

Identity processes and experience of being alone during late adolescence

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Abstract

The aim of this study was to assess the relation between the experience of being alone and identity processes analysing the mediation role of adolescents' age and gender. The Ego Identity Process Questionnaire – EIPQ (Balistreri, Busch-Rossnagel, & Geisinger, 1995) and the Louvain Loneliness Questionnaire for Children and Adolescents – LLCA (Marcoen, Goossens, & Caes, 1987) were administered to 181 high school adolescents and 141 university students, classed as late adolescents. Data revealed that, both in the interpersonal and ideological domains, exploration was positively related both with affinity for aloneness and with peer and parent-related loneliness, while in the interpersonal domains commitment was negatively related to these dimensions. Moreover, exploration was associated with a positive attitude to being alone, but not with peer-related loneliness in older individuals. Results supported the hypothesis proposed by Buchholz (1997), who defined “alonetime”, or the time spent in solitude, as an opportunity for exploration.

Keywords: loneliness, aloneness, exploration, commitment

Introduction

Many clinical and developmental studies considered loneliness, from childhood to adolescence, in line with “risk perspective” according to what Larson (1999; p. 245)

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called “imperative to Social Connection” (see Asher & Coie, 1990; Corsano, 1999 for a review). Especially during adolescence, being alone has been considered a negative behaviour, connected with isolation from family and peers (Mahon, Yarcheski, Yarcheski, Cannella, & Hanks, 2006). According to this perspective, many researches described solitary adolescents as passive, sad and introspective (Van Buskirk & Duke, 1991), experiencing greater stress and depression (Cacioppo et al., 2000), and characterised by problems such as peer rejection, social anxiety and victimisation (Storch & Masia-Warner, 2004).

A different loneliness perspective can be identified in other studies (Csikszentmihalyi & Larson, 1984; Corsano, 1999; Katz & Buchholz, 1999; Rotenberg & Hymel, 1999; Goossens, 2006; Goossens et al., 2009; Macqueron, 2009), which considered being alone as a multidimensional experience, not necessarily related to social withdrawal and isolation, but also as an opportunity for growth in adolescence. In this respect, Marcoen, Goossens and Caes (1987) have distinguished different aspects of being alone: loneliness, which refers to a subjective feeling; aloneness that describes the objective state of being alone; aversion to aloneness that reflects an unwanted isolation; and affinity for aloneness that means a voluntary isolation. The distinction of these dimensions helped researchers to better understand the experience of being alone in adolescence and the role it could play in relation with processes such as those connected with identity acquisition.

In line with this perspective, the aim of this study was to evaluate the relation between the multidimensional experience of being alone during adolescence, measured by the Louvain Loneliness Questionnaire for Children and Adolescents (LLCA, Marcoen, Goossens, & Caes, 1987), and identity construction processes, measured by the Ego Identity Process Questionnaire – EIPQ (Balistrieri, Busch-Rossnagel, & Geisinger, 1995), in a group of younger and older male and female Italian adolescents.

Identity construction processes and experience of being alone

Research has shown a high level of loneliness during adolescence (Csikszentmihalyi & Larson, 1984). Goossens (2006) has explained this characteristic by considering different developmental factors, such as separation/individuation processes, reorganisation of parents and peers relationships, sex partner research, and exploration for identity issues. According to this perspective, the time adolescents spend in solitude is very important for their development. When they are alone, they listen to music, watch television, read and rest, but, above all, they reflect. The isolation could therefore help them to put their thoughts in order to better focus on their goals. In particular, they may think about what worries them, may carry out evaluations with respect to themselves and may imagine their future. In short, being alone may give adolescents the possibility to explore opportunities to develop. As Csikszentmihalyi & Larson (1984) point out "loneliness is the price to pay for individuation" (p. 187).

