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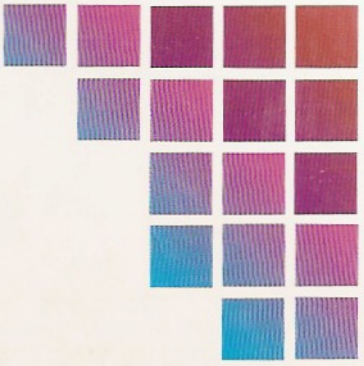

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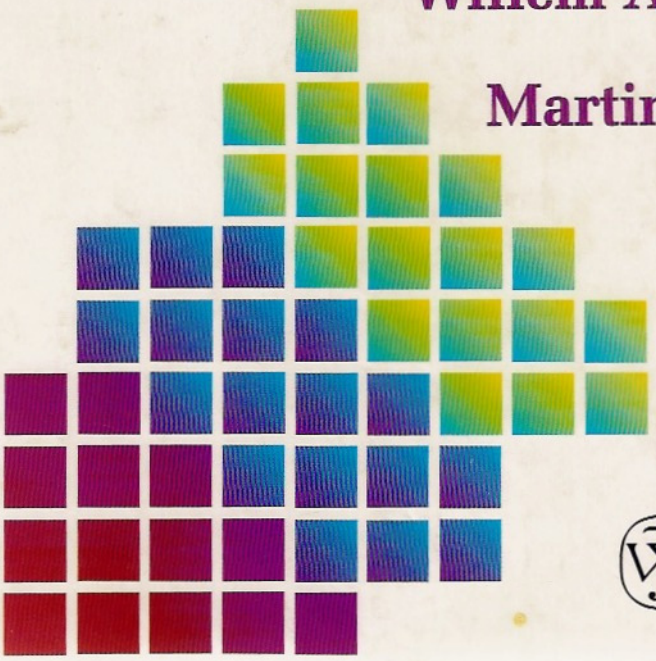

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CHAPTER 9 Perceived parental rearing behaviour in alcoholics

Radu Vrasti and Martin Eisemann†*

Despite the fact that alcoholism represents one of the major public health problems and growing research areas of recent years, little is known about the etiology of alcohol abuse and dependence. One could say that the field of addiction is in a preparadigmatic state of development (Campo & Rohner, 1992) due to lack of agreement between scientists regarding the etiology of alcoholism. Lay people often ask why the majority of people drink alcoholic beverages but only a few of them become abusers or get alcohol-related problems? On the other hand, it is well known that alcoholism is a disorder that runs in families, i.e. the importance of genetic factors being very strongly established. Thus, Cotton (1979) reviewing 29 studies over the previous 40 years covering 6251 alcoholics has found a significant difference of incidence of alcoholism between relatives of alcoholics and non-alcoholics. In this way, the existence of similar types of disorder across two or more generations is taken as evidence on the familial transmission of alcoholism.

One of the most rapidly growing fields of research in alcoholism is genetics, which has been focusing on three research areas: twin studies, showing a higher concordance in monozygotic than dizygotic twins (Kaij, 1960), adoption studies, indicating a greater influence of biological than adoptive parents (Cloninger, Bohman & Sigvardsson, 1981), and linkage analysis emphasising the role of a major gene (Parsian et al., 1991). Familial transmission of alcoholism appears to be clearly documented. However, the alcoholism seems not to be inherited in a simple Mendelian way.

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In spite of impressive results from genetic methods, Rutter (1992) points to a series of misconceptions or mistaken views held by some non-geneticists. The first mistaken view is that if a characteristic is strongly genetic, environmental influences must be rather unimportant. Another is the stereotype that nature and nurture are polarised and separate or that disorders running in families must be or at least are highly likely to be genetic in origin.

During the early 1970s new research strategies have emerged which have developed the ongoing genetic-environmental discussion in alcoholism as a non-Mendelian disorder. Cloninger, Bohman & Sigvardsson (1981) stated:

> Questions about mode of inheritance and about the relative importance of genetic and environmental factors are determining the relative importance of differences in one or more gene loci and of differences in environment that determine differences in the phenotype of individuals in a particular population.

