



PERGAMON

Personality and Individual Differences 34 (2003) 521–532

---

---

PERSONALITY AND  
INDIVIDUAL DIFFERENCES

---

---

www.elsevier.com/locate/paid

# Perceived parenting styles, depersonalisation, anxiety and coping behaviour in adolescents

Uwe Wolfradt<sup>a,\*</sup>, Susanne Hempel<sup>b</sup>, Jeremy N.V. Miles<sup>c</sup>

<sup>a</sup>*Department of Psychology, Martin-Luther-University, D-06099 Halle, Germany*

<sup>b</sup>*University of Derby, UK*

<sup>c</sup>*University of York, UK*

Received 12 November 2001; received in revised form 4 March 2002; accepted 24 March 2002

---

## Abstract

The present study investigated the relationship between perceived parenting styles, depersonalisation, anxiety and coping behaviour in a normal high school student sample ( $N=276$ ). It was found that perceived parental psychological pressure correlated positively with depersonalisation and trait anxiety among the adolescents. Perceived parental warmth was positively associated with active coping and negatively correlated with trait anxiety in the adolescents. A cluster analysis revealed four types of parenting styles: authoritarian, authoritative, permissive and indifferent. The group with the authoritarian parenting style showed higher scores on depersonalisation and anxiety. The groups with the authoritative and permissive style of both parents showed the highest score on active problem coping. The discussion focuses on the role of parenting styles in dysfunctional personality traits during adolescence. © 2002 Elsevier Science Ltd. All rights reserved.

*Keywords:* Perceived parenting styles; Depersonalisation; Anxiety; Coping

---

## 1. Introduction

Several recent studies have indicated that there is a relationship between various forms of psychopathology during childhood and adolescence and perceived parenting style, that is the child's perceptions of their parent's behaviour. Parenting style is usually conceptualised along two dimensions: parental demand (e.g. control) and parental response (e.g. warmth). Four parenting styles can be distinguished: authoritative (high demand and high responsiveness), authoritarian (high demand and low responsiveness), permissive (low demand and high responsiveness) and

---

\* Corresponding author. Fax: +49-345-5527217.

E-mail address: u.wolfradt@psych.uni-halle.de (U. Wolfradt).

indifferent or neglectful (low demand and low responsiveness) (Baumrind, 1971; see also Paulson & Sputa, 1996). According to Darling and Steinberg (1993) parenting styles must be distinguished from parenting practices—behaviours defined by specific content and socialisation goals (e.g. school achievement). Parenting styles can be understood as attitudes toward the child that are communicated to the child and create an emotional climate in which parents' behaviour is expressed. Darling and Steinberg proposed a model in which parenting style is a contextual variable that moderates the relationship between specific parenting practices and specific child outcomes.

Several studies emphasise the importance of perceived parenting styles as risk factors for individual development during adolescence (see Perris, Arindell, & Eisemann, 1994, for a review). In this context, individual differences such as coping strategies, anxiety and psychopathological factors seem to play an important role (Endler & Parker, 1994; Hoffman, Levy-Shiff, Sohlberg, & Zarizki, 1992).

Many theoretical approaches divide coping efforts into two groups: those intended to act on the stressor (active or problem-focused coping) and those intended to regulate emotional states resulting from the stressful event (passive or emotion-focused coping; Compas, 1987). Previous research has concluded that problem-focused coping is associated with more adaptive functioning and that emotion-focused coping, reflective of emotional dysregulation is associated with greater affective, behavioural, and social dysfunction (Hoffman et al., 1992; Windle & Windle, 1996).

The results of research investigating perceived parenting styles and adolescent maladjustment are very heterogeneous. In a longitudinal study with a large adolescent sample, Shucksmith, Hendry, and Glendinning (1995) found that permissive parenting style was predominant, and that the most effective style (based on measures of school integration and mental well-being) was the authoritative style. Lamborn, Mounts, Steinberg, and Dornbusch (1991) also reported that adolescents with authoritative parents were better adjusted (in terms of less school misconduct, drug use and delinquency) and more competent (areas of achievement) than adolescents with neglectful or indulgent parents. Johnson, Shulman, and Collins (1991) found that parental warmth was positively related to optimal psychological adjustment, and also found that rejecting discipline (e.g. control, punishment) was related to poorer psychological adjustment. Wagner, Cohen, and Brook (1996) also found that adolescents who reported warm parenting by both mother and father were less likely to suffer symptoms of depression in reaction to stressful events than were adolescents who reported harsher discipline by both parents.