Most recently other studies have considered "alonetime" as the time adolescents need for coping with developmental tasks, primarily for identity construction processes (Marcoen, Goossens, & Caes, 1987; Buchholz & Chinlund, 1994; Corsano, 2003; Corsano, Majorano, & Champretavy, 2006). Buchholz (1997) has considered the "alonetime" as a type of creative space to reflect on and work through emotions and experiences. In Eriksonian terms, it is a space for exploring identity alternatives (Erikson, 1950); therefore it is a space for achieving an identity in different identity domains (Marcia, 1980).

Studies focused on the relation between the experience of being alone and identity, have primarily considered adolescents' identity development according to Marcia's identity status paradigm (for an extensive review see Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993; Berzonsky & Adams, 1999; Waterman, 1999; Schwartz, 2001; Kroger, Martinussen & Marcia, 2010). As is well known, the identity status approach is based on two measurable processes (exploration and commitment in

different areas of life) and on four identity statuses. A sense of identity is based on the individual's commitments in significant psychosocial domains. Commitments can have an assigned character (*foreclosure*) or can be self-chosen after a period of exploration of alternatives (*achievement*). If commitments provide the individual with a sense of identity (Bosma, 1985), exploration refers to the adolescents' active questioning and weighing up of various identity alternatives. Adolescents may explore various alternatives without arriving at firm commitments (*moratorium*) or not thoroughly explore the different options at hand and at the same time not making any clear commitments (*diffusion*)⁹.

On the relation between experience of being alone and identity statuses, Goossens and Marcoen (1999) found differences in loneliness dimensions as measured by LLCA (Marcoen, Goossens, & Caes, 1987) in the four identity statuses for the interpersonal identity domains (which combine information on the sub-domains of friendship, dating, recreation and gender roles), but not for ideological identity domains (which comprise issues for occupation, religion, politics and general philosophy of life) as measured by the Extended Objective Measure of Ego-Identity Status – EOM-EIS (Adams, Bennion, & Hu, 1989). In particular, they assessed that adolescents in the foreclosure status showed the lowest level of parent-related loneliness and those in the diffusion status obtained higher scores than achievers and moratoriums on the L-Peer scale (peers-related loneliness scale). In another study, using the Groningen Identity Developmental Scale (GIDS; Bosma, 1992), Goossens and Marcoen (1999) found that loneliness towards peers was negatively correlated with commitment regarding friendship. Moreover, parent-related loneliness (L-Part)

⁹ In more recent years many studies have instead sparked off a lively debate about the measurement of identity statuses (Schwartz & Dunham, 2000; Schwartz, 2004). In particular, Bosma (1985) and Meeus (1993) stressed the importance of considering the content of certain commitments too; more recently Goossens (2001) discussed the relation between status assignment and continuous measures of exploration and commitment; other authors proposed an extension of the original identity paradigm model and, in particular, of the processes of exploration and commitment (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005; Luyckx, Goossens, Soenens, & Beyers, 2006; Crocetti, Rubini, Luyckx, & Meeus, 2008; Crocetti, Rubini, & Meeus, 2008).

was negatively correlated with commitment respect to them. Finally, always considering continuous measures of exploration and commitment rather than status assignment, a positive correlation emerged between affinity for aloneness and exploration scores for the domains of philosophy of life (ideology, politics and religion combined) and friendship.

Although the above studies have shown the existence of a relationship between the experience of being alone and identity formation processes, it seems that the issue still remains largely unexplored, principally with respect to the direction and to the strength of the relations between different meanings attributed to being alone and identity processes in males and females, in younger and older adolescents and in different identity domains. As some studies based on identity status paradigms have shown (see Marcia et al., 1993 for a review), exploration and commitment in identity domains varied according to gender and age. It varies also in accordance with the live tasks determined by societal level. One example is furnished by the processes of separation and individuation that actually occurred in a longer period than that to which the Erikson's model, developed in the mid-sixties, referred (Scabini, Marta & Lanz, 2006). The transition to adult seems today increasingly linked to a perception of insecurity and uncertainty about the real possibility of making plans for the future (Kroger, 2000; Benasayag & Schmit, 2003; Mancini, 2010). If these changes are related to some societal variables (Baumaister & Muraven, 1996; Côté, 1996; 2006), they are also related to intra-individual and inter-individual differences in identity development (Bosma, 1985). It is for this reason that it can be assumed that the strength of relations between identity processes and to be alone dimensions may also change depending on age and gender.

