

LONELINESS AND ATTACHMENT REPRESENTATIONS IN ADOLESCENTS AND YOUNG ADULTS IN THE CONTEXT OF PEER RELATIONSHIPS

REPRÉSENTATIONS DE SOLITUDE ET D'ATTACHEMENT CHEZ DES ADOLESCENTS ET JEUNES ADULTES DANS LE CONTEXTE DES RELATIONS AVEC LES PAIRS

Marta Bastos & Maria Emilia Costa |

ABSTRACT

Based on a life-span attachment perspective, the present study attempts to the exploration of the relationship between adolescents and young adults' loneliness and representations of attachment in peer relationships. A total of 389 university students from several faculties of Porto University, ages between 17 and 27 years old, completed a multidimensional measure of loneliness (an adaptation of the Loneliness and Aloneness Scale for Children and Adolescents (LACA, Marcoen, Goossens & Caes, 1987) and of the Social and Emotional Loneliness Scale for Adults (SELSA; DiTommaso & Spinner, 1993)), and a measure of peer attachment (the Inventory of Parent and Peer Attachment, IPPA, Armsden & Greenberg, 1987). Results indicated that securely attached individuals experienced lower levels of peer-related loneliness than the insecure ones. Implications of these findings are discussed in terms of the potential usefulness of attachment theory as a framework to understand the experience of loneliness.

Key words: loneliness, attachment, peer relationships, adolescence, young adulthood.

RÉSUMÉ

Cette investigation étudie les associations entre le sentiment de la solitude et l'attachement aux pairs on les adolescents et les jeunes adultes. Une mesure multidimensionnelle de la solitude (une adaptation de la Loneliness and Aloneness Scale for Children and Adolescents (LACA, Marcoen, Goossens & Caes, 1987) et de la Social and Emotional Loneliness Scale for Adults (SELSA; DiTommaso & Spinner, 1993)), et une mesure du style de l'attachement (le Inventory of Parent and Peer Attachment, IPPA, Armsden & Greenberg, 1987) ont été recueillies à un échantillon de étudiants de la Université de Porto. Les résultats montrent que les adolescents au style d'attachement sécure ont un moindre sentiment de solitude vis-à-vis de leurs pairs. Les implications des résultats sont analysées selon la théorie de l'attachement comme un cadre théorique pour l'étude de la expérience de la solitude.

Mots clés: solitude, attachement, relations entre pairs, adolescence, vie de jeune adulte

INTRODUCTION

Based on a life-span attachment perspective, the present study attempts to explore the relationship between adolescents and young adults' loneliness and representations of attachment in the context of peer relationships. Adolescents and young adults are particularly vulnerable to loneliness, due to the developmental changes in the attachment organisation and to the consequent transformation of parent-child relationships (Weiss, 1991). The entrance to the university world enhances these challenges for students, because it implies several changes concerning the individual's educational, social and environmental world. During this transition we can observe a concomitant escalation of the needs of intimacy, and simultaneously, an emerging drive for independence, autonomy and individuality from parents. By studying the relationship between loneliness and attachment, we hope to raise awareness and provide new orientations and guidelines for student counselling and psychotherapy.

LONELINESS

Loneliness is typically defined as "the unpleasant experience that occurs when a person's network is deficient in some important way, either qualitatively or quantitatively" (Perlman & Peplau, 1981, pp. 31). It is conceived as a subjective experience, not synonymous of objective isolation, which means that: "People can be alone without being lonely or lonely in a crowd" (Peplau & Perlman, 1982, pp. 3).

Following the work of Weiss (1973), Marcoen, Goossens and Caes (1987) and DiTommaso and Spinner (1993), it was decided to use in the current investigation a multidimensional perspective of loneliness, that differentiated the general experience of loneliness on the basis of relationship-specific indices of loneliness - parental loneliness, peer loneliness and romantic loneliness - according to the principal relationships that adolescents and young adults construct. Secondly, the concept of loneliness was broadened to include individual's attitudes to aloneness. Two different clusters of reactions to be alone can be distinguished. The "aversion to aloneness" is characterised by a fear of being alone or/and by feeling uneasy when lacking the company of others. The "affinity to aloneness" regards an experience of positive feelings when being alone, a constructive time positively correlated with identity development and personality adjustment (Larson, 1990, 1999). This positive attitude is defined as Solitude, which refers to "any active and constructive use of time spent alone" (Marcoen & Goossens, 1993, pp.198). These two attitudes should not be conceived as apposite poles on a single underlying continuum, but rather as representing distinct constructs for adolescents (Goossens, Marcoen, Hees & Woestijne, 1998).

