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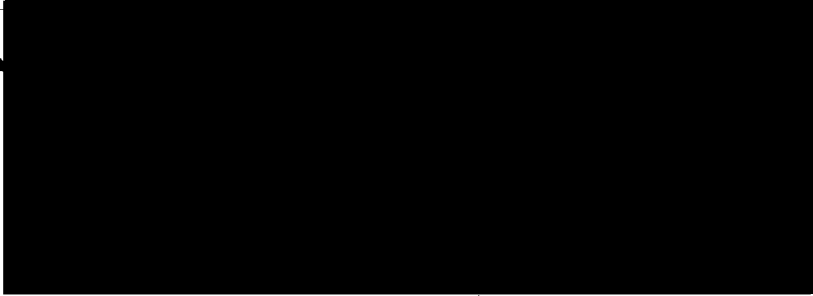NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* _DR. MARILYN BOWMAN_

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A FACTOR ANALYTIC STUDY OF

THE TAPLIN CHECKLIST

by

Christopher Robert Gingell

B.A. Simon Fraser University 1978

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

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ABSTRACT

The Taplin Checklist is a twenty-one item questionnaire developed to measure parents' attitudes concerning the causes of their children's problem behaviours. A brief review of research on parent-training, parental attitudes, and attribution theory provides a theoretical context congruent with the content of the Taplin Checklist. The present study is an analysis of the psychometric properties of the Taplin Checklist using a factor-analytic procedure. Subjects in the study were parents of children with behaviour problems, who were receiving treatment at parent training and family clinics. Fathers' and mothers' scores were factored separately, each producing a six factor solution. Discussion focused on relating the conceptual characteristics of the factors to an attributional framework. Future research and suggestions for redevelopment of the Taplin Checklist were discussed.

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I. INTRODUCTION

Parental attitudes have long been known to be an important factor in the development of a child's personal and social behaviour (Schaefer & Bell, 1957, 1958). The prime role of parental attitudes in the etiology of a child's behavioural maladjustment has also long been assumed (Peterson, Becker, Shoemaker, Luria & Hellmer, 1961). However, the role parental attitudes play in the treatment of children's problems has still not been clearly delineated. The Taplin Checklist was developed to measure parental attitudes thought to be important in a parent-training model of therapy.

The Taplin Checklist was developed at the Oregon Social Learning Center. Their programme uses a training method based on social learning theory (Rotter, 1954; Rotter, Chance & Phares, 1972) and Patterson's parent-training model (Patterson & Flieschman, 1979; Patterson, Reid, Jones & Conger, 1975; Reid, 1978; Weinrott, Bauske & Patterson, 1979) to teach parents better ways of dealing with their children. In this parent-training model the parents are seen as behaviour therapists, who are trained to reshape the child's social environment in order to extinguish maladaptive behaviours and increase pro-social behaviours. The primary focus of the treatment method is to change parental behaviour in order to change child behaviour.

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However, in training parents in the use of behaviour modification techniques to deal with a child's problems in the family, it is recognized that not only do the patterns of parent-child interaction have to change but also the parents' attitudes toward and perceptions of the child have to change (Forehand & King, 1977). In fact, one integral part of parent-training is to teach parents to perceive the controlling factors of their children's behaviour from a social learning perspective: to identify the antecedents and consequences of problem behaviours. Successful parent-training may involve leading the parents to identify relevant causes of their child's behaviours, determine the controllability of the causes, and to modify or change specific causes of behaviour.

The consideration of the importance of parents' perceptions of cause of children's behaviors led to the development of the Taplin Checklist. The specific attitude to be measured was the parents' attributions of causes of children's problem behaviours. However, a brief examination of the Taplin Checklist indicates that the item content covers such diverse areas as prognosis, length of problem, environmental influences, dispositional causes, parental responsibility, discipline, and cure. Therefore an analysis of the psychometric properties of the Taplin Checklist is needed, in order to assess the ability of the Taplin Checklist to measure parental attributions.