The current study aims

The aim of this study was to investigate the relation between the dimensions of experience of being alone and exploration and commitment in the two different

identity domains, interpersonal and ideological, according to theoretical framework proposed by Buchholz (1997), Corsano (2003) and Goossens and Marcoen (1999).

In particular, this study had four specific aims:

1) to assess differences in exploration and in commitment scores in relation to gender and age. As the literature has suggested, we expected that females would show significantly higher scores than males on exploration scores (Bosma, 1985). However, it can be assumed that this is especially true for domains that adolescents consider more important to their identity, in the female cases in the interpersonal identity domain (Meeus & Dekovic, 1995). Regarding age, literature has suggested a developmental trend (Waterman, 1993; Meeus, 1998; Kroger, Martinussen, & Marcia, 2010) that allows us to hypothesise that older adolescents (university students) will have greater commitment than exploration scores compared to younger adolescents (high school students). Again, it can be assumed that this is especially true for domains that younger and older adolescents consider more important to their identity, in the high school students' cases in the interpersonal identity domains (Meeus & Dekovic, 1995);

2) to assess differences in the four loneliness dimensions in relation to gender and age. In particular, we expected that peer-related loneliness decreased during adolescence, while parent-related loneliness increased; in parallel, aversion to aloneness decreased. In addition, we expected higher peer-related loneliness for girls than boys, and for younger rather than older adolescents (Marcoen, Goossens & Caes, 1987; Corsano, 2003);

3) to investigate relations between exploration/commitment scores and the four LLCA dimensions of experience of being alone. According to Goossens and Marcoen (1999), we could expect a positive correlation between affinity for aloneness and exploration scores and a negative correlation between loneliness towards parents and peers and commitment in the interpersonal domains;

4) to evaluate whether and to what extent the relationship between identity and experience of being alone varied according to the gender and age of the adolescents. In line with previous hypotheses, exploration was expected to be more positively related to loneliness towards peers and parents in girls especially and particularly in younger adolescents rather than in older ones, and we expected commitment to be more negatively related to loneliness towards peers and parents in younger adolescents than in older ones, especially in interpersonal domains.

Method

Participants

322 adolescents participated in the study: 181 were recruited from Italian high schools (75 males, 106 females; $M_{age} = 17.69$, $SD = .63$), and 141 from Italian university courses (63 males, 78 females; $M_{age} = 19.46$, $SD = .50$). High school students had an average age significantly less than university students [$F_{(1, 320)} = 0.34$, $p > .05$]; males and females were equally distributed in the two sub-samples [$\chi^2_{(1)} = 0.34$, $p > .05$].

All the participants were white, and from monocultural Italian families. Each participant, or their family in the case of individuals under 18 years of age, gave informed consent.

Measures

Solitude

The Louvain Loneliness Scale for Children and Adolescents (LLCA: Marcoen, Goossens, & Caes, 1987; Italian version by Melotti, Corsano, Majorano, & Scarpuzzi, 2006) was administered to each participant to investigate the dimensions of solitude. This tool analyses the multidimensional nature of loneliness by means of four subscales:

- a) *Parent-related loneliness* (L-Part): feelings of rejection and isolation occurring within the relationship with parents;
- b) *Peer-related loneliness* (L-Peer): feelings of isolation and abandonment in the relationships with peers;
- c) *Aversion to aloneness* (A-Neg): a negative attitude to being alone leading the individual to avoid being alone;
- d) *Affinity for aloneness* (A-Pos): a positive attitude to aloneness connected to the attempt to find time to be alone.

Each subscale comprises 12 items measured on a 4-point Likert-type scale (1 = never; 2 = seldom; 3 = sometimes; 4 = often). The application of the LLCA to 522 Italian adolescents aged 14 to 19 years (Melotti et al., 2006) confirmed the original structure with four factors: all four subscales of the LLCA have high reliability (Cronbach's Coefficients range from .78 to .89).

