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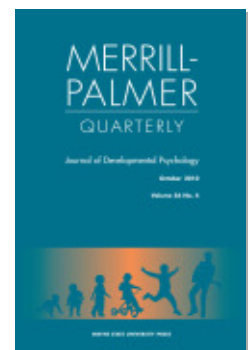
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Adolescent Personality Types and Subtypes and Their Psychosocial Adjustment

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Recent studies have suggested the existence of three personality types: resilient, overcontrollers, and undercontrollers. In this article, we searched for subtypes within each of the three main personality types. Using cluster analysis on the Big Five personality self-descriptions of 3,284 Dutch adolescent boys and girls, we distinguished communal and agentic resilient, vulnerable and achieving overcontrollers, and impulsive and oppositional undercontrollers. About two-thirds of the communal resilient and vulnerable overcontrollers were girls; agentic resilient and oppositional undercontrollers were mainly boys. The personality subtypes were further validated on a comprehensive set of self- and peer-reported adjustment measures, including perceived relational support, psychological well-being, delinquency, bullying involvement, peer acceptance and rejection, and peer-reported behavior. The personality subtypes were associated with very distinctive adjustment patterns.

During the last decade, the person-centered approach in the study of personality (cf. Magnusson, 1990) has rapidly complemented the long-standing variable-centered approach. In the variable-centered approach, personality traits are classified into dimensions that are thought to reflect the basic structure of personality. Persons are distinguished from each other on the basis of their scores on these dimensions, and external correlates of personality are studied by examining the associations between separate personality dimensions and dependent variables (Stern, 1911). Despite relevant criticisms (e.g., Block,

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1995), the five-factor (Big Five) model is currently one of the most accepted classifications for personality traits. According to this model, personality can be described in terms of five dimensions: extraversion, agreeableness, conscientiousness, emotional stability (or neuroticism), and openness to experience.

The variable-centered approach is valuable because it describes the building blocks of personality in terms of basic personality dimensions. However, this approach misses an important aspect of personality, namely the intra-individual configuration or profile of personality dimensions (Asendorpf, 2002). Because separate dimensions of personality do not describe the person as a whole, a more person-centered approach is needed (Stern, 1911). In the person-centered approach, individuals instead of variables are classified into categories depending on their configuration or profile of personality traits. Individuals' profiles can be compared, and personality types can be constructed consisting of individuals with similar profiles that occur frequently (Asendorpf, Borkenau, Ostendorpf, & van Aken, 2001; van Aken, van Lieshout, Scholte, & Haselager, 2002). A personality profile describes the scores of an individual on several personality dimensions, and thus the contribution to that profile of one dimension relative to the contribution of the other dimensions. If the variable-centered approach describes the building blocks of personality, the person-centered approach describes the building. It presents the personality structure of an individual. A profile provides a more effective descriptive system about individuals and can refine predictions of individuals' behaviors (Robins, John, & Caspi, 1998). A prediction based on a personality profile (i.e., a person-centered approach) does take into account that the meaning of one personality dimension in part depends on the scores of the other dimensions. For example, a high score on extraversion combined with a high score on agreeableness has a different psychological meaning than a high score on extraversion combined with a low score on agreeableness.

The idea that a classification of personality dimensions (such as the Big Five model) reflects the basic structure of personality, whereas the person-centered approach represents the personality structure of an individual, has met with serious criticisms, though. The atheoretical, empirical factor models are considered descriptive systems, not models of the structure of personality (cf. Block, 1995). Others, however, have used Block and Block's (1980) view on the role of ego-control and ego-resiliency on the organization of personality as the cornerstone for the integration of dimensional models of personality and temperament (such as the Big Five model and Rothbart's [1989] model

of temperament) with developmental task models into a lifespan personality model (Asendorpf & van Aken, 1999; Robins et al., 1998; van Lieshout, 2000, 2002) of persons as self-organizing, goal-oriented agents (Stern, 1911).

Personality Types

In a number of recent person-centered studies on personality, three replicable personality types have been found (e.g., Asendorpf et al., 2001; Asendorpf & van Aken, 1999; Dubas, Gerris, Janssens, & Vermulst, 2002; Hart, Atkins, & Fegley, 2003; Hart, Hofmann, Edelstein, & Keller, 1997; Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996; Schnabel, Asendorpf, & Ostendorf, 2002; van Aken et al., 2002;¹ van Lieshout, Haselager, Riksen-Walraven, & van Aken, 1995). These three personality types have been labeled resilient, overcontrollers, and undercontrollers and refer to the curvilinear nature of the personality dimensions ego-resiliency and ego-control proposed by Block and Block (1980). *Ego-resiliency* describes the tendency to respond flexibly and resourcefully rather than rigidly to changing situational demands, especially taxing experiences such as stress and conflict. *Ego-control* refers to the ability to contain rather than to express emotional and motivational impulses. Individuals high in resilience (i.e., resilient) are believed to be able to adapt an optimal level of impulse control flexibly to changing demands, whereas ego-brittle individuals, who are low in resilience, lack this flexibility. Depending on their habitual level of ego-control they either strongly repress their impulses (i.e., high level of control, or overcontrollers) or let their impulses prevail (i.e., low level of control, or undercontrollers).

The three personality types have been found across studies that used Q-factor analyses on California Child Questionnaire patterns (Asendorpf & van Aken, 1999; Hart et al., 1997, 2003; Robins et al., 1996, 1998) or cluster analyses on Big Five scales (Asendorpf et al., 2001; Dubas et al., 2002; Schnabel et al., 2002; van Lieshout et al., 1995). Irrespective of the data-analytic procedures used to derive the clusters, there is considerable consistency in the Big Five profiles of the three types (see Caspi, 1998). Resilient have a profile characterized by high scores on all Big Five dimensions. Overcontrollers generally score low on extraversion and emotional stability, relatively high

1. The results concerning the three main personality types in this article were published earlier in van Aken et al. (2002). In order to enable comparison of the personality subtypes with the three main types, these analyses were repeated in this article.

on conscientiousness, and moderate on agreeableness and openness. Undercontrollers are characterized by moderate to high scores on extraversion and low scores on agreeableness and conscientiousness. The three personality types have been found to also differ significantly on external correlates. Resilients show the best adjustment and score highest on intelligence, school achievement, and social competence. Overcontrollers are likely to show relatively high academic competence as well, but at the same time they show a general lack of social skills and exhibit emotional problems. Undercontrollers in general tend to score low on academic performance and to exhibit behavioral problems, to be less accepted by peers, and to be more often involved in serious delinquency.