The conceptual context of the Taplin Checklist suggested by the original development and purpose of the questionnaire is

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threefold: (1) it was developed at a center using a behavioural-based therapy and thus should measure parental attitudes relevant to that perspective, (2) it involves the substantial research on parental attitudes that has been largely ignored by the parent-training research, and (3) since it is intended to focus on parents' perceptions of causes of their child's behaviours this involves attribution research literature. Since "studies of parents' attributions regarding their own children are conspiciously absent" (Beckman, 1976, p 212), the following brief review of the above three research areas is intended to provide a relevant context for this study.

The first section provides the historical context of the Taplin Checklist by describing the original purpose and development of the measure. The second section examines the role of parents as behaviour therapists and the need for considering parental attitudes as an important factor when accounting for the differential success of parents in parent-training. The third section briefly reviews parental attitude research: the definition of these attitudes, the types of attitudes, and the purpose behind this research. The next section concerns the role of parent attitude change in conjunction with treatment of the child. A fifth section briefly describes attribution theory and describes the research on the development of schemes to categorize types of causal explanations. The sixth section describes research on parental attributions. A section summarizing the above areas is then provided. The final section

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describes the purpose of the present study.

Development of the Taplin Checklist

The Taplin Checklist (1971) grew out of work at the Oregon
Social Learning Center (OSLC), Eugene, Oregon, where staff
observed that the families that they dealt with attributed the
causes of their child's behaviour problems to a variety of
sources. [1] During sessions, workers encountered families who
attributed the child's problem to something inside the child
(disease, personal attribute) as well as those who simply
indicated that there was something wrong with the child, rather
than understanding the problem behaviour as part of the family's
interaction style. These child-attributions were felt to be an
important factor in the potential that the families had in being
successful in changing the child's behaviour. Since the OSLC
parent-training programme works from a child-management approach
based on social learning principles, it was thought important to
identify those families that could best use this approach. It
became important to differentiate between those families who see
themselves as a factor in the problem (situational orientation),
from those whose attribution was that the problem was internal
to the child himself (dispositional orientation). It was felt
that parents' attribution of the locus of the problem made a
difference in the success they had in modifying their child's

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[1] The information is this section was provided by personal
communication with Dr. John Reid at the OSLC.

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behaviour using the OSLC approach. For example, it was thought that those families who had the "internal" orientation might not fit into a programme that is focused toward a child-management model of parent-training, and families who believe the root of the problem is inside the child might start out with some opposition to the OSLC parent-training programme.

The Taplin Checklist was drawn up to study this dimension (dispositional vs. situational) in the parents' attributions of the causes of the child's behaviour. It was suggested that this measure could then be used to provide predictive information. One could look for a relationship between the parents' attribution and their success in parent-training, or their success in child behaviour outcomes. Once this relationship was clarified it could then be used as a screening device. It was also suggested that the Taplin Checklist would provide relevant clinical information about the parents' initial attribution orientation for those therapists who are trying to change the parents' attitudes, as Forehand & King (1977) suggest; the measure could be used as a pre-post instrument which could measure attitude change. The OSLC could see if the programme had any influence on the types of attributions made by the parents about the causes of the child's problem behaviours. In summary, the Oregon Social Learning Center hoped to use the Taplin Checklist for four uses: (1) predictive information, leading to a (2) screening device, (3) clinical information, and (4) therapy process information.

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Parents as Behaviour Therapists

Research of the last 15 years has indicated that training parents as behaviour therapists is an effective treatment approach for modifying the behaviour problems of children (Berkowitz & Graziano, 1972; Johnson & Katz, 1973; O'Dell, 1974; Tavormina, 1974; Graziano, 1977; Forehand & Atekson, 1977). Although methods for measuring child behavioural maladjustment and evaluating parent-training effectiveness have become more sophisticated as research has increased, there has been, as Graziano (1977) points out:

> no systematic study of the relationship between parent characteristics and training success--either training of the parent or the parents' training of the child--has been conducted. The parameters for predicting high and low success parents are yet to be identified. (p. 274)

