally unrelated to either conscientiousness domain or its specific traits. The only exception is lower competence in avoidant females, a relation that was found for anxiety as well. Both anxious and avoidant females thus show lower competence in dealing with various

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... challenges of everyday life. This finding, also reported by previous research on romantic attachment (Marušić et al., 2006; Shaver & Noftle, 2006), suggests that generalized perception of lower self-efficacy is reflected in close personal relations as well. Developmental research has demonstrated that secure attachment in childhood was predictive of better social competence later in life (Weinfield et al., 1999; Zimmermann, 2004).

The most notable findings of our study are in line with previous research findings on relations between romantic attachment and basic personality, extending the evidence to the domain of friendship relations. Two attachment dimensions thus seem to be related to somewhat different personalities. Anxious attachment is primarily related to neuroticism, indicating that pervasive proneness to negative emotionality is reflected in close personal relations as well. Avoidance in friendships is mainly characterized by lower extraversion and agreeableness, with avoidant individuals displaying a pattern of personality characteristics indicative of adjustment problems that could potentially harm close relationships.

The empirical evidence therefore suggests a moderate overlap of the two sets of personality domains emerging from different theoretical traditions. Theoretical background provided by the attachment theory underlines the crucial role of environmental influences in the formation of adult attachment style, where environment operates through early attachment experiences a child has with the primary caregiver and thus shapes the development of personality (Thompson, 1999, 2000). However, recent behavioral genetic studies point to the substantial genetic influences in the development of adult attachment, suggesting that attachment anxiety is shaped by both environmental and genetic factors, while the genetic influence in attachment avoidance still remains inconclusive (Crawford et al., 2007; Gillath et al., 2008). Furthermore, the observed relations between personality and attachment could be partly attributed to the common genetic influences, as suggested by Donnellan et al. (2008). Their study reveals a shared genetic basis underlying the associations of attachment anxiety and avoidance with neuroticism and extraversion, indicating that biologically based personality traits could influence the person-environment interactions and thus mediate the development of internal working models of attachment in adulthood. Crawford et al. (2007) offer a similar conclusion, suggesting that neuroticism provides an underlying genetic basis for the observed relationship between attachment anxiety and emotional dysregulation found in their study. While further research is needed to shed light on the origins of personality-attachment relations and the possible contribution of

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... genetic and environmental factors, the degree of overlap found in our study lends support to the conclusion that adult attachment style in close relations could not be reduced to variability in core personality domains. Adult attachment evidently explains a unique portion of variance in interpersonal functioning beyond the one explained by five basic personality factors.

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Ličnost i privrženost prijateljima

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Istraživanje ispituje povezanost privrženosti i osobina ličnosti kod mlađih odraslih osoba. Poseban je naglasak na privrženosti u prijateljstvima, jer je taj oblik bliskih veza razmjerno manje zastupljen u istraživanjima privrženosti. Prilagođeni Brennanov Inventar iskustava u bliskim vezama (Kamenov i Jelić, 2003.) i NEO PI-R upitnik koji ispituje pet temeljnih dimenzija ličnosti (Costa i McCrae, 1992.) primijenjeni su na uzorku od 352 studentice i studenta Sveučilišta u Zagrebu. Rezultati pokazuju brojne veze između privrženosti i ličnosti i na razini širokih dimenzija i na razini

MARUŠIĆ, I., KAMENOV, Ž., JELIĆ, M.: PERSONALITY AND... specifičnih faceta ličnosti. Anksiozni tip privrženosti prijateljima povezan je prije svega s neuroticizmom, dok je izbjegavanje u prijateljskim vezama uglavnom povezano s nižim rezultatima u dvije interpersonalne domene ličnosti, ekstraverziji i ugodnosti.

Ključne riječi: privrženost prijateljima, osobine ličnosti, petofaktorski model

Persönlichkeitsmerkmale und Anhänglichkeit gegenüber Freunden

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Im vorliegenden Artikel wird untersucht, in welchem Zusammenhang die Persönlichkeitsmerkmale junger Erwachsener und die Verbundenheit mit Freunden stehen. Besondere Betonung liegt auf der Anhänglichkeit gegenüber Freunden, da diese Art von Beziehungen relativ selten in entsprechenden Untersuchungen verteten ist. Zum Einsatz kamen ein adaptierter Fragebogen nach Brennan zur Ermittlung von Erfahrungen in engen Beziehungen (Kamenov und Jelić, 2003) und das Revised NEO Personality Inventory zur Ermittlung der fünf grundlegenden Persönlichkeitsdimensionen (Costa und McCrae, 1992); an der Untersuchung nahmen 352 Studentinnen und Studenten der Universität Zagreb teil. Die Ergebnisse verweisen auf vielfache Zusammenhänge zwischen Persönlichkeitsmerkmalen und der Anhänglichkeit gegenüber Freunden, sowohl im weiteren Sinne als auch auf der Ebene spezifischer Persönlichkeitsfacetten. Der durch Anxiosität bedingte Typ der Anhänglichkeit ist in erster Linie mit Neurotizismus verbunden, während ausweichendes Verhalten in Freundschaften vornehmlich in Bezug steht zu niedrigeren Werten in den interpersonalen Persönlichkeitsmerkmalen Extravertiertheit und Wohlbefinden.

Schlüsselbegriffe: Anhänglichkeit gegenüber Freunden, Persönlichkeitsmerkmale, Big-Five-Modell