The most complex phenotype is an expression of the interplay between a few major loci modified by extensive multifactorial variability including both polygenic and environmental factors. Thus, alcoholism should have a complex developmental pathway from genotype to phenotype. A comprehensive etiological model of alcoholism must take into account both multiple genetic and multiple environmental factors – in other words, the transactions between nature and nurture (Knop, 1989). The most important reviews on genetic data were considering the importance of environmental mechanisms (Reiss, Plomin & Hetherington, 1991). Generally speaking, this research paradigm has developed three ways of interpreting the enormous amount of data: the concept of familial and non-familial alcoholism, the problems of specific premorbid risk factors for alcoholism from a developmental perspective, and the concepts of children of alcoholics (CoAs). This paper will focus on the latter.

The children of alcoholics tend to have a three to fourfold increased susceptibility to alcoholism (Knop et al., 1993), in which parental alcoholism seems to be the strongest predictor for later alcoholism in offspring.

The interest in understanding the mechanisms behind the fact that alcoholics are vulnerable to the development of alcoholism or alcohol-related problems emerges from epidemiological and public health factors. First, we have to show that these children constitute the most readily identifiable high risk group for alcoholism. In the USA there are estimated to be 28 million alcoholic adults with children in their homes

and approximately 7 million of these children are under the age of 18 (Russel, Henderson & Blume, 1985). If it is taken into account that estimates are based upon self-perception in response to survey questionnaires about alcohol misuse or alcohol-related problems, it becomes obvious that figures are underestimated and that the problem of CoAs is a more serious one.

Many researchers have tried to determine the detrimental effects of alcoholic households on their children. The literature offers a number of variables as possible mediators in the relationship between parental alcoholism and offspring outcome.

From a very large body of data we can conclude that CoAs exhibited higher level of symptoms of mental disorders (West & Prinz, 1987), more sociopathy (Beardslee, Son & Vaillant, 1986), earlier and more severe alcohol-related and antisocial problems (Schuckit, 1984), more serious problems at home, school and work (Werner, 1986), more depression and more aggressive defenses (Jarmas & Kazak, 1992), a higher level of anxiety (West & Prinz, 1987), were more likely to manifest psychiatric symptoms and marital instability (Greenfield, Swartz, Landeman & George, 1993), had poorer self-esteem (Brennan, Shaver & Tobey, 1991), external locus of control (Kern, et al, 1981; Prewett, Spence & Chakins, 1981), more denial of feelings (Cermak & Brown, 1982), more emotional problems and poorer cognitive abilities and performance (Bennett, Wolin & Reiss, 1988), greater levels of stress due to their inability to get along with others, lower level of attachment with parents, and an inappropriate goal directedness (Johnson & Pandina, 1991) or differences in temperamental characteristics such as low soothability (facility to be calmed after experiencing emotional distress) and high emotionality and sociability (Tarter, Alterman & Edwards, 1985).

These findings are probably non-specific factors for alcoholism, but powerful ones. The extent to which these manifestations are simple prolegomena to the later alcoholism is not classified yet. It is possible that these factors make up "core mediational structures" as an intrinsic part of the etiological chain (Zucker, 1991). Aggressive antisocial traits, some particularities of temperament, external locus of control, or lack of attachment might be agglutinated providing the core around other specific factors.

Parental problems related to alcohol abuse can affect psychological adjustment of children within the family system. These processess may be overlapped and interrelated.

The family as a primary social group in the society, exerts major influences on the development of social behaviour. Probably, the first exposure and experiences with alcohol are likely to take place within the family (Barnes, 1990). A wide range of behaviours such as use of alcohol and of other illicit substances and antisocial traits are shaped here, mediated by parent–child relationships and socialisation within the family.

The disruptive effects of parental drinking on family life could be distinguished conceptually as follows:

Alcohol-related stressors. These are consequences of marital distress, legal problems, financial instability, work fluctuation, health problems as a result of abusive drinking (Johnson, Sher & Rolf, 1991).

Disrupted family system. This is the breaking of the cohesion, flexibility and communication in the family. Alcoholic families perceived their family environments to be less cohesive and less expressive with more conflicts compared to other families (Barnes, 1990).