These results suggest that a positive relationship with parents provides a form of social support, which enhances psychological resources (e.g. self-esteem) and therefore enables adolescents to cope with stressful events (Cohen & Wills 1985; Baumrind, 1991). In a study of high school students, Dusek and Danko (1994) found that students with authoritarian parents reported less frequent use of active coping behaviour than did students with highly permissive or authoritative parents. The results of the described studies showed that perceived authoritarian and controlling parenting styles are closely related to psychological disturbance in adolescence. A smaller number of studies have investigated the role of perceived parenting styles in the development of anxiety (e.g. Gerlsma, Emmelkamp, & Arrindell, 1990; Furukawa, 1992; Muris & Merckelbach, 1998), suggesting that parental rejection and control are closely associated with anxiety in childhood. These studies suggest that the parenting styles perceived by the adolescents have a substantial impact on their level of psychopathology.

## 2. Depersonalisation experiences during adolescence

Depersonalisation experiences represent a specific type of dissociation, and can be described as “a loss of familiarity with both environment and self” (APA, 1987). Depersonalisation experiences may appear along a continuum of severity ranging from common, mild experiences (Dixon, 1963), along with transient symptoms in response to psychosocial stressors (Elliott, Rosenberg, & Wagner, 1984), to a chronic depersonalisation disorder causing marked distress (Steinberg, 1991; Silberg, Stipic, & Taghizadeh, 1997). These chronic forms of adolescent depersonalisation can have their roots in childhood trauma (physical and/or sexual abuse, emotional neglect, domestic violence, see Atlas & Hiott, 1994; Brunner, Parzer, Schuld, & Resch, 2000; Hornstein, 1996; Santonastaso, Favaro, Olivotto, & Friederici, 1997).

Hornstein and Putnam (1992) examined a sample of traumatised adolescents and found that 60–90% showed hypervigilance, exaggerated startle behaviour, a variety of fears, anxieties and avoidance behaviour—these may lead to depersonalisation, as some studies have found a close association between depersonalisation and anxiety (Trueman, 1984; Wolfradt, 1997). Mild depersonalisation symptoms during adolescence may result from sleep deprivation, illness, psychological stressors and drug-induced states (Steinberg, 1991). Mild and transient symptoms of depersonalisation seem to be normal phenomena—during puberty the adolescent is confronted with the developmental task of integrating various components of identity to achieve a harmony between self definition and the role expectation by his/her family and society (Erikson, 1971). Harter (1983) suggested that, especially around the age of 14, adolescents feel divided into different selves (e.g. one version of self for friends, and a different version for peers). According to Rosenberg (1987) this changing of self may challenge the sense of personal sameness and thus can produce feelings of depersonalisation. Probst and Jansen (1991) provided evidence that depersonalisation is not an unusual phenomenon. They examined the incidence of depersonalisation experiences in a non-clinical adult and adolescent sample, and found an 80% prevalence rate for depersonalisation. Although dissociative experiences in general, and depersonalisation in particular, might be associated with experienced trauma, depersonalisation phenomena may play an adaptive role during identity formation. When exposed to negative events, individuals may use adaptive dissociative capacities to defend themselves against events that would otherwise overwhelm ordinary coping abilities (Beahrs, 1990; Schumaker, 1991).

There is a small amount of research investigating the relation between depersonalisation or dissociative experiences and perceived parenting styles among adolescents. A study by Mann and Sanders (1994) suggested a relationship between parental inconsistency and rejection, and dissociation in a sample of 40 boys. Berenbaum and James (1994) found a positive relationship between perceived negative dominant family environment (e.g. showing contempt for another’s action) and dissociation among undergraduate students. Additionally, some authors characterised dissociative families as authoritarian (e.g. Kluft, 1984; Spiegel, 1986). There are different explanations for the close relationship between specific parenting styles and dissociative experiences. One explanation is the insecure attachment behaviour between parents and child in dissociative families (Main & Hesse, 1996), another explanation is that children learn to dissociate, when they begin to oppose strong parental demands (such as in authoritarian parenting). According to Putnam (1997) the interplay of discrete states of consciousness (such as mood states) is a major vehicle for family interactions. He writes: ‘There are many reasons why

individuals want to influence the states of mind of their family members. In addition to the issues of power and authority, there are more subtle positive human needs, such as feeling understood. Struggles to set dominant affective tonal state for family interactions may revolve around the need for congruency of affect and emotional perspective' (pp. 167/168). In this context, children, being in a lower power position in family hierarchy, activate specific states (e.g. fantasy worlds or dissociative states) when they are unable to exert influences about the family scene. Little attention has been paid to this relationship in previous research.

