Separation–individuation revisited: on the interplay of parent–adolescent relations, identity and emotional adjustment in adolescence [☆]

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Abstract

The objective of this study was to test our alternative interpretation of the separation–individuation hypothesis. This interpretation states that separation from the parents is not a precondition for individuation, but rather separation and individuation are two parallel processes of development during adolescence. We investigated our interpretation in two ways. Firstly, we looked at descriptive age differences in parental support and development of relational and societal identity. Secondly, we investigated the variation with age of the associations between parental support and emotional adjustment, and identity and emotional adjustment. Data of a representative Dutch sample of 2814 adolescents, aged 12–24 were used. In both cases, the findings supported our interpretation of the separation–individuation hypothesis and similar results were found in the descriptive analyses and the structural equation models. Parental support decreased with age, and so too did its association with emotional adjustment. In other words, as adolescents become older, they experience less parental support, while its importance for their emotional adjustment also declines. The opposite pattern was observed with respect to identity development: as adolescents become older, their relational and societal identity commitments develop,

and the degree to which these commitments are developed also becomes more important for their emotional adjustment.

Introduction

Adolescence is the period in which the parent–child relationship changes in character, and identity is formed. The frequency and duration of contacts between parent and adolescent decrease (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996), the parent–adolescent relationship becomes less authoritarian and more egalitarian (Youniss & Smollar, 1985), and identity becomes less diffuse and more clear and articulated (Erikson, 1968; Adams & Fitch, 1982; Waterman, 1993). This article investigates the association between the change in the parent–adolescent relationship during adolescence and the development of identity. Especially, we test our alternative interpretation of the separation–individuation hypothesis. This interpretation states that separation from the parents is not a precondition for individuation, but rather separation and individuation are two parallel processes of development during adolescence.

With respect to the development of identity, we restrict ourselves to studies conducted on the basis of the Eriksonian concept of identity and Marcia's (1966) elaboration of this into the identity status model. Marcia regards identity as the outcome of two processes: exploration of developmental alternatives in a certain domain; and selection of one of these alternatives, that is to say, entering into a commitment. Marcia describes four clearly differentiated identity statuses, based on the amount of exploration and commitment, which the adolescent is experiencing or has experienced. Identity diffusion (D) indicates that the adolescent has made no commitment as yet regarding a specific developmental task, and may or may not have explored different developmental alternatives in that domain. Foreclosure (F) means that the adolescent has made a commitment without exploration. In moratorium (M), the adolescent is in a state of active exploration and has made no commitment or at best an unclear one. Identity achievement (A) signifies that the adolescent has finished a period of active exploration and has made a commitment.

Separation–individuation

The classic separation–individuation theory of Blos (1967) states that in order to achieve individuation, the adolescent has to let go of the internalized childhood image of the parent. Theoretically, this hypothesis has primarily been elaborated by Kroger (1985) in the field of identity research; she proposes that a parallel can be seen between the structure of the parent–child relation and the structure of the ego. In adolescence the childhood image of the parents is rejected, as too is the idea that they are omnipotent and their rules must be obeyed; the adolescent starts to define him/herself and the parents as autonomous people in a relationship.

This redefinition of the parent–adolescent relation enables the adolescent to leave behind the child's identity and to enter autonomously into new commitments in order to form a new identity. Within the identity status tradition the theoretical interpretation of the separation–individuation process has been quite univocal and its empirical study straightforward. In theoretical sense most researchers see separation and individuation as two linked processes (Kroger, 1985; Kroger & Haslett, 1988; Lopez, Watkins, Manus, & Hunton-Shoup, 1992; Lucas, 1997). They assume a direct association between separation and individuation. So, in their empirical studies they test whether the degree of separation from the parents is predictive of the degree of identity development. We propose a new interpretation and assume that separation and identity development are two processes, which run in parallel. We base our alternative interpretation on research into age related changes on parent–adolescent relationships and identity formation. In the following we will discuss the findings of empirical research relating to both perspectives.

A direct link between separation and identity development?

Within Marcia's paradigm, very little research has been done concerning the direct link between separation and identity. Kroger (1985) and Kroger and Haslett (1988) report on the association between separation–individuation patterns, as measured with Hansburg's separation-anxiety test (SAT), and identity status. In both studies, identity achievers most frequently showed secure separation from their parents. In neither study was it found, however, that identity diffusion is associated with insecure separation from the parents. These findings seem to concur with the more general observation from a meta-analysis by Rice (1990) that "the association between parent–adolescent attachment and identity development is unclear" (p. 525).