Disruptive family culture. (Bennett & Wolin, 1990.) By family culture these authors comprise the patterns of behaviour and the belief system of the family including language, thoughts and actions during the socialisation process of each new generation. Family rituals (e.g. dinner time, evenings, holidays, weekends, vacations or guests) are a central part of this approach, being profoundly disturbed in alcoholic families.

> Family rituals are symbolic forms of communication between family members. Because of the satisfaction that family members experience through their repetition, rituals are performed in a systematic manner over time. Due to their special meaning and repetitive nature, rituals contribute to the establishment and perseveration of a family's collective sense of itself, which we call the "family identity". Family rituals offer an especially handy window through which to view the family and to assess the relative impact of chronic problems such as alcoholism upon family life. (Bennett & Wolin, 1990)

Disrupted attachment behaviour. It is well known that early socialization experiences in the family shape and determine the structure and function of adult interpersonal relationships, i.e. dysfunctional parenting being associated with negative social bonding in adulthood (Parker, Barrett & Hickie, 1992). Bowlby (1988) has pointed out that an individual's experiences with parents strongly influence the later capacity to establish affectional bonds. Testing the Bartholomew theory of adult

attachment style, Brennan, Shaver & Tobey (1991) have shown that children of alcoholic parents could be characterized as "undeserving of the love and support of others" and as individuals who dismiss intimacy, "possess a positive model of the self that minimizes the subject's awareness of distress or social needs".

Family violence. A lot of studies emphasize that alcoholism in the family is related with physical abuse (Orford, 1990) and child abuse (Famularo, Stone, Barnum & Wharton, 1986).

Parental model. Parents of pre-alcoholics usually serve as inadequate role models. They serve as role models for how to drink, in which circumstances and for what reasons. Parental modelling of alcohol use is an important factor in learning how to drink, since adolescents have the tendency to imitate preferably the same-sex parent (Barnes, 1990).

On the other side, a stigmatisation label of alcoholic family can perpetuate inappropriate behaviour in individuals with deviant behaviour (Burk & Sher, 1988). In addition to the lack of attachment bonds, the pejorative label as child of an alcoholic could seriously affect the socialisation process.

Also, by learning, children of alcoholics have very early, during the preschool years, the ability to recognise alcoholic beverages based on odor and are able to recognise the cultural rules of alcohol use and to formulate the alcohol expectancies and behavioral effects (Zucker & Fitzgerald, 1991).

Disruptive childhood roles. Negative consequences of having an alcoholic parent force the child to adjust, affecting in this way the overall well-being. In order to "survive" the child of an alcoholic has to adopt a variety of dysfunctional roles. Very recently, Braithwaite & Devine (1993) and Jenkins, Fisher & Harrison (1993) have demonstrated that more frequent roles adopted to CoAs are "lost-child" (described as detached, withdrawn, shy and helpless) or clown (mischievous, using distraction and humor to deal with his/her unhappy events). By these "survival roles" children of alcoholics withdraw themselves from the family.

Disruptive parental rearing practices. The degree to which alcoholism impacts on parent–child relationships and on the family environment finally affects the parental educational pattern. This very dynamic process comprises all family disturbances secondary to alcohol misuse.

Historically, family education was considered to be an important factor in the intergenerational transmission of alcoholism. Moral development theorists have described parental love as a main source of positive influence on values whereas parent discipline and punishment were related with delinquent behaviour (Shaw & Scott, 1991).

Measuring parental rearing behaviour, Parker, Barrett & Hickie (1992) have found that parental care is a principal dimension influencing socialisation, attachment, dependency and intimate relationships. Uncaring parenting is regarded as a casual factor to general psychopathology. Despite expanding sophisticated genetic methodologies and their significant results, studies on powerful influences of parental rearing practices in alcoholism development are still of interest. According to Dekovic & Gerris (1992) "the need for conceptualizing and studying a more general and underlying meaning of child rearing practices has resulted in a body of research studying parental 'beliefs', 'cognitions', 'attributions', 'ideas', 'schemata', or 'conceptions' ". One of the main conclusions from Dekovic's studies is that child-rearing practices comprise an interactive process between parents and their child during which parental behaviour continuously acts upon the child which in turn affects the parents' course of action. Dekovic proposed as a core of her model of child-rearing practices the parental cognitions and behaviour. These cognitions represent the parental conception about children, parenthood and parent–child relationship together with the parents' expectancies and modelling due to cultural stereotypes and beliefs or by influence from information sources: friends, mass media, books, journals, other parents, etc.