The primary purpose of the present study is to investigate the relationship between perceived parenting styles and individual differences in depersonalisation, anxiety, and coping styles among adolescents. More specifically, it aims to examine which types of perceived parenting style are associated with depersonalisation, anxiety and different kinds of coping behaviour in an adolescent sample. One major emphasis is to increase knowledge about individual differences in a measure of depersonalisation, a concept that is a fruitful area of study among adolescents. It is hypothesised that adolescents characterised by a perceived authoritarian parenting style would show a higher level of depersonalisation and anxiety and use a more passive (avoidant) coping strategy, in comparison with adolescents perceiving a permissive or authoritative parenting style.

### 3. Method

#### 3.1. Sample

The sample was composed of 276 German high school students from Jena, Germany (150 girls and 126 boys) ranging in age from 14 to 17 years ( $M = 15.4$ ,  $S.D. = 0.68$ ). The respondents were from two different high schools and shared predominantly middle class backgrounds. The majority of students' families were intact, only 18.1% of the adolescents reported that their parents lived separately.

#### 3.2. Procedure

The adolescents were asked to complete a battery of different scales including 'Parents and Children': the Zurich Brief Questionnaire for the Assessment of Parental Behaviors (Reitzle, Winkler Metzke, & Steinhausen, 2001), the Questionnaire of Experiences of Dissociation (QED,

Table 1

Correlations amongst personality measures—depersonalisation and trait anxiety—and parental control, pressure and warmth and coping styles (active, passive)

	Parenting Styles			Coping	
	Control	Pressure	Warmth	Active	Passive
Depersonalisation	0.14*	0.29***	-0.09	-0.11	0.33***
Trait Anxiety	0.26***	0.41***	-0.31***	-0.28***	0.27***

\*  $P < 0.05$ .

\*\*\*  $P < 0.001$ .

Riley, 1988), the trait version of the State-Trait-Anxiety Inventory (STAI-X2, Spielberger, Gorsuch, & Lushene, 1970), and a coping questionnaire for adolescents (Seiffge-Krenke, 1989). The students completed the questionnaires within a period of 45 min during classes as allowed by the school authorities. No participants were aware of the purpose of the study. All participants were given permission by their parents to participate in the study.

### 3.3. Measures

#### 3.3.1. 'Parents and Children': The Zurich Brief Questionnaire for the Assessment of Parental Behaviors

The Questionnaire 'Parents and Children' (Reitzle et al., 2001) is a self-report scale consisting of 32 items, measuring three types of perceived parenting styles, which do not reflect specific socialisation goals: parental control and demand (e.g. 'Mother/Father wants to know what I spend my money for' or 'Mother/Father says, when I have to come back home'), parental psychological pressure (e.g. 'Mother/Father become quickly furious, when I do not do what she/he wants' or 'Mother/Father does not talk with me, if I am bad') and parental warmth and support (e.g. 'Mother/Father praises me if I do things well' or 'Mother/Father is there if I need her/him'). A total of 14 items related to warmth, seven items to control, and seven items to pressure. Responses to each item were made on a 4-point format (1 = *disagree* to 4 = *totally agree*) separately for mother and father. For each item, adolescents first assessed mother's perceived parenting style and then father's parenting style. The internal consistencies of the subscales for maternal and paternal parenting styles ranged from  $\alpha = 0.64$  to  $\alpha = 0.85$ .

#### 3.3.2. Questionnaire of Experiences of Dissociation (QED)

The 26-Item QED (Riley, 1988) was used to obtain self-reports of dissociative experiences. This self-report questionnaire includes items ranging from normal (e.g. fantasies, daydreams) to more pathological forms of dissociation (e.g. depersonalisation, body-detached behaviour) and assesses the occurrence of these experiences. According to Ray (1996), many QED items refer to depersonalisation experiences. Subjects were instructed not to consider experiences that occurred when they were under the influence of alcohol and drugs. The rating format was changed from originally dichotomous (true/false) to a seven point rating scale (1 = *totally disagree* to 7 = *totally agree*). The internal consistency of the QED in our study was  $\alpha = 0.84$ .