The peer setting was chosen because we have assumed that, as youths move through adolescence, this is the context where they spend more time. Larson (1999) argued that although in the peer setting feelings of loneliness are rare, the adolescents who feel lonelier are more likely to show symptoms of depression, lower self-esteem, lower grade point averages, and more problem behaviour. Chronic feelings of loneliness constitute a high risk for development and are strongly related to a large variety of psychological disorders, such as anxiety, depression, anorexia nervosa and bulimia, alcohol and drug abuse, and suicide (Perlman & Landor, 1999). Loneliness in this context is a significant risk factor, possibly because it is an indicator that the cultural imperative to social attachment has not yet been fulfilled (Larson, 1999).

ATTACHMENT

According to the attachment theory there is a universal human need to establish close enduring emotional bonds to feel secure and explore one's self and the world with confidence (Ainsworth, 1978, 1989; Bowlby, 1969, 1973). Although traditionally the term attachment has been used to describe the affective bond between infants and their primary caregivers (Ainsworth, 1978), over the years this narrow definition of attachment was broadened to include other developmental periods and other attachment figures. By adolescence, interactions with peers began to become important sources of intimacy, feedback about social behaviour, social influence and information, and ultimately, attachment relationships (Ainsworth, 1989; Hartup, 1992). The growing push for autonomy from parents may create a healthy pressure to use peers as attachment figures, so that attachment needs can be met while establishing autonomy in the relationship with parents. From this perspective, adolescence is a period where attachment relationships are gradually transferred from parents to peers. This transfer involves a transformation from hierarchical attachment relationships (in which one primarily receives care and support from a caregiver) to reciprocal attachment relationships (in which both receives and offer care and support) (Allen & Land, 1999).

In our research we've used Bartholomew and Horowitz's (1991) four-category attachment model defined by combining Bowlby's definition of internal working models of self and others (Bowlby, 1973, 1980). Bartholomew and Horowitz (1991) have distinguished two patterns characterised by comfort in becoming intimate with others: the secure pattern, defined by a positive self and others model (low anxiety and low avoidance), and the preoccupied pattern defined by a negative self model and a positive others model (high anxiety and low avoidance). Two other patterns are marked by a hesitancy to become intimate to others: a fearful pattern defined by a negative self and others model (high anxiety and high avoidance), and a dismissing pattern, defined by a positive self model and a negative others model (low anxiety and low avoidance).

OVERVIEW AND MAJOR HYPOTHESES

Studies that have investigated the relationship between loneliness and attachment have provided general support on the influence of the quality of the attachment experiences on loneliness feelings. DiTommaso and Spinner (1993) found that secure individuals report less emotional and social loneliness, when compared to those who classified themselves as insecure in adulthood. Goossens et al. (1998) observed that securely attached adolescents (classified according to de Wuffel's (1986) attachment) experienced lower levels of parent- and peer-related loneliness when compared to insecure ones. However, to date, no study has been reported that has examined the specific relationship between peer attachment and peer-related loneliness.

Our hypothesis is that the quality of peer attachment will influence peer-related loneliness, by influencing adolescents' representations of self, others and interpersonal relationships (Bowlby, 1973, 1980), the quality of peer relationships (Cassidy & Berlin, 1999), and peer acceptance and social competence (Allen & Land, 1999).

It is expected that fearful and dismissing adolescents will have higher scores on peer-related loneliness, since both of them have a negative disposition towards other people and avoid close contact with others as a result of their expectations of adverse consequences. The dismissing group, however, should be less vulnerable to loneliness when compared to the fearful group, because they don't need the others' acceptance to maintain a positive self-regard (Bartholomew & Horowitz, 1991).

Preoccupied individuals, in turn, thanks to their unique high scores on reliance on others, on crying in the presence of others and on the use of others as a secure base (Bartholomew & Horowitz, 1991), should be less vulnerable to loneliness when compared to fearful and dismissing individuals. The preoccupied group reaches out to others in an attempt to fulfil their dependency needs. Secure individuals should have the lowest loneliness scores due to their unique capacity to construct adequate, satisfying and intimate relationships.

