

"Why do they have to grow up so fast?" Parental Separation Anxiety and Emerging Adults' Pathology of Separation-Individuation*

Evie Kins, Bart Soenens, and Wim Beyers

Department of Developmental, Personality and Social Psychology, Ghent University, Ghent, Belgium

This study examined associations between parental separation anxiety, controlling parenting, and difficulties in the separation-individuation process, as manifested in separation-individuation pathology. In a sample of emerging adults involved in the process of home leaving ($N = 232$) and their parents, it was found that parental separation anxiety is positively related to separation-individuation pathology in emerging adults. Dependency-oriented controlling parenting served as an intervening variable in the relationship between parents' feelings of separation anxiety and pathology of the separation-individuation process in emerging adults. These associations were not moderated by emerging adults' residential status (i.e., living with parents or (semi-)independently), suggesting that parental characteristics and behaviors remain important antecedents of separation-individuation pathology even when one no longer lives in the parental household. © 2011 Wiley Periodicals, Inc. *J Clin Psychol* 67:1–18, 2011.

Keywords: Separation-individuation; pathology; separation anxiety; psychological control

According to psychodynamic models of development, the process of separation-individuation plays a pivotal role in personality development during childhood, adolescence, and beyond. Disturbances in this developmental process have serious implications for adult personality and social relationships (Pine, 1979). Pathology of the separation-individuation process is, for instance, manifested in difficulties to differentiate the self from others and intolerance for aloneness. In this study we investigated a number of presumed parental antecedents of pathological separation-individuation during emerging adulthood, a period between the age of 18 and the late twenties characterized by important changes in the parent-child relationship (Aquilino, 2005; Arnett, 2000). Specifically, we focused on the role of parental separation anxiety and dependency-oriented psychological control. As emerging adulthood is a time of imminent leave-taking from the parental home, with separation-individuation issues strongly coming to the fore, we also explored the role of the residential status among emerging adults.

The Separation-Individuation Process

Although separation-individuation is an intrapsychic process that remains active during all stages of life, it is considered a central developmental task during adolescence (Blos, 1967, 1979). This process involves the relinquishing of infantile self-conceptions and the establishment of a sense of self that is distinct and individuated from parental object representations. Due to physical and cognitive maturation, adolescents no longer see themselves as children and no longer view their parents as the all-knowing and almighty figures they once were during childhood (i.e., deidealization). Thus, adolescents become aware of their separateness from parents and actively pursue an individuated sense of self (Levy-Warren, 1999).

Separation-individuation not only refers to a redefinition of the self but also to a redefinition of the relationship with caregivers. That is, young people need to transform the former hierarchical parent-child relationship into a mutual relationship between two equal

*This article was reviewed and accepted under the editorship of Beverly E. Thorn.

Correspondence concerning this article should be addressed to: Evie Kins, Ghent University, Faculty of Psychology and Educational Sciences, Department of Developmental, Personality and Social Psychology, Henri Dunantlaan 2, B-9000 Ghent, Belgium; e-mail: Evie.Kins@UGent.be

adults (Aquilino, 1997; Grotevant & Cooper, 1986). As such, successful separation-individuation does not necessarily imply emotional detachment or complete independence from parents. Instead, there is an ongoing connectedness with the parents, and studies have indeed shown that parents remain important sources of support for their adolescents (Doyle & Markiewicz, 2005; Hair, Moore, Garrett, Ling, & Cleveland, 2008; Quintana & Kerr, 1993). Ideally, the parent-child relationship increasingly reflects symmetry, as the infantile nature of the relationship is given up. Hence, separation-individuation is not about breaking bonds with parents, but about the resolution of a dialectic balance between maintaining a sense of connectedness to the family and establishing an individuated self (Baltes & Silverberg, 1994; Frank, Butler-Avery, & Laman, 1988; Grotevant & Cooper, 1986; Smollar & Youniss, 1989).

Although controversy exists in the literature concerning the adaptive function of separation-individuation (Beyers & Goossens, 1999), research has shown that successful resolution of this process is critical for healthy psychosocial functioning. That is, being able to maintain and regulate a healthy balance between closeness and distance in relationships with significant others has been related to better adjustment (Allen, Hauser, Eickholt, Bell, & O'Connor, 1994; Frank, Pirsch, & Wright, 1990; Holmbeck & Leake, 1999; Holmbeck & Wandrei, 1993; Lapsley, Rice, & Shadid, 1989). Conversely, disturbances in this process—which will be referred to in this study as pathology of separation-individuation—seem to have serious implications for adult personality and social relationships (Pine, 1979). According to Pine (1979), pathology of the separation-individuation process can be divided into lower-order and higher-order disturbances depending on the level of self-other differentiation. In the lower-order disturbance, pathology is rooted in a failure to differentiate the self from others. Because there are no clear boundaries between the self and others, there is a loss of a sense of separateness. This lack of differentiation could come with either feelings of panic over merging or with a pathological acceptance of this self-other unity. One manifestation of this lower-order disturbance is rebellion, where children try to be as different from parents as possible, because taking on any characteristics of the parents would be experienced as a sense of loss. In higher-order disturbances the self is already differentiated from others, but pathology is tied to this differentiation process. Instead of being characterized by feelings of merger, these disturbances are characterized by a fear of loss of the differentiated other, as expressed for instance in an intolerance of aloneness, coercion in order to gain omnipotent control over the other, and deficits in object constancy (Christenson & Wilson, 1985; Pine, 1979). The latter manifestation of a higher-order disturbance denotes a difficulty to hold a constant inner representation of the other, resulting in a defense mechanism of splitting internal representations of the self and others into strict categories of good and bad. Splitting expresses itself in thinking in extremes or black and white thinking. These oscillations in experiences of the self and others lead to chaotic relationships, identity diffusion and extreme mood swings.

Disturbances in the process of separation-individuation have been found to relate to insecure attachment, maladjustment to college, and symptomatology (e.g., depression, anxiety, somatization, and obsessive-compulsion; Lapsley, Aalsma, & Varshney, 2001; Lapsley & Edgerton, 2002). Furthermore, several studies showed that pathological separation-individuation is related to personality disorders and to borderline personality disorder in particular (Christenson & Wilson, 1985; Dolan, Evans, & Norton, 1992). Given the negative well-being outcomes associated with pathological separation, it is important to study possible antecedents of disturbances in the process of separation-individuation. Because healthy separation-individuation is about establishing a separate self within the context of an ongoing connectedness to the parents, parents' reaction to the developmental needs of their offspring possibly plays a decisive role in the course of the separation-individuation process (Allen et al., 1994; Baltes, & Silverberg, 1994; Grotevant & Cooper, 1986; Shulman & Seiffge-Krenke, 1997). One parental feature that may interfere with a supportive parental response to children's increasing independence is separation-anxiety.

Parental Separation Anxiety

Parents' responses to separation-related issues, including their children's increasing independence, can be very diverse. Separation responses can include anxiety associated with

being apart from the child, sadness with the imminent or existing loss, and anger or frustration about the inability to maintain close proximity. Such unpleasant emotional states, tied to the separation experience, are referred to as parental separation anxiety (Bartle-Haring, Brucker, & Hock, 2002; Hock et al., 2001; Hock & Lutz, 1998).

Research on parental separation anxiety has focused primarily on parents of infants and young children (Hock & Lutz, 1998; McBride & Belsky, 1988; Stifter, Coulean, & Fish, 1993; Wood, 2006). Parents' feelings about separation from their adolescent or emerging adult children have been studied to a lesser degree. Hock et al. (2001) found that parents' separation responses toward adolescents can be represented by two dimensions: Anxiety About Distancing and Comfort with Secure Base Role. "Anxiety about distancing" reflects parental feelings of discomfort and loss in response to their adolescents' growing affiliation with others and decreasing involvement with parents. Parents who are highly anxious about their adolescent's distancing deny their child's increasing striving for independence and demonstrate age-inappropriate behavior toward their child. "Comfort with secure base role" on the other hand reflects parental commitment to being accessible for support and advice to their adolescent children who are expanding their social world. Although these parents respect the developmental needs of their adolescents, they too might experience a sense of loss when they are not so obviously needed anymore as during childhood.