The range of a parental behaviour repertoire depends on conceptual resources for interpreting and revealing tasks of parenting. Thus, Dekovic & Gerris (1992) have found that demographic variables such as occupation and educational level affect parental cognitive and behavioural functioning. Higher levels of reasoning were related to an authoritative pattern of child rearing, indirect positive control, warmth, acceptance and support, lower levels of reasoning were linked with an authoritarian rearing and restrictiveness. The second level of Dekovic's model is the relationship between parental cognition and behaviour and the child's social cognitions defined as the child's understanding of the parent–child relationship and other interpersonal relationships, i.e. with individuals, close friendships, or the peer group. In this regard, Selman (1980) has distinguished four levels: egocentric understanding (child is not able to differentiate between his/her own interpretation of a social situation and his/her parents' point of view), authoritarian (identifica-

tion with parental view and opinions), emotional understanding (assessing the quality of emotional bonds with others), and individual personality (parent–child relationship is viewed as an interplay relation).

In another paper, Dekovic, Gerris & Janssens (1991) have shown that the relationship between parental reasoning and the child's level of interpersonal understanding seems to be mediated by parental behaviour such as authoritative control, support and restrictive control. From this view it becomes obvious to evaluate in what ways an "alcoholic" family atmosphere influences parental reasoning, parental behaviour and finally, the child's level of interpersonal understanding, and consequently a vulnerability factor predisposing for later alcoholism or general psychopathology.

In the following part of this chapter we will focus on parts of a large multinational research project co-ordinated by the WHO Collaborating Center at Umeå University, Sweden on parental rearing practices and psychopathology in adulthood. Within this project we conducted a study on the relationship between dysfunctional parental rearing and the occurrence of alcoholism in offspring.

Perris and his co-workers have suggested a theoretical framework for linking together the experience of dysfunctional parental rearing and psychopathology later in life. "It is my aim . . . to suggest a conceptualisation of the mechanism by which the experience of dysfunctional parental rearing attitudes might be translated into occurrence of manifest psychopathology" (Perris, 1988).

The core of Perris' model is the relationship between dysfunctional parental rearing practices and cognitive schemata of the child defining his/her own meaningful world. The negative impact of such practices is transferred into cognitive distortions and finally in a vulnerable person (see Chapter 1 of this volume).

Our method is based on the assessment of memories of parental rearing practices by the EMBU questionnaire developed by Perris et al. (1980). The parental perceptions and internalised representations of the parents rated by the EMBU questionnaire are significantly similar with the results from other methods of assessment. There is a general opinion that psychiatric patients have more negative perceptions or express greater ambivalence regarding their parents than matched normal controls (Bornstein & O'Neill, 1992). In our ongoing study about non-shared environment, siblings of alcoholic individuals have shown that parental representations are depending on the cognitive schemata of the respondents. Findings from cross-cultural assessments demonstrated a

Table 9.1 Memories of parental rearing behaviour – EMBU factors: Comparison between adult alcoholic children of alcoholics, depressives and healthy controls.

EMBU factors	Adult (alcoholic) children of alcoholics $n = 40$ (A)	Depressives $n = 72$ (B)	Healthy controls $n = 129$ (C)
	M ± SD	M ± SD	M ± SD
Father			
Rejection*	46.8 ± 10.2	41.3 ± 12.1	38.8 ± 8.3
Emotional warmth	48.9 ± 11.3	47.8 ± 10.2	50.4 ± 9.5
Overprotection	38.5 ± 8.9	37.1 ± 7.3	36.6 ± 7.0
Mother			
Rejection*	46.9 ± 11.7	43.7 ± 12.5	42.0 ± 8.9
Emotional warmth	52.1 ± 10.6	49.6 ± 10.7	54.5 ± 8.5
Overprotection	42.3 ± 8.2	40.0 ± 8.0	41.5 ± 6.7

Pair-wise comparisons (Mann-Whitney U-Test).
*Father rejection A versus C, $p < .001$; rejection Mother A versus C, $p < .01$.

good reliability. Similarly, by recent research, Barry & Fleming (1990) have found that family history of alcoholism does not influence the perception of family relationships.