The QED scale contains many items relating to depersonalisation, but also assesses other aspects of dissociation. A high value of alpha is not necessarily indicative of a unidimensional scale (Green, Lissitz & Mulaik, 1977; Shevlin, Miles, Davies, & Walker, 2000) so an exploratory factor analysis was carried out to examine the structure of this scale. Further details of the factor analysis are reported in Miles, Hempel, and Wolfradt (submitted). Items relating to depersonalisation loaded onto the first factor, and these included items such as "Occasionally I feel like someone else," "I often wonder who I really am", and "I often feel as if things are not real". Items which had an absolute loading greater than 0.5 were selected and summed to create a measure. There were eight such items, which had a value for coefficient alpha of 0.85.

#### 3.3.3. State-Trait-Anxiety-Inventory (STAI)

The STAI by Spielberger et al. (1970) is a widely-used, well-validated instrument to measure anxiety. The trait-version (STAI-X2) of this self-report instrument is composed of 20 items, each

rated on a 5-point frequency scale (1 = never to 5 = always). The STAI-X2 reached an internal consistency of  $\alpha = 0.81$ .

### 3.3.4. *Coping behaviour*

The coping questionnaire by Seiffge-Krenke (1989) focuses on problems related to the developmental tasks of adolescence. It consists of 20 items which refer to three types of coping: a passive/avoidant coping strategy (e.g. 'work off anger by listening to loud music'), an active problem-oriented strategy (e.g. 'talk directly about problems with the person concerned') and a cognitive strategy (e.g. 'I say to myself that problems will always occur'). The participants rated the coping strategies on a five-point-frequency scale (1 = never to 5 = very often). Based on a principal component analysis with varimax rotation, only two coping dimensions were identified: active coping ( $\alpha = 0.64$ ) and passive coping ( $\alpha = 0.48$ ). The coefficient alpha for the coping questionnaire was lower than would usually be considered acceptable, but alpha must be considered as an inappropriate measure of reliability when scale items are causal rather than effect indicators of the variable of interest (Bollen & Lennox, 1991).

## 4. Results

### 4.1. *Relationship between personality measures and parenting styles*

Overall, the correlations of measures between parents, are again high, for control  $r = 0.56$ , pressure  $r = 0.67$ , and warmth  $0.57$ ; in the further analyses parental and maternal parenting styles were combined. Zero-order correlations among perceived parenting styles coping styles and depersonalisation as well as trait anxiety are shown in Table 1.

High levels of depersonalisation are associated with higher levels of parental pressure, the correlation was, using Cohen's (1988) criteria, medium sized.<sup>1</sup> High levels of depersonalisation were also associated with higher levels of parental control. Trait anxiety showed a similar pattern of correlations: positive correlations with parental pressure and control and a negative correlation with parental warmth. Furthermore, active coping was negatively correlated with trait anxiety and passive coping was positive correlated with both depersonalisation and trait anxiety.

There were few significant correlations between coping strategies and parenting measures, with the exception of warmth, which was associated with more use of active coping strategies ( $r = 0.41$ ,  $P < 0.001$ ). Finally depersonalisation and trait anxiety was positively correlated ( $r = 0.44$ ,  $P < 0.001$ ).

### 4.2. *Different groups of perceived parenting styles*

Different groups of perceived parenting styles were identified using a cluster analysis based on the  $z$ -transformed scores of the mean maternal and paternal parenting styles. The squared Euclidean distance, in combination with Ward's method was used for combining clusters. Examination of the dendrogram and the agglomeration schedule suggested a four cluster solution, which was close to the typology described by Baumrind (1971), and also found by Shucksmith et al. (1995).

<sup>1</sup> Cohen (1988) defined a small correlation as  $r = 0.1$ , medium as  $r = 0.3$  and large as  $r = 0.5$ .

The mean scores for each of the parenting measures, for the four clusters are shown in Table 2, along with their respective standard deviations.

Cluster number 1, comprising 16.1% ( $n = 39$ ) of the sample, is characterised by high scores for parental control and pressure, and low scores for warmth, and is thus related to the authoritarian parenting style. Cluster 2, comprising 32.2% ( $n = 78$ ) of the sample, is characterised by high ratings for control and warmth, and moderate ratings for pressure, representing the authoritative parenting style. Cluster 3, comprising 21.5% ( $n = 53$ ) of the sample, is characterised by high warmth ratings, and low control and pressure, and therefore represents the permissive parenting style. Finally, Cluster 4, comprising 30.2% ( $n = 73$ ) of the sample, is characterised by low ratings for parental control and warmth, and moderate ratings for pressure, and therefore represents the indifferent parenting style. When interpreting these clusters the absolute, as well as relative, ratings should be taken into account. Ratings vary on a four-point scale from 1 to 4, and therefore the midpoint is 2.5. Thus in all four groups, the children rated their parent's style above the midpoint for warmth, and only the father's of the indifferent and permissive groups fell slightly below the midpoints for control (see Table 2).