Lopez (1989), Lopez et al. (1992), Lucas (1997) and Palladino-Schultheiss and Blustein (1994) used Hoffman's (1984) psychological separation inventory (PSI) to measure separation and various identity measures. The PSI is a questionnaire that explores four areas of psychological separation: (a) functional independence, which focuses on one's ability to direct personal affairs without parental assistance; (b) emotional independence, the freedom from excessive need for approval, closeness, and emotional support; (c) conflictual independence, the freedom from guilt, anxiety, mistrust, and responsibility toward or resentment of parents; and (d) attitudinal independence, the degree to which one's attitudes, values, and beliefs are different from those of one's parents. Lucas found no association between functional independence and identity and Lopez (1989) and Lucas (1997) no association between emotional independence and identity. Lucas (1997) and Palladino-Schultheiss and Blustein (1994) found that attitudinal independence from parents was not associated with a strong commitment, but rather with a weak one. Separation was therefore associated with weak—instead of strong—identity development. Only for conflictual independence some studies did find results supporting the hypothesis of a direct link between separation and individuation. Lopez (1989), Lopez et al. (1992) and Palladino-Schultheiss and Blustein (1994) found positive associations between conflictual independence and a strong developed identity. However, Lopez et al. and Palladino-Schultheiss and Blustein did find these results for female students only, while Lucas (1997) did not find any association in males and females between conflictual independence and identity.

Finally, working from the perspective of separation anxiety Bartle-Haring, Bruckner, and Hock (2002) found positive associations between mother's providing of a secure base and identity

achievement, but inconsistent results between father's separation anxiety and foreclosure in males and females. Here again, findings seem to show that it is not separation that predicts strong identity development, but instead a qualitative good relationship with parents.

The conclusion is therefore that the existing research is sparse and inconclusive. The findings of the cited studies offer no support for a direct link between separation and individuation: in most of the cases no associations between separation variables and identity are found, in some cases separation seems to predict a weak identity instead of a strong one, while only in a very limited number of cases separation seems to be predictive of a strong identity. It should also be noted that all the cited studies were conducted with college-student samples. Therefore it is hard to generalize their findings to broader populations of adolescents.

Separation and individuation: two parallel developmental processes?

This interpretation of the separation–individuation hypothesis assumes that separation from the parents and the development of identity are two developmental processes, which run in parallel during adolescence. Existing research systematically shows that adolescents do indeed separate from their parents: during the course of adolescence, they start to spend less time with their parents (Larson et al., 1996), the closeness with their parents declines (Holmbeck, 1996) and they receive less social support from their parents (Furman & Buhrmester, 1992; Meeus, Raaijmakers, & Vollebergh, 1992). Moreover, reviews of research (Meeus, 1996; Waterman, 1982, 1985, 1993; Berzonsky & Adams, 1999) provide support for the fundamental developmental hypothesis of the identity status model, formulated by Waterman (1993). Most of the studies found a progressive development of identity: a development from identity diffusion towards identity achievement. In addition, Meeus (1996) found in a narrative meta-analysis that studies that use separate measures of commitment and exploration show more progressive developmental trends than studies with identity status classification. Therefore, we will use separate measures in this study.

In sum, we conclude that on the one hand there are consistent findings that adolescents separate psychologically from their parents as they age, while on the other hand a systematic growth of identity with age has been found. Separation from parents and individuation seem to run parallel during adolescence.

Research questions and data analytical strategy

The central question of this article concerns the separation–individuation hypothesis, and more specifically the variant which states that separation from the parents and identity formation are two parallel processes of development during adolescence. We answer this question for two identity domains: relational and societal identity. For both domains we also use measures of parental support, and additionally a measure of emotional adjustment. Parental support in the field of relations (from now on parental support-r) indicates the level of support adolescents experience when having problems in relationships, while societal parental support (from now on parental support-s/w) indicates support in the domains of school an/or work. The separation–individuation hypothesis is tested in two ways. Firstly, we present descriptive data concerning the

increase or decrease in parental support with age and the development of relational and societal identity. On the basis of the literature review, we formulate two hypotheses with respect to the descriptive data. (1) For parental support-r and parental support-s/w we expect a separation effect: as adolescents grow older, they will experience less support from their parents. (2) For relational and societal identity we expect an individuation effect. We will study two identity variables: commitment and exploration. In discussing both concepts Marcia (1993, p. 9) states explicitly that a person cannot have an identity without commitments. Marcia (1993, p. 10) adds that individuals with firm commitments without much exploration of alternatives could be considered as having a firm identity. So, commitment seems to be the key variable in Marcia's conceptualization of ego-development and consequently of individuation. Commitment indicates the structure and the strength of identity, while exploration refers to the process whereby identity is formed. Theoretically, it is therefore more plausible to define commitment as an indicator of ego structure, i. e. individuation than exploration (Stephen, Fraser, & Marcia, 1993, p. 287). Consequently, we define especially age related growth of commitment as an individuation effect.

Secondly, we examine the association between parental support and relational and societal identity and emotional adjustment. The associations between the different variables are investigated integrally in two structural models, one for relational identity and one for societal identity (see Figs. 1a and b).