One parent-training method, based on social learning theory (Rotter, 1954; Rotter et al., 1972), assumes that a child's behaviours are learned, and thus centers on the nature of the family system that serves to induce and maintain maladaptive children's behaviours. The emphasis is then on changing the social environment of the child. Given this view, one goal of effective treatment is to teach the parents the fundamental concepts of child management. This involves having the parents acquire the dual skills of giving tangible and social reinforcement to the child contingent on the production of pro-social behaviours, and also applying mild punishment to

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maladaptive behaviours. This method necessarily involves restructuring the parents perceptions of "what" controls their child's behaviours. It focuses on helping parents develop a greater understanding of the factors that serve to reinforce and maintain their child's inappropriate behaviours and to teach the parents effective methods for systematically promoting desired behaviour. By doing so the parents change their behaviour and thus their child's behaviour.

> In such an approach, the parents or other key social
> agents living with the child are taught skills necessary
> to reduce deviant behaviour and increase more adaptive
> forms of interaction. (Patterson, 1974, p. 142)

There is evidence that in the success parents have with this method the single consideration of parental skills and training does not totally account for parents' training success or child behaviour change. Studies within the last decade (Eyeberg & Johnson, 1974; Forehand & King, 1977; Patterson, Cobb & Ray, 1973; Rickard, Forehand, Wells, Griest & McMahon, 1981; Ross, 1974) have identified two main factors involved in parents referring their child for psychological help: the actual rate of child maladaptive behaviour, and the parents' perceptions of and attitudes toward their child.

Lobitz & Johnson (1975) suggest that "parent attitudes are better predictors of referral for psychological treatment than [are] child misbehaviours; consequently, changes in parents' attitudes may be a primary goal of therapy with children" (p. 106). More importantly, when positive behavior change maintained at follow-up occurs, parental attitude change is also

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shown to have been maintained. In fact some parents may not lack parenting skills and thus do not need help in changing children's behaviours. Rather their attitudes and perceptions are influencing the reported rate of of problem behaviours and therefore their attitudes need to be changed (Rickard et al., 1981). The importance of changing both "cannot be minimized" (Atkeson & Forehand, 1978, p. 457). As Karoly & Rosenthal (1977) point out:

> Prehaps a treatment package directed at reprogramming the perceptions (labels, attitudes, values, expectancies, etc.) of parents in combination with systematic parent training would yield an even more powerful intervention tool than that currently being applied. (p. 410)

The emphasis on parental attitudes in behaviourally-based parent-training is not new. In Rotter's (1973) description of the environmental treatment of children he suggests that a satisfactory treatment of the child must include some treatment of the parents, some attempt to change parent behaviour. The importance of treating parents in conjunction with treating the child is reflected in his statement "without involving change in parental attitudes... such an accomplishment seems highly unlikely" (page 424). When he is describing how to treat parents he keeps stressing the role of attitudes. For example:

> Sometimes it is true that there is a definite change in parental attitudes preceding the bringing of the child to the clinic or to the therapist...and the parents are likely to perceive changes in the child that they may attribute to the effect of the clinic when such changes are in fact effects of their own already changed attitudes. (Rotter, 1973, pp. 424-425)

Rotter describes this positive attitude as willingness or readiness to change on the part of the parents, which "is probably the most significant variable upon which parents of problem children may be assessed" (page 425). His description of negative parental styles includes: (1) parents who fulfil their needs for domination by controlling their child, (2) parents who are not ready to accept the importance of the role their behaviour plays in the child's problem, and (3) parents who are dubious about therapist suggestions. These negative influences suggest the importance of authoritarian, dominant, control and responsibility attitudes which have been the focus of the research with parental attitude instruments.