There was no difference in the gender makeup of cluster membership ( $\chi^2 = 3.73$ ,  $df = 3$ ,  $P = 0.29$ ) and no age difference [ $F(2, 238) = 1.01$ ,  $P = 0.39$ ].

Table 3 shows the mean scores for the measures of personality adjustment and the coping styles, for each of the four clusters. For all measures, there are highly significant differences between the clusters. The authoritarian parenting style cluster exhibits high levels of depersonalisation, anxiety and passive coping but low levels of active coping. The authoritative and permissive parenting styles are both associated with high levels of active coping and low levels of depersonalisation, but the permissive parenting style is also associated with low levels of anxiety, whereas the authoritative parenting style group is associated with moderate levels of trait anxiety. The indifferent parenting style is associated with low levels of active coping, and moderate levels of depersonalisation and anxiety.

Table 2

Mean and standard deviation scores for transformed ratings of parental rating variables, by cluster membership

Group		Pressure		Control		Warmth	
		Mother	Father	Mother	Father	Mother	Father
Authoritarian ( $n = 39$ )	<i>M</i>	2.74	2.54	3.35	3.07	2.35	2.34
	S.D.	0.44	0.43	0.33	0.43	0.47	0.51
Authoritative ( $n = 78$ )	<i>M</i>	2.05	1.98	3.18	2.98	3.21	3.05
	S.D.	0.39	0.37	0.36	0.42	0.34	0.32
Permissive ( $n = 52$ )	<i>M</i>	1.65	1.57	2.39	2.18	3.21	2.99
	S.D.	0.30	0.29	0.34	0.38	0.29	0.34
Indifferent ( $n = 73$ )	<i>M</i>	1.98	1.89	2.62	2.30	2.54	2.28
	S.D.	0.34	0.35	0.37	0.41	0.36	0.40
Total	<i>M</i>	2.06	1.95	2.87	2.62	2.87	2.69
	S.D.	0.50	0.47	0.51	0.56	0.52	0.53

The scale ranged from 1 to 4.

Table 3

Mean and standard deviation scores of personality and coping for the four parenting styles, and ANOVA results<sup>a</sup>

	Parenting styles				F
	Authoritarian	Authoritative	Permissive	Indifferent	
	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	
Personality					
Depersonalisation	3.77b	3.04a	2.97a	3.00a	5.27**
Trait anxiety	2.89c	2.48a,b	2.29a	2.62b	13.34***
Coping					
Active	2.93a	3.38b	3.48b	2.91a	10.64***
Passive	3.11b	2.67a	2.65a	2.77a,b	3.46*

<sup>a</sup> Means (*M*) having the same letter (a, b or c) are not significantly different at  $P < 0.05$  in the Scheffé difference comparison.

\*  $P < 0.05$ .

\*\*  $P < 0.01$ .

\*\*\*  $P < 0.001$ .

## 5. Discussion

The present study examined the relation between perceived parenting styles, depersonalisation experiences, trait anxiety and coping behaviour, using two approaches. In the first approach, correlations between measures of perceived parental control, pressure and warmth, measures of personality adjustment and coping styles were examined. It was found that the perceived parenting style was correlated with depersonalisation, anxiety and active coping styles of the adolescents. Both perceived control and pressure of the parents positively predicted anxiety, whilst warmth was a negative predictor of the adolescent's anxiety. Perceived parental pressure were the most important predictor of depersonalisation among the adolescents, where perceived parental control and warmth showed only small correlations with depersonalisation. These results confirm previous findings that a negative family climate is closely related to dissociative experience (Berenbaum & James, 1994; Mann & Sander, 1994). Among the coping strategies, only active coping correlated with perceived parenting style to any extent, and that was exclusively with maternal and paternal warmth. Among the maternal and paternal parenting styles positive relations were found: father's warmth is closely associated with mother's warmth, father's pressure with mother's pressure and father's control with mother's control. Finally, high positive correlations between the parenting dimensions control and pressure for mother as well as for father were found.

