

Correlates of the Temporal Consistency of Personality Patterns in Childhood

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ABSTRACT The temporal consistency of children's personality patterns as measured by the California Child Q-set was investigated in a sample of 151 German children between ages 4 and 6 years, and in a sample of 87 Dutch children between ages 10 and 12 years. Children's personality patterns showed a high interindividual variance of consistency. Correlational analyses revealed that children's ego resiliency predicted the longitudinal consistency of their Q-sort patterns irrespective of variations in age, culture, and type of judge. Itemwise extreme group comparisons of very consistent and very inconsistent children with a middle group showed that consistent children were characterized by culturally desirable traits, and inconsistent children by undesirable traits. The items typical for consistent children changed with age in agreement with the change in major developmental tasks. Discussion focuses on the processes that mediate the positive relations between the temporal consistency of personality, ego resiliency, and the age-appropriateness of personality.

Numerous studies have investigated the longitudinal stability of the rank order of individuals in a particular personality trait (see reviews

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of Conley, 1984, for adulthood, and Moss & Susman, 1980, for childhood). Because these studies evaluate the temporal stability of the interindividual differences in one variable, they have been called "variable-centered approaches to personality" (J. Block, 1971; Magnusson, 1988). Not surprisingly, different stabilities have been found for different traits within the same sample of individuals (e.g., IQ is more stable than extraversion, and extraversion is more stable than overall self-esteem among adults; see Conley, 1984).

A very different approach to the consistency of personality is to investigate the longitudinal consistency of the ranking of various traits in terms of their saliency for a particular person (see J. Block, 1971; J. H. Block & J. Block, 1980; Magnusson, 1988; Ozer & Gjerde, 1989). For example, if John is highly aggressive, good in sports, average in intelligence, and low in concentration ability at age 8, does John show the same pattern of traits at age 12? This "person-centered approach" (J. Block, 1971; Magnusson, 1988) evaluates the temporal consistency of intra-individual differences in one person. If we follow Allport's (1937) definition of personality as the individual organization of behavior, this type of consistency reflects the consistency of personality more directly than the variable-centered notion of trait stability. Not surprisingly, different consistencies have been found for different persons in regard to the same sample of traits.

For example, Ozer and Gjerde (1989) examined the 3- to 4-year consistency of personality at various ages within the age range of 3 to 18 years on the basis of Q-sort descriptions (using the California Child Q-set for ages 3 to 14, and the California Adult Q-set for ages 14 to 18). These are sets of 100 items describing a wide range of social and cognitive personality attributes. For an individual person, these items are sorted into nine categories of saliency ("least characteristic for the person" to "most characteristic for the person"). Thus, each person was described by a profile on 100 items. The sorts of at least three different raters per person and assessment were averaged, and different raters served for different assessments. The consistency scores for the Q-sort patterns of 44 females and 40 males varied at least between $-.01$ and $.80$ for four age comparisons and both genders. Some subjects were remarkably consistent in their Q-sort pattern, whereas others changed considerably. What factors contribute to this high variability of consistency?

Some of the variance reported by Ozer and Gjerde (1989) and others

(e.g., Göttert & Asendorpf, 1989) may be due to differences among observers rather than to differences among children. These differences in perception may be related to the accuracy of observers, but they may also reflect meaningful differences in the situational context in which the behavior is observed, or in the focus on particular aspects of behavior. If a child is evaluated by different observers at different points in time, differences among observers will necessarily cause some variation in the consistency of the personality descriptions of the child. If children are evaluated by the same observers at both points in time, a similar though probably somewhat smaller effect stems from temporal changes in the accuracy of the observers' perception of the child. Thus, the variability of consistency will be overestimated in both cases by observer effects. These effects can be minimized by aggregating the personality descriptions of many observers for each child.