Comparing alcoholics, depressives and healthy controls on memories of parental rearing behaviour, our data presented in Table 9.1 illustrate that adult children of alcoholics, themselves meeting DSM-III-R diagnostic criteria of alcohol abuse or dependence, reported significantly more parental rejection than controls.

When comparing adult alcoholic children of alcoholics, with other alcoholics without alcoholism in their first degree relatives (Table 9.2) no differences on perceived parental rearing practices occurred. Surprisingly, both groups of alcoholics, with and without family history of alcoholism (FH + versus FH–) reported a high degree of rejection.

In this way it becomes evident that there are no differences in family rearing practices between alcoholic families and non-alcoholic families with an offspring that will develop alcoholism during his/her life span. Does this imply that family loading of alcoholism has lost its powerful influence on the intergenerational transmission of alcoholism? One explanation could be a specific mental representation of the parents in the offspring. Bornstein & O'Neill (1992) suggested that "viewing the

Table 9.2 EMBU scores (mean ± SD) in alcoholics divided according to family history and in healthy controls. Pair-wise comparisons.

EMBU scores	Alcoholics FH+ $n = 40$ (A)	Alcoholics FH– $n = 43$ (B)	Healthy controls $n = 129$ (C)	Pairwise comparison*
	M ± SD	M ± SD	M ± SD	
Father				
Rejection	46.8 ± 10.2	42.8 ± 9.8	38.8 ± 8.3	A vs C $p < .000$ B vs C $p < .001$
Emotional warmth	48.9 ± 11.3	48.1 ± 8.5	50.4 ± 9.5	n.s.
Overprotection	38.5 ± 8.9	36.4 ± 8.5	36.6 ± 7.0	n.s.
Mother				
Rejection	46.9 ± 11.7	42.7 ± 8.8	42.0 ± 8.9	A vs C $p < .01$ B vs C n.s.
Emotional warmth	52.1 ± 10.6	53.0 ± 6.6	54.5 ± 8.5	n.s.
Overprotection	42.3 ± 8.2	39.8 ± 7.0	41.5 ± 6.7	n.s.

*Mann-Whitney U-Test.

parents in a negative light may allow the dysfunctional person to explain consciously or unconsciously, their interpersonal and psychological problems in terms of 'bad parenting' ".

In our opinion this is rather speculative. It has been repeatedly demonstrated in our study as well, that parental rejection is a very reliable finding in parental rearing practices of future alcoholics. Thus, Campo & Rohner (1992) have found that both perceived paternal and maternal rejection in childhood tend to be significantly higher among substance abusers than among non-abusers. Holmes & Robins (1987) pointed out that harsh discipline by parents and similar parental practices perceived as unfair and cruel by offspring predicted alcohol abuse. DeJong, Harteveld, van de Wielen & van de Staak (1991), using the same EMBU instrument and comparing alcoholics with a normal Dutch population found that alcoholics reported significantly more parental rejection.

Shaw & Scott (1991) stated that disciplinary style of parenting, in particular punitive and rejective behaviour predisposed the adolescents to delinquent and hostile behaviour. It is unclear whether the relation between parental rejection and alcoholism in offspring is mediated by delinquent or antisocial behaviour. On the other hand, the importance of antisocial traits in the developmental course of alcoholism is well established.

Tarter, Alterman & Edwards (1985) have developed a vulnerability model of alcoholism by conceptually integrating temperamental traits into the behaviour-genetic perspective for elucidating the susceptibility to alcoholism. If admitted that temperamental traits, although to a significant extent inherited, are modifiable by the environment, the conception of "poorness of fit", in terms of a lack of relationship between the child's temperament and home environment was discussed (Thomas & Chess, 1984; Chess & Thomas 1992). Windle & Searles (1990) postulated a transactional model assuming reciprocally interactive exchange processes between temperament and personality development and environmental changes.