The second approach used in the study was to apply hierarchical cluster analysis to the perceived parenting style ratings, and see if distinctive categories of parenting style would emerge. Four different categories of style were identified using cluster analysis, which corresponded to the four styles of authoritarian, permissive, indifferent and authoritative, proposed by Baumrind (1971, 1991), and also identified using cluster analysis by Shucksmith et al. (1995). The emerged authoritarian parental style cluster characterised by high scores for parental control and pressure,

and low scores for warmth. The authoritative cluster characterised by high ratings for control and warmth, and moderate ratings for pressure, comprised the greatest proportion of the sample. The permissive cluster is characterised by high warmth ratings, and low control and pressure. The indifferent cluster is characterised by low ratings for parental control and warmth, and moderate ratings for pressure.

Differences in depersonalisation, anxiety and coping strategies were investigated for these groups, and it was found that depersonalisation, anxiety and active coping levels did differ significantly between the four parental style groups. Regarding depersonalisation, it was the perceived authoritarian style group who showed the highest depersonalisation scores, and the permissive parenting group the lowest, with indifferent and authoritative parenting styles not being strongly associated with depersonalisation in the adolescents. Anxiety showed a similar pattern to depersonalisation, with the authoritarian group showing high levels, the permissive group showing low levels and the authoritative and indifferent groups showing similar, central levels. Regarding the use of active coping strategies, the authoritative and permissive parenting style groups showed the highest levels of active coping, and the authoritarian as well as the indifferent parenting style group the lowest.

Discussing the results in terms of a general psychosocial adjustment, our study confirms previous investigations only in part (see Perris et al., 1994). As hypothesised, it was the group of adolescents that perceived their parents as authoritarian who scored higher on depersonalisation and anxiety. Meanwhile, a better general adjustment of the group that perceive an authoritative parental style among their parents, as found by Lamborn et al. (1991), could not be shown in the current study; adolescents who described their parents as authoritative only showed more active coping. In our sample, adolescents who perceived their parents as permissive seemed to show a distinctive better psychosocial adjustment by scoring lowest on depersonalisation and anxiety and showing high levels of active coping. Trueman (1984) and Wolfradt (1997) also found a substantial correlation between depersonalisation and anxiety.

It is worth noting that in the current study we asked for the perceived parenting style, having adolescents describing their parents. A further limitation is that we have not assessed the depersonalisation and anxiety level of the parents. This limitation means that we cannot answer the question of whether the parental depersonalisation and parenting authoritarian style are responsible for the adolescent depersonalisation level, or whether the highly depersonalised adolescents see the parenting behaviour as more authoritarian. We would argue that the young person's perception of the parenting style is the more important dimension—this is an approach commonly employed in this type of research (e.g. Shucksmith et al., 1995). Although a third option is possible: people who are high in dissociation and anxiety as an overlapping trait, describe their parents in a negative way, because they have a proneness to report more negative events than people low in dissociation and anxiety (see Johnson, Edman, & Danko 1995; Irwin, 1998; Merckelbach & Muris, 2001).

Our study focuses on the perception of the young person and thereby remains within the theoretical framework of the development of dissociation outlined in Section 1.

However, it should be noted that some authors have shown that discrepancies occur between adolescents' and parents' self-reports on parenting style. For example, Smetana (1995) found that adolescents perceived their parents as more permissive and more authoritarian than parents viewed themselves, whereas parents viewed themselves as more authoritative than did

adolescents. For measures of personality adjustment and coping styles in adolescents it appears to be more important to study the adolescents' perception of the parenting styles, rather than to seek more objective measures, or to study the parents' assessment of their rearing behaviour. Nevertheless, other measures of parental style may lead to differences in the magnitude and the relationships between the constructs.

The relationship between parenting styles across more heterogeneous samples, and the application of other measures and other aspects of parenting style may prove a fruitful area for future research.

### Acknowledgements

Thanks are extended to Jean Pretz, Matthias Reitzle, Axel Schölmerich and Ute Schönpflug for helpful comments on earlier version of this article. We thank also Ines Freymann for assistance in data collection and data entry.