Many of the person-centered studies on personality types and their behavioral correlates focused on children (e.g., Asendorpf & van Aken, 1999; Hart et al., 1997; van Lieshout et al., 1995) or adults (e.g., Asendorpf et al., 2001; Boehm, Asendorpf, & Avia, 2002; Schnabel et al., 2002), while very few focused on adolescents (Dubas et al., 2002; van Aken et al., 2002). Given the developmental differences among children, adolescents, and adults, the personality types of children or adults and their significance for adjustment may not directly be generalized to adolescence. The first goal of the present study was to examine (a) whether the three personality types found in children and adults could similarly be identified in a sample of Dutch adolescents and (b) how these personality types were related to various facets of adjustment. Using cluster analysis on adolescents' self-reports on a Big Five questionnaire, we expected to find resilients, overcontrollers, and undercontrollers in boys as well as in girls. The numbers of boys and girls in each of these personality types may differ, though. This first goal was considered a necessary step in order to come to a more fine-grained description of the association between adolescent personality profiles and adaptation.

Personality Subtypes

The repeated finding of three personality types across studies that differ in sample, geographic location, statistical procedures, and measures used to derive the types seems to provide evidence for the existence of these three broad personality types. However, a complete typology of personality should not only provide a classification into three broad types but should also offer a more fine-grained classification system in order to grasp more specific and subtle individual differences that remain unnoticed in the broader personality types (cf. Caspi, 1998; Robins et al.,

1998). Moreover, because sometimes 25–40% of a sample consists of over- and undercontrollers, and over- and undercontrollers are found to be at risk for internalizing and externalizing problems, respectively, it seems unlikely that such large numbers of individuals will be maladjusted. The classification of individuals into more specific subtypes might offer a more detailed prediction of psychosocial adjustment. Although the number of studies on personality types is increasing, the search for personality subtypes and their behavioral significance has received little attention. Very few studies have tried to look for subtypes within each type. Robins et al. (1998) performed a Q-factor analysis within each of the three main personality types and found two subtypes among resilient and undercontrollers but no replicable subtypes among the overcontrollers. Van Lieshout, Scholte, van Aken, Haselager, and Riksen-Walraven (2000) also identified two subtypes of resilient that had a high resemblance with the subtypes reported by Robins et al. (1998). These two resilient subtypes were labeled agentic and communal resilient. Agentic resilient scored high on extraversion and emotional stability, whereas the communals scored high on agreeableness and conscientiousness and had a somewhat more prosocial behavioral profile. The subtypes of the undercontrollers were labeled antisocial and impulsive undercontrollers and differed mostly in their antisocial tendencies, with the antisocial undercontrollers being more at risk for antisocial behavior while the impulsive undercontrollers were more likely to be impulsive in a less antisocial way. The impulsive undercontrollers scored intermediate on agreeableness and conscientiousness, whereas the antisocial undercontrollers scored extremely low on these Big Five dimensions. In addition to these subtypes for resilient and undercontrollers, van Lieshout et al. (1995) also found two subtypes in the overcontrollers, labeling them achieving and vulnerable overcontrollers. These two subtypes differed mostly on conscientiousness and emotional stability, with the vulnerable overcontrollers scoring low to extremely low on these two dimensions, while the achieving overcontrollers scored significantly higher. More recently, studies on German (Schnabel et al., 2002) and Spanish (Boehm et al., 2002) samples found the same replicable resilient subtypes but reported mixed findings for the replicability of the over- and undercontrollers subtypes. This may have been due to methodological reasons such as sample size, methods of replication, and scale unreliability and has led these authors to conclude that the search for personality subtypes required more investigation.

Therefore, the second goal of the present study was to extend the existing research on personality subtypes by examining whether subtypes similar to those reported by Robins et al. (1998) and van Lieshout et al. (1995,

2000) would be found in our sample of adolescent boys and girls. Although those studies reported important findings on personality subtypes and their behavioral correlates, they also suffered from some limitations in terms of nature and size of the samples they used. Robins et al. (1998) only studied boys, and found a relatively small number of overcontrollers that might have been too small for further study, while van Lieshout et al. (2000) studied only resilient subtypes. Although the longitudinal study by van Lieshout et al. (1995) included boys as well as girls and examined subtypes in resilient as well as over- and undercontrollers, it was based on a very small ($n = 79$) sample of elementary school children.

In addition, because one of our main concerns was to investigate in what way personality subtypes were related to adaptation, we examined whether the different subtypes showed differential patterns of psychosocial adjustment. In addition to self-reports, peer reports were also used to assess a comprehensive set of positively and negatively valenced facets of adjustment. The facets included the quality of interpersonal relationships (i.e., perceived support, peer acceptance and rejection, peer-reported self-confidence and sociability), peer-reported achievement orientation, internalizing problems (i.e., self-reported psychological well-being, self- and peer-reported victimization, and peer-reported emotionality-nervousness), and externalizing problems (i.e., self-reported delinquency, self- and peer-reported bullying, and peer-reported aggression-inattentiveness).

Method

Participants

Participants initially included 3,361 adolescents. Due to missing data on personality variables, 77 were dropped from further analyses, resulting in a final sample of 3,284 adolescents. These participants (1,402 girls and 1,882 boys) attended 17 first-grade ($n = 352$, mean age 12.5 years), 43 second-grade ($n = 1,009$, 13.4 years), 44 third-grade ($n = 967$, 14.5 years), and 45 fourth- and fifth-grade ($n = 956$, 15.6 years) secondary school classes in the Arnhem-Nijmegen region in the Netherlands. The age of the adolescents ranged from 12 years to 18 years ($M = 14.5$ years, $SD = 9$ months). Five percent of the students considered themselves minorities (1.5% came from Surinam, the Netherlands Antilles, or the Molucca Islands; 2% from Mediterranean countries; and 1.5% from other countries).