The importance of parental attitudes in Rotter's (1973) theoretical perspective is most strongly stated:

> We do not mean to intimate that face-to-face treatment of the child is of little or no value; we mean only that face-to-face treatment of the child which is not accompanied by changes in parental attitudes may be highly inefficient and perhaps of no value. (p. 426)

In summary, parental attitudes are thought to play an integral part in parent-training success. In order for parents to change their own behaviour and their child's behaviours they must perceive their own influence on and control of the behaviours. Central to this task is for the parents' ability to identify and change the causes of their child's behaviours. It is clear that parents' perceptions of responsibility for the problem and attitudes toward control of the problem will affect the therapy process. Given the importance of parental attitudes,

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then:

> The question arises as to whether training parents to
> modify their child's deviant behavior will produce
> changes in the parents' perceptions and attitudes toward
> the child. (Forehand & King, 1977, p. 94)

Parental Attitudes

The research on parental attitudes comes out of the need to
describe and predict parental influence on the child. The basic
premise for developing and using parental attitude measures is
that stable parental personality characteristics (called "need
dispositions" with emotional, cognitive and motivational
elements), that are relevant to a parents' role, can predict
parents' behaviour toward their child, and can be measured
through assessing parental attitudes (Schaefer & Bell, 1957).
This description of parental attitudes is congruent with
Allport's (1935) definition of attitudes as:

> a mental and neural state of readiness, organized
> through experience, exerting a directive or dynamic
> influence upon the individual's response to all objects
> and situations with which it is related (In Fishbein, M.
> (Ed.), 1967, p. 8).

The point is, parental attitudes are considered to direct or
influence the parents' responses to their children.

This generic definition of parental attitudes includes
attitudinal concepts such as authoritarianism (Becker & Krug,
1965), supportiveness (Siegelman, 1966), responsibility (Gildea,
Glidewell & Kantor, 1961), discipline (Baumrind, 1967),
democratic control (Schaefer & Bell, 1957), acceptance

(Burchinal, Hawkes & Gardener, 1957), permissiveness (Peterson, Becker, Hellmer, Shoemaker & Quay, 1959), overindulgence (Cook, 1963), and hostility-love (Schaefer & Bell, 1958).

Although there are a variety of instruments to measure this diversity of attitudes, the Parent Attitude Research Instrument (PARI) (Schaefer & Bell, 1957, 1958) is the most widely used measure, being used in over 80% of the research studies. The research with the PARI has taken two directions. First, there is a series of studies examining the psychometric properties of the PARI. Second, there is a diverse group of studies assessing the relation of the PARI to child adjustment, parental behaviours, and treatment changes. Only a few of the issues in this research are discussed.

The first psychometric problem with parental attitude measures, and specifically the PARI, is that the scales and scale content cover different types of attitudinal concepts. Hedinnus (1959) suggests that examination of the content of questionnaire items reveals there is a mix of those items pertaining to parental practices or behaviours and those specifically focusing on attitudes. Fishbein & Ajzen (1975) distinguish between attitudes, beliefs, and behavioural intentions, which correspond to the differences between affect, cognition, and conation. Attitudes refer to favourable or unfavourable evaluations (e.g., feelings) of an object. Beliefs include opinions and knowledge about an object (e.g., attributes). Behavioural intentions refers to the person's

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intentions (i.e., subjective probability) to perform the behaviour in question. Parental attitude measures include scales that confound statements about parental values and beliefs, actions, and evaluations about the child.

Another problem with the PARI is that the scales were developed on an a priori basis, with implied negative connotations associated with each attitude area measured. Cook (1963) and Paulson, Grossman & Shapiro (1974) indicated that scale endorsement is not necessarily seen as describing pathogenic attitudes in particular populations and situations. For example, endorsement of authoritarian-control could be an appropriate function of the inadequacies of the child (e.g., cerebral palsy, mongolism). This example highlights the fact that the lack of positive results in this research could be a result of hypotheses that do not specifiy particular effects of parental attitudes on child behaviour.

There has been considerable research done on the factor structure of the PARI (Becker & Krug, 1965; Cline, Richards & Needham, 1963; Cross & Kawash, 1968; DeBoeck, 1967; Nichols, 1962; Schludermann & Schludermann, 1970a, 1970b, 1974, 1977; Sims & Poulucci, 1975; Zuckerman, Barret-Ribback, Monaskin & Nortin, 1958, Zuckerman & Nortin, 1961) which indicates that these scales consistently produce three major factors: Authoritarian-Control, Democratic Attitudes, and Rejection of the Home Making Role. It is important to note that there are some attitude scales that are differentially important to

mothers and fathers, and that the factor structures are different for the two groups. The importance of these factors is that they are thought to represent the prime global parental attitudes.