Although anxiety about distancing and comfort with secure base role have been positively correlated in empirical research, both dimensions also show a differentiated pattern of associations with measures of parent and adolescent psychosocial functioning, with anxiety about distancing emerging as a relatively more maladaptive parental orientation than comfort with secure base role (Bartle-Haring et al., 2002; Hock et al., 2001; Soenens, Vansteenkiste, Duriez, & Goossens, 2006). Hock et al. (2001), for instance, found that self-other differentiation was lower in families where parents scored high on anxiety about distancing. Parental anxiety about distancing has been negatively related to identity development in late adolescence and early adulthood, particularly within father-daughter dyads (Bartle-Haring et al., 2002).

The present study aims to add to this limited body of literature on associations between parental separation anxiety and outcomes of the separation-individuation process during (late) adolescence and emerging adulthood. Although parental separation anxiety might also be determined by characteristics of the child (McBride & Belsky, 1988), we specifically hypothesize that high scores on parental anxiety about distancing will be positively associated with emerging adults' pathology of separation-individuation, whereas high scores on parental comfort with secure base role will be unrelated or negatively related to emerging adults' pathology of separation-individuation. In addition we considered the possibility that the hypothesized relationship between parental separation anxiety and emerging adults' pathological separation-individuation would be (at least partially) mediated by parenting processes and by dependency-oriented parental psychological control in particular.

Dependency-Oriented Psychological Control

Psychological control is a form of intrusive parenting behavior, characteristic of parents who pressure their children through manipulative strategies such as guilt-induction, love-withdrawal, and conditional approval (Barber, 1996). Because psychologically controlling parents fail to take an empathic stance toward their children and pressure them to meet the parents' standards, their behavior interferes with the child's need for autonomy (Soenens & Vansteenkiste, 2010). Research has consistently shown that psychological control is predictive of poor adjustment and of internalizing problems in particular (Barber, Stoltz, & Olsen, 2005; Soenens et al., 2008). In this study, we argue that parental psychological control may play an intervening role in associations between parents' separation anxiety and emerging adults' pathological separation-individuation.

First, theory and research suggest a link between parental separation anxiety and psychological control. Soenens et al. (2006), for instance, argued that parents who are highly anxious about their child's distancing perceive the growing independence of their child as a threat to the parent-child relationship. These parents may use psychological control as a

means to keep the child within close proximity. Consistent with this reasoning, Soenens et al. (2006) found that parental anxiety about distancing was related to a general measure of parental psychological control. Parental comfort with secure base role was negatively related to psychological control, suggesting that parents who deal adequately with their child's developmental striving for independence refrain from such controlling parenting strategies. In a subsequent study, Soenens, Vansteenkiste, and Luyten (2010) examined associations between parental separation anxiety and dependency-oriented psychological control. Dependency-oriented psychological control is defined as a specific form of psychological control driven by parental concerns about interpersonal closeness and relatedness. These parents use pressuring and intrusive parenting strategies in order to keep the child emotionally and physically in close proximity. In line with the notion that separation-anxious parents would use psychological control as a pressuring means to enforce dependency and parent-child closeness, Soenens et al. (2010) found that parental anxiety about distancing was strongly related with dependency-oriented psychological control.

Second, theory and research suggest that psychological control, and dependency-oriented psychological control in particular, may play a role in the development of pathological separation-individuation. According to Barber (1996), for instance, a psychologically controlling parenting climate will interfere with the development of individuation as such a climate is nonresponsive to the child's needs and allows no space for individuality. Similarly, Wood (2006) argued that parental intrusiveness may evoke separation anxiety in children. As children of intrusive and overprotective parents have few experiences with independent action and are prone to misperceive novel and ambiguous situations as threatening, they are likely to respond fearfully to separations. This hypothesized association between intrusive parenting and separation anxiety has been empirically confirmed in samples of both children (Wood, 2006) and late adolescents (Mayseless & Scharf, 2009).

Role of Emerging Adults' Residential Status

Emerging adulthood is the time period in human life span between adolescence and adulthood. It is characterized by exploration in various life domains (Arnett, 2000). When emerging adults are in the process of home-leaving, separation-individuation issues are likely to become prominent again in the parent-child relationship (Holmbeck & Wandrei, 1993; Rice, Cole, & Lapsley, 1990). As a part of the general delay of the transition to adulthood in Western post-industrial societies, young people coreside in the parental home longer or return to the parental home after a short period of independent living (Cherlin, Scabini, & Rossi, 1997; Goldscheider & Goldscheider, 1994). Although research on this topic is sparse, there is some evidence that living with parents at this age could be detrimental for emerging adults' functioning. The redefinition of the parent-child relationship into an increasingly symmetrical relationship has shown to be particularly problematic when young people and their parents live under the same roof (Flanagan, Schulenberg, & Fuligni, 1993). Emerging adults coresiding with their parents demonstrate, at least in Western postindustrial societies, a more negative parent-child relationship than their independently living peers, reflecting less independence, less support, and less mutual respect (Flanagan et al., 1993; Sullivan & Sullivan, 1980; White & Rogers, 1997).

To the best of our knowledge, the present study is the first to examine whether emerging adults' living condition has a main effect on a direct measure of pathology of separation-individuation as well as on its' hypothesized antecedents (i.e., parental separation anxiety and dependency-oriented psychological control). It could be argued that the process of separation-individuation is more salient and less likely to be resolved for coresiding emerging adults and their parents. Hence, we aimed to examine whether emerging adults living in the parental household display more disturbances in the process of separation-individuation, have parents who are more anxious about their child's distancing, and have parents who more often use psychologically controlling parenting strategies to keep their child within close boundaries.

In addition, we aimed to explore whether emerging adults' residential status would moderate the hypothesized relationships between parental separation anxiety, dependency-oriented psychological control, and pathological separation-individuation. Because emerging

adults living in the parental household are exposed to parental influences on a daily base, their parents' functioning and rearing style may affect them more strongly compared to emerging adults who live independently. Accordingly, we examined whether the hypothesized associations between parental antecedents and pathological separation-individuation would be more pronounced among co-residing emerging adults compared with their peers who have already taken steps toward independent living.

The Present Study

This study had four main research questions. First, we aimed to examine direct associations between parental separation-anxiety and pathological separation-individuation among emerging adults. We hypothesized that high parental anxiety about their child's distancing would be related to more pathological separation-individuation, whereas parental comfort with being an ongoing source of security for their almost-adult-child would be unrelated or negatively related to pathological separation-individuation. Second, we aimed to examine the mediating role of perceived parental dependency-oriented psychological control in associations between parents' separation-related feelings and pathological separation-individuation. Contrary to most past research, which typically focused on maternal separation anxiety only, we examined both maternal and paternal separation anxiety and dependency-oriented psychological control. Therefore, both the direct effects and mediation model were estimated separately for mothers and fathers to explore if the hypothesized paths in the models generalize across parent gender.¹ Third, we explored the main effect of emerging adults' residential status on pathology of the separation-individuation process and its' hypothesized antecedents. We investigated mean level differences across the various residential statuses to test whether continued coresidence with parents in emerging adulthood was associated with more separation-individuation pathology, parental separation anxiety, and dependency-oriented psychological control. Fourth, we examined the possible moderating effect of emerging adults' residential status. Although we had no clear predictions about this moderating effect, we were particularly interested to see if the hypothesized paths between parental separation anxiety, dependency-oriented psychological control, and pathological separation-individuation were stronger for coresiding emerging adults compared with emerging adults who have already taken steps towards independent living.