In our extensive study we have tried to evaluate the reciprocal influences between family history of alcoholism (FH+) and temperamental

Table 9.3 Karolinska Scales of Personality. Pair-wise comparisons (Mann-Whitney U-Test) between groups.

KSP scale	Alcoholics FH + $n = 40$ (A)	Alcoholics FH – $n = 43$ (B)	Controls $n = 129$ (C)	Pairwise comparisons
	M ± SD	M ± SD	M ± SD	
Neuroticism				
Social-cognitive anxiety	26.6 ± 3.7	23.6 ± 3.8	24.6 ± 3.8	A vs B $p < .001$ A vs C $p < .01$
Somatic anxiety	23.1 ± 6.1	19.7 ± 5.2	18.0 ± 4.2	A vs B $p < .05$ A vs C $p < .001$ B vs C $p < .05$
Muscular tension	22.1 ± 5.9	18.6 ± 4.5	15.9 ± 3.8	A vs B $p < .01$ A vs C $p < .001$ B vs C $p < .001$
Psychasthenia	25.7 ± 3.4	23.7 ± 4.4	23.3 ± 4.2	A vs B $p < .05$ A vs C $p < .001$
Weak ego				
Monotony avoidance	25.5 ± 3.5	23.3 ± 4.7	24.4 ± 4.5	
Impulsivity	24.5 ± 2.8	22.7 ± 3.6	23.2 ± 3.3	
Socialisation	52.2 ± 6.9	54.3 ± 8.1	59.8 ± 6.1	A vs C $p < .000$ B vs C $p < .000$
Aggression				
Indirect aggression	11.3 ± 2.5	10.2 ± 2.5	10.6 ± 2.4	
Verbal aggression	13.0 ± 2.0	12.2 ± 2.7	11.9 ± 2.1	A vs C $p < .01$
Irritability	11.7 ± 2.2	11.3 ± 2.5	10.6 ± 2.3	A vs C $p < .01$
Inhibition of aggression	26.7 ± 4.1	25.5 ± 4.4	26.7 ± 3.4	

and personality traits as measured by the Karolinska Scales of Personality (KSP) developed by Schalling (1970), supposed to have a good correlation with neurobiological characteristics.

The results presented in detail elsewhere (Vrasti, Eisemann & Bucur, 1993) have shown that adult children (who became alcoholics) of alcoholics exhibited more social-cognitive anxiety, somatic anxiety, muscular tension and coldness and lower level of social conformity than alcoholics raised in non-alcoholic families (see Table 9.3).

Our finding of high scores on the impulsivity KSP factor in alcoholic FH+ (adult alcoholic children of alcoholics) might be related to a low level of platelet monoamine oxidase activity being under genetic control, which is a very reliable marker for psychopathology in general and for alcoholism in particular (Oreland, von Knorring & Bohman, 1985). Similar results regarding impulsivity were reported by Tarter, Hegedus, Winstein & Alterman (1984). Sandahl, Lindberg & Bergman (1987) found that alcoholics with unfavourable outcome scored higher on anxiety and impulsivity. Fisher, Jenkins, Harrison & Jesch (1993) have found in their study of personality characteristics of adult children of alcoholics the former as more rebellious, lacking self-control over emotions, and as immature.

In an attempt to rank the discriminative power of parental rearing factors and personality factors distinguishing between adult alcoholic children of alcoholics, other alcoholics and normals, we have found (see

Table 9.4 Discrimination of alcoholics divided by FH+ by means of Karolinska Scales of Personality, Dysfunctional Attitudes Scale and EMBU.

Weight	Variables	Alcoholics FH+	Alcoholics FH–	F	*p*
+1.48	DAS total score	159.7 ± 21.5	143.3 ± 21.7	12.0	.0009
+0.66	Social-cognitive anxiety (KSP)	26.6 ± 3.7	23.6 ± 3.7	13.3	.0005
+0.51	Detachment (KSP)	25.0 ± 3.7	23.3 ± 3.8	3.7	.05
+0.41	Socialisation (KSP)	52.2 ± 6.9	54.3 ± 8.1	1.4	.22
+0.40	Paternal rejection (EMBU)	46.8 ± 10.2	42.8 ± 9.8	3.3	.07
+0.36	Impulsiveness (KSP)	24.5 ± 2.8	22.7 ± 3.7	6.0	.01
+0.35	Somatic anxiety (KSP)	23.1 ± 6.1	19.7 ± 5.2	6.9	.01
–0.67	Self-esteem depending on others (DAS)	34.1 ± 9.1	29.8 ± 8.2	5.2	.02
–0.78	Depressogenic information processing (DAS)	42.8 ± 9.6	38.5 ± 10.1	3.7	.05