The major theme running through most of the research is there are no consistent positive results linking PARI attitudes, especially these factors, to child adjustment or parental behaviour. A closer examination of results indicates there are some appropriate positive relations between specific scales and specific behaviours, but this has been depreciated by some researchers (e.g., Medinnus, 1963a, 1963b; Zunich, 1962a, 1962b, 1971). General attitudes toward child-rearing may not be highly related to parental behaviour. What is indicated, as Medinnus (1963a) mentions, is that it is better to examine specific dimensional (scale) differences to specific behaviours than examine a general (i.e., factor) attitude to behaviour relation. More recent research, which has considered this problem, indicates a more promising use of the PARI (e.g., Humphries & Bauman, 1980; Mannino, Kisielewski, Kimbro & Morgenstern, 1968; Marsella, Dubanoski & Motts, 1974).

However, despite the enormous amount of research on parental attitudes there still are a number of issues to be resolved. The specific relations between parental attitudes, parental practices and child behaviour still need to be clarified. Do global attitudes have a different impact on child behaviours than do specific attitudes, and what are these

differences? What is the significance of those attitudes which show changes over time compared to those attitudes that do not change? What factors or events tend to produce shifts in parent attitudes? At this point, it is still the prime focus in this research to examine how particular attitudes influence the development of certain child behaviours.

Parent-Training and Parent Attitude Change

The consideration of the role parental attitudes play in treatment of the child is not new. Witmer (1933) suggested that parental attitudes are prognostic indexes in clinical work with children. Shoben (1949) in his classic study assessing parental attitudes in relation to child adjustment noted that: (1) clinical work had shown that therapists must determine the extent that parents' attitudes and associated behaviours have contributed to the difficulties of the child, and (2) it was necessary to find the amenability of certain attitudes for change through retraining parents. Although there has been a large volume of research on parental attitudes, the examination of the importance of parental attitudes to treatment is far from complete. Burden & Judson (1980) note "one important aspect of early intervention projects involving parents of handicapped children, namely changes in parental attitudes, would seem to be elusive to study" (p. 47).

The parent-training research literature suggests this is a fruitful area to study and there has been some indication of a positive relation between parent attitude change and successful intervention. Studies examining the effects of the Adlerian approach to family education (Hinkle, Arnold, Croake & Keller, 1980), Parent Effectiveness Training (Mitchell & McManis, 1977) and group-oriented approaches to parent education (Wulf & Bartenstein, 1980) all suggest that positive parental attitude change is associated with positive child behaviour change or with the effectiveness of retraining and re-educating parents. The following is a brief review of studies that either mention change in parental attitudes or attempt to measure change in relation to parent-training or treatment of the child.

Studies that have found significant differences between parent-training groups and controls, or pre-post training differences, have identified the following parental attitudes as important: acceptance of diagnosis, increased sympathy and optimism, and changes in goal orientations and expectations (Appell, Williams & Fishell, 1964); increased parents' confidence in themselves, concern for their child and acceptance of their children (Hereford Parent Attitude Survey (HPAS) and PARI) (Lillibridge, 1972); increased mutual parent-child understanding (Gabel, 1973); more liberal and less controlling attitudes (PARI) (Mitchell & Mcmanis, 1977); and more democratic attitudes (Stern, 1974; Hinkle et al., 1980). White (1975) and Pearlstein (1976) found parental attitude differences with the

PARI and the HPAS , respectively, between parent-training and control groups. Other research has suggested that there are no differences between parent-training and control mothers' attitudes measured by the HPAS (Vogel, 1975; Kowalewski, 1976; Fairbank, 1977). Sirridge (1975) found a behaviour modification training programme resulted in parents developing more inflexible and conservative attitudes toward global statements on child-rearing.