The structural models are used for the second test of the separation–individuation hypothesis. Our interpretation of the separation–individuation hypothesis will be supported if we obtain the following results. If the association between parental support and emotional adjustment (path 1, Figs. 1a and b) is greater for younger adolescents than for older adolescents, then a separation
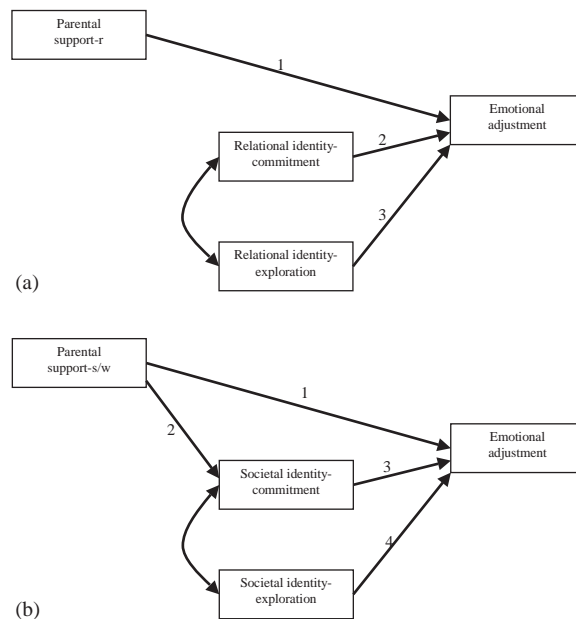

Fig. 1. (a) and (b) Models for relational support and relational identity, and school/work support and societal identity. Path 2 of Fig. 1b was not included in the initial model, but was in the final model.

effect has been found. Conversely, identity may be regarded as a measure of individuation, and a strengthening of the association between identity and emotional adjustment with age can serve to support the individuation effect. Since it is more plausible to define commitment as an individuation variable than exploration, we define especially a strengthening of the association between the commitment variables and emotional adjustment by age as an individuation effect (path 2 in Fig. 1a and path 3 in Fig. 1b). We will study this strengthening effect exploratively for the association between exploration and emotional adjustment.

Method

Subjects

Data for this study were collected as part of a broader longitudinal project 'Utrecht Study of Adolescent Development (USAD) 1991–1997' (Meeus & 't Hart, 1993). A national sample of Dutch adolescents aged 12–24 was drawn from an existing panel of 10,000 households. The respondents were interviewed in their homes. They were also asked to fill out an extensive questionnaire in the presence of the interviewer. They were then given another questionnaire to fill out on their own and send back to the research organization. Our data come from this questionnaire, which was returned by 95% of those interviewed. In total 2969 young people returned this second questionnaire. 'T Hart (1992) checked the representativeness of the sample by comparing it with population figures published by the Dutch Central Bureau of Statistics (CBS). With respect to district, urbanization level, educational level and religious affiliation, no differences were found between the sample and the CBS figures. The sample can therefore be regarded as representative of the Dutch indigenous adolescent population (white adolescents born in the Netherlands) of the early 1990s. The questions on parental support, identity and emotional adjustment were fully completed by 2814 young people. Four age groups were represented: early adolescence (12–14, $n = 527$), middle adolescence (15–17, $n = 748$), late adolescence (18–20, $n = 658$) and young adulthood (21–24, $n = 881$). 1303 males and 1511 females filled out the questionnaire. Approximately 80% of the adolescents were living in the parental home, while 20% were living on their own. In the two youngest age groups none of the adolescents were living on their own, while 10% of the late adolescents and 67% of the young adults were. The educational level of the respondents was: 18% low (vocational education and lower general education), 43% modal (modal level of vocational and general education) and 39% high (highschool preparing for college and university, college, university). About 46% had a religious affiliation and 54% did not.

Measures

Parental support

Was assessed by means of the personal network list of Meeus (1989), which uses the 'role-relational approach' (Fischer, 1982) of personal network delineation. The subjects indicated on 10-point Likert items (response categories ranging from 10 to100) the extent to which they receive support and help from father and mother when having problems in the domain of personal

relationships and school/work. So, the support questions tap the support adolescents receive from their parents in direct social interaction. For both domains the two support scores were factor-analysed and, as in earlier studies (Meeus, 1989), a one-factor structure was found. We thus computed a score for parental support-r and parental support s/w. Concurrent validity of the support measures has been demonstrated in a sample of Dutch adolescents aged 12–18 (Rispens, Hermanns, & Meeus, 1996) by correlations ranging from .45 to .56 between the scales of parental support and the parental attachment scale of the Inventory of Parent and Peer Attachment by Armsden and Greenberg (1987) (Helsen, Vollebergh, & Meeus, 1999).

Identity

This construct was assessed with the Utrecht-Groningen Identity Development Scale (U-GIDS, Meeus, 1996). Since the U-GIDS was inspired by Marcia's identity status model the instrument uses measures for commitment and exploration, and allows for identity status classification. More information on the U-GIDS can be found in Meeus (1996) and Meeus, Iedema, Helsen, and Vollebergh (1999). Identity was measured in two domains: relational identity was assessed by items in the domain of relationships, and societal identity by items on school/work. We decided to pick these two domains since they refer to two key developmental tasks in adolescence: building satisfactory relationships with peers and securing an attractive occupational career and through it a good position in society. In both domains of identity the U-GIDS uses six five-point Likert items (response categories ranging from 1 = 'completely untrue' to 5 = 'completely true') for the measurement of commitment, and five for the measurement of exploration.