Method

Participants and Procedure

Participants in this study were emerging adults and their parents. We deliberately chose to sample emerging adults aged 21 to 26, because we found it particularly relevant to study emerging adults who are in the process of home leaving. Undergraduate students, participating in a course on developmental psychology, collected data for this study. To ascertain that we would obtain a sample with substantial variability in age and gender, each student was asked to contact one family with an emerging adult aged between 21 and 23 years and one family with an emerging adult aged between 24 and 26 years. Moreover, one of the emerging adults had to be female and the other had to be male. Only 5% of the contacted

¹We chose to estimate separate models for maternal and paternal ratings, rather than having both in the same structural model, for a number of reasons. First, we did not have a priori theoretical expectations about which parent would be more influential in fostering pathology of the separation-individuation process. Rather than assessing the relative contribution of mothers and fathers in the development of pathology of the separation-individuation process, we are more interested in replicating a process model across paternal and maternal ratings of separation-anxiety and psychological control. Second, there are also some methodological arguments against entering paternal and maternal ratings simultaneously into one model. The approach of entering both variables simultaneously into the predictive model often yields contradictory, unstable, and sample-specific results (see Stolz, Barber, & Olsen, 2005 for an elaborate discussion of this problem).

families refused to participate in the study. Emerging adults and parents who agreed to take part in this study received a questionnaire, which they were asked to complete during a home visit. Participation was completely voluntary and anonymity was guaranteed.

This procedure resulted in a sample of 232 emerging adults with a mean age of 23 years and 7 months ($SD = 1$ year, 9 months). Due to the sampling procedure, an equal number of men and women participated in this study. The majority of the participants was highly educated (75%) and came from intact families (79%). On the basis of previous research charting the different types of residential statuses of emerging adults in Belgium, (Kins, Beyers, Soenens, & Vansteenkiste, 2009), each emerging adult was asked to indicate one of three types of residential status, that is: (a) living with parents, (b) living semi-independently (e.g., living in a student room during the week, yet returning to the parental home during weekends), or (c) living fully independently. At the time of data gathering 43% of the emerging adults were living permanently in the parental household, 26% were living semi-independently, and 31% were living fully independently. Furthermore, a total of 442 parents (i.e., 99% of the mothers and 91% of the fathers) agreed to take part in the study. Mean age was 50 years ($SD = 4$ years) and 52 years ($SD = 4$ years), for mothers and fathers respectively. On a 6-point scale, mothers' mean educational level was 3.98 ($SD = 1.29$) and fathers' educational level was 4.24 ($SD = 1.36$), indicating an average of 14 years of education for both parents.

Missing values in the data set (3%) were estimated using the expectation maximization (EM) algorithm, a method used to obtain maximum likelihood estimates (Schafer, 1997). As Little's test (1988) suggested that data were missing completely at random (MCAR), $\chi^2(624, N = 232) = 511.17$, *ns*, this procedure for imputation of missing values was deemed acceptable. Consequently, $N = 232$ for all analyses.

Measures

All questionnaires were administered in Dutch, the participants' mother tongue. Questionnaires not available in Dutch were translated according to the guidelines of the International Test Commission (Hambleton, 1994). Items of all measures were scored on 5-point Likert scales, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scale scores were computed by taking the mean of the scale items.

Pathology of the separation-individuation process. Emerging adults' manifestations of disturbances in the separation-individuation process were measured with the Separation-Individuation Inventory (SII; Christenson & Wilson, 1985). In recent studies, this 39-item questionnaire has been denoted as PATHSEP (Lapsley et al., 2001; Lapsley & Edgerton, 2002). Items pertain to a number of expressions of pathological separation, including difficulty in differentiating from others (e.g., "I find that when I get emotionally too close to someone, I sometimes feel that I have lost a part of who I am"), splitting (e.g., "I find that I really vacillate between really liking myself and really disliking myself"), and relationship issues associated with separation-individuation disturbances (e.g., "I am tempted to try to control other people in order to keep them close to me"). Factor analytic examination of this questionnaire revealed the presence of one internally consistent factor (Christenson & Wilson, 1985; Lapsley et al., 2001). In the present study, all 39 items of this scale also coalesced around a single factor. Hence, an overall scale score was computed with higher scores reflecting greater pathology in terms of the separation-individuation process. Reliability and validity of the scale has been previously demonstrated (Christenson & Wilson, 1985; Dolan et al., 1992; Lapsley & Edgerton, 2002; Ryan & Lynch, 1989). Cronbach's α was .89.

Parental separation anxiety. Parents' emotions associated with their children's increasing independence and imminent leave-taking were assessed with the 35-item Parents of Adolescents Separation Anxiety Scale (PASAS; Hock et al., 2001), which has two subscales: Anxiety About Distancing (AAD) and Comfort with Secure Base Role (CSBR). Sample items are: "I feel sad when I realize my teenager no longer likes to do the things that we used to enjoy doing together" (AAD) and "I feel good knowing that my teenager feels that s/he can call on me" (CSBR). Although the PASAS was originally designed to measure feelings about

separation in parents of adolescents, this scale has also been used in samples of parents of freshman and senior college students (Bartle-Haring et al., 2002; Hock et al., 2001). As parents in our sample were asked to report about their emerging adult children (ranging in age from 21 to 26 years), some slight adaptations were made to this scale. For instance, the word teenager was replaced by son/daughter throughout the whole questionnaire and some of the items were rephrased in the future or past tense depending on the emerging adult's residential status (e.g., "It will be a sense of relief for me when my son/daughter moves out of the house permanently"—"It was a sense of relief for me when my son/daughter moved out of the house permanently"). As such, items became of relevance for parents of all emerging adults, even when their child was already married and/or had left the parental household. Furthermore, two items pertaining to the transition to college were dropped from the questionnaire as they are irrelevant to parents of emerging adults who finished their education after high school (i.e., 25% of our sample). Information about psychometric properties and validity of the PASAS were provided by Hock et al. (2001). Cronbach's α for the AAD subscale in this study was .82 for mothers and .88 for fathers. For the CSBR subscale Cronbach's α was .76 for mothers and .75 for fathers.

Dependency-oriented psychological control. Emerging adults were administered the 8-item Dependency-oriented Psychological Control (DPC) subscale from the Dependency-oriented and Achievement-oriented Psychological Control Scale (DAPCS; Soenens et al., 2010). Emerging adults completed the items separately for their mother and father. A sample item reads: "My mother/father blames me that I no longer want to do things that we used to enjoy." Information about the psychometrics of this scale is presented in Soenens et al. (2010). The 8 items showed good internal reliability (Cronbach's $\alpha > .80$) and the scale was externally validated by relating it to measures of parenting style and family climate. In this study Cronbach's α was .87 for maternal ratings and .80 for paternal ratings.

Results

Descriptive Statistics

Preliminary analyses. Means and standard deviations of all study variables (i.e., AAD, CSBR, DPC, and PATHSEP) are presented in Table 1. Prior to examining our hypothesized relationships, we explored the effects of a number of relevant background characteristics on our study variables to decide which variables should be controlled for in our main analyses. It concerns the following background variables: family structure (i.e., intact vs nonintact),

Table 1
Descriptive Statistics and Correlations between Study Variables (N = 232)

| Measure | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 |
|--------------------|----------|-----------|--------|-------|-------|------|--------|--------|
| AAD | | | | | | | | |
| 1. Mother report | 2.31 | .52 | | | | | | |
| 2. Father report | 2.25 | .46 | .46*** | | | | | |
| CSBR | | | | | | | | |
| 3. Mother report | 3.81 | .43 | .23** | .16* | | | | |
| 4. Father report | 3.71 | .38 | .09 | .16* | .22** | | | |
| DPC | | | | | | | | |
| 5. EA about Mother | 1.88 | .59 | .21** | .20** | .09 | -.01 | | |
| 6. EA about Father | 1.67 | .48 | .14* | .18** | .01 | -.10 | .52*** | |
| PATHSEP | | | | | | | | |
| 7. EA report | 2.20 | .42 | .28*** | .21** | -.04 | .07 | .42*** | .38*** |

Note: All measures were scored on 5-point Likert scales, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). AAD = Anxiety About Distancing, CSBR = Comfort with Secure Base Role, DPC = Dependency-oriented Psychological Control, EA = Emerging Adult, PATHSEP = Pathological Separation.