Measures

Big Five personality self-descriptions. A self-report questionnaire consisting of 25 bipolar items was used to assess the Big Five personal-

ity factors. Subjects were asked to rate on a 7-point scale how each item held for them. A score of 1 indicated that pole A (e.g., "I am talkative") was very true for the respondent, while a score of 7 on this scale indicated that pole B (e.g., "I am silent, quiet") was very true; scale point 4 indicated that both poles were a little bit true. In an earlier study (Scholte, van Aken, & van Lieshout, 1997), exploratory and confirmatory factor analyses revealed that these 25 items represented the Big Five personality factors. Cronbach's alpha reliabilities (and example items) of the factors are as follows: extraversion ("I am spontaneous"), .78; agreeableness ("I am considerate, helpful"), .75; conscientiousness ("I am hard-working"), .60; emotional stability ("I am calm, relaxed"), .75; and openness ("I am inquisitive"), .57. These five factors were standardized across the entire sample, and the standard scores were used as the input variables for the cluster analyses.

Self-reported adjustment. A 27-item self-report questionnaire (RSI; Scholte, van Lieshout, & van Aken, 2001) was used to measure adolescents' relational support perceived from parents, special siblings, and best friends. A special sibling was defined as the brother or sister who was most important to the participant. The subjects were asked to indicate on a 5-point scale—ranging from (1) *very true* to (5) *very untrue*, with the scale's midpoint (3) labeled as *sometimes true, sometimes untrue*—how much each of the items held for each of these persons. For the present study, the scales for parental support ($\alpha = .91$), sibling support ($\alpha = .85$), and friend support ($\alpha = .83$) were used.

Psychological well-being included the following subscales that were aggregated. Self-esteem was assessed using 7 items of the Rosenberg (1979) Self-Esteem Questionnaire ($\alpha = .66$). Loneliness was measured by three items (e.g., "I often feel lonely," $\alpha = .46$). Ruminating about social relationships, appearance, and school performances was measured by seven items ($\alpha = .72$). Somatic complaints were assessed by a 7-item scale that referred to complaints such as headaches and feeling sick ($\alpha = .76$).

Separate subscales were used for overt and covert delinquency and for conflict with authority (cf. Loeber and Hay, 1994). Covert delinquency (12 items, $\alpha = .90$) concerned such behaviors as running away from home or staying away without parental permission. Overt delinquency (3 items, $\alpha = .83$) concerned violence and getting into fights, while conflict with authority (5 items, $\alpha = .65$) referred to behaviors such as quarreling with parents or teachers.

Involvement in bullying was assessed using two scales of the Bully/Victim Self-Report Questionnaire (Olweus, 1991). These scales referred to bullying others (5 items, $\alpha = .82$), to indicate how much a person

actively participated in bullying others, and victim of direct bullying (5 items, $\alpha = .77$). Per scale, 4- and 5-point Likert-scale item scores were transformed into Z-scores and averaged.

Peer-reported adjustment. Each child in the school class of the participants was asked to nominate three to five classmates whom they liked most (peer acceptance) and did not like at all (peer rejection). The liked-most and not-liked-at-all scores for each participant were computed by tallying the number of nominations received. In order to control for different numbers of nominating children in class groups, these raw scores were transformed into *p* scores using a binomial distribution and thus indicating how likely a child was to be nominated as liked-most or not-liked-at-all.

To assess peer-perceived bullying involvement, each child in the school class of the participants was asked to nominate up to five classmates who bullied others and were being bullied by others. For each participant the received nominations on each of the two items were tallied and transformed into *p* scores.

Peer-reported behavior consisted of five behavioral factors and was based on nominations given by the classmates on 20 nomination items. On each of these items, the received nominations for each participant were tallied and transformed into *p* scores. These 20 scores were subsequently factor-analyzed (see Scholte et al., 1997), resulting in five behavioral factors. These five factors included aggression-unattractiveness (e.g., being perceived as quarrelsome, lazy, absent-minded, irritable), achievement-withdrawal (e.g., being perceived as persistent, hardworking, shy, reserved, withdrawn), self-confidence (e.g., being perceived as sensible, secure, steady, sincere), sociability (e.g., being perceived as enthusiastic, considerate, intelligent), and emotionality-nervousness (e.g., being perceived as emotional, anxious, nervous, uncreative). The Cronbach's alpha reliabilities for the scales based on these factors were .75, .72, .70, .66, and .55, respectively.

Procedure

Before the data were collected, written consent was obtained from the school principal. If deemed necessary by the school principal, consent was also obtained from adolescents' parents by means of letters they filled out and replied. All class groups were visited by trained research assistants in the fall and winter of 1994. Adolescents participated on a voluntary basis. Class group testing sessions of approximately one and a half hours were used to obtain self-reports and peer nominations. For the nominations, participants were presented a list with the names

of all the students in their class, each name followed by a code number, to use as a reference in making the peer nominations. Participants were instructed to nominate three to five same-sex or cross-sex classmates, including those not present during the assessment, on each of the peer-nomination items. Information about the procedures and the instructions were read aloud. Students' questions were answered before, during, or after administration. If the teachers remained in the classroom, they were asked not to interfere with the procedure.

Results

Three Main Personality Types

Exploratory factor analysis on the 25 personality items confirmed the Big Five personality factors found in a previous study (Scholte et al., 1997). To investigate whether the same three personality types found in studies on children and adults could be distinguished in our sample of adolescents, cluster analyses were computed on the self-reported Big Five personality dimensions. The personality scores of the adolescents were standardized within the total sample, and these standardized scores served as the input variables for the cluster analyses. The cluster analyses were accomplished in two steps. First, the same cluster analyses were computed on a number of randomly selected independent halves of the total sample. These repeated analyses yielded three clusters that were similar in terms of the scores on the five personality dimensions. Second, on the basis of these cluster analyses, initial cluster centers were specified for each variable. These cluster centers were obtained by Ward's method, a method frequently applied in cluster analyses (e.g., Kamphaus, Huberty, DiStefano, & Petoskey, 1997). The initial centers were then used to classify each adolescent into a cluster, using the SPSS-X procedure QUICK CLUSTER. Three types of adolescents were found that differed in the configuration of their personality scores. These configurations of personality scores were very similar to the configurations found in other studies.

Table 1 presents the scores of the three personality types found in the cluster analysis. Because the clusters were defined using *Z*-standardized scores for the total sample, the cluster means are deviation scores from the total sample mean of 0 and *SD*s of 1. Thus, each cluster's mean *Z*-score indicates how far that cluster deviates from the total sample mean score (0) and from the means of the two other clusters. The distances in *SD* units between the clusters' means and the total sample zero mean may be interpreted as the effect size, where .2 *SD*

Table 1. Personality Dimension Mean Scores of the Three Personality Types (Z-Standardized Scores)

	Resilients ¹	Overcontrollers ²	Undercontrollers ³	F-value (df = 2, 3281)
Extraversion	.55 ^a	-.71 ^c	.41 ^b	906.33
Agreeableness	.76 ^a	-.29 ^b	-.66 ^c	816.51
Conscientiousness	.66 ^a	-.12 ^b	-.80 ^c	724.16
Emotional stability	.58 ^a	-.65 ^c	.28 ^b	745.43
Openness	.78 ^a	-.56 ^c	-.19 ^b	921.72

Note. ¹ $n = 1,178$; 482 girls, 696 boys. ² $n = 1,356$; 705 girls, 651 boys. ³ $n = 750$; 215 girls, 535 boys.