Because Ozer and Gjerde (1989) used at least three observers per subject, it is very likely that much of the variance of the consistency coefficients in this study could not be attributed to different perceptions. Instead, it reflects differences among subjects' consistency of personality. Ozer and Gjerde (1989) tried to approach these differences by a gender-specific cluster analysis of the four consistency coefficients obtained from each subject. These clusters describe different patterns of consistency through the 3- to 18-year age range (e.g., always consistent or increasingly consistent). For both males and females, the largest cluster consisted of subjects with a continual high consistency of personality. These subjects differed from the rest of the sample in terms of their most characteristic and least characteristic items. Although these typical characteristics changed from age to age and were somewhat different for males and females, consistent subjects were always described as having more culturally desirable traits (e.g., high intellectual capacity), and less undesirable traits (e.g., fearfulness); see Hampson, Goldberg, and John (1987), for a discussion of the cultural desirability of personality traits. J. Block (1971) reported a similar finding for another sample followed from junior through senior high school.

The present study was aimed at conceptually replicating and refining the major findings of Ozer and Gjerde (1989), and in addition at testing the hypothesis that one particular higher order trait is positively related to the temporal consistency of personality in childhood: ego resiliency. The construct of ego resiliency was defined by J. H. Block and J. Block (1980)

at one extreme by resourceful adaptation to changing circumstances and environmental contingencies, analysis of the "goodness of fit" between situational demands and behavioral possibility, and flexible invocation of the available repertoire of problem-solving strategies. . . . The opposite end of the ego-resiliency continuum (ego-brittleness) implies little adaptive flexibility, an inability to respond to the dynamic requirements of the situation, a tendency to persevere or to become disorganized when encountering changed circumstances or when under stress, and a difficulty in recouping after traumatic experiences. (p. 48)

The more ego-resilient people are, the more they can adapt to changing environments in an active way by controlling their environment within the limits provided by nature and society. One particular consequence of ego resiliency is that people can better seek out, shape, and create environments that are compatible with their personality (see Allport, 1937; Plomin, 1986; Scarr & McCartney, 1983; Snyder & Ickes, 1985). In addition, ego-resilient persons will more likely receive positive feedback on their actions. They thus reach a better personality-environment fit which, in turn, stabilizes their personality pattern. Through this process, ego resiliency stabilizes personality. Thus, our main premise is that ego resiliency promotes the temporal consistency of personality by person \rightarrow environment effects.

In the present study we tested this hypothesis directly by correlating Q-sort indices of ego resiliency with the 2-year consistency of children's personality. These indices were obtained by correlating each child's Q-sort profile with the prototypic profile of an "ego-resilient child" (as defined by J. H. Block & J. Block, 1980). To test the robustness of the results, culture, age, and type of Q-sort (teacher vs. mother) were allowed to vary.

Furthermore, extreme group comparisons of highly consistent, average, and highly inconsistent children were conducted in order to explore which other traits are related to the consistency and to the inconsistency of personality. This methodological approach carries the analysis beyond correlations or the Ozer and Gjerde (1989) method because it allows us to detect traits that are related to consistent personality patterns but not to inconsistent ones, and vice versa. This is an important advantage if the personality patterns that characterize consistent children are not simply a mirror image of those patterns that characterize inconsistent children.

METHOD

Subjects

Data from two different samples are analyzed. The German sample was drawn from the Munich Longitudinal Study on the Genesis of Individual Competencies (LOGIC), which is relatively unbiased in terms of IQ and social class (Weinert & Schneider, 1989). Children were recruited for the LOGIC study in 1984 when they started preschool at an age of 3 to 4 years. The present data refer to the 151 children (78 boys, 73 girls) with no missing values in the assessments at age 4 (± 6 months) and 2 years (± 2 months) later at age 6.

Subjects in the Dutch sample participated in a longitudinal project on the development of competence carried out at the University of Nijmegen. The study started in 1975 with 100 firstborn, 9-month-old children (47 boys, 53 girls; Riksen-Walraven, 1978). The majority of the group consists of low-socioeconomic status (SES) families. The present data refer to the 87 children (46 girls, 41 boys) who were assessed both at age 10 and at age 12.

Q-Sort Assessments

The samples were assessed by German, or Dutch, versions of the California Child Q-set (CCQ; J. H. Block & J. Block, 1980). The CCQ is a Q-sort procedure containing 100 statements about a child's social and cognitive personality characteristics. Q-sorts were done following the instructions provided by J. H. Block and J. Block (1983). In particular, judges were instructed to sort the Q-sort items for each child into 9 categories of saliency for that child, ranging from "least characteristic for the child" to "most characteristic for the child." Judges were instructed to sort the items in such a way that each category contained the same number of items (forced equal distribution). Thus, each child was described by a profile of scores ranging from 1 to 9, and the means and standard deviations of the profiles were identical for all children.