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

number of siblings, emerging adults' gender, age, level of education (i.e., high vs low), and relationship status (i.e., having a partner or not). We performed a multivariate analysis of covariance (MANCOVA) with the background variables as independent variables and the study variables as dependent variables. Significant multivariate effects emerged for number of siblings, $F(7, 207) = 5.84, p < .001, \eta^2 = .17$, emerging adults' gender, $F(7, 207) = 2.83, p < .01, \eta^2 = .09$, and relationship status, $F(7, 207) = 2.31, p < .05, \eta^2 = .07$. Follow-up univariate analyses were conducted and results are displayed in Table 2. Number of siblings had a significant effect on maternal and paternal AAD and on maternal CSBR. The more siblings emerging adults have, the lower both parents' scores on AAD and the lower mothers' scores on CSBR. Second, emerging adults' gender had a significant effect on maternal AAD and on both maternal and paternal CSBR, with mothers expressing more AAD and both parents expressing more CSBR towards their daughters than towards their sons. Third, relationship status had a significant effect on PATHSEP. Emerging adults involved in a romantic relationship scored significantly lower on PATHSEP compared with their single peers. Given that number of siblings, emerging adults' gender, and relationship status, were significantly related to the study variables, we controlled for the effects of these background variables in all subsequent analyses.

In addition, to examine whether the parenting variables in this study differ across parental gender, we conducted a repeated measures MANOVA with parent gender as a within-subjects variable and with AAD, CSBR, and DPC as dependent variables. A significant multivariate effect emerged for parent gender, $F(3, 229) = 14.61, p < .001, \eta^2 = .16$. Univariate follow-up analyses indicated significant effects of parental gender on CSBR ($F(1, 231) = 8.86, p < .01, \eta^2 = .04$) and DPC ($F(1, 231) = 35.38, p < .001, \eta^2 = .13$). Mothers scored higher on CSBR ($M = 3.81, SD = .03$) and DPC ($M = 1.87, SD = .04$) in comparison with fathers ($M = 3.71, SD = .03$ and $M = 1.67, SD = .03$, respectively).

Residential status and study variables. To examine the main effect of emerging adults' residential status (i.e., with parents, semi-independent, independent) on the study variables, we conducted a MANCOVA. Emerging adults' residential status and significant background variables were entered in the model as independent variables and the study variables were treated as dependent variables. Results indicated that emerging adults' residential status had no significant multivariate effect on the study variables, $F(14, 440) = 1.07, ns$. One significant univariate effect appeared for residential status on fathers' use of DPC. However, as this was an isolated finding and as the multivariate effect of residential status was not significant, this result was not further interpreted.

Structural Analysis

Correlational analysis. Correlations among all study variables are presented in Table 1. Mothers' and fathers' feelings of anxiety associated with emerging adults' distancing (AAD) were highly positively correlated. Furthermore, for both mothers and fathers, AAD was positively related to satisfaction with being an ongoing source of support and guidance for the emerging adult child (CSBR). Parental AAD was significantly related in expected ways to perceived dependency-oriented psychological controlling parenting (DPC). Conversely, parents' CSBR was unrelated to DPC. Maternal and paternal ratings of DPC were highly correlated. Emerging adults' pathology of the separation-individuation process (PATHSEP) was positively related to both mothers' and fathers' AAD, but was unrelated to parents' CSBR. Finally, as expected, PATHSEP was significantly associated with both maternal and paternal ratings of DPC.

Structural equation modeling. We used structural equation modeling with latent variables to address the primary hypotheses in this study. First, we examined direct effects of parental AAD and CSBR on emerging adults' PATHSEP. Second, we estimated the hypothesized mediation model, with DPC as an intervening variable between AAD/CSBR and PATHSEP. Third, the moderating role of emerging adults' residential status was examined

Table 2
Univariate Follow-up Analyses of Background Variables with a Significant Multivariate Effect on the Study Variables

| | Siblings | EA's Gender | | | | | | Relationship Status | | | | EA's Gender | | Relationship Status | | |
|-----------------|----------|-------------|-----|--------|-----|------------|-----|---------------------|-----|--------------------------|----------------|----------------------------------|----------------|---------------------|-----|--|
| | | Male | | Female | | No Partner | | Partner | | F _{EA's Gender} | | F _{Relationship Status} | | | | |
| | | M | SD | M | SD | M | SD | M | SD | F(1, 213) | η ² | F(1, 213) | η ² | | | |
| AAD | B | | | | | | | | | | | | | | | |
| Mother report | -.14 | 2.17 | .06 | 2.47 | .08 | 2.35 | .08 | 2.29 | .06 | 11.85*** | .05 | 8.64*** | .04 | .42 | .00 | |
| Father report | -.12 | 2.19 | .06 | 2.32 | .07 | 2.29 | .07 | 2.23 | .05 | 21.11*** | .09 | 2.35 | .01 | .62 | .00 | |
| CSBR | | | | | | | | | | | | | | | | |
| Mother report | -.16 | 3.76 | .05 | 3.92 | .06 | 3.85 | .06 | 3.83 | .05 | 14.86*** | .07 | 3.99* | .02 | .05 | .00 | |
| Father report | -.03 | 3.65 | .05 | 3.84 | .06 | 3.72 | .06 | 3.77 | .04 | 1.25 | .01 | 6.88** | .03 | .44 | .00 | |
| DPC | | | | | | | | | | | | | | | | |
| EA about Mother | -.02 | 1.96 | .07 | 1.83 | .09 | 2.00 | .09 | 1.78 | .07 | .16 | .00 | 1.30 | .00 | 3.52 | .02 | |
| EA about Father | .03 | 1.73 | .06 | 1.62 | .08 | 1.65 | .08 | 1.69 | .06 | .68 | .00 | 1.34 | .00 | .18 | .00 | |
| PATHSEP | | | | | | | | | | | | | | | | |
| EA report | -.01 | 2.30 | .05 | 2.30 | .06 | 2.42 | .07 | 2.18 | .05 | .21 | .00 | .00 | .00 | 9.12** | .04 | |

Note: All measures were scored on 5-point Likert scales, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). AAD = Anxiety About Distancing, CSBR = Comfort with Secure Base Role, DPC = Dependency-oriented Psychological Control, EA = Emerging Adult, PATHSEP = Pathological Separation.
p* < .05; *p* < .01; ****p* < .001.

both in the direct effects model and in the model with DPC as an intervening variable. Models were estimated separately for mothers and fathers in Lisrel 8.71 (Jöreskog & Sörbom, 1996). Emerging adults' gender, number of siblings and relationship status were entered as control variables in all models by allowing paths to each of the model constructs.

Parental separation anxiety, comfort with secure base role, dependency-oriented psychological control, and pathological separation-individuation were modeled as latent variables. Except for the control variables (which were represented by a single indicator variable), all four latent constructs were represented by a set of three parcels consisting of a random selection of their respective scale items. The same parceling procedure was used to represent maternal and paternal constructs. Although the utility and efficacy of parceling can be debated, this technique was deemed appropriate as our focus was on relations between latent variables and parcels were only used to build a measurement model. Moreover, aggregating items into parcels has psychometric merits as well as advantages for model estimation (Little, Cunningham, Shahar, & Widaman, 2002).

Data screening of the observed indicator variables (i.e., the parcels) indicated that assumptions of normality were violated both in terms of skewness and kurtosis at the multivariate level, $\chi^2(2, N = 232) = 283.61, p < .001$. As a result, we used the asymptotic covariance matrix as input in all subsequent analyses and considered the Satorra-Bentler Scaled chi-square (SBS- χ^2 ; Satorra & Bentler, 1994) to evaluate model fit ($N = 232$ for all models tested). Additionally, the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR) were inspected to evaluate model goodness of fit. According to Hu and Bentler (1999), combined cutoff values close to .06 for RMSEA and .09 for SRMR indicate good model fit. CFI-values of .90 or higher reflect acceptable fit (Bentler, 1990).