All f -values are significant at $p < .001$.

Different lettered superscripts for mean scores of the same variables indicate significant differences.

is a small effect, .5 SD is a medium effect, and .8 SD is a large effect (Cohen, 1988).

The Big Five configuration of our first cluster was very concordant with resilient in earlier studies (e.g., Asendorpf & van Aken, 1999; Dubas et al., 2002; Robins et al., 1996): these adolescents scored highest on all five personality dimensions. Our second cluster revealed a pattern of overcontrollers: adolescents from this type scored lowest on extraversion, intermediate on agreeableness and conscientiousness, and lowest on emotional stability and openness. Our third cluster, finally, was very similar to undercontrollers. These adolescents scored relatively high on extraversion, lowest on agreeableness and conscientiousness, and intermediate on emotional stability and openness.

The distribution of boys and girls over the three types indicated significant gender differences ($\chi^2 = 109.74$, $df = 2$, $p < .001$). Resilient adolescents made up 35.9% of the total sample ($n = 1178$; 482 girls and 696 boys) and were equally often girls and boys. Overcontrollers included 41.3% of the total sample ($n = 1,356$; 705 girls and 651 boys) and were significantly more often girls, whereas Undercontrollers comprised a total of 22.8% ($n = 750$; 215 girls and 535 boys) and were significantly more often boys.

Psychosocial Adjustment of the Three Main Personality Types

To study the psychosocial adjustment of the three main personality types, ANOVAs were used in which the three clusters as well as gender served as independent factors and several adjustment indicators

Table 2. Adjustment of the Three Personality Types (Z-Standardized Scores)

	Resilients ¹	Overcon- trollers ²	Undercon- trollers ³	F-value
Self-report				
Parental support	.30 ^b	-.13 ^a	-.19 ^a	76.36***
Sibling support	.28 ^b	-.16 ^a	-.14 ^a	59.53***
Friend support	.35 ^b	-.20 ^a	-.15 ^a	93.83***
Self-esteem	.29 ^c	-.24 ^a	-.01 ^b	82.60***
Loneliness	-.16 ^a	.18 ^b	-.08 ^a	35.50***
Ruminating	-.15 ^a	.18 ^b	-.08 ^a	35.40***
Somatic complaints	-.17 ^a	.14 ^c	-.01 ^b	26.31***
Overt delinquency	-.02 ^b	-.17 ^a	.29 ^c	44.81***
Covert delinquency	-.09 ^a	-.12 ^a	.34 ^b	48.84***
Authority conflict	-.14 ^b	-.07 ^a	.33 ^c	47.52***
Bullying others	-.11 ^a	-.20 ^a	.49 ^b	118.20***
Victim	-.21 ^a	.18 ^c	-.02 ^b	42.57***
Peer report				
Peer acceptance	.15 ^b	-.10 ^a	.06 ^b	20.58***
Peer rejection	-.05 ^a	-.03 ^a	.10 ^b	6.14**
Bullying others	.09 ^b	-.27 ^a	.34 ^c	105.03***
Victim	-.07 ^a	.11 ^b	-.07 ^b	11.37***
Aggression-inattentiveness	-.03 ^c	-.25 ^a	.44 ^b	123.97***
Achievement-withdrawal	-.04 ^b	.30 ^c	-.42 ^a	134.25***
Self-confidence	.21 ^b	-.25 ^a	.16 ^b	80.77***
Sociability	.16 ^b	-.16 ^a	.09 ^b	34.02***
Emotionality-nervousness	-.14 ^a	.17 ^b	-.09 ^a	35.92***

Note. ¹ $n = 1,178$. ² $n = 1,356$. ³ $n = 750$.

** $p < .01$, *** $p < .001$.

Different lettered superscripts for mean scores of the same variables indicate significant differences.

as dependent variables. The adjustment measures included self-reports on variables referring to perceived relational support, well-being, delinquency, and involvement in bullying, as well as peer reports on peer acceptance, bullying involvement, and peer-reported behavior. Adolescents' scores on these variables were again standardized within the total sample, and the mean standard scores of the three types were compared. Zero scores represent sample mean scores with a *SD* of 1.

Effect sizes and differences between cluster means shown in Table 2 may be interpreted similarly to those in Table 1.

Self-report. Resilients scored highest on support perceived from parents, siblings, and best friends. Differences between resilients and over- and undercontrollers were large. Note that the latter two did not differ significantly on these support dimensions. Resilients reported the highest self-esteem and the least somatic complaints and, together with the undercontrollers, reported the lowest levels of loneliness and ruminating. Overcontrollers turned out to have the lowest scores on all aspects of psychological well-being: they had the lowest self-esteem, were most lonely, ruminated the most, and suffered significantly more often from somatic complaints. Compared to all other adolescents, undercontrollers reported the highest involvement in three forms of delinquency (i.e., overt and covert delinquency, and conflict with authority) and were more likely to bully other adolescents. Overcontrollers were most often victims of bullying.

Peer report. Compared to the other adolescents, overcontrollers were the least accepted by their classmates, were less often perceived as perpetrator and most often as a victim of bullying. While undercontrollers were as much liked by their peers as were resilients, they were significantly more rejected and also scored higher on peer-perceived bullying. Clear differences, especially between overcontrollers and undercontrollers, were found for each of the five peer-reported behavior dimensions. Undercontrollers were perceived to be most aggressive and inattentive and least oriented toward academic achievement and social withdrawal, while the overcontrollers showed the opposite. They were least aggressive and most withdrawn and achieving. On the other three peer-reported behavior dimensions, the overcontrollers were least adjusted: classmates perceived them to be the least self-confident, sociable, and emotionally stable. Resilients, in general, scored intermediate on aggression and achievement-withdrawal and relatively high on self-confidence, sociability, and emotional stability.