Eigenvalue 0.64, Wilks lambda 0.60, $chi^2 = 37.95$, df = 10, $p < .0000$.
Percentage of grouped cases correctly classified by means of canonical discriminant function = 76.

Table 9.5 Discrimination of alcoholics with FH+ and healthy subjects by means of Karolinska Scales of Personality, Dysfunctional Attitudes Scale and EMBU.

Weight	Variables	Alcoholics FH+	Healthy controls	F	*p*
+0.58	Muscular tension (KSP)	22.1 ± 5.9	15.9 ± 3.8	58.9	.0000
+0.56	Depressogenic inform. processing (DAS)	42.8 ± 9.6	32.5 ± 9.9	32.5	.0000
+0.56	Self-esteem depending on others (DAS)	34.1 ± 9.1	27.1 ± 8.0	22.1	.0000
+0.50	Paternal rejection (EMBU)	46.8 ± 10.2	38.8 ± 8.3	25.0	.0000
+0.50	Verbal aggression (KSP)	13.0 ± 2.0	11.9 ± 2.1	7.9	.005
–0.31	Maternal rejection (EMBU)	46.9 ± 11.7	42.0 ± 8.9	7.8	.005
–0.45	Socialisation (KSP)	52.2 ± 6.9	59.8 ± 6.1	42.5	.0000
–0.54	DAS total score	159.7 ± 21.5	139.9 ± 26.5	18.5	.0000
–0.65	Indirect aggression (KSP)	11.3 ± 2.5	10.6 ± 2.4	2.9	.08

Eigenvalue 0.85; Wilks lambda; $chi^2 = 99.7$; df = 10; $p < .0000$.
Percentage of grouped cases correctly classified by means of canonical discriminant function = 87.

Tables 9.4 and 9.5) that the most powerful variables in these comparisons were anxiety, muscular tension and paternal rejection (Vrasti, Eisemann & Bucur, 1993).

In order to evaluate the most discriminative combination of factors taken into account (EMBU factors, KSP factors and cognitive dysfunctional factors according to Hautzinger, Luka & Trautmann, 1989) and their relative contribution to the distinction between alcoholism FH+ and FH− multiple regression analysis was used (Vrasti & Eisemann, 1993).

We selected, as a first step of analysis, the social cognitive anxiety factor of KSP, the most discriminative factor in the above-mentioned study, which strongly correlated with the dependent variable taken into account, i.e. the family history. In this way, our analysis selected ten factors accounting for 30% of the variance of family history of alcoholism.

In addition to our own data, the overview given here reflects the enormous amount of data which has accumulated during recent years. However, a more significant progress is hampered by the prevailing disease model of alcoholism, which takes into account only specific etiological factors and rejects non-specific ones as inappropriate etiological elements (Zucker, 1991). Accordingly, parental rearing practices represent a non-specific etiological factor for alcoholism. These kind of

Table 9.6 Stepwise multiple regression with family history (FH) as dependent variable and parental rearing practices (EMBU), personality traits (KSP), and cognitive dysfunctional attitudes (DAS) as independent variables.