In a first step, we investigated the measurement model with 15 observed indicator variables and 7 latent variables (i.e., 3 control variables and 4 substantive latent factors) for mothers and fathers separately. Both the measurement model for mothers and fathers showed good fit: SBS- $\chi^2(72) = 109.33, CFI = .98, RMSEA = .05, SRMR = .05$ and SBS- $\chi^2(72) = 127.96, CFI = .96, RMSEA = .06, SRMR = .06$, respectively. Factor loadings of the indicator variables on their respective latent factors were moderate to high—ranging from .64 to .88 for the maternal data ($M = .81$) and ranging between .57 and .87 for the paternal data ($M = .78$)—and significant ($p < .001$). In sum, reliable measurement models were obtained.

Next, we tested a set of structural models to investigate the main hypotheses of this study. In a first model, AAD and CSBR were simultaneously entered as predictors of PATHSEP. Results of the maternal model, SBS- $\chi^2(42) = 67.32, CFI = .98, RMSEA = .05, SRMR = .05$, showed that whereas AAD was positively related to PATHSEP ($\beta = .37; p < .001$), the path from CSBR to PATHSEP was not significant ($\beta = -.11; ns$). Virtually similar results were obtained in the paternal model, SBS- $\chi^2(42) = 94.38, CFI = .95, RMSEA = .07, SRMR = .07$, with AAD relating positively to PATHSEP ($\beta = .25; p < .001$), and with CSBR being unrelated to PATHSEP ($\beta = .02; ns$). Although AAD and CSBR were positively interrelated in the maternal data ($r = .25, p < .01$), they were unrelated in the paternal data ($r = .11, ns$).

In the next set of models we addressed the intervening role of DPC in the relation between the parent characteristics (i.e., AAD and CSBR) and emerging adults' PATHSEP. In a first model, the parent characteristics were only indirectly related to PATHSEP through DPC. Estimation of this full mediation model yielded good fit for the maternal data, SBS- $\chi^2(74) = 122.09, CFI = .97, RMSEA = .05, SRMR = .06$. Results showed that whereas AAD was positively related to DPC ($\beta = .26, p < .001$), CSBR was not ($\beta = .08, ns$). DPC was in turn related to PATHSEP in the hypothesized direction ($\beta = .48, p < .001$). The indirect effect from maternal AAD to emerging adults' PATHSEP through DPC was significant, as indicated by a Sobel (1982) test for indirect relations ($z = 2.66, p < .01$). Bootstrap results, using Preacher and Hayes (2008) methodology for indirect effects based on 5000 bootstrap resamples, confirmed the Sobel test with a bootstrapped 95% confidence interval (CI) around the indirect effect not containing zero ($b = .06; CI = .02-.12$). Because maternal AAD had an initial positive association with PATHSEP, a second model was tested to examine whether this path would remain significant or would be reduced to nonsignificance after including DPC as a mediator in the model. Adding a direct path

from AAD to PATHSEP to the model (depicted in Fig. 1A), significantly improved the model fit, $\Delta\text{SBS-}\chi^2(1) = 14.97, p < .001$, and although this path was reduced to $\beta = .24$ (i.e., a reduction of 35%) it remained significant. Because the indirect effect of AAD on PATHSEP also remained significant in this model ($z = 2.55, p < .05$), it can be concluded that the relationship between maternal AAD and PATHSEP is partially, rather than fully, mediated by DPC.

Estimating the mediation model on the paternal data (see Fig. 1B) yielded a good model fit $\text{SBS-}\chi^2(74) = 132.38, \text{CFI} = .96, \text{RMSEA} = .06, \text{SRMR} = .06$. Whereas AAD was positively related to DPC ($\beta = .31, p < .001$), CSBR was unrelated to DPC ($\beta = -.16, ns$). DPC was in turn positively associated with PATHSEP ($\beta = .46, p < .001$). Analogously to the results of the maternal model, paternal AAD was indirectly related to emerging adults' PATHSEP through DPC ($z = 2.74, p < .01$). Bootstrapping corroborated these results ($b = .08; 95\%$ bootstrap $\text{CI} = .03-.15$). Because parental AAD initially showed a direct effect on PATHSEP, further mediation analyses were performed. Adding a direct path from AAD to PATHSEP improved model fit $\Delta\text{SBS-}\chi^2(1) = 8.96, p < .01$. However, as this path was reduced to nonsignificance ($\beta = .13, ns$) in the mediation model (i.e., a reduction of 48%), it could be concluded that the relationship between paternal AAD and PATHSEP was fully mediated by DPC.

Finally, we performed multigroup analyses to examine the moderating role of emerging adults' residential status on both the model with direct effects from AAD and CSBR to PATHSEP and the model with DPC as an intervening variable. First, it was tested whether moderation would occur in the model with direct effects. These analyses revealed that the common fit of the maternal model—where all parameters were specified to be invariant across the three types of residential status—was good: $\text{SBS-}\chi^2(198) = 217.33, \text{CFI} = .98, \text{RMSEA} = .04$. Free estimation of the parameters of all structural paths in the model (i.e., paths from both AAD and CSBR to PATHSEP and correlation between AAD and CSBR) did not significantly improve the common fit of the model: $\Delta\text{SBS-}\chi^2(6) = 3.02, ns$. As the results of this multivariate test were nonsignificant, no further univariate analyses were conducted in which

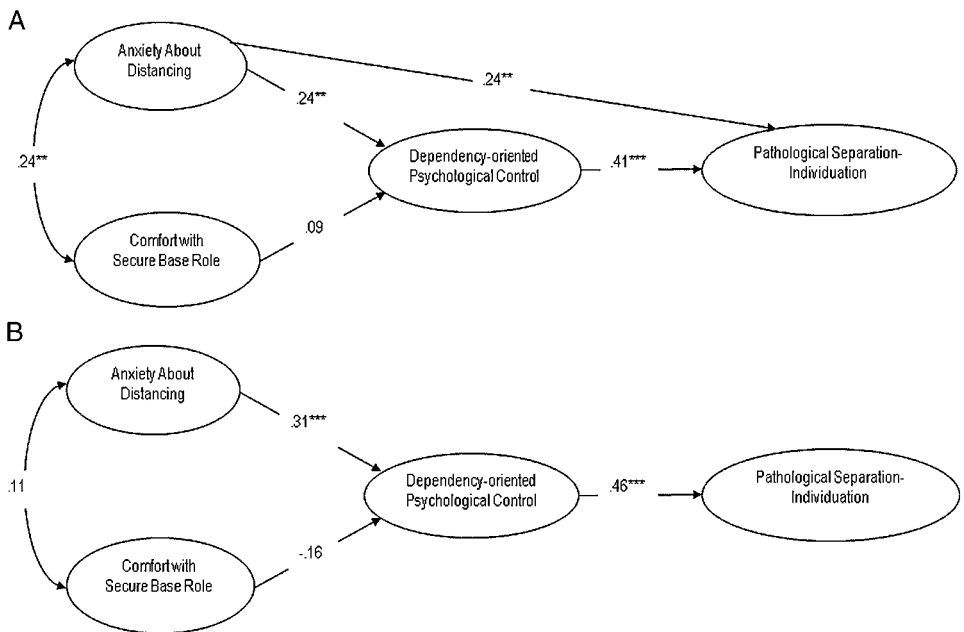


Figure 1. Structural model of the relationships between parental separation anxiety, comfort with secure base role, dependency-oriented psychological control and emerging adult's pathology of the separation-individuation process, separately for (A) the maternal and (B) the paternal data. For clarity of presentation the effects of the control variables (age, emerging adults' gender, number of siblings, and relationships status) are not shown. Fit mother model: $\text{SBS-}\chi^2(73) = 112.06, \text{CFI} = .98, \text{RMSEA} = .05, \text{SRMR} = .05$. Fit father model: $\text{SBS-}\chi^2(74) = 132.38, \text{CFI} = .96, \text{RMSEA} = .06, \text{SRMR} = .06$. * $p < .05$; ** $p < .01$; *** $p < .001$.

each of the paths is freed separately. Hence, it can be concluded that type of residential status did not moderate the direct effects of AAD and CSBR on PATHSEP. Conversely, the common goodness of fit of the paternal model, $SBS-\chi^2(198) = 293.41$, $CFI = .90$, $RMSEA = .08$, did improve significantly when all structural paths were estimated freely across the three residential statuses: $\Delta SBS-\chi^2(6) = 15.78$, $p < .05$. Follow-up univariate testing revealed that the free estimation of only one parameter improved model fit ($\Delta SBS-\chi^2(2) = 10.29$, $p < .01$), that is, the correlation between AAD and CSBR. In the coresident group the correlation between AAD and CSBR was $r = .15$ (*ns*), in the semi-independent group the correlation was $r = .30$ ($p < .01$), and in the independent group the correlation was $r = -.04$ (*ns*).