Identity

The Ego Identity Process Questionnaire (EIPQ, Balistrieri, Buss-Rossnagel, & Geisinger, 1995; Pace & Zappulla, 2009) was administered to each participant to assess adolescents' identity-related processes of commitment and exploration. This instrument is a 32-item scale that investigates *exploration in breadth* (two items) and *commitment making* (two items) in eight identity domains: four interpersonal domains (friendships, dating, sex role and family) and four ideological domains (occupational choice, political preference, religious affiliation, and personal values). For each item, adolescents answered using a six-point Likert-type scale ranging from 1 (Strongly disagree) to 6 (strongly agree). The application of the EIPQ to 461 Italian adolescents aged from 16 to 19 years (Pace & Zappulla, 2009) confirmed the original structure with two factors, exploration and commitment. By following the same procedure used in these previous studies, a correlation of $-.34$ ($p < .001$) was found between the dimensions of exploration and commitment for this study. Internal consistency

estimates for the current sample (alpha coefficients) were .73 (commitment), and .61 (exploration).

Procedure

Data were collected with the permission of school authorities. Data were collected in the school or university classrooms during lesson times. Before data collection, informations were given about the nature of the research without going into details on the hypotheses formulated; each questionnaire also contained brief instructions explaining the rules for completion. The administrator was present to provide all necessary explanations and collect data in order to ensure the questionnaires were completed as well as possible. Participants were encouraged to answer sincerely and accurately, and not to leave any question unanswered. The average time taken to complete the two questionnaires was 40 minutes.

Results

Gender and age differences in exploration and commitment

Two-way MANOVAs were conducted to compare genders and age (2×2) with respect to exploration and commitment scores in the interpersonal and ideological identity domains, as measured through EIPQ.

Mean and standard deviation for EIPQ exploration and commitment scores in the interpersonal and ideological identity domains, classified according to genders and age, are reported in Table 1.

The results showed that, with respect to exploration, there was a significant effect on within-subject factor [$F_{(1, 318)} = 57.99, p < .001, \eta^2 = .15$]: regardless of gender and age, the interpersonal identity domain was significantly more explored ($M = 3.67$) than the ideological ($M = 3.36$) one. Irrespective of the two identity domains considered, tests of between-subject effects showed that females ($M = 3.60$) scored significantly higher than males ($M = 3.43$) [$F_{(1, 318)} = 10.12, p < .01, \eta^2 = .03$] and that

high school adolescents ($M = 3.59$) scored significantly higher than university students ($M = 3.45$) [$F_{(1, 318)} = 7.21, p < .01, \eta^2 = .02$].

Table 1. Descriptive statistics for commitment and exploration in interpersonal and ideological domains

Identity domains		Male		Female		Total
		High School	University	High School	University	
		M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Interpersonal	<i>Exploration</i>	3.61 (.07)	3.52 (.08)	3.89 (.06)	3.68 (.07)	3.67 (.04)
	<i>Commitment</i>	3.88 (.09)	4.03 (.10)	3.95 (.07)	4.18 (.09)	4.01 (.04)
Ideological	<i>Exploration</i>	3.38 (.06)	3.23 (.07)	3.49 (.05)	3.37 (.06)	3.67 (.03)
	<i>Commitment</i>	3.89 (.08)	4.09 (.09)	3.79 (.07)	4.02 (0.08)	3.95 (.04)

The same analysis conducted on commitments scores showed only a low within-subject effect of gender on interpersonal and ideological commitment measures [$F_{(1, 318)} = 5.66, p < .05, \eta^2 = .02$]: females ($M = 4.07$) scored higher than males ($M = 3.96$) in interpersonal domain and males ($M = 3.99$) scored higher than females ($M = 3.91$) in ideological domains. Tests of between-subject effects showed that high school adolescents ($M = 3.88$) scored significantly lower in commitment than university students ($M = 4.08$) [$F_{(1, 318)} = 8.26, p < .01, \eta^2 = .03$].