In sum, these findings from self-reports and peer reports confirm earlier findings in children and adults. Resilients are most adjusted. Overcontrollers are more achievement-oriented and are at risk for internalizing problems and a lack of social skills. Undercontrollers show externalizing problems, have low achievement, and exhibit behavior problems in peer relations. In general, significant effect sizes varied between small and medium.

Gender. Gender main effects showed that, compared to boys, girls perceived more support from parents, siblings, and best friends. They reported lower self-esteem, higher levels of ruminating and somatic

complaints, and were less involved in self-reported and peer-reported bullying, both as a perpetrator and as a victim. Girls were also more accepted and less rejected by their peers, were perceived to be less aggressive, and to display more self-confidence and sociability. Personality type by gender interactions indicated that the difference between male and female resilients in the level of support perceived from best friends was significantly larger than the difference between male and female over- or undercontrollers. Furthermore, gender differences on peer-reported bullying and self-confidence were significantly larger for resilients and undercontrollers than for overcontrollers.

Personality Subtypes

Applying Q-cluster analysis, we computed two-cluster solutions within each of the three main types. The Big Five scores, standardized on the total sample, were again used as the cluster variables. Two-cluster solutions were computed because in earlier studies (Robins et al., 1998; van Lieshout et al., 1995) within each of the three main types, two subtypes were specified. In the present study, three-cluster solutions within each of the three main types were also inspected, but they revealed that the third clusters were always a result of the splitting up of one cluster in two that only differed in mean level of the Big Five scores. Table 3 presents the means on the Big Five personality dimension for each of the subtypes. As a result of the Z-standardization of the personality dimension scores on the total sample, differences among cluster means shown in Table 3 may be interpreted similarly to those in Table 1.

Resilients. The two-cluster solution split the resilients in two subtypes. Relative to all other adolescents, adolescents of both subtypes scored higher than average on each Big Five dimension, except on emotional stability. On this dimension, adolescents of the first subtype scored lower, whereas adolescents of the second subtype scored very high. Comparing both subtypes with each other revealed that the first subtype scored lower on extraversion, somewhat higher on agreeableness and conscientiousness, much lower on emotional stability, and lower on openness. Following Robins et al. (1998), they were called communal resilients. The deviations from the total sample means are medium to very large and are especially large for emotional stability. These adolescents seem to be emotionally tough, very extroverted and open to new experiences. This subtype of resilient adolescents was called agentic resilients. Robins et al. (1998) refer to McAdams (1993) and Bakan (1966) when they describe agency in terms of separation from others, mastery of the environment, assertion, and self-expan-

Table 3. Personality Dimension Mean Scores of the Personality Subtypes (Z-Standardized Scores)

	Resilients		Overcontrollers				Undercontrollers		t-value
	Communal ^a	Agentic ^b	t-value	Vulnerable ^c	Achieving ^d	t-value	Impulsive ^e	Oppositional ^f	
Extraversion	.22	.80	-11.46***	-.60	-.76	3.56***	.59	.14	8.62***
Agreeableness	.85	.70	3.19***	-.32	-.28	-.87	-.28	-1.24	17.17***
Conscientiousness	.73	.60	2.45*	-.78	.15	-22.71***	-.99	-.51	-8.42***
Emotional stability	-.17	1.11	-36.66***	-1.45	-.33	-27.39***	.11	.54	-8.14***
Openness	.55	.95	-8.68***	-.96	-.40	-12.78***	-.48	.26	-13.24***

Note. ^an = 494; 60% girls, 40% boys. ^bn = 684; 27% girls, 73% boys. ^cn = 388; 66% girls, 34% boys. ^dn = 968; 46% girls, 54% boys. ^en = 456; 38% girls, 62% boys. ^fn = 294; 15% girls, 85% boys.

* p < .05, ** p < .01, *** p < .001. Different lettered superscripts for mean scores of the same variables indicate significant differences.

sion. In contrast, communion is viewed as an individual's tendency to give up his or her individuality by merging with others and the environment. Significant gender differences were found, $\chi^2 = 127.07$, $df = 1$, $p < .001$: 60% of the communal resilients were girls, whereas 73% of the agentic resilients were boys.

Overcontrollers. Two subtypes were found in the group of overcontrollers that showed a high resemblance in their personality profile with the subtypes identified by van Lieshout et al. (1995). Compared to all other adolescents, both subtypes scored low on each of the Big Five dimensions except for conscientiousness, on which the second subtype scored above the mean. Direct comparison between the two subtypes of overcontrollers showed that they differed on each of the Big Five factors, with the exception of agreeableness. The first subtype scored lower on conscientiousness, emotional stability, and openness, and higher on extraversion. Adolescents of this subtype were labeled vulnerable overcontrollers (cf. Block, 1971), while adolescents of the second subtype were called achieving overcontrollers, expressing their conscientiousness and higher school achievement (van Lieshout et al., 1995). Of the vulnerable overcontrollers, 66% were girls, while the achieving overcontrollers were about equally often boys and girls, $\chi^2 = 41.05$, $df = 1$, $p < .001$.

Undercontrollers. Relative to all other adolescents, both subtypes of undercontrollers scored above the mean on extraversion and emotional stability, and below the mean on agreeableness and conscientiousness. Comparing both subtypes of undercontrollers with each other revealed the following. The adolescents of the first subtype scored higher on extraversion and agreeableness and lower on conscientiousness, emotionally stability, and openness. Adolescents of this subtype were labeled impulsive undercontrollers, whereas the adolescents of the second subtype were called oppositional undercontrollers. Although both subtypes consisted of a large majority of boys (62% and 85%, respectively), there were significantly fewer girls among the oppositional undercontrollers than was expected, $\chi^2 = 46.62$, $df = 1$, $p < .001$.

Psychosocial Adjustment of the Personality Subtypes

To examine whether significant differences existed between the subtypes within each main personality type, ANOVAs were computed with subtype and gender as independent factors and the various adjustment measures as dependent variables. Results are presented in Table 4. As in the other tables, subtype mean scores are again expressed as standard deviation ($SD = 1$) from the total sample mean ($= 0$).