Next, multigroup analyses were also performed to examine whether emerging adults' type of residential status moderates the structural paths in the estimated mediation models. The partial mediation model for the maternal data was found to be invariant across the three residential statuses: $SBS-\chi^2(205) = 253.35$, $CFI = .97$, $RMSEA = .06$, as free estimation of the structural paths in the model did not significantly improve model fit $\Delta SBS-\chi^2(10) = 6.76$, *ns*. Similarly, estimation of a restricted paternal full mediation model, where all parameters are set equal across emerging adults' types of residential status, showed good model fit: $SBS-\chi^2(206) = 281.62$, $CFI = .94$, $RMSEA = .07$, and freeing the parameters of the structural paths across the three groups did not improve model fit: $\Delta SBS-\chi^2(8) = 11.91$, *ns*. As a result, it could be concluded that emerging adults' type of residential status does not moderate the hypothesized paths in both the maternal and paternal mediation models.

Discussion

Emerging adulthood is a critical turning point in the human life span, during which young people make the transition to adult life (Arnett, 2000). Throughout this period emerging adults move from a dependent status to a more independent status. For instance, they learn to take responsibility for their own actions, become financially independent from parents, gain self-sufficiency, and move out of the parental household. This growing need for independence and self-regulation additionally requires a transformation of the parent-child relationship (Tanner, 2005). Thus, it is not surprising that issues of closeness versus distance in parent-child relationships strongly revive during this life stage and may, at least for some emerging adults, give rise to a pathological resolution of the developmental task of separation-individuation. The present study examined parental separation anxiety and dependency-oriented psychological control as antecedents of emerging adults' pathology of the separation-individuation process. Several interesting findings emerged.

Parental Separation Anxiety

When children grow up to become adults, some parents may have difficulties to accept that childlike dependencies on parents are relinquished and regulation of children's behavior is gradually transferred from parents to children themselves. It was expected that a separation-anxious parental orientation could translate in emerging adults' difficulties to cope with the separation-individuation process, as manifested in pathological separation. In line with this expectation, it was found that parents' feelings of separation-related loss and distress relate to an unhealthy resolution of the process to achieve an independent status. These findings contribute to earlier findings showing that parental AAD is related to problems in identity development (Bartle-Haring et al., 2002) and to lower general well-being in adolescents (Soenens et al., 2006).

Parental comfort with being a secure base was, by contrast, unrelated to pathological separation-individuation. Hence, contrary to previous research with adolescents in which parental CSBR was found to be an adaptive parental orientation (Bartle-Haring et al., 2002; Hock et al., 2001; Soenens et al., 2006), it cannot be concluded that being an ongoing source of parental support is a protective factor against pathology of the separation-individuation process in emerging adulthood. Moreover, although parents' anxiety about distancing and comfort with secure base role have been strongly related in research with adolescents, this

correlation was relatively small in the current study with emerging adults and was even not significant for fathers. One possible explanation for the stronger differentiation between AAD and CSBR at a later age—and for fathers of emerging adults in particular—is that separation anxiety becomes less of an expression of genuine parental involvement and concern. Instead, as emerging adults' strivings for independence become more normative and age-appropriate, parental anxiety about distancing may increasingly become a self-concerned parental orientation which has nothing to do with positive involvement in their children's development.

In sum, both maternal and paternal separation anxiety are related to emerging adults' pathology of the separation-individuation process. On the basis of attachment theory (Bowlby, 1973) and object-relations theory (Mahler, 1963), it could be argued that parents' response to their children's development during the separation-individuation process is a function of parents' own experiences with their attachment figures during childhood. Parents' own developmental history is thus likely to affect the way in which parents respond to separation events and to their children's increasing independence in particular (Bloom-Feshbach & Bloom-Feshbach, 1987). In line with these ideas, empirical research by Hock et al. (2001) has found that parents having insecure attachment representations particularly experience high levels of parental separation anxiety. These findings possibly suggest a mechanism of intergenerational transmission where parents respond with feelings of sadness and loss to their child's separation-individuation process because of unresolved issues with their own attachment and separation experiences. Future research that takes into account parents' personal history with separation-individuation and attachment is needed to more fully address the possibility of intergenerational transmission of separation-individuation pathology.

Dependency-Oriented Psychological Control as a Mediator

The relationship between parental separation anxiety and emerging adults' pathology of the separation-individuation process was mediated by dependency-oriented psychological control. In line with our expectations and results of previous studies (e.g., Soenens et al., 2010), this finding demonstrates that parents who are highly anxious about their child's distancing use more controlling parenting tactics and, more specifically, engage in manipulative strategies to keep their emerging adult child emotionally and physically close to them. The subsequent relation between dependency-oriented psychological control and emerging adults' pathological separation-individuation is consistent with the notion that overprotective parents who leave their child no space for individuality undermine the development of healthy separation-individuation (Barber, 1996; Wood, 2006).

Although the initial relation between parental separation anxiety and pathological separation-individuation was reduced to nonsignificance after taking into account the role of dependency-oriented psychological control in the paternal model (suggesting full mediation), this direct path remained significant in the maternal model (suggesting partial mediation). These findings suggest that fathers' separation anxiety needs to be explicitly communicated through parenting (i.e., pressuring the child to remain dependent on the parent) to become a risk factor for emerging adults' pathological separation-individuation. In contrast, maternal separation anxiety seems to affect emerging adults' pathological separation in a direct fashion, suggesting that maternal separation anxiety may represent a more visible and salient attitude, reflected in many of the mother's behaviors and communications. Alternatively, other mediators (such as attachment style) may additionally explain part of the effect of maternal separation anxiety on emerging adults' pathology of the separation-individuation process.

Notwithstanding this minor difference between maternal and paternal findings, the consistency of the findings across the maternal and paternal data was remarkable. This consistency is surprising, because separation anxiety and promotion of dependency are often considered as typical maternal characteristics. As such, mothers are particularly thought to be involved in disturbances of the process of separation-individuation. Nevertheless, results of this study have shown that when fathers feel anxious about their child's distancing and pressure the child to stay within close proximity, they too seem to contribute to emerging adults' separation-individuation pathology.

In this study, like in many studies on pathological separation, we focused primarily on dependency and on parental pressure to be dependent. Nevertheless, as healthy separation-individuation requires an optimal balance between connectedness and independence (Grotevant & Cooper, 1986; Smollar & Youniss, 1989), disturbances could also be converted in an excessive urge for independence. On the basis of the recent work by Soenens et al. (2010) on domain-specific expressions of psychological control, we argue that a different type of parental pressure may elicit such excessive dependency longings, that is, achievement-oriented psychological control. Contrary to dependency-oriented psychological control, parents using this type of intrusive parenting encourage independence and individual achievement in a controlling and pressuring manner. It would be interesting for future studies to examine whether these two types of pathology of the separation-individuation process can actually be distinguished and whether they are differentially associated with unique parenting antecedents.