Gender and age differences in aloneness/loneliness dimensions

Two-way ANOVAs were conducted to compare genders and age (2×2) with respect to LLCA subscales. Mean and standard deviation for LLCA subscales are reported in Table 2.

Two-way ANOVAs showed a significant difference between boys and girls in the L-Part ($F_{(1, 318)} = 6.14, p < .01, \eta^2 = .02$), with females scoring lower ($M = 20.66$) than males ($M = 22.42$). A significant difference also emerged between high school students and university students on the L-Part, and A-Neg. In particular, university students showed higher scores in loneliness towards family ($M = 23.52$ vs $M = 21.96$;

$F_{(1, 318)} = 5.68, p < .01, \eta^2 = .02$), and lower aversion to aloneness ($M = 28.27$ vs $M = 31.37$; $F_{(1, 318)} = 16, p < .001, \eta^2 = .05$). A significant interaction effect between gender and age emerged on the L-Peer scale. In particular, younger girls had a higher perception of loneliness towards peers than boys, while this was reversed for university students ($F_{(1, 318)} = 12.64, p < .001, \eta^2 = .04$).

Table 2. Descriptive statistics for aloneness/loneliness dimensions

	Male		Female		TOTAL
	High School (N = 75)	University (N = 63)	High School (N = 106)	University (N = 78)	
L-Part	22.89 (5.76)	24.36 (4.80)	21.30 (5.28)	22.83 (6.23)	22.64 (5.63)
L-Peer	18.93 (6.15)	22.75 (6.71)	22.34 (7.60)	20.79 (5.55)	21.25 (6.77)
A-Neg	30.13 (6.15)	28.33 (6.93)	32.25 (6.53)	28.22 (6.12)	29.98 (6.63)
A-Pos	30.59 (5.93)	30.33 (4.94)	32.05 (5.83)	31.11 (6.65)	28.85 (5.92)

Relation between aloneness/loneliness and identity processes

The relation between exploration/commitment scores in the interpersonal and ideological domains and the four LLCA dimensions of experience of being alone was explored. The Pearson correlation is reported in Table 3.

Table 3. R Pearson correlation between aloneness/loneliness dimensions and identity processes

		L-Part	L-Peer	A-Neg	A-Pos
Interpersonal	Commitment	-.28**	-.16**	-.04	-.16**
	Exploration	.14*	.13*	.10	.21**
Ideological	Commitment	-.09	-.03	-.01	-.12*
	Exploration	.06	.17**	-.02	.21**

* $p < .05$; ** $p < .01$

Significant relations emerged between interpersonal domains, commitment and exploration scores and LLCA subscales. In particular, commitment scores in the interpersonal domains were negatively related to L-Peer, L-Part and A-Pos subscales; in contrast, exploration scores in the interpersonal identity domains were positively related to the same subscales. Commitment was negatively related to A-Pos, even in the ideological domain; while exploration in the ideological domain was positively related to L-Peer and A-Pos.

Relation between aloneness/loneliness and identity processes: Gender and age differences

To evaluate whether and to what extent the relationship between identity and experience of being alone varied by gender and age of the adolescents, a series of Pearson correlations was performed on commitment and exploration scores (in the interpersonal and ideological domain) and LLCA subscales, separately according to gender and the age groups of participants. The Pearson correlation is reported in tables 4 and 5.

Beyond the inferences (the statistical significance of Pearson values), there were no more significant differences in correlations between high school and university participants. The only two significant differences between the Pearson values were those concerning exploration in the ideological domain and loneliness towards peers (L-Peer; $p < .05$) and commitment in the interpersonal domain and A-neg subscale ($p < .001$). For high school students, exploration in the ideological domain was highly associated with loneliness towards peers, while this association was not apparent in university students. Moreover, commitment in the interpersonal domain was associated with higher aversion to aloneness (A-Neg) for younger adolescents, but this association was the reverse for university students.