### References

- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3<sup>rd</sup> ed.). Washington, DC: Author.
- Atlas, J. A., & Hiott, J. (1994). Dissociative experience in a group of adolescents with history of abuse. *Perceptual and Motor Skills*, 78, 121–122.
- Baumrind, D. (1971). Current pattern of parental authority. *Developmental Psychology*, 4, 1–103.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11, 56–95.
- Beahrs, J. O. (1990). The evolution of post-traumatic behaviour: three hypotheses. *Dissociation*, 3, 15–21.
- Berenbaum, H., & James, T. (1994). Correlates and retrospectively reported antecedents of alexithymia. *Psychosomatic Medicine*, 56, 353–359.
- Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: a structural equation perspective. *Psychological Bulletin*, 110, 305–314.
- Brunner, R., Parzer, P., Schuld, V., & Resch, F. (2000). Dissociative symptomatology and traumatogenic factors in adolescent psychiatric patients. *The Journal of Nervous and Mental Disease*, 188, 71–77.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Erlbaum.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Compas, B. E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, 101, 393–403.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: an integrative model. *Psychological Bulletin*, 113, 487–496.
- Dixon, J. C. (1963). Depersonalisation phenomena in a sample population of college students. *British Journal of Psychiatry*, 109, 371–375.
- Dusek, J. B., & Danko, M. (1994). Adolescent coping styles and perceptions of parental child rearing. *Journal of Adolescent Research*, 9, 412–426.
- Elliot, G. C., Rosenberg, M., & Wagner, M. (1984). Transient depersonalisation in youth. *Social Psychology Quarterly*, 47, 115–129.
- Endler, N. S., & Parker, J. D. A. (1994). Assessment of multidimensional coping: task, emotion, and avoidance strategies. *Psychological Assessment*, 6, 50–60.
- Erikson, E. (1971). *Childhood and society*. Harmondsworth: Penguin.

- Furukawa, T. (1992). Perceived parental rearing, personality and mental status in Japanese adolescents. *Journal of Adolescence*, *15*, 317–322.
- Gerlsma, C., Emmelkamp, P. M., & Arrindell, W. A. (1990). Anxiety, depression, and perception of early parenting: a meta-analysis. *Clinical Psychology Review*, *10*, 251–277.
- Green, S. B., Lissitz, R. W., & Mulaik, S. A. (1977). Limitations of coefficient alpha as an index of test unidimensionality. *Educational and Psychological Measurement*, *37*, 827–838.
- Harter, S. (1983). Developmental perspectives on the self-system. In E. M. Heatherington (Ed.), *Handbook of child Psychology Vol. 4* (pp. 275–386). New York: Wiley.
- Hoffman, M. A., Levy-Shiff, R., Sohlberg, S., & Zarizki, J. (1992). The impact of stress and coping: developmental changes in the transition to adolescence. *Journal of Youth and Adolescence*, *21*, 451–469.
- Hornstein, N. L. (1996). Dissociative disorders in children and adolescents. In L. K. Michelson, & W. J. Ray (Eds.), *Handbook of dissociation. Theoretical, empirical, and clinical perspectives Ch. 7* (pp. 139–159). New York: Plenum Press.
- Hornstein, N. L., & Putnam, F. W. (1992). Clinical phenomenology of child and adolescent dissociative disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, *31*, 1077–1085.
- Irwin, H. J. (1998). Dissociative tendencies and the sitting duck: are self-reports of dissociation and victimization symptomatic of neuroticism? *Journal of Clinical Psychology*, *54*, 1005–1015.
- Johnson, R. C., Edman, J. L., & Danko, G. P. (1995). Self-reported negative experiences and dissociation. *Personality and Individual Differences*, *18*, 793–795.
- Johnson, B. M., Shulman, S., & Collins, W. A. (1991). Systemic patterns of parenting as reported by adolescents: developmental differences and implications for psychosocial outcomes. *Journal of Adolescent Research*, *16*, 235–252.
- Kluft, R. P. (1984). Multiple personality disorder in childhood. *Psychiatric Clinics of North America*, *7*, 121–134.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Pattern of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, *62*, 1049–1065.
- Main, M., & Hesse, E. (1996). Disorganization and disorientation in infant strange situation behavior: phenotypic resemblance to dissociative states. In L. K. Michelson, & W. J. Ray (Eds.), *Handbook of dissociation. Theoretical, empirical, and clinical perspectives* (pp. 107–138). New York: Plenum Press.
- Mann, B. J., & Sanders, S. (1994). Child dissociation and the family context. *Journal of Abnormal Child Psychology*, *22*, 373–388.
- Merckelbach, H., & Muris, P. (2001). The causal link between self-reported trauma and dissociation: a critical review. *Behaviour Research and Therapy*, *39*, 245–254.
- Miles, J. N. V., Hempel, S., & Wolfradt, U. (submitted for publication). A factor analysis of the Questionnaire of Experiences of Dissociation (QED).
- Muris, P., & Merckelbach, H. (1998). Perceived parental rearing behaviour and anxiety disorders symptoms in normal children. *Personality and Individual Differences*, *25*, 1199–1206.
- Paulson, S. E., & Sputa, C. L. (1996). Patterns of parenting during adolescence: perceptions of adolescents and parents. *Adolescence*, *31*, 369–381.
- Perris, C., Arrindell, W. A., & Eisemann, M. (1994). *Parenting and psychopathology*. New York, NY: Wiley.
- Probst, P., & Jansen, J. (1991). Experiences of depersonalisation and déjà vu: their prevalence in nonclinical samples (in German). *Zeitschrift für Klinische Psychologie, Psychopathologie und Psychotherapie*, *39*, 357–368.
- Putnam, F. W. (1997). *Dissociation in children and adolescents. A developmental perspective*. New York: Guilford Press.
- Ray, W. J. (1996). Dissociation in normal populations. In L. K. Michelson, & W. J. Ray (Eds.), *Handbook of dissociation. Theoretical, empirical, and clinical perspectives* (pp. 51–66). New York, NY: Plenum Press.
- Reitzle, M., Winkler Metzke, C., & Steinhausen, H.-C. (2001). Parents and Children: the Zurich Brief Questionnaire for the Assessment of Parental Behaviors [Eltern und Kinder: Der Zürcher Kurzfragebogen zum Erziehungsverhalten (ZKE)]. *Diagnostica*, *47*, 196–207.
- Riley, K. C. (1988). Measurement of dissociation. *The Journal of Nervous and Mental Disease*, *176*, 449–450.
- Rosenberg, M. (1987). Depersonalisation: the loss of personal identity. In T. Honess, & K. Yardley (Eds.), *Self and identity. Perspective across the lifespan* (pp. 193–206). New York: Routledge & Kegan Paul.
- Santonastaso, P., Favaro, A., Olivotto, M. C., & Friederici, S. (1997). Dissociative experiences and eating disorders in a female college sample. *Psychopathology*, *30*, 170–176.