The German version of the CCQ (Götttert & Asendorpf, 1989) was a translation of the 54-item short form of the CCQ developed by Schiller (cited in J. H. Block & J. Block, 1980). This short form had been shown to represent the major dimensions of the original 100-item CCQ well (e.g., ego resiliency). In the Dutch sample, a Dutch translation of the full 100-item CCQ was used (van Lieshout et al., 1986).

In Germany, children's main teachers in class served as judges. Because no difference is made in Germany between preschool and kindergarten, children often stay for 3 years in the same class with the same teacher. In the present sample, the same teacher provided the Q-sorts of both assessments for 97 children (64% of the sample). The Q-sorts of the remaining 54 children were obtained from different teachers (7 children changed class, and the teachers

of 47 children changed during the 2-year period). In the Dutch sample, children's main teachers also provided the Q-sort descriptions at both ages. For the majority of children, the teacher changed between the two assessments. In addition, Q-sort descriptions were given at the same two ages by the main caregiver of the child (at age 10, 85 mothers, 2 fathers; at age 12, 83 mothers, 4 fathers).

In both samples, the Q-sort of each child was correlated with the Q-sort prototype of a resilient child that was used in the research of J. H. Block and J. Block (see J. H. Block & J. Block, 1983, for a definition). These authors asked experts to describe the personality of a typical resilient child using the 100 items of the CCQ, and then averaged the (highly similar) Q-sorts of the experts; the resulting Q-sort was considered a prototypic description of a resilient child. Thus, in our study we obtained for each child and year of assessment one correlation that described the similarity between the child's personality and the personality of a prototypic resilient child. These similarity scores served as the ego-resiliency scores of the children for each assessment.

RESULTS

Correlations among Ego-Resiliency Scores

Figure 1 contains the zero-order Pearson correlations among all assessments of ego resiliency. Three correlations describe the temporal stability of the resiliency judgments of the same type of judge ($M_{10}-M_{12}$; $T_{10}-T_{12}$; T_4-T_6), two correlations describe the synchronic consistency of the resiliency judgments between different types of judges ($M_{10}-T_{10}$; $M_{12}-T_{12}$), and two correlations describe diachronic (cross-time) relations between different judges ($M_{10}-T_{12}$; $T_{10}-M_{12}$).

The 2-year stabilities of the German teacher scores tended to be lower than the 2-year stabilities of the Dutch teacher scores. This tendency might be attributed to the younger age of the German sample. The stabilities for the children who were judged by the same teachers did not significantly differ from the comparable stabilities for the children who were judged by different teachers. The Dutch mother scores showed a very high stability and only a moderate synchronic consistency with the teacher scores; the stability of the teacher scores was lower than the stability of the mother scores; and the diachronic relations between different judges were particularly low. This pattern of correlations is to be expected because (a) mothers and teachers observe children in different environments, which prevents high synchronic consistencies and leads to diachronic correlations that are lower than the stability co-

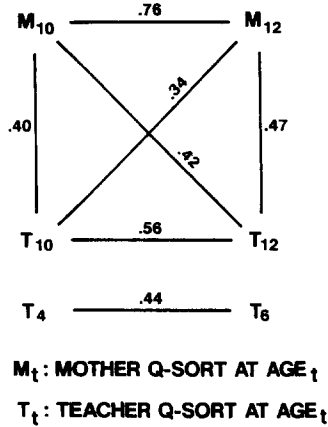


Figure 1
 Zero-Order Pearson Correlations among the Ego-Resiliency Scores

efficients; and (b) mothers remained the same whereas most children were judged by different teachers at the two assessments, which yields higher stabilities of the mother judgments as compared to the stabilities of the teacher judgments.