Table 4. Adjustment of the Personality Subtypes (Z-Standardized Scores)

	Resilients			Overcontrollers			Undercontrollers		
	Communal	Agentic	F-value	Vulnerable	Achieving	F-value	Impulsive	Oppositional	F-value
Self-report									
Parental support	.28	.33	.86	-.42	-.01	37.60***	-.08	-.35	7.18**
Sibling support	.22	.32	2.71	-.39	-.09	18.95***	.04	-.41	18.41***
Friend support	.27	.45	8.82**	-.54	-.16	23.58***	.08	-.37	20.87***
Self-esteem	.22	.34	5.66*	-.78	-.01	121.93***	-.08	.08	.00
Loneliness	-.16	-.19	.21	.53	.03	39.17***	-.16	.06	5.87*
Ruminating	.00	-.20	8.52**	.53	.03	52.14***	.01	.07	.38
Somatic complaints	-.11	-.11	.00	.53	-.06	72.83***	.15	.00	2.29
Overt delinquency	-.22	.04	16.47***	-.02	-.22	15.84***	.25	.29	.15
Covert delinquency	-.25	-.02	14.23***	.06	-.16	14.92***	.17	.23	.12
Authority conflict	-.23	-.07	5.86*	.12	-.15	17.13***	.37	.28	.63
Bullying others	-.20	-.06	9.12**	-.07	-.17	7.02**	.25	.34	1.10
Victim of bullying	-.20	-.18	2.28	.35	.06	25.51***	-.11	.07	5.95*

Table 4. (continued)

	Resilients		Overcontrollers			Undercontrollers			
	Communal	Agentic	F-value	Vulnerable	Achieving	F-value	Impulsive	Oppositional	F-value
Peer report									
Peer acceptance	.15	.21	.85	-.03	-.14	2.62	.24	-.13	16.69***
Peer rejection	-.14	-.04	2.81	.13	-.06	4.68*	-.05	.36	18.08***
Bullying others	-.10	.08	9.13**	-.22	-.27	.78	.18	.35	2.91
Victim of bullying	-.01	-.15	5.48*	.12	.11	.03	-.20	.13	12.89***
Aggression-inattentiveness	-.25	.03	21.49***	-.05	-.32	20.97***	.33	.40	.57
Achievement-withdrawal	.16	-.15	25.88***	.10	.39	19.57***	-.53	-.30	8.30***
Self-confidence	.23	.30	7.98**	-.18	-.28	2.46	.31	.06	7.57**
Sociability	.17	.22	.66	-.08	-.21	4.64*	.26	.07	4.07*
Emotionality-nervousness	-.06	-.21	6.33**	.26	.16	2.58	-.17	.01	3.63

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

Resilients. The communal and agentic resilient adolescents reported similarly high levels of perceived support, except on support perceived from best friends, on which agentic resilient adolescents scored higher. Both types of adolescents also showed a higher-than-average level of psychological well-being, although there were some significant differences. Agentic resilient adolescents reported a higher self-esteem and turned out to ruminate less than the communal resilient adolescents. Communal resilient adolescents were less involved in all three forms of delinquency and in bullying other adolescents. The peer reports indeed confirmed the latter finding: according to their classmates and compared to the agentic resilient adolescents, they were less often a perpetrator of bullying; agentic resilient adolescents were less often a victim of bullying. Communal resilient adolescents were perceived to be less aggressive and inattentive, more oriented toward achieving well in school, and also somewhat less self-confident and emotionally stable (i.e., scored higher on emotionality) than the agentic resilient adolescents.

Overcontrollers. Particularly in their self-descriptions, vulnerable and achieving overcontrollers report medium to large differences on most adjustment measures. Compared to the achieving overcontrollers, vulnerable overcontrollers perceived less support from parents, siblings, and best friends. They also scored lower on all aspects of psychological well-being. Achieving overcontrollers reported a smaller involvement in various forms of delinquency and bullying others. Vulnerable overcontrollers were more often victimized. Except for minor to small deviations from sample averages in peer acceptance and emotionality-nervousness, classmates do not observe adjustment problems in vulnerable or achieving overcontrollers. The many medium to large adjustment differences in self-reports between vulnerable and achieving overcontrollers were small or absent in peer reports. In peer reports, the vulnerable overcontrollers were a little more rejected. Compared to vulnerable overcontrollers, the achieving overcontrollers were less aggressive and inattentive and, in accordance with the label of this subtype, more oriented toward academic achievement and more withdrawn and less sociable.

Undercontrollers. In contrast with the overcontrol subtypes, the undercontrol subtypes differed more often in peer reports than in self-reports; the self-report measures on perceived relational support are an exception. Compared to the impulsive undercontrollers, oppositional undercontrollers reported lower support perceived from their parents, siblings, and best friends. The impulsive undercontrollers reported average levels within the total sample, while the oppositional undercontrollers reported moderately low levels. In addition, the lat-

ter adolescents felt more lonely and felt more often a victim of bullying. The impulsive undercontrollers were more accepted by peers; the oppositional undercontrollers more often rejected. Compared to the impulsive undercontrollers, they were more often the victims of bullying. The impulsive and oppositional undercontrollers were perceived by classmates as similarly aggressive and inattentive, but the impulsive undercontrollers were lower in achievement and less withdrawn and higher in self-confidence and sociability. Because no differences were found in the delinquent tendencies of both subtypes of undercontrollers, it was decided not to use Robins et al.'s (1996) label "antisocial undercontrollers" for the oppositional undercontrollers.

Gender. Some gender differences were found that seemed to be specific for some subtypes but not for others. Whereas girls in each of the resilient and overcontrollers subtypes were more accepted and less rejected by their peers than were boys, no such differences were present for boys and girls in the undercontrollers subtypes. That is, both impulsive undercontrolled boys and girls scored about average on being disliked or liked, whereas both oppositional undercontrolled boys and girls scored well above average on being disliked by their peers.

Discussion

In our study, we were able to replicate the three main personality types who showed configurations of Big Five personality dimensions that were similar to those described in earlier studies (e.g., Asendorpf et al., 2001; Dubas et al., 2002; Hart et al., 1997, 2003; Robins et al., 1996; van Lieshout et al., 1995). Our finding adds to the evidence that these three personality types are robust across cultures, samples, statistical procedures, and instruments. Despite the orientation of our study on the Big Five personality model, we found strong support for Block and Block's (1980) view on the curvilinear relation between the dimensions of ego-resiliency and ego-control in personality functioning. One of our types represented resilient persons, scoring high on ego-resiliency and average on ego-control. The other two types impersonated the two counterparts of ego-control in their psychosocial functioning, that is, the undercontrollers and the overcontrollers. Under- and overcontrollers had low scores on ego-resiliency and were clearly opposites on the control dimension as well as in their patterns of psychosocial adjustment. It should be noted that the Big Five profiles of overcontrollers and undercontrollers are mutually complementary: mean scores of the Big Five dimensions of each of these types are mirrored along an imaginary axis of the mean scores of the two types. This mirror-

ing effect is consistent with the contrast between ego-overcontrol and ego-undercontrol as manifestations of Block and Block's (1980) ideas about impulse control.