It is predicted that peer-related loneliness will decrease from late adolescence through adulthood, with a concomitant increase of parental loneliness. By late adolescence, peers and romantic partners assume prominent status in the attachment hierarchy and in the adolescent social world, by replacing parental figures as the predominant source of emotional security (Hazan & Zeifman, 1999; Steinberg & Silverberg, 1986).

Finally, affinity for aloneness should increase during the transition from adolescence to adulthood, with a concomitant decline of aversion to aloneness, as a sign of increased emotional maturity and psychological development (Marcoen & Goossens, 1993).

Gender differences across attachment and loneliness are expected, at least in some dimensions, as a result of Portuguese gender roles differentiation, culture and definition.

METHOD

PARTICIPANTS

The sample consisted of 389 university students, age ranged from 17 to 27 years old (mean=21; s.d.=1.64). In the sample, 69.9% were female

and 30.1% male, proportions that are more or less representative of the Portuguese gender distribution in university.

INSTRUMENTS

DEMOGRAPHIC INFORMATION

The participants provided information on age, gender, marital status, and

some other variables, which were not used in the present study.

LONELINESS

The instrument presented is a self-report questionnaire based on two main measures: the Louvain Loneliness and Aloneness Scale for Children and Adolescents (LACA; Marcoen et al., 1987) and the Social and Emotional Loneliness Scale for Adults (SELSA; Ditommaso & Spinner, 1993). The LACA is a 48-item measure that comprises 4 subscales: Loneliness in the relationships with parents (L-Part), loneliness in the relationship with peers (L-Peer), aversion to aloneness (A-Neg) and affinity to aloneness (A-Pos). The SELSA is a 36-item measure that assesses emotional (romantic and family) and social loneliness. 12 items from this scale were used to assess romantic emotional loneliness (L-Rom). Subjects were asked to respond to the full measure in a 5-point likert type scale (totally agree to totally disagree).

Principal components factor analysis yielded five orthogonal, theoretically interpretable factors, consistent with their original structures, with 4 item exceptions, that seem to be due to language translations and acculturation factors.

Internal consistency estimates (Cronbach alpha) and intercorrelations for these subscales, presented in Table 1, revealed good levels of internal consistency (alphas ranged from .75 to .95), and minimal sub-scale overlap between the five subscales, indicating that they are tapping somewhat different aspects of the experience of loneliness and aloneness. Despite the negative correlation found between the A-Neg and A-Pos scales, these should not be considered opposite, because each probes for nearly independent aspects of the evaluation of aloneness, representing two distinct constructs.

ATTACHMENT

The Inventory of Parent and Peer attachment (IPPA; Armsden & Greenberg, 1987) was used to determine the quality of attachment to peers. The IPPA is a 25 item self-report questionnaire designed to measure specific working models of attachment, by assessing the positive

Principal components factor analysis yielded two orthogonal, theoretically interpretable factors, different from the authors' three factor structure, labelled as: Trust and Communication in peer relationship (TCP), and Alienation in peer relationship (AP). As can be seen in Table 1, the reliability of the measure reveals

affective/cognitive experiences of good communication and trust in the accessibility and responsiveness of attachment figures and the negative affective/cognitive experiences of anger and/or hopelessness resulting from unresponsive or inconsistently responsive attachment figure. Subjects were asked to respond in a 5-point likert type scale (never true to always true).

good internal consistency for all subscales (Cronbach alphas of .93 and .72). The magnitude of the correlation between the two dimensions, show some subscale overlap, suggesting that the factors are not independent. The pattern of factor loadings suggests a partial confirmation of the notion of positive and negative affective/cognitive dimensions of attachment, as suggested by Armsden and Greenberg (1987).

Table 1. Inter-Correlations and Internal Consistency for Loneliness and Attachment Subscales

Subscales	1	2	3	4	5	6	7	Alpha
1.L-Romantic	--	--	--	--	--	--	--	.95
2. L-Peer	.199**	--	--	--	--	--	--	.90
3. L-Parent	.120*	.184**	--	--	--	--	--	.90
4. A-Neg	.169**	.185**	.009	--	--	--	--	.85
5. A-Pos	.193**	.281**	.061	-.124**	--	--	--	.75
6. TCP	.003	-.560**	-.138**	.081	-.181**	--	--	.93
7. AP	.203**	.631**	.156**	.083	.391**	-.632**	--	.72

** $p < 0.01$

* $p < 0.05$

PROCEDURES

Subjects responded to the questionnaires in regular university class sessions. They were informed in an introductory letter of the objectives of the study and asked for voluntary participation. The instruments were administered, along with other measures and according to standard instructions. The questionnaires were presented in different

sequences, to control for order effects.