Table 4. R Pearson correlation between aloneness/loneliness dimensions and identity processes in high school and university students

			L-Part	L-Peer	A-Neg	A-Pos
High School Students	Interpersonal	Commitment	-.31***	-.19**	.17*	-.18**
		Exploration	.21**	.21**	.04	.18**
	Ideological	Commitment	-.11	-.08	.07	-.13
		Exploration	.11	.27***	-.06	.24**
University Students	Interpersonal	Commitment	-.29***	-.13	-.25**	-.11
		Exploration	.10	.02	.10	.25**
	Ideological	Commitment	-.11	.02	-.03	-.09
		Exploration	.04	.03	-.03	.18**

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5. R Pearson correlation between aloneness/loneliness dimensions and identity processes in boys and girls

			L-Part	L-Peer	A-Neg	A-Pos
Boys	Interpersonal	Commitment	-.22*	-.09	-.13	-.16
		Exploration	.17*	.03	.23*	.07
	Ideological	Commitment	-.10	-.10	-.14	-.16
		Exploration	.01	.06	-.14	.28**
Girls	Interpersonal	Commitment	-.31***	-.23*	.02	-.17*
		Exploration	.17*	.17*	-.01	.27***
	Ideological	Commitment	-.09	.03	.11	-.08
		Exploration	.13	.22**	.04	.16

* $p < .05$; ** $p < .01$; *** $p < .001$

Some significant differences also emerged regarding subsamples of boys and girls. Exploration in the interpersonal domain was significantly associated with aversion to aloneness (A-Neg) for boys, while association was negative but not significant for girls. The differences between boys and girls were significant ($p < .05$). The pattern was reversed for ideological commitment. A negative but not significant association with A-Neg emerged for boys and a positive but not significant association emerged for girls ($p < .05$).

Comparing these results with the correlations made on the complete sample, we can note that the significant correlations found between exploration and commitment in the interpersonal domain and peer and parent-related loneliness subscales, remained the same only in younger and female adolescents, while these lose at least some of their significance in older and male adolescents.

Discussion

This study has been focused on relations between loneliness dimensions and exploration and commitment in the interpersonal and ideological identity domains, considering adolescents' age and gender differences. Therefore, relations between the four dimensions of the LLCA and exploration and commitment processes revealed by EIPQ were considered both in the whole group of participants and in younger and older male and female adolescents.

In order to achieve this aim, we at first investigated whether the processes of exploration and commitment in interpersonal and ideological identity domains and the four different dimensions of loneliness varied according to age and gender. As hypothesised, age influenced both the processes of identity construction and the experience of being alone. In line with literature, data suggested a developmental trend. Higher scores of exploration and lower scores of commitment were, in fact, found in high school students, both in interpersonal and ideological domains. In this sense results confirmed the hypothesis that the Marcia model could be considered a developmental paradigm (Waterman, 1993; Meeus, 1998; Kroger, Martinussen, & Marcia, 2010), at least with respect to the two identity domains considered here. In this respect, regardless of participants' age (and gender) data showed that exploration – but not also commitment – was significantly higher in the interpersonal than in the ideological identity domain. This suggests that adolescents actually show greater investment in the interpersonal than in the ideological identity domains. As Yoder (2000) pointed out, external “barriers” could impose some limitation upon identity processes, expanding “descriptions of identity status to specifically include or exclude

conditions over which an individual has little or no control, but which affect, often profoundly, his or her developmental options” (p. 98). Italian socio-cultural and socio-economic contextual conditions seem to restrict exploration of choices that adolescents can make about their ideological identity, i.e. those connected with professional, values, political and gender role identity domains. This is particularly more true for males that are less implicated in the exploration processes than females. Confirming the literature (Bosma, 1985; Marcia et al., 1993), data showed females closer to acquiring an identity in the interpersonal domain; but data found in the literature also indicated that males were closer to acquiring a foreclosure identity in the ideological domain.