The scales for commitment measure the extent to which the young people feel committed to, and derive self-confidence, a positive self-image and confidence in the future from relationships and school/work. Examples of commitment items are: 'My best friend/partner (school/work) gives me security in life' and 'I'm sure my best friend/partner (school/work) was the best choice for me'. The scales for exploration measure the extent to which the young people are actively engaged in exploring relationships or school/work. Examples of exploration items are: 'I often think about my best friend/partner (school/work)' and 'I try to find out a lot about my best friend/partner (school/work)'. Cronbach's alphas of the scales for relational commitment and exploration were .89 and .82, and those for societal commitment and exploration .86 and .82. Earlier analyses showed a strong convergent-divergent validity of the scales of relational and societal identity (Meeus, 1996). Concurrent validity of the identity measures of the U-GIDS has been demonstrated in two samples: a sample of 500 Dutch adolescents aged 12–18 (Rispens, Hermanns, & Meeus, 1996), and a sample of 3300 Dutch adolescents aged 12–24 (Meeus, & 't Hart, 1993). In these samples significant associations (correlations ranging between .19 and .45) were found between U-GIDS measures and various other self and personality measures: between the relational and societal commitment and exploration scales and Block's measure of ego-resiliency (Block & Kremen, 1996), between relational commitment and Harter's social competence scale (Harter, 1985), and between societal commitment and Harter's measure of scholastic competence (Harter, 1985). Construct validity of the relational identity status classification based on the scales of relational commitment and exploration of the U-GIDS was demonstrated by Meeus (1996); he showed that the relational identity statuses of the U-GIDS were similarly related to emotional adjustment as Marcia's identity statuses.

Emotional adjustment

This construct was made of the following scales: (a) A shortened version of the General Health Questionnaire (GHQ; Goldberg, 1978; Kienhorst, Wilde de, Bout van den, & Diekstra, 1990; Meeus, 1994), measuring the degree to which psychological stress and depression had recently been experienced. This measure consists of 2 subscales: psychological stress (6 items), and depression (4 items). On a 4-point scale, the adolescents indicated to what extent they experienced various symptoms (e.g., feeling tense and nervous, feeling unhappy and dejected) during the past four weeks (1 = "much more than usual" to 4 = "not at all"). Internal consistencies of both scales were high (alphas were .88 for psychological stress and .80 for depression); so mean scores were derived for each subscale. (b) The Cantril ladder (Cantril, 1965) for measuring general well being and happiness. On a 10-point scale, respondents indicated how they generally felt (from 1 = "very bad" to 10 = "very well"). (c) The consideration of suicide. Youngsters indicated on a 4-point scale whether they had considered committing suicide during the last 12 months (1 = "never" to 4 = "very often") (Diekstra et al., 1991). Because of high interrelations (correlations ranging between .29 and .73), an exploratory factor analysis was conducted with the four scale scores as variables. A single-factor solution was obtained, explaining 58.8% of the total variance; loadings were .60 and higher (see also Helsen, Vollebergh, & Meeus, 2000). Each adolescent was thus assigned one factor score, derived by way of the short regression method, for the construct of emotional adjustment. The scales of some items were reversed, so that a higher score indicates a higher emotional adjustment.

Results

Age differences in parental support and identity: separation and individuation?

Table 1 shows means and standard deviations of all variables for the total sample and the four age groups. A MANOVA followed by Scheffé contrast tests revealed age differences for parental support and identity. Parental support-r and parental support-s/w decrease with age, relational identity-commitment, relational identity-exploration, societal identity-commitment and societal identity-exploration increase with age, and emotional adjustment decreases with age (η^2s = .02, .09, .10, .05, .01, .05, and .01, respectively). All age differences were significant at $p < .001$. The column Scheffé contrasts in Table 1 shows that for parental support-r, societal identity-commitment and emotional adjustment, early adolescents differ from middle, late and post adolescents; for parental support-s/w early adolescents differ from middle and late adolescents, and middle and late adolescents differ from post adolescents; for relational identity-commitment a linear increase at each age level was found, while for both relational identity-exploration and societal identity-exploration an increase was found from early and middle to late adolescence, and from late to post adolescence.

These findings support our first two hypotheses. Parental support decreases with age, indicating a separation effect, and identity becomes stronger with age, indicating an individuation effect. The individuation effect was found for commitment and exploration: as adolescents become older, their relational and societal commitments become stronger, and they reflect on them more.