Research indicates that the method of parent re-education may have an effect on the success of changing parental attitudes and the types of attitudes changed (Mitchell & McManis, 1977; Pearlstein, 1976; Wulf & Bartenstein, 1980). It would seem that differences in treatment goals and methods of remediation, having implicit differences in "what" they see as the problem, would have different expectations as to the important parental attitudes needing change. However, the use of the PARI and the HPAS may mask finding positive parental attitude change. It is difficult for instruments that measure general parent attitudes and methodologies that use a scattergun approach to find specific attitude change.

Judson & Burden (1980) have focussed on this problem. They designed a questionnaire in order to assess certain intervention effects on maternal attitudes that had been shown to be involved in parental responses to their handicapped children (e.g., embarassment, guilt, need to blame others, overprotection, lack of confidence, etc.). Judson & Burden mention that instruments

such as the PARI could be insensitive to measuring project-specific attitude changes; the instruments must be specific, sensitive to change, and relevant to those changes targeted in the study. As an initial exploration the measure highlights the need for context-specific attitude measures and fulfils a need in regard to the neglected area of changes in parental attitudes (Judson & Burden, 1980).

In research examining the relation of parent attitude change to behaviour modification parent-training, the consensus is that parent-training results in successful parental attitude change (Eyeberg & Johnson, 1974; Forehand & King, 1977; Karoly & Rosenthal, 1977; Patterson, Cobb & Ray, 1973; Peed, Roberts & Forehand, 1977; Tavormina, 1975). It is important to note that attitude change is defined as the parents perceiving the child as less maladjusted; it measures changes (decreases) in parents' perceptions of negative child behaviours. The two instruments used in this research, the Becker Bipolar Adjective (1960) and the Parent Attitude Test (PAT) (Cowen, Huser, Beach & Rappaport, 1970) are considered attitudinal by these researchers because they do not directly sample problem behaviours, as in parents counting the frequency of a particular behaviour (e.g., noncompliance). Although these instruments seem to include an evaluative component, the primary focus is on parents' perceptions of child characteristics, that is, parents are another observer of child-based data.

Tavormina (1975) assessed the relative effectiveness of behavioral versus reflective group counselling with parents of mentally retarded children using a number of outcome measures including the HPAS, behaviourally-based instruments, and post-treatment evaluations (Patterson & Reid, 1973). On the HPAS, only the causation scale showed a significant treatment by testing-period interaction. Parent-training significantly increased the parents' perceptions of themselves playing an important role in the determination of the child's behaviour. Tavormina suggests that these "mothers felt that they gained more control over the child's behavior and saw themselves as less helpless in affecting what the child did" (p.28). This highlights a specific attitude change in relation to treatment that would be expected in that type of programme. Since on the other measures the behavioral parent-training showed superior effectiveness, it is disappointing that the relation between changes in parents' perceptions of cause and the child's and the parent's behaviour change is not reported.

The above research indicates a variety of parental attitudes found to change with parent-training. However, although there are generally positive results, no consistent pattern emerges to identify focal parental attitudes. There is no consensus on what particular attitudes are to be restructured. If parental attitudes are important in parent-training, as Rotter and others posit, then this would indicate a reassessment of the types of parental attitudes that

are being assessed for change.

Attribution Theory

In social psychology, attribution theory assumes that people are interested in the causes of the behaviour of self and others. This is increasingly important in closely interdependent relations, such as those involving spouses, children, parents and friends. We actively engage in understanding the actions of others, and this includes determining why a person acts as he does. Not only does this provide a meaningful context to the action but also it helps us predict future actions. This attribution process (i.e., assigning a cause to the action) results in one of two basic modes: either we attribute actions to situational factors, or we attribute the actions to personal dispositions of the actor. This attribution is systematically biased according to an actor-observer difference, in which actors tend to attribute their behaviours to situational factors, while observers attribute actions to personal dispositions of the actor (Jones & Nisbett, 1971).

From the attribution theory perspective the focus is on the perceived causes of behaviours, not on the "real" causes of the behaviour. Attribution theory examines the construction of causal explanations, focussing on two questions: (1) is the behaviour representative of personal characteristics (dispositional attribution) or environmental factors

(situational attribution), and (2) are the causes of the behaviour under the individual's control. The first "locates" the cause, the second determines the actor's responsibility for the behaviour (Synder, 1976).