RESULTS

Initial analyses examined correlations between loneliness subscales and attachment dimensions using SPSS .10 (Table 1). The highest correlation found was between the L-Peer subscale and the two attachment dimensions, showing the critical importance of attachment to peers to the loneliness felt in this domain.

GENDER AND AGE EFFECTS

One-way ANOVAs revealed significant gender effects for peer-related loneliness (L-Peer), parent-related loneliness (L-Parent) and aversion to aloneness (A-Neg). No significant results were found for the attachment dimensions. Means and standard deviations

for these comparisons are given in table 2. Females scored significantly higher on the L-peer scale than did males, which score significantly higher on the L-parent scale. On the A-Neg subscale, females show higher negative attitudes to aloneness than males.

Table 2. Means and Standard Deviations for Loneliness and Attachment Subscales as a function of Gender

Subscales	Male sample		Female sample		F
	M	SD	M	SD	
L-Romantic	2.468	1.086	2.416	1.128	.1780
L-Peer	1.966	.6015	2.146	.6942	5.949*
L-Parent	2.208	.6223	2.2025	.5801	7.733*
A-Neg	2.979	.5866	3.105	.5530	4.106*
A-Pos	3.160	.5952	3.190	.5090	.2510
TCP	3.763	.4838	3.853	.5697	2.215
AP	2.136	.5316	2.247	.5546	3.3285

* $p < 0.05$

Age effects were calculated for two age groups (17-21 and 22-27 years old). One-way ANOVAs revealed significant effects for the L-parent and the A-Neg subscales. Means and standard deviations for these comparisons are given in table 3.

As can be seen, the youngest group score lower than the older on L-parent loneliness. With regard to aversion to aloneness, analysis indicated that the youngest group score higher than the older group.

No significant effects were found for the attachment dimensions.

Table 3
Means and Standard Deviations for Loneliness and Attachment Subscales as a function of Age

Subscales	17 – 21years old		22 – 27 years old		F
	M	SD	M	SD	
L-Romantic	2.4590	1.1064	2.3720	1.1351	.5000
L-Peer	2.1109	.6669	2.0504	.6841	.6680
L-Parent	2.0201	.5513	2.2171	.6756	9.129*
A-Neg	3.1144	.5555	2.9625	.5762	6.027*
A-Pos	3.1822	.5305	3.1793	.5499	.0020
TCP	3.8317	.5310	3.8146	.5806	.0800
AP	2.2154	.5479	2.2113	.5554	.0050

* $p < 0.05$

INDIVIDUAL DIFFERENCES IN ATTACHMENT

In order to examine the individual differences in attachment, an exploratory categorisation of subjects was made. Exploratory clusters analysis using K-means cluster was performed on the attachment dimensions, revealing four differentiated groups. Bartholomew's (1990, 1991) theoretical conceptualisation of attachment, guided the interpretation of the cluster solution. Table 4 presents the means of the attachment dimensions of the four patterns on the final cluster solution.

Differences between the four clusters on the attachment dimensions were identified through MANOVAs and follow tests are indicate in table 4. Attachment classifications were distributed as the following: 103 participants were classified as secure (25.1%), 179 as preoccupied (47.1%), 90 as dismissing (23.7%) and 8 as fearful (2.1%). This higher percentage of preoccupied individuals was also observed in Portuguese university students by Matos (2002), with other attachment questionnaires.

Table 4. Peer Clusters and results from a multivariate analysis of variance

Subscales	Clusters			
	Secure	Preoccupied	Dismissing	Fearful
TCP	4.3780 _a	3.8551 _b	3.2771 _c	2.2422 _d
AP	1.6214 _d	2.1979 _c	2.8127 _b	3.5357 _a

Note: Means with different sub-scripts are significantly different from one another at $p < .05$ (Sheffé test).

ATTACHMENT PREDICTING LONELINESS

In order to explore the validity of assigning subjects to differently defined attachment groups, loneliness differences across attachment were analysed. A one-way analysis of variance was performed to explore attachment style differences in peer-related loneliness.

Significant effects were found for the attachment clusters. Post-hoc comparisons using Scheffé test indicated that the secure and the preoccupied group score significantly lower on the L-Peer scale than the fearful group, with the dismissing group falling in between (Table 5).