Table 1
Parental support, identity, and emotional adjustment: mean comparisons for the different age groups

	Total sample (*n* = 2814)		Age groups								Scheffé contrasts
			1, 12–14 year olds		2, 15–17 year olds		3, 18–20 year olds		4, 21–24 year olds		
			(*n* = 527)		(*n* = 748)		(*n* = 658)		(*n* = 881)		
	M	S.D.	*M*	S.D.	*M*	S.D.	*M*	S.D.	*M*	S.D.	
Parental support-r	65.96	23.94	72.38	23.42	66.06	23.43	63.48	23.28	63.89	24.52	1 > 2, 3, 4
Parental support-s/w	61.09	27.04	75.66	21.79	64.24	24.95	56.50	26.23	53.13	28.21	1 > 2, 3 > 4
Relational identity-commitment	3.67	.79	3.25	.72	3.58	.76	3.70	.76	3.97	.74	1 < 2 < 3 < 4
Relational identity-exploration	3.21	.86	2.95	.86	3.08	.89	3.22	.87	3.47	.75	1, 2 < 3 < 4
Societal identity-commitment	3.59	.66	3.46	.62	3.62	.66	3.65	.61	3.60	.70	1 < 2, 3, 4
Societal identity-exploration	3.27	.78	3.03	.77	3.13	.81	3.33	.73	3.49	.71	1, 2 < 3 < 4
Emotional adjustment	−.02	.99	.21	.93	.03	1.00	-.09	1.03	−.06	.97	1 < 2, 3, 4

Note. The symbols < and > refer to significant mean differences between age groups; < indicates lower means in an age group, > indicates higher means.

Structural equations: total sample models

The separation–individuation hypothesis assumes that as adolescents become older the association between parental support and emotional adjustment decreases, and that between identity commitment and emotional adjustment increases. In order to test whether these associations vary with age, it must first be shown that they exist in the total sample, that is to say, across all the age groups. Thus, we initially tested in the total sample two baseline models for both identity domains, which can be summarized as follows: (1) Parental support predicts emotional adjustment. (2) Relational identity-commitment (from now on relational identity-c) and societal identity-commitment (societal identity-c) predict emotional adjustment. (3) Relational identity-exploration (relational identity-e) and societal identity-exploration (societal identity-e) predict emotional adjustment (see Figs. 1a and b). We will accept the models if the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA) are satisfactory; GFI (Jöreskog & Sörbom, 1989) and CFI (Bentler, 1990) should be above .90, and RMSEA below .07 (Steiger, 1990). If this is the case, we will not concern ourselves with the significance of χ^2, since this fit statistic has been shown not to be discriminatory in large samples like ours. The chi-square difference test will be used to determine which models best represent the data. The resulting value $\Delta\chi^2$ can be statistically tested with the degrees of freedom as the difference between the degrees of freedom from both models. If $\Delta\chi^2$ exceeds 3.84 for a change of 1 in degrees of freedom, then the fit of the model has improved significantly at $p < .05$.

Relational identity

The initial model fitted the data of the total sample excellently: CFI = 1.00, CFI = 1.00 and RMSEA = .00. Parental support-r, relational identity-c and relational identity-e predict emotional adjustment. Remarkably, relational identity-c was found to be positively associated to emotional adjustment, while relational identity-e showed a negative association to emotional adjustment. Model parameters are shown in Table 2.

Societal identity

The initial model showed a reasonable fit to the data. Especially the value of RMSEA was a bit critical (.08) and the modification indices suggested to include the path parental support s/w to societal identity-c in the model. Inclusion of this path led to a significant improvement of fit: $\Delta\chi^2 = 28.99$, $\Delta df = 1$, $p < .001$; other fit indices were: GFI = 1.00, CFI = 1.00 and RMSEA = .04. Parental support-s/w predicts societal identity-c, and parental support s/w, societal identity-c and societal identity-e are predictive of emotional adjustment. Again, societal identity-c was found to be positively associated to emotional adjustment, while societal identity-e showed a negative association to emotional adjustment. Model parameters are shown in Table 2.

Structural equations: multigroup analyses

In order to test the separation–individuation hypothesis we scrutinized whether the paths included in the baseline models vary by age. For these multigroup analyses we compared three models: (1) a restricted model, in which all the estimated parameters were required to be equal across groups, (2) an initial separation–individuation model in which these parameters were

Table 2
Structural equation models: parameters and path coefficients (standardized)

Parameters	Path coefficients				
	Total sample	Age groups			
		1 (12–14)	2 (15–17)	3 (18–20)	4 (21–24)
Relational identity					
1. Parental support-r—Emotional adjustment	.22	.29a	.30a	.13b	.12b
2. Relational identity—Emotional adjustment	.13	−.04[a]a	−.01[a]	.14b	.20b
3. Relational identity—Emotional adjustment	−.07	−.17	−.08	−.13	−.15
Relational identity—Relational identity-exploration	.54	.48	.50	.58	.48
Societal identity					
1. Parental support-s/w—Emotional adjustment	.15	.22a	.26a	.06[a]b	.03[a]b
2. Parental support-s/w—Societal identity-commitment	.09	.08	.09	.10	.09
3. Societal identity-commitment—Emotional adjustment	.25	.15a	.24b	.25b	.31b
4. Societal identity-exploration—Emotional adjustment	−.09	−.09	−.08	−.07	−.08
Societal identity-commitment—Societal identity-exploration	.43	.40	.38	.44	.47

Differences between non-fixed path coefficients of the final models are given. Values sharing a common letters across columns are not significantly different from each other, while values with a different letters are significantly different at .01 or better.