Temporal Consistency of Q-Sort Patterns

As in Ozer and Gjerde’s (1989) study, the temporal consistency of the Q-sort patterns was determined for each child by correlating the child’s Q-sort profile between two points in time. Table 1 provides descriptive data about the distributions of the 2-year consistencies of the Q-sort profiles for the three types of judgments; this table can be directly compared with Table 1 in Ozer and Gjerde (1989).

The consistencies are somewhat lower than those reported by Ozer and Gjerde (1989) for a comparable age range because in the present study there was only one judge for each child. According to a Wilcoxon test (Bradley, 1968), German children who were judged by different teachers were as consistent in their Q-sort patterns as those judged by the same teacher. More important for the present study is the great interindividual variation of the consistencies, which ranged from $-.44$ to $+.88$; this great range of variation is comparable with the variability found by Ozer and Gjerde (1989).

Table 1
Temporal Consistencies of Q-Sort Patterns

Type of judgment	N	2-year consistencies (Pearson <i>r</i> s)				Maximum
		Minimum	Q1 ^a	Median	Q3 ^a	
German teacher sort, ages 4 to 6	151	-.44	.24	.43	.58	.88
Dutch teacher sort, ages 10 to 12	80	-.09	.32	.47	.60	.87
Dutch mother sort, ages 10 to 12	87	-.24	.45	.61	.70	.83

Note. The correlation between the consistencies of the teacher sorts and the consistencies of the mother sorts was .19 ($p < .05$).

a. Q1 and Q3 are the first and third quartiles, respectively, of the distribution of the consistency coefficients.

Table 2
Prediction and Retrodiction of the Consistency of Personality
by Ego Resiliency

Consistencies	N	Ego-resiliency score			
		T1	M1	T2	M2
Teacher, ages 4 to 6	151	.57***	—	.29***	—
Teacher, ages 10 to 12	80	.38***	.23*	.47***	.33**
Mother, ages 10 to 12	87	.25*	.49***	.31**	.36***

Note. Reported are Pearson correlations between Pearson correlations. T1 = teacher Q-sort, first assessment; M1 = mother Q-sort, first assessment; T2 = teacher Q-sort, second assessment; M2 = mother Q-sort, second assessment.

* $p < .05$

** $p < .01$

*** $p < .001$.

Relations between the Consistency of Q-Sort Patterns and Ego Resiliency

Table 2 presents the correlations between children's 2-year consistencies of Q-sort patterns and their ego-resiliency scores at the first and the second assessment.

Irrespective of the variation of culture, age, and type of judge, ego resiliency significantly predicted and retrodicted the consistency of the Q-sort patterns—even if the resiliency scores were based on the Q-sort pattern of a different type of judge (e.g., the temporal consistency of

- mothers' Q-sort was significantly predicted by the teacher resiliency scores).

The influence of judgment effects on these relations could be tested in the German sample by comparing the two subsamples with the same versus a different teacher in terms of the correlational pattern of Table 2. No systematic differences were observed. In particular, even for the small subsample of children whose teacher had changed, all four predictive/retrodictive correlations were positive and significant (in each case, $p < .007$). Thus, judgment effects cannot explain the dependency of consistency on ego resiliency.

Furthermore, the predictions and retrodictions of consistency always tended to be higher if the predictors/retrodictors were based on the Q-sorts that were evaluated for consistency. This may be due to context effects: The processes responsible for the translation of ego resiliency into consistency differ between the social contexts that are relevant for mothers' versus teachers' judgments.

Extreme Group Analyses

The correlations of Table 2 are significant, but moderate to low in most cases. Therefore, it is not clear whether they reflect differences between consistent and average children, differences between inconsistent and average children, or both. Furthermore, ego resiliency is a broad construct that comprises diverse personality characteristics, some of which may show particularly close relations with consistency. Extreme group analyses comparing consistent, average, and inconsistent children in terms of the saliency of single Q-sort items can explore both questions.

For the German Q-sort, the Dutch teacher sort, and the Dutch mother sort, the 15 most consistent children and the 15 least consistent children were compared with the 15 children concentrated around the median of consistency by t tests separately conducted for each Q-sort item. Because of the many tests applied, an item was considered to distinguish between an extreme group and the average group only if the t test was significant at the .01 level. This procedure protects against interpretations of chance results in both samples in the same way, but its capacity to detect group differences might be somewhat lower for the Dutch sample due to its smaller size. Therefore, effect sizes of the group differences are reported for each significantly discriminating item (effect sizes are independent of sample n). Table 3 presents the results for the six Q-sort assessments.