At this level of main personality types, resilient adolescents were highly adjusted in all self-reported and peer-reported domains of functioning. In contrast, overcontrollers in general showed specific patterns of lower adjustment in terms of social inhibition and internalizing problems. Undercontrollers tended more often to have externalizing problems and problems in peer relations. Other studies reported comparable adjustment patterns for these three main personality types (e.g., Dubas et al., 2002; Hart et al., 1997; Robins et al., 1996; van Lieshout et al., 2000). The clear overrepresentation of boys among the undercontrollers, the slighter but significantly higher proportion of girls among the overcontrollers, and the equal numbers of boys and girls among the resilient types added further to the validity of the three main personality types.

Our study also revealed, however, that restricting to these three main types and their behavioral correlates would mean that one is likely to miss a more detailed insight in the association between personality profiles and adjustment or maladjustment. In our study, a more fine-grained and differentiated picture was obtained when each of the three main personality types was broken down into two personality subtypes. The identified subtypes were similar to the subtypes identified in the few earlier studies that have searched for personality subtypes. The subtypes of the resilient types and undercontrollers were comparable to the subtypes identified among North American adolescent boys (Robins et al., 1998). All subtypes, including the overcontrolling subtypes, were similar to those found in our earlier study (van Lieshout et al., 1995). The resilient type consisted of two subtypes, labeled communal resilient types and agentic resilient types. Both subtypes were very well adjusted, and differences in functioning were not easy to detect. In general, communal resilient types are more often girls, show more social and emotional involvement, and tend to be more socially concerned. They are more likely to strictly adhere to social rules, as indicated by their low involvement in delinquency and bullying others. Agentic resilient types are more often boys and present themselves—and are similarly perceived by their peers—as strong and independent, but at the same time they value their friends highly. Compared to the communal resilient types, they tend to be less well socially adjusted. They are more risk-taking, somewhat lax in school tasks, and willing to commit delinquent acts. Their involvement in delinquency is at average level and not necessarily an indication of maladjustment, however, because the majority of adolescents are likely

to have committed delinquent acts. Some levels of deviancy may thus be considered normative in adolescence (cf. Moffitt, 1993).

At this point it should be noted that Block and Block (1980) mention the curvilinear nature of the relation between ego-control and ego-resiliency explicitly, but at the same time they present a 2×2 model in some places, that is, ego-resilient undercontrollers, ego-resilient overcontrollers, ego-brittle undercontrollers, and ego-brittle overcontrollers. More specifically, they describe items at age 4 that were significant functions of both earlier (age 3) ego-control and ego-resiliency, and use the four quadrants to present these items. Resilient undercontrollers are characterized as energetic, active, curious, and exploring. Resilient overcontrollers are characterized as compliant and empathic. It is clear that these two subtypes of resilients resemble our agentic and communal resilients, respectively. To confirm this, the level of ego-control for the two subtypes should be compared, and the agentic resilients should show more undercontrol than the communal resilients. Since we have no direct measure of ego-control, we cannot perform these analyses, but studies using the California Child Questionnaire for studying personality types could easily do this.

The overcontrollers also consisted of two subtypes that clearly differed in their patterns of adjustment. In self-descriptions and peer evaluations, the achieving overcontrollers appear as self-contained, hardworking adolescents who do their best in school and avoid involvement in delinquency, peer aggression, and bullying. The picture emerging from these findings is that of a group of socially inhibited adolescents who are predominantly oriented toward academic achievement. Indeed, an academic achievement orientation and social inhibition are frequently associated in several studies of adolescence (e.g., Masten et al., 1995; van Lieshout et al., 1995; Wentzel & Asher, 1995). Their social inhibition is not just their own perception but seems to be reflected in peer evaluations too. However, given their average psychological well-being and, in particular, their average level of loneliness, they do not really seem to suffer from their social inhibition.

The vulnerable overcontrollers, on the other hand, display a behavioral pattern that does give reason for concern because they tend to medium levels of internalizing problems. These adolescents not only have a very negative self-concept and low self-esteem, but they perceive their social interactions and social relationships very negatively too, including their best friendships. This is striking, since in adolescence best friends are generally considered to be among the most important providers of companionship and intimacy, who may even compensate for low parental support (Furman & Buhrmester, 1992). From the vul-

nerable overcontrollers' negative self-perceptions, one would expect peer reports to confirm the low-quality interactions, social isolation, and internalizing problems. This was not the case. The vulnerable overcontrollers are about normally accepted by their classmates and are not perceived to be very withdrawn at all. This discrepant finding suggests that the vulnerable overcontrollers suffer from a low psychological well-being and feelings of social isolation that are difficult to detect for people in their social environment. Vulnerable overcontrollers are complementary to agentic resilient, confirming the large discrepancy in self-presentation of vulnerable overcontrollers compared to agentic resilient as revealed in their low self-esteem and psychological well-being. The vulnerable overcontrollers may constitute a group of adolescents that are particularly at risk, not only for concurrent but also for future problems.

Among the undercontrollers, two distinctive subtypes were found in terms of personality profiles and adjustment. As was the case with the overcontrollers, one subtype includes more adjusted adolescents, while the other subtype consists of adolescents with serious relational problems. The distinctions are more manifest in peer evaluations than in their self-perceptions. The impulsive undercontrollers seem to be undercontrollers in the true sense. These adolescents show a lack of impulse control in several domains of functioning, including delinquency, social interactions (i.e., aggression and inattentiveness), and school achievement. But in contrast to the oppositional undercontrollers, their impulsive behaviors do not seem to elicit strong antagonistic responses from peers. For example, although the impulsive undercontrollers tend to bully others, they are much more liked and less disliked by their classmates, and are perceived as being more self-confident and sociable than the oppositional undercontrollers. The oppositional undercontrollers, in contrast, display a behavioral pattern that is similarly marked by externalizing problems but elicits negative responses from peers. Recall that the oppositional undercontrollers describe themselves as extremely unfriendly and emotionally tough. They are most discrepant from communal resilient in agreeableness, and from vulnerable overcontrollers in emotional stability. They report very low support from parents, siblings, and friends. However, they do not report more delinquency or active bullying than the impulsive undercontrollers. This last finding is confirmed by their peers, who also do not judge them as being more involved in bullying, and also not as being more aggressive. In the eyes of their peers, the oppositional undercontrollers elicit more rejection and are more often victims of bullying. Also in the eyes of peers, they are somewhat less self-confi-

dent and sociable than the impulsive undercontrollers. It seems that the core problem for the oppositional undercontrollers lies in their social relationships rather than in higher levels of oppositional behaviors.