[a]Non-significant coefficients, $p > .05$.

allowed to differ across groups, and (3) an parsimonious separation–individuation model in which parameters that in the initial separation–individuation model were found not to differ across age groups were fixed across groups again. The χ^2 difference test was used again to determine which model best represents the data. Table 3 presents these model comparisons.

Table 3 shows that in both identity domains the initial and the parsimonious separation–individuation models fitted the data better than the restricted model (model 2 versus model 1 and model 3 versus model 1), and that the fit of the two latter models was not different from each other (model 3 versus model 2). From the perspective of parsimony we decided to use the parsimonious models as the final ones. Critical ratio tests for differences between parameters were used to assess whether paths were different for the various age groups.

Relational identity

Fit measures for the parsimonious separation–individuation model were excellent: GFI = .99, CFI = .99 and RMSEA = .02. Table 2 shows that the paths from parental support-r to emotional adjustment and from relational identity-c to emotional adjustment were different for the age groups. As revealed by critical ratio tests parental support-r is a better predictor of emotional adjustment in the age groups 12–14 and 15–17 than in the age groups 18–20 and 21–24. Critical ratio tests also revealed that relational identity-c is a better predictor of emotional adjustment in the two older age groups as compared to both the younger age groups.

Table 3
Model comparisons

Model	Model comparison tests				
	$\chi2$	df	$\Delta\chi2$	Δdf	$\Delta\chi2/\Delta$df
Relational identity					
1. All parameters equal across groups	72.83	17			
2. Initial separation-individuation model	22.39	8			
Model 2 & Model 1			50.44	9	5.60*
3. Parsimonious separation-individuation model	25.20	11			
Model 3 & Model 1			47.63	6	7.94**
Model 3 & Model 2			2.81	3	.94
Societal identity					
1. All parameters equal across groups	97.03	16			
2. Initial separation-individuation model	42.45	4			
Model 2 & Model 1			54.58	12	4.54*
3. Parsimonious separation-individuation model	54.82	10			
Model 3 & Model 1			42.21	6	7.04**
Model 3 & Model 2			12.37	6	2.06

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

Societal identity

Fit measures for the parsimonious separation–individuation model were very good: GFI = .99, CFI = .95 and RMSEA = .04. Table 2 shows that the paths from parental support-s/w to emotional adjustment and from societal identity-c to emotional adjustment were different for the age groups. As revealed by critical ratio tests parental support-s/w is a better predictor for emotional adjustment in the age groups 12–14 and 15–17 than in the age groups 18–20 and 21–24. Critical ratio tests also showed that societal identity-c is a better predictor of emotional adjustment in the three older age groups as compared to the youngest age group.

These results support our interpretation of the separation–individuation hypothesis. The association between parental support and emotional adjustment becomes weaker during the course of adolescence, and the associations between identity commitments and emotional adjustment get stronger. Additional analyses showed that these findings were not due to differences in living arrangement between the younger and the older age groups. In the group of adolescents living in the parental home the same age differences were found as in the total sample.

Discussion

Separation–individuation

The primary objective of this study was to test our new interpretation of the separation–individuation hypothesis. This interpretation states that separation from the parents is not a precondition for individuation, but rather separation and individuation are two parallel

developmental processes in adolescence. We investigated our interpretation in two ways: firstly, by looking at descriptive age differences in parental support and development of relational and societal identity, and secondly by investigating the variation with age of the associations between parental support and emotional adjustment, and identity commitment and emotional adjustment. In both cases the results support the separation–individuation hypothesis and similar results were found in the descriptive analyses and the structural equation models. Parental support decreases with age, and so too does its association with emotional adjustment. In other words, as adolescents become older, they experience less parental support, while its importance for their emotional adjustment also declines. The opposite pattern is observed for the development of identity: as adolescents become older, their relational and societal commitments become stronger, and the strength of these commitments also becomes more important for their emotional adjustment. The convergence for parental support and relational identity-c is shown in Figs. 2a–c, and for parental support and societal identity-c in Figs. 2d–f.

These results also mean that a change takes place during the course of adolescence in the relative importance of parental support and identity commitments in predicting emotional adjustment. In early adolescence parental support predicts emotional adjustment better than identity commitments; in the domain relations the two path coefficients are respectively .29 versus −.04, and in the domain school/work .22 versus .15. This pattern is reversed in post adolescence, because in the domain relations the coefficients are now .12 versus .20, and in the domain school/work .03 versus .31. This pattern therefore looks like a disordinal interaction in analysis of variance (Kerlinger, 1979, p. 267): in the one (age) group, variable X is a more important predictor than variable Y, and in the second (age) group, the pattern is reversed (see Figs. 2c and f). As far as we know, this pattern has never previously been reported in research on parent–adolescent relations and identity in adolescence.