Emerging Adults' Residential Status

The residential statuses of emerging adults are typically very diverse, as this is a highly unstable life stage where young people get the chance to try out a lot of possibilities (Arnett, 2000). For instance, some emerging adults still reside in the parental home, whereas others have already established an independent household. As previous studies have suggested that the separation-individuation process might be hampered when the emerging adult coresides with his/her parents (Flanagan et al., 1993; White & Rogers, 1997), it was deemed important to take into account the role of emerging adults' residential status in this study. On the basis of a simplistic and literal understanding of the "separation" concept, leaving-taking from the parental home could be viewed as a crucial step for healthy resolution of the separation-individuation process. However residential status was not related to pathology of the separation-individuation process, nor to parental anxiety about their child's distancing, nor to the use of dependency-oriented controlling parenting strategies. Hence, these results plead against a literal interpretation of separation as physical disengagement from parents and instead support a view on separation as intrapsychic process (Blos, 1967, 1979; Mahler, 1963). Separation is about redefining the sense of self, and about knowing where I stop and you begin (Levy-Warren, 1999). Although physical distancing from the family by moving out of the parental home may be an outward manifestation of the inner process of separation, it is not the core element of this process. Moreover, it might be more important to pay attention to the reasons behind an emerging adult's residential status, instead of the residential status as such, when studying separation-individuation pathology (Kins et al., 2009). Young people who continue to live with their parents out of pressure rather than choice, for example because they lack financial resources or because they would feel guilty if they left home, might experience most disturbances. The same could hold true for emerging adults whom live independently for controlled reasons (e.g., they were forced to leave) rather than for autonomous reasons (e.g., because they like it or find this personally important).

Further, emerging adults' residential status did not moderate associations between parental separation anxiety, parenting, and separation-individuation pathology. This suggests that, irrespective of residential status, these parental antecedents may contribute to pathology of the separation-individuation process. Hence, even when emerging adults have left the parental home and are not exposed to parental influences on a daily basis anymore, parents who are highly anxious about their child's distancing (and their resulting dependency-oriented parenting style) seem to affect the child's coping with separation-individuation issues. In line with previous research of Kins et al. (2009), these results indicate that the objective residential status is relatively less relevant in the prediction of separation-individuation and adjustment compared to family dynamics and subsequent modes of personal functioning within each type of residential status. Clinicians working with emerging adults and their families would do well to take into account these family dynamics in order to prevent separation-individuation pathology in emerging adulthood.

Limitations

Although this study is to our knowledge among the first to study hypothesized parental antecedents of separation-individuation pathology in emerging adulthood, some limitations are worth noting. First of all, although this study included emerging adults with substantial variability in gender, age, and residential status, this is not a representative sample. Therefore, it remains to be examined whether the structural relationships obtained in this sample can be generalized to a broader population of emerging adults and their parents. Moreover, as this is a self-selected sample the subjects included in our study may be relatively well-adjusted. Consequently, future research will have to indicate if our results can be replicated in clinical samples and particularly in samples of people suffering from disturbances in the separation-individuation.

Second, in this cross-sectional study we focused exclusively on the impact of parents on children, thus adopting a unidirectional perspective on the association between parental characteristics and pathology of the separation-individuation process. As previous studies have indicated that characteristics of the child (e.g., health status) can affect parents' separation anxiety (Hock & Lutz, 1998), the effect of the child on the parent should be taken into consideration as well. Applied to the present study this would mean that parental feelings of separation anxiety and dependency-oriented psychological control will be reinforced when parents see that their child struggles with the resolution of the separation-individuation process and experiences difficulties to learn to stand alone as a self-sufficient person. It is possible that mothers are especially sensitive to this child-effect, as we found a somewhat stronger direct remaining association between separation anxiety and pathology of the separation-individuation process in the maternal data compared to the paternal data. Longitudinal research is needed to explore such reciprocal effects and to further unravel the complex interplay between parental separation anxiety and emerging adults' pathology of the separation-individuation process. In particular, the temporal precedence assumed in the mediation model of this cross-sectional study could be more appropriately tested with a longitudinal design. Moreover, as emerging adults are in the process of making commitments to new systems outside the family of origin (Tanner, 2005), it is unlikely that only the parent-child relationship would affect emerging adults' resolution of the separation-individuation process. Thus, it would be interesting to investigate in future studies how relationships with significant others (e.g., a romantic partner, good friend) additionally affect the separation-individuation process.

Third, given the homogeneous nature of the study sample, including exclusively Belgian emerging adults and their parents, the finding that emerging adults' objective residential status is less relevant in the prediction of separation-individuation pathology should be interpreted carefully. That is, Belgium is a small country (i.e., total surface area of 30.528 km² or 11.787 square miles) where everyone lives within driving distance. Hence, even when young people have an independent residential status, they generally live close to the parental home. As such, leaving the parental home might be a less radical rupture from parental influences for Belgian emerging adults compared with young people from other countries. This could explain why parental characteristics and behaviors remain important antecedents of emerging adults' separation-individuation pathology even when one no longer lives in the parental home. Further research in countries where independent living implies a substantial geographical distance from the parental home, like the U.S. and Canada, is needed before it can be concluded that the role of emerging adults' objective residential status can be completely discarded in the prediction of pathology of separation-individuation.

Finally, this study starts from the idea that a gradual development towards more independence is normative when a child grows up to become adult. This assumption is typical for Western individualistic societies, where separateness from others is highly promoted. The interpretation of the separation-individuation process and what is considered as pathological might however be very different in more collectivistic cultures, where the priority of the group is emphasized over individual goals. In addition, the role of family process in the prediction of (pathology of) the separation-individuation process might be even more pronounced in these societies. Cross-cultural comparison studies are needed to help unravel these questions.

Conclusion

This study showed that parents' feelings of separation anxiety are related to a pathological way of dealing with the separation-individuation process among emerging adults. These feelings of threat and loss when confronted with the child's distancing appear to be transferred to the child through parental promotion of dependence in a pressuring fashion, even when emerging adults have left the parental home and no longer live with their parents.

References

- Allen, J.P., Hauser, S.T., Eickholt, C., Bell, K.L., & O'Connor, T.G. (1994). Autonomy and relatedness in family interactions as predictors of expressions of negative adolescent affect. *Journal of Research on Adolescence, 4*, 535–552.
- Aquilino, W.S. (1997). From adolescent to young adult: A prospective study of parent-child relations during the transition to adulthood. *Journal of Marriage and the Family, 59*, 670–686.
- Aquilino, W.S. (2005). Family relationships and support systems in emerging adulthood. In J.J. Arnett & J.L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century*. Washington, DC: American Psychological Association.
- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469–480.
- Baltes, M.M., & Silverberg, S.B. (1994). The dynamics between dependency and autonomy: Illustrations across the life span. In D.L. Featherman, R.M. Lerner, & M. Perlmutter (Eds.), *Life-span development and behavior* (Vol. 12, pp. 41–90). Hillsdale NJ: Erlbaum.
- Barber, B.K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development, 67*, 3296–3319.
- Barber, B.K., Stolz, H.E., & Olsen, J.A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, method, and culture. *Monographs of the Society for Research in Child Development, 70*(4), 1–151.
- Bartle-Haring, S., Brucker, P., & Hock, E. (2002). The impact of parental separation anxiety on identity development in late adolescence and early adulthood. *Journal of Adolescent Research, 17*, 439–450.
- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238–246.
- Beyers, W., & Goossens, L. (1999). Emotional autonomy, psychosocial adjustment and parenting: Interactions, moderating and mediating effects. *Journal of Adolescence, 22*, 753–769.
- Bloom-Feshbach, J., & Bloom-Feshbach, S. (1987). Introduction: Psychological separateness and experiences of loss. In J. Bloom-Feshbach & S. Bloom-Feshbach (Eds.), *The psychology of separation and loss: Perspectives on development, life transition, and clinical practice* (pp. 1–59). San Francisco: Jossey-Bass.
- Blos, P. (1967). The second individuation process of adolescence. *Psychoanalytic Study of the Child, 22*, 162–186.
- Blos, P. (1979). *The adolescent passage*. Madison, CT: International Universities Press.
- Bowlby, J. (1973). *Attachment and loss* (Vol. 2). Separation. New York: Basic.
- Cherlin, A.J., Scabini, E., & Rossi, G. (1997). Still in the nest: Delayed home leaving in Europe and the United States. *Journal of Family Issues, 18*, 572–575.
- Christenson, R.M., & Wilson, W.P. (1985). Assessing pathology in the separation-individuation process by an inventory: A preliminary report. *Journal of Nervous and Mental Disease, 173*, 561–565.
- Dolan, B.M., Evans, C., & Norton, K. (1992). The Separation-Individuation Inventory: Association with borderline phenomena. *Journal of Nervous and Mental Disease, 180*, 529–533.
- Doyle, A.B., & Markiewicz, D. (2005). Parenting, marital conflict and adjustment from early- to mid-adolescence: Mediated by adolescent attachment style? *Journal of Youth and Adolescence, 34*, 97–110.
- Flanagan, C., Schulenberg, J., & Fuligni, A. (1993). Residential setting and parent-adolescent relationships during the college years. *Journal of Youth and Adolescence, 22*, 171–189.
- Frank, S.J., Butler-Avery, C.B., & Laman, M.S. (1988). Young adults' perceptions of their relationships with their parents: Individual differences in connectedness, competence and emotional autonomy. *Developmental Psychology, 24*, 729–737.