Table 3
Q-Sort Correlates of Consistent and Inconsistent Children

Consistent children	Inconsistent children
<i>German teacher sort, age 4</i>	<i>German teacher sort, age 4</i>
Not stubborn (90; 1.48)	Not considerate of peers (2; 1.75)
Attentive (66; 1.43)	Dramatizes mishaps (57; 1.74)
Not easily offended (78; 1.37)	Not planful (67; 1.32)
Gets along well with peers (4; 1.35)	Easily irritated (95; 1.24)
Considerate of peers (2; 1.17)	Cannot be trusted (76; 1.19)
Does not transfer blame (11; 1.16)	Not competent or skillful (89; 1.17)
Admired by peers (5; 1.15)	Does not respond to reason (25; 1.16)
Does not push limits (13; 1.11)	Sulky or whiny (94; 1.12)
Not easily irritated (95; 1.10)	Not curious and exploring (40; 1.12)
<i>German teacher sort, age 6</i>	Not self-reliant, confident (88; 1.09)
Does not push limits (13; 1.72)	Not attentive (66; 1.08)
Considerate of peers (2; 1.21)	Not self-assertive (82; 1.05)
Can be trusted (76; 1.16)	<i>German teacher sort, age 6</i>
Obedient and compliant (62; 1.07)	No item differentiated groups
<i>Dutch teacher sort, age 10</i>	<i>Dutch teacher sort, age 10</i>
Doesn't show mannerisms (49; 1.30)	No item differentiated groups
Warm and responsive (3; 1.29)	<i>Dutch teacher sort, age 12</i>
Not easily offended (78; 1.17)	No item differentiated groups
Cheerful (75; 1.16)	<i>Dutch mother sort, age 10</i>
<i>Dutch teacher sort, age 12</i>	Takes advantage of others (20; 1.26)
Intelligent (68; 1.37)	Aggressive (85; 1.08)
Not emotionally labile (54; 1.24)	Inhibited and constricted (35; 1.07)
Competent, skillful (89; 1.18)	<i>Dutch mother sort, age 12</i>
High standards for self (47; 1.16)	Suspicious of others (79; 1.21)
Attentive (66; 1.09)	Not initiating of activities (36; 1.10)
Warm and responsive (3; 1.04)	
<i>Dutch mother sort, age 10</i>	
No item differentiated groups	
<i>Dutch mother sort, age 12</i>	
Interesting, arresting child (42; 1.21)	

Note. Reported are items that distinguish significantly ($p < .01$) between consistent and average children, or inconsistent and average children; item number in the original California Child Q-sort and effect size of the group difference in parentheses (in terms of $d = 2t/\sqrt{df}$).

In Table 3, age as well as observer effects can be found. In the German sample, both a high and a low consistency of the Q-sort pattern could be predicted from characteristics of the children at age 4. In the Dutch sample, descriptions given by the teacher did not differentiate between inconsistent and average children, as was the case in the German sample at age 6. This might explain why, for the 4- to 6-year-olds, the predictive power of ego resiliency was higher than its retrodictive power (see Table 2).

In general, all characteristics typical for consistent children were culturally desirable traits, whereas all characteristics of inconsistent children were undesirable ones. Inconsistent children were described at age 4 by their teachers as being emotionally unstable and easily distractible, and at ages 10 and 12 by their mothers as being suspicious, taking advantage of others, aggressive, inhibited, or not initiating activities. Consistent children were described by their teachers at ages 4, 6, and 10 as being more socially competent, for example, as more cooperative, attentive, and considerate of others. At age 12, consistent children were characterized by their teachers more in terms of intellectual aptitudes and skills.