These results support our developmental interpretation of the separation–individuation hypothesis (Blos, 1967). Although our measure of parental support does not allow us to assess whether the adolescent in fact rejects the childhood image of the parents, the results that we found can certainly be interpreted as a separation effect. The support which adolescents receive from their parents with respect to relations and school/work decreases during the course of adolescence, and also becomes less important for their emotional adjustment. The importance of the parents thus decreases in both domains in two respects, and this can be described as a separation effect. In addition, the development of identity can be regarded as an indicator of individuation. As identity commitments become more developed, adolescents have made more clearly defined choices concerning their lives, they know better who they are and how they want their future to be. The fact that identity commitments develop consistently from early adolescence onwards, and that they become more strongly associated with emotional adjustment with age, can thus be seen as a double demonstration of individuation. Not unexpectedly, this double individuation effect was not found for exploration. Our explanation for these findings is that exploration refers to the process of identity formation and therefore is less an indicator of ego structure and individuation than commitment (Marcia, 1993). We will discuss the association between exploration and emotional adjustment later on. In sum, the data on parental support therefore point to a separation effect, and those on identity commitment to an individuation effect. In that sense, we found confirmation for the simultaneous occurrence in adolescence of separation and individuation.
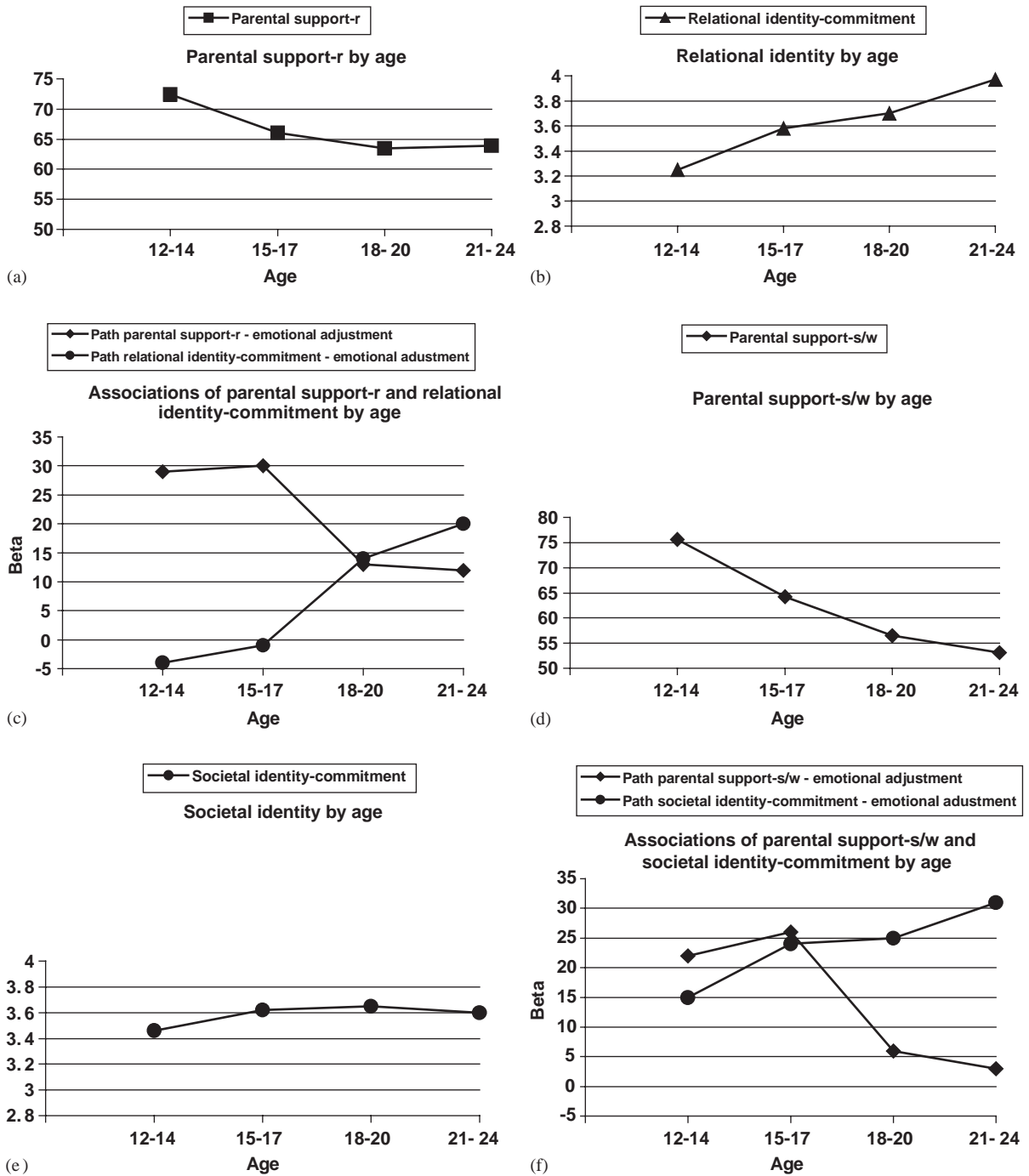
Fig. 2. (a) to (f) Separation–individuation as demonstrated in descriptive findings and models for parental support-r and relational identity-commitment (Figs. 2a–c), and parental support-s/w and societal identity-commitment (Figs. 2d–f).