Dependent variable	Step	Independent variable	R^2 adjusted	Overall Significance F	*p*	Beta
Family history of alcoholism in first-degree relatives of probands	1	Social-cognitive anxiety	.130	8.017	.006	.345
	2	DAS-total score	.192	12.512	.001	.774
	3	Detachment	.215	6.930	.01	.225
	4	Depressogenic inform. processing	.235	6.182	.01	−.390
	5	Self-esteem depending others	.253	4.351	.04	−.339
	6	Somatic anxiety	.266	2.647	.10	.175
	7	EMBU – paternal rejection	.272	3.740	.05	.199
	8	Socialisation	.293	2.849	.09	.204
	9	Impulsiveness	.302	3.012	.08	.184
	10	Irritability	.308	1.655	.20	−.146

factors could explain why some alcoholics could be tracked to homes without alcoholic parents but with an appropriate dysfunctional environment for the development of alcoholism. A developmental perspective of alcoholism genesis integrates both biologically inherited characteristics and environmental factors in a model considering the mechanisms causing the risk for a negative outcome among children of alcoholics. This assumption is underlined by the fact that alcoholism does not emerge abruptly in adulthood but gradually. This implies a dynamic process "from a state involving the presence of risk to a state involving the emergence of the full-blown disease entity" (Zucker, Ellis & Fitzgerald, in press).

In the stress-diathesis model, promoted by Tarter, Alterman & Edwards (1985) and Tarter & Edwards (1987), the genetic fate must be highlighted by environmental forces through the years; the outcome being ultimately determined by facilitating environmental circumstances. Our model presented in Figure 9.1 is an attempt to integrate the variables discussed above and offers a heuristic framework.

In this model the parental rearing behaviour is related with other family features which in turn interact with biological and cultural and social factors leading to the propensity to alcohol misuse.

This chapter has to be seen as an attempt to further elucidate the patterns of environmental transmission of traits from parents to offspring,

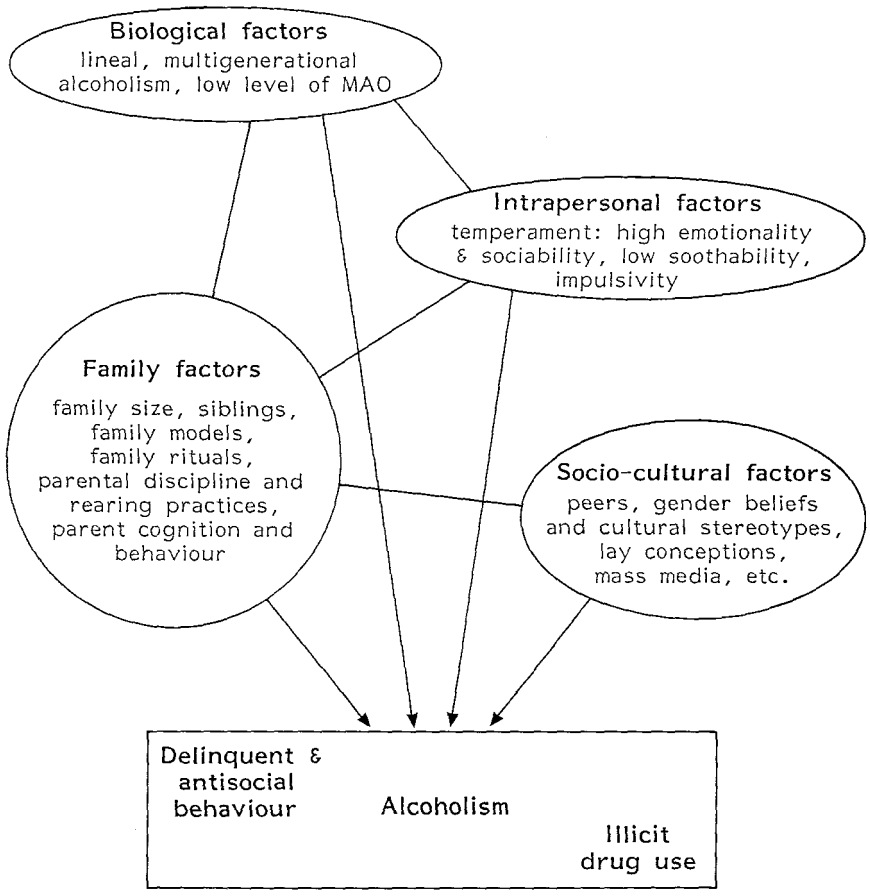

Figure 9.1 Model of the development of alcoholism.

termed as "vertical cultural transmission" (Kendler, 1988), and being based on the strategies for resolving the issues of biological and cultural inheritance (Cloninger, Lewis, Rice & Reich, 1981).

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