Table 5. Means on the L-Peer subscale for the Attachment clusters

Subscale	Clusters			
	Secure	Preoccupied	Dismissing	Fearful
L-Peer	1.6233 _c	2.0251 _c	2.6061 _b	3.6771 _a

Note: Means with different sub-scripts are significantly different from one another at $p < .05$ (Sheffé test).

DISCUSSION

The purpose of the present study was to demonstrate the potential utility of a multidimensional approach to adolescent loneliness. The five aspects of loneliness and attitude towards being alone could be clearly distinguished.

Concerning gender differences our findings are contrary to almost all studies that found boys to be lonelier than girls (see Koenig & Abrams, 1999, for a meta-analysis). Girls' major loneliness feelings on the peer relationship can be associated with the fact that, during adolescence, males replace family time with time spent alone, whereas females replace it with time spent with friends (Larson & Richards, 1991; Montemayor, 1982). The results found an aversion to aloneness, replicated the results found by Marcoen and Goossens (1993) where girls tend to feel more negatively about being alone than boys, which seems to reinforce Larson and Richards (1991) hypothesis. Differences in relation to parental loneliness seems to retract traditional Portuguese families, that are more likely to foster autonomy and independence on boys and more likely to protect girls from exploration and to allow more emotional expression and dependence.

The non-significant age effects across peer relationships alerts to the relative stability of peer attachment and of peer-related loneliness across adolescence and young-adulthood. Normative age-trends were observed in the parental relationship and in aversion to aloneness. It seems that by late adolescence the relationship with peers is already stabilised, in contrast to the relationship with parents where some turmoil can still be found due to the process of separation-individuation.

Our findings show that the attachment theory can be used as a framework for understanding the experience of loneliness in peer relationships. As hypothesised, quality of peer attachment was highly negative correlated to loneliness. Low loneliness levels of secure and preoccupied adolescents can be due to their capacity to feel comfortable with intimacy, which protects them from emotional isolation, and consequently, from feelings of loneliness. Preoccupied individuals' higher dependence on others for establishing an internal self-regard (Bartholomew & Horowitz, 1991) is illustrated by their high levels of TCP (even lower than the secure group), and can explain their tendency to score higher than the secure group on peer-related loneliness.

Fearful and dismissing individuals' avoidance of intimacy, characterised by their lower scores of trust and communication with peers, seems to be the cause of their higher loneliness levels. In Bartholomew and Horowitz (1991) study, dismissing and fearful prototype ratings were negatively correlated with self-report and friend-reports ratings of sociability. The higher alienation scores report by the fearful group can be associated with its unique higher levels on peer-related loneliness. Angelic and Grigoris (2002) using the IPPA attachment inventory and the UCLA loneliness scale, found a positive association between the alienation subscale and loneliness levels. Contrary to dismissing adolescents, fearful adolescents strongly depend on others to maintain their positive self-regard, but concurrently avoid them in order to minimise eventual disappointment. In this way, they probably suffer more loneliness, because they simultaneously want and avoid closeness.

It is difficult to compare these findings with other studies linking attachment to

loneliness (Man & Hamid, 1998; Kobak & Sceery, 1988; DiTommaso & Spinner, 1993), because none of them have measured these two constructs in the context of specific relationships. Goossens et al. (1998) observed that the subjects classified (according to de Wuffel's attachment model) as securely attached to their parents, score significantly lower on peer-related loneliness than the insecure ones. In a second sample, the authors examine that secure adolescents score lower than did avoidant and anxious-ambivalent adolescents, with dependent attached individuals scoring in between. These results seems to converge with ours, giving some empirical proofs of the convergence of the De Wuffel's attachment model with the four categories of the Bartholomew and Horowitz model (1991), as suggested by Goossens et al. (1998).

Although with some limitations, this study suggests, in support of previous findings, the possibility of using attachment theory as a framework for examining feelings of loneliness in adolescents and young adults. Attachment theory seems a promising perspective to helping us understand students' vulnerabilities to loneliness and aloneness, by providing useful information about how the individual sees himself and the world, how he reacts to separation and isolation, and how he copes with aloneness.

The peer cluster interpretation was exploratory and needs to be replicated, in order to be validated. Further research is necessary to extend these results, analysing the specific association between attachment and loneliness in different relationships.

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