Our data do not support the direct interpretation of the separation–individuation hypothesis, as we did not find decreasing importance of parental support to be a necessary condition for the development of identity. Here again, our findings are in agreement with earlier studies (Kroger & Haslett, 1988; Lopez et al., 1992; Lucas, 1997; Palladino-Schultheiss & Blustein, 1994).

There is, however, one caveat to our findings: it might be that the separation effect found in this study is restricted to measures, which, like our measure of social support, mainly assess aspects of the direct social exchange. With measures assessing the more structural quality of the parent–adolescent relation, such a separation effect would perhaps be less likely to occur. Thus, Engels, Finkenauer, Meeus and Deković (2001) report that the relation between parental attachment and emotional adjustment increases between early and middle adolescence, and Buhrmester and Furman (1987), Lamborn and Steinberg (1993), and Oosterwegel and Oppenheimer (1993), among others, have shown with a variety of measuring instruments that parents retain their influence throughout adolescence.

Identity formation

Our results are important in several respects for research on identity formation. Firstly, they support the fundamental developmental hypothesis of the identity status model of Waterman (1982, 1993). Identity develops progressively with age, commitments grow stronger, and the level of exploration also increases. In addition, with age the strength of commitments becomes increasingly important for emotional adjustment. In early adolescence, emotional adjustment is not determined by the level of commitment, as it is in late adolescence.

Our results do not support the hypothesis of Marcia (1993) and Waterman (1993) with respect to the timing of identity development. Marcia and Waterman propose that identity develops especially strongly in late and post adolescence. Our descriptive results show that commitment and exploration quite regularly become stronger with age, and not especially in late and post adolescence. The same applies for the association between commitment and emotional adjustment, which also quite regularly becomes stronger during the course of adolescence.

While we found the predicted positive association between commitment and emotional adjustment, a negative association between exploration and emotional adjustment was found. Adolescents who have stronger commitments are better emotionally adjusted, while adolescents who explore more show lower levels of emotional adjustment. A tentative explanation can be found by taking a closer look at commitment and exploration. Commitment indicates the structure and the strength of identity, while exploration refers to the process whereby identity is formed. A clear self-definition and a definite idea of the desired direction in life therefore determine the adolescent's level of happiness. This result is in line with research on self-certainty and self-concept clarity, which has shown that clarity of the self-definition is associated with a low level of depression and a high level of self-esteem (Campbell, 1990; Campbell et al., 1996). Exploration is a measure of the way in which adolescents use and seek information (Berzonsky, 1989; Berzonsky & Neimeyer, 1994; Stephen, Fraser, & Marcia, 1993); it is therefore mainly important for the way in which commitments are formed and maintained. So, exploration has two different, but related aspects to it. On the one hand, as it is often conceptualized, it points to the personal strength and motivation to seek new ways in life and find new commitments. On the other hand, exploration also might indicate an insecure life situation and ambiguity about one's

identity, and give rise to emotional problems. So, the capacity to explore identity alternatives has it's costs to it. This might explain why exploration goes together with a somewhat lowered level of emotional adjustment. This interpretation is supported by the findings of a review by Meeus et al. (1999). They showed that adolescents in moratorium, the identity status with the highest actual level of exploration, have the lowest level of emotional adjustment.

Issues and limitations

A serious limitation of this study is its cross-sectional design, which does not allow us to draw definite conclusions on the directions of the paths. We showed that parental support predicts emotional adjustment and societal identity commitment, and identity commitments predict emotional adjustment. The converse could also be true: strong commitments could be the cause of high levels of support from parents, and a high level of emotional adjustment of strong commitments. Because the associations, which we found, vary with age, however, we do not see this as a likely interpretation. One can easily understand that parental support decreases with age, and also exerts less influence on emotional adjustment, and equally that commitments become stronger with age, and exert a greater influence on emotional adjustment. To interpret these associations in the opposite direction is not really tenable.

In general we found small effect sizes in our empirical study (Cohen, 1992). An explanation for this could be that we presented data from a representative national sample. We have therefore had to work with the small differences that are found in a general population, and not the more powerful differences that are obtained by, for instance, comparing contrast groups. In this connection, we concur with the observation of Prentice and Miller (1992) that small effects can be impressive if they are of major theoretical importance; and we have shown that several of our data are new and theoretically significant.

Finally, when interpreting the results, it is important to bear in mind that all the concepts used in the present study were assessed by the self-report method. This means that when we refer to, for instance, parental support, we are speaking of the adolescents' perception of the support offered by parents. No information on parental support was given by the parents themselves. Consequently, the finding that parental support is linked to emotional adjustment, for instance, represents the view of the adolescents and not that of their parents. This calls for a multi-informant replication of this study, in which in addition to the adolescents also parents are questioned.

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