DISCUSSION

This study probed the hypothesis that the temporal consistency of children's personality is related to their ego resiliency. Following a person-centered approach, the consistency of personality was conceived of as the temporal consistency of the organization of traits within one individual. This consistency varied strongly between different children. The expected positive correlation between ego resiliency and the consistency of personality was confirmed irrespective of variations in age and culture, whether parental or teacher judgments were analyzed, and whether consistency referred to the same judge at both assessments, or to different judges. Itemwise analyses revealed that if an item significantly distinguished consistent or inconsistent children from those with average consistency, consistent children were always characterized by culturally desirable traits, and inconsistent children always by undesirable ones (see J. Block, 1971, and Ozer & Gjerde, 1989, for similar findings).

Beyond this general finding, an inspection of the items that distinguished consistent and inconsistent children from average children did not reveal any particular personality traits that were constantly asso-

ciated with consistency or inconsistency. What could be observed at least for the teacher judgments, however, was a systematic age-related change in the content of the most discriminating items for consistent children. The typical characteristics of consistent children shifted from emotional stability and good peer relations in preschool and kindergarten to intellectual capacities and skills in late childhood. This shift appears to reflect a major reorientation in the demands of the school setting between these age periods (particularly because the second assessment of the Dutch sample occurred when school achievements of the children were used for decisions on further education).

Such a reorientation of demands fits in with the notion of age-related changes in the culturally prescribed social life of children (see Higgins & Parsons, 1983). Somewhat more balanced in regard to the biological origins of age-related societal demands is the notion of developmental tasks (Havighurst, 1952; Oerter, 1986). These are defined as life-adjustment tasks to be achieved by a growing person. According to Havighurst (1952), these tasks may stem both from age-related biological changes and from societal expectations. More recent accounts of developmental tasks conceive them not as independent of the developing person, but rather as actively constructed both by the developing persons and by their interaction partners within a given cultural-historical context (see Kindermann & Skinner, 1988, 1991).

The data of the present study suggest that the temporal consistency of personality is related to the fit between specific behaviors and the developmental tasks for the given age. Therefore the temporal consistency of personality seems to refer to developmental changes in behaviors that fit the requirements of a developmental task. In other words, consistency is related to the *age-appropriateness* of personality. Because the developmental tasks change during development, consistent children are likely to display different competencies at different ages. Despite these changing relations between the consistency of personality and specific competencies, higher order aspects of competence such as ego resiliency or the age-appropriateness of personality appear to show stable relations with the temporal consistency of personality (see Waters & Sroufe, 1983, for the distinction between domain-specific competencies and the higher order construct of competence).

Because age-appropriateness of personality implies some change in the structure of personality, it may seem paradoxical that highly consistent children do indeed change according to the developmental tasks prescribed by nature and society. Theoretically children could exist who

do not change in their personality patterns at all; these children would be highly consistent (in fact, the correlation between their Q-sort profiles would equal 1), but they could not fulfill new developmental tasks because they would not have changed accordingly.

The data of the present study suggest that these children are very rare. Instead, maximal consistency (which was far from 1 for the 2-year periods) was found for children who changed in line with the change of major developmental tasks, from a focus on emotional stability and good peer relations to a focus on school achievement. Less change may be difficult to achieve because it would conflict with biological norms and cultural expectations of development, and such conflicts would in fact result in *more* personality change relative to one's age group. In a famous German novel, a child refused to grow physically after the age of 3 years and became a midget (Grass, 1959); becoming a midget in terms of personality may be even more difficult to accomplish.

Trying to explain consistency differences by differences in ego resiliency or age-appropriateness is not the whole story, though. Consistency in the present study always means consistency of the view important referent persons (parents, teachers) have. It is not unlikely that high consistency of their observations promotes ego resiliency because the social environment is more predictable. Van Aken and van Lieshout (1991) have indeed demonstrated that the consistency of Q-sort descriptions over time and across judges is a predictor of children's competence with peers. The fact that consistency between 10 and 12 years was related to ego resiliency as judged afterward supports such a hypothesis.

Finally, an important hidden variable may simultaneously increase consistency, ego resiliency, and the age-appropriateness of personality: the stability of the overall environment. Children who grow up in a generally stable, predictable environment may find it easier to adapt to particular changes in environmental demands. Consequently, they may act more resilient, may be more consistent in their personality, and may be better able to keep up with cultural expectations of what a good child of this age is like. Probably all these factors contribute to the relation between ego resiliency and the consistency of personality.

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