In addition to the fine-grained psychological profile of the personality subtypes, our study has a number of other strong features supporting the relevance of the distinction of personality subtypes. First, our findings are in accordance with several other findings regarding the development of adjustment problems. For example, Conger, Ge, Elder, Lorenz, and Simons (1994) reported that the connection between economic stress and internalizing problems among adolescents is mediated by family interaction—for example, coercive and hostile parenting and parent-child conflict—in a manner similar to the mediation of oppositional behavior. Of all adolescents, vulnerable overcontrollers and oppositional undercontrollers report the lowest levels of support perceived from parents, siblings, and best friends. This finding suggests that the same overall low quality of relationships is associated with internalizing or externalizing problems, depending on the personality profile of the children. That is, low quality of perceived support is associated with internalizing problems and a vulnerable overcontrolled personality profile in overcontrollers and with externalizing problems and an oppositional undercontrolled personality profile in undercontrollers. As indicated by the study of Conger et al. (1994), parenting conditions may affect adolescent adjustment, and thus it may be that under more favorable parenting conditions, overcontrollers may develop into achieving overcontrollers and undercontrollers may manifest themselves as relatively well adjusted impulsive undercontrollers. Elsewhere (van Aken et al., 2002) we have shown how such a combination of personality type and peer relationships can be considered predictive of adjustment problems.

The low levels of perceived support from best friends in oppositional undercontrollers reflect Cairns, Cairns, Neckerman, Gest, and Gariépy's (1988) finding that highly aggressive boys are likely to have low-quality friendships. Oppositional undercontrollers show characteristics of provocative victims (Olweus, 1991), or bully-victims. They are as delinquent, aggressive, and bullying of others as impulsive undercontrollers, but they are bullied more often themselves, are highly rejected by peers, feel more lonely, are less self-confident and sociable, and report an overall low quality of support. They seem at risk for co-morbidity of internalizing and externalizing problems (e.g., Mynard & Joseph, 1997; Olafsen & Viemerö, 2000). Our study showed that these bully-victims not only differ in their aggressive behavior (cf. Pikas, 1989) but have very distinct personality profiles as well.

Second, gender differences are particularly distinct among the personality subtypes compared to the main personality types and personality dimensions. In variable-centered personality research, gender differences on the Big Five personality dimensions were small, if found at all. Two of the three Big Five main personality configurations—namely, overcontrollers and undercontrollers—revealed larger gender differences, and gender differences were even more pronounced among the subtypes. Moreover, the overrepresentation of girls in communal resilient is in accordance with the greater empathy, nurturance, intimacy, and emotional support that women value in communal, reciprocal relationships. The more agentic and instrumental qualities of male relationships may explain the overrepresentation of boys among agentic resilient (Geary, 2002; Maccoby, 1990; Winsted, Derlaga, & Rose, 1997). Similarly, the larger proportions of girls among vulnerable overcontrollers and of boys among oppositional undercontrollers are in accordance with the larger number of girls with internalizing and emotional problems and of boys with externalizing and conduct problems (Loeber & Farrington, 1998). These findings suggest that especially in the study of gender differences, a person-centered approach can differentiate between the two genders and is thus complementary to the more commonly used variable-centered approach. A person-centered approach may be more in accordance with the functioning of men and women as organic wholes.

Third, in contrast to York and John's (1992) rejection of cluster analysis as a reliable method for typological research, in our study cluster analysis on the Big Five personality dimension scores provided a useful statistical tool for the reliable and valid distinction of the personality types and subtypes and the unequivocal assignment of each participant to one of the distinguished types and subtypes. Our large sample also diminished the effects of outliers and the problems involved in assigning individuals to specific types and subtypes. Moreover, the use of *Z*-standardized personality dimension and adjustment scores allowed us at the same time to estimate the size of relevant differences among the personality types and subtypes and, in addition, to evaluate the deviation of specific types and subtypes from the total sample means.

Limitations and Suggestions for Further Study

Our study did not address a number of issues. First, the present study concerned a sample of adolescents and did not examine developmental pathways of personality and adjustment. The personality types and

subtypes have been considered as independent categories and the various indicators of adjustment and social interactions as the dependent variables, though causality was not inferred. Longitudinal studies are needed to examine the extent to which specific personality (sub)types influence specific patterns of behavior and vice versa (cf. Hart et al., 1997). Second, in many of our studies (e.g., van Aken, 1994; van Aken et al., 2002) a transactional developmental model was assumed with reciprocal effects over time between personality and relational support. According to these models, the quality of relational support perceived by the over- and undercontrollers could affect their personality development and adjustment. It is interesting to note that the less problematic subtypes of these two main personality types report levels of support around the sample mean. The interaction between personality and perceived support may predict whether over- and undercontrollers will develop into the more problematic or nonproblematic subtype. For example, an overcontroller with higher perceived relational support might develop into an achieving overcontroller, without having the negative perceptions of the self and others that marked the vulnerable overcontroller. Third, an important problem of both cluster analysis and inverse factor analysis is to decide how many clusters or factors to derive and study. In our investigation we used the existing studies on personality types and subtypes (e.g., Robins et al., 1998; van Lieshout et al., 1995) as our guideline and thus derived three types with two subtypes each. Of course, in a large sample such as ours, more subclusters could have been derived. Our ultimate criterion, however, was the psychological meaningfulness of the subtypes. Each of our subtypes turned out to have a very clear and distinctive behavioral pattern with characteristics that have been identified in several fields of research, while additional subclusters only diffused this pattern. Nevertheless, each individual may have a unique personality profile, and limiting the study of personality profiles to six is very few. The study of a larger diversity of personality profiles with different samples, instruments, methods, and external correlates will be needed to further evidence the existence of personality subtypes.

In sum, moving beyond the three main personality types has resulted in six psychologically meaningful personality subtypes that showed distinctive positive and negative adjustment patterns of adolescent boys and girls, patterns that would not have been captured otherwise. The present study may thus be a promising extension of the existing person-centered research on personality.

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