- Frank, S.J., Pirsch, L.A., & Wright, V.C. (1990). Late adolescents' perceptions of their relationships with their parents: Relationships among deidealization, autonomy, relatedness and insecurity and implications for adolescent adjustment and ego identity status. *Journal of Youth and Adolescence*, 19, 571–588.
- Goldscheider, F., & Goldscheider, C. (1994). Leaving and returning home in 20th century America. *Population Bulletin*, 48, 2–35.
- Grotevant, H.D., & Cooper, C.R. (1986). Individuation in family relationships: A perspective on individual differences in the development of identity and role-taking skill in adolescence. *Human Development*, 29, 82–100.
- Hair, E.C., Moore, K.A., Garrett, S.B., Ling, T., & Cleveland, K. (2008). The continued importance of quality parent-adolescent relationships during late adolescence. *Journal of Research on Adolescence*, 18, 187–200.
- Hambleton, R.K. (1994). Guidelines for adapting educational and psychological tests: A progress report. *European Journal of Psychological Assessment*, 10, 229–244.
- Hock, E., & Lutz, W.J. (1998). Psychological meaning of separation anxiety in mothers and fathers. *Journal of Family Psychology*, 12, 41–55.
- Hock, E., Eberly, M., Bartle-Haring, S., Ellwanger, P., & Widaman, K.F. (2001). Separation anxiety in parents of adolescents: Theoretical significance and scale development. *Child Development*, 72, 284–298.
- Holmbeck, G.N., & Leake, C. (1999). Separation-individuation and psychological adjustment in late adolescence. *Journal of Youth and Adolescence*, 28, 563–581.
- Holmbeck, G.N., & Wandrei, M.L. (1993). Individual and relational predictors of adjustment in first-year college students. *Journal of Counseling Psychology*, 40, 73–78.
- Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Jöreskog, K.G., & Sörbom, D. (1996). LISREL 8: User's Reference Guide. Lincolnwood, IL: Scientific Software International.
- Kins, E., Beyers, W., Soenens, B., & Vansteenkiste, M. (2009). Patterns of home leaving and subjective well-being in emerging adulthood: The role of motivational processes and parental autonomy support. *Developmental Psychology*, 45, 1416–1429.
- Lapsley, D.K., Aalsma, M.C., & Varshney, N.M. (2001). A factor analytic and psychometric examination of pathology of separation-individuation. *Journal of Clinical Psychology*, 57, 915–932.
- Lapsley, D.K., & Edgerton, J. (2002). Separation-individuation, adult attachment style and college adjustment. *Journal of Counseling and Development*, 80, 484–493.
- Lapsley, D.K., Rice, K.G., & Shadid, G.E. (1989). Psychological separation and adjustment to college. *Journal of Counseling Psychology*, 36, 286–294.
- Levy-Warren, M.H. (1999). I am, you are, and so are we: A current perspective on adolescent separation-individuation theory. In A.H. Esman, L.T. Flaherty, & H.A. Horowitz (Eds.), *Adolescent psychiatry: Developmental and clinical studies* (pp. 3–24). Hillsdale, NJ: Analytic Press.
- Little, R.J.A. (1988). Missing data in large surveys. *Journal of Business and Economic Statistics*, 6, 287–301.
- Little, T.D., Cunningham, W.A., Shahar, G., & Widaman, K.F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, 9, 151–173.
- Mahler, M.S. (1963). Thoughts about development and individuation. *Psychoanalytic Study of the Child*, 18, 307–324.
- Mayselless, O., & Scharf, M. (2009). Too close for comfort: Inadequate boundaries with parents and individuation in late adolescent girls. *American Journal of Orthopsychiatry*, 79, 191–202.
- McBride, S.L., & Belsky, J. (1988). Characteristics, determinants, and consequences of maternal separation anxiety. *Developmental Psychology*, 24, 407–414.
- Pine, F. (1979). Pathology of the separation-individuation process as manifested in later clinical work: Attempt at delineation. *International Journal of Psychoanalysis*, 40, 225–242.
- Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Quintana, S.M., & Kerr, J. (1993). Relational needs in late adolescent separation-individuation. *Journal of Counseling and Development*, 71, 349–355.

- Rice, K.G., Cole, D.A., & Lapsley, D.K. (1990). Separation-individuation, family cohesion and adjustment to college: Measurement validation and test of theoretical model. *Journal of Counseling Psychology, 37*, 195–202.
- Ryan, R.M., & Lynch, J.H. (1989). Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. *Child Development, 60*, 340–356.
- Satorra, A., & Bentler, P.M. (1994). Corrections to test statistics and standard errors in covariance structure analysis. In A. von Eye & C.C. Clogg (Eds.), *Latent variables analysis: Applications for developmental research* (pp. 399–419). Thousand Oaks, CA: Sage.
- Schafer, J.L. (1997). Analysis of incomplete multivariate data (Monographs on Statistics and Applied Probability, 72). London: Chapman & Hall.
- Shulman, S., & Seiffge-Krenke, I. (1997). *Fathers and adolescents: Developmental and clinical perspectives*. London: Routledge.
- Smollar, J., & Youniss, J. (1989). Transformations in adolescents' perceptions of parents. *International Journal of Behavioral Development, 12*, 71–84.
- Sobel, M.E. (1982). Asymptotic interval for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology 1982* (pp. 290–313). San Francisco: Jossey-Bass.
- Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review, 30*, 74–99.
- Soenens, B., Vansteenkiste, M., Duriez, B., & Goossens, L. (2006). In search of sources of psychologically controlling parenting: The role of parental separation anxiety and parental maladaptive perfectionism. *Journal of Research on Adolescence, 16*, 539–559.
- Soenens, B., Vansteenkiste, M., Luyckx, K., Luyten, P., Duriez, B., & Goossens, L. (2008). Maladaptive perfectionism as an intervening variable between psychological control and adolescent depressive symptoms: A three-wave longitudinal study. *Journal of Family Psychology, 22*, 465–474.
- Soenens, B., Vansteenkiste, M., & Luyten, P. (2010). Towards a domain-specific approach to the study of parental psychological control: Distinguishing between dependency-oriented and achievement-oriented psychological control. *Journal of Personality, 78*, 217–256.
- Stifter, C.A., Coulean, C.M., & Fish, M. (1993). Linking employment to attachment: The mediating effects of maternal separation anxiety and interactive behavior. *Child Development, 64*, 1451–1460.
- Stolz, H.E., Barber, B.K., & Olsen, J.A. (2005). Toward disentangling fathering and mothering: An assessment of relative importance. *Journal of Marriage and the Family, 67*, 1076–1092.
- Sullivan, K., & Sullivan, A. (1980). Adolescent-parent separation. *Developmental Psychology, 16*, 93–99.
- Tanner, J.L. (2005). Recentering during emerging adulthood: A critical turning point in life span human development. In J.J. Arnett & J.L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 21–55). Washington, DC: American Psychological Association.
- White, L.K., & Rogers, S.J. (1997). Strong support but uneasy relationships: Coresidence and adult children's relationships with their parents. *Journal of Marriage and the Family, 59*, 62–76.
- Wood, J.J. (2006). Parental intrusiveness and children's separation anxiety in a clinical sample. *Child Psychiatry and Human Development, 37*, 73–87.