- Schumaker, J. F. (1991). The adaptive value of suggestibility and dissociation. In J. F. Schumaker (Ed.), *Human suggestibility. Advances in theory, research and application* (pp. 108–131). New York: Routledge.
- Seiffge-Krenke, I. (1989). Coping with everyday problem situations: a coping questionnaire for adolescents (in German). *Zeitschrift für Differentielle und Diagnostische Psychologie*, *10*, 201–220.
- Shevlin, M., Miles, J. N. V., Davies, M. N. O., & Walker, S. (2000). Coefficient alpha: a useful indicator of reliability? *Personality and Individual Differences*, *28*(2), 229–238.
- Shucksmith, J., Hendry, L. B., & Glendinning, A. (1995). Models of parenting: implications for adolescent well-being within different types of family contexts. *Journal of Adolescence*, *18*, 253–270.
- Silberg, J. L., Stipic, D., & Taghizadeh, F. (1997). Dissociative disorders in children and adolescents. In L. T. Flaherty, & R. M. Sarles (Eds.), *Handbook of child and adolescent psychiatry Vol.3* (pp. 329–355). New York: Wiley.
- Smetana, J. G. (1995). Parenting styles and conceptions of parental authority during adolescence. *Child Development*, *66*, 299–316.
- Spiegel, D. (1986). Dissociation, double binds, and posttraumatic stress in multiple personality disorder. In B. G. Braun (Ed.), *Treatment of multiple personality disorder* (pp. 61–78). Washington, DC: American Psychiatric Press.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). *Manual for the State-Trait-Anxiety Inventory*. Palo Alto: Consulting Psychologists Press.
- Steinberg, M. (1991). The spectrum of depersonalisation: assessment and treatment. In A. Tasman, & S. M. Goldfinger (Eds.), *Review of psychiatry Vol. 10* (pp. 223–247). Washington, DC: American Psychiatric Press.
- Trueman, D. (1984). Anxiety, depersonalisation and derealization experiences. *Psychological Reports*, *54*, 91–96.
- Wagner, B. M., Cohen, P., & Brook, J. S. (1996). Parent/adolescent relationships. Moderators of the effect of stressful life events. *Journal of Adolescent Research*, *11*, 347–374.
- Windle, M., & Windle, R. C. (1996). Coping strategies, drinking motives, and stressful life events among middle adolescents: associations with emotional and behavioural problems and with academic functioning. *Journal of Abnormal Psychology*, *105*, 551–560.
- Wolfradt, U. (1997). Dissociative experiences, trait anxiety and paranormal beliefs. *Personality and Individual Differences*, *23*, 15–19.