Also, in the loneliness dimensions differences emerged between age and gender groups. In particular, older adolescents showed a greater parent-related loneliness and a lower aversion to aloneness, as reported in various research (Marcoen, Goossens & Caes, 1987; Goossens & Marcoen, 1999; Corsano, 2003). This trend highlighted the developmental path of separation/individuation. As adolescents grow older, they are less satisfied with their relationship with their parents (Goossens, 2006). For the university students the separation/individuation process was expected to be completed (Steinberg & Silverberg, 1986); for this reason the individual experience of emotional autonomy was associated with higher separation towards family. The decrease in parental support (higher scores in the L-Part subscale) could be seen as separation effect (Pace & Zappulla, 2009). Finally, decreasing of aversion to aloneness could be explained with respect to the ability to use solitude to achieve individual goals during adolescence (Csikszentmihalyi & Larson, 1984). Mediation analyses supported this datum, showing that while in high school students exploration was always associated with a peer-related loneliness, this did not happen for university students. Older adolescents learned to manage the loneliness and not to fear it.

Differences by gender emerged in the experience of being alone too. In particular, girls showed a lower parent-related loneliness, and a higher peer-related loneliness

during high school. These findings were in accordance with Goossens and Marcoen (1999) and Corsano, Majorano and Champretavy (2006), and are supported by the girls' family attitudes. The more protective family environment in which they live, leads the girls to perceive a higher family support and to experience a lower parent-related loneliness. On the other hand, a greater investment in their peers, at least at the beginning of adolescence, leads the girls to feel a higher peer-related loneliness.

As a second point, we investigated relationships between exploration and commitment and different dimensions of experience of being alone. As hypothesised, data showed that exploration was positively related to affinity for aloneness and peer and parent-related loneliness. Instead, commitment was negatively related to the same dimensions, in particular for the interpersonal domains. Supporting these findings, Goossens and Marcoen (1999) indicated a positive relation between exploration and affinity for aloneness in friendship and philosophy of life, and that adolescents with foreclosure status (mainly characterised by commitment) had the lowest score on the L-Part scale of all the other groups. Also in the present study, adolescents who showed higher exploration seek solitude but, as new result, they feel lonely too, both with respect to parents and peers. This datum emerged especially in interpersonal domains, for girls and for younger adolescents: it was consistent with the above considerations about peer-related loneliness in girls and about developmental trend of loneliness. However, data indicated that exploration was associated with affinity for aloneness, but not with peer-related loneliness in older adolescents. As they grow older, adolescents learn to manage the feeling that emerges from the time spent in solitude, therefore aversion to aloneness decreased with age.

Generally speaking, this study confirms the relation between experience of being alone and identity formation processes founded in previous research (Goossens & Marcoen, 1999). It suggests that different dimensions of solitude may play an important role in the identity construction processes, even if in the ego identity domains (Erikson, 1968) more so than in domains more related to social aspects of

identity, such as the ideology considered here. It is in interpersonal identity domains that, probably, the identity construction processes are not only characterised by the exploration in depth and identification with commitment (Luyckx, Goossens, Soenens, Byers & Vansteenkiste, 2005), but also by activities that allow individuals to experience through “doing” what the possible implications of their identity choices are, including those related to the social identification processes (Tajfel, 1981).

These findings expanded the results of Goossens and Marcoen's (1999) study, which showed a correlation between exploration and a positive attitude to being alone, especially for the ideological domain of philosophy of life and friendship. In fact, in this study the active search for time spent in solitude was associated with exploration in both identity domains. Moreover, results showed that if exploration was also associated with peer-related loneliness in younger participants, older adolescents seem to learn to cope with it, and do not fear the absence of others. Further studies would be necessary in order to investigate how adolescents learn to do it and why some of them do not, moving towards feeling of discomfort and distress (Larson, 1999; Goossens, 2006). Nevertheless, this change shows the close link that exists during adolescence between the separation/individuation and the identity construction processes, confirming once again the Marcia model as a developmental paradigm.

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