Theoretical attempts to classify attributions started with Heider (1958) who perceived causes of outcomes as being due to either an "effective personal force" (either ability or effort) or an "effective situational force" (either task difficulty or luck). The above four causal explanations were classified by Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum (1971) on two dimensions: stable versus unstable, and personal versus situational. Rosenbaum (1972) added a third dimension: intentional versus unintentional actions, thus adding the notion of responsibility. Weiner, Russill & Lerman (1978) note that the three dimensions are no longer orthogonal, for example intentionality implies instability.

Most attributional research has simply used Heider's four categories, and the two dimensions that describe them, to explain events. However, some research has focussed on the categories or types of attributional causes that are used to explain behaviour. Frieze (1976) found that there can be a variety of causes used to explain a situation. Weiner, Russell & Lerman (1978) developed 12 categories from Frieze's results, to explain success or failure events. Orvis, Kelly & Butler (1976) categorized couples' attributions of self and partner's behaviour into 32 types of causal explanations grouped into 13

broad classes that could be described by the dimensions of stability, locus of problem, intentionality and focus. Medway (1979) had 11 attribution items rated for degree of importance in contributing to a particular child's school problems.

In examining the types of causal categories used to explain these different situations it is clear that a particular list is not intended to be all inclusive for all situations. In fact there are often other perceived causes of outcomes that are only appropriate to a given particular situation and to those involved. What is evident is the important point that the domain of causal explanations is specific to the actor-by-observer-by action context. In reference to the present study: variables relevant to the child, the parent, and the problem-behaviour situation.

Another important aspect of these studies is that the information cues used to explain behaviours provided in attribution studies are not always analogous to the types of information used to explain events by people in everyday situations (Frieze, 1976). The prime emphasis is on "naive" explanations of behaviour. This is seen in Selby, Calhoun & Johnson (1977) who were interested in the perceived causes used by naive observers to explain psychological problems. This is also seen in Orvis et al. (1976), where their purpose was to map untutored causal attributional conflicts of couples (i.e., different explanations of the same event). They wanted to sample the domain of the layman's causal repertoire, to find "the types

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of causes the layman uses to explain behaviour....a kind of datum that is lacking in current attribution research" (Orvis et al., 1976, page 354).

Selby, Calhoun & Johnson (1977) present the best study that has attempted to identify the major categories for causal explanations of psychological problems that are used by the layman. They note that the importance and interest in perceptions of causes in treatment and social psychology "argues for the exploration of the dimensions of these perceived causes" (Selby et al., 1977, p. 291). They factored a pool of 52 statements representing a variety of causal explanations for psychological problems. These included psychodynamics, biological, situational, child-rearing, interpersonal strain, personality dispositions, and life crises factors. Responses ranged along a six-point scale measuring contribution of the item to psychological problems. Principle components factor analysis resulted in five factors accounting for 30.2% of the variance: I. personal characteristics, II. organic causes, III. natural disasters, IV. family/marital crises, and V. childhood and family conditions. These represent distinct groups of causes of psychological problems. These factors can be described in reference to the framework of attribution theory: a dimension of internal versus external causes of behaviour, and a dimension of stable versus unstable causes of behaviours dimension. Personal characteristics (I) represents the internal attribution, while natural disasters (III) and current family/marital crises (IV)

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represent the external end of the dimension. Personal characteristics (I), organic causes (II), and childhood and family conditions (V) represent the stable causes, while natural disasters (III) and family/marital crises (IV) represent unstable causes. They suggest the use of these two dimensions, with the categories of causes, to classify the etiology of psychological problems. They also suggest that these factors have a differential impact on strategies for behaviour change. They emphasize that:

> the categories of causes identified in this study would seem potentially fruitful avenues for studies concerned with community attitudes and conflicts involving the delivery of psychological help and social change. Such research might enhance effectiveness in program planning and community education (Selby et al., 1977, p. 294)

There are three important points suggested by the above research. First, the list of attributions that can be used to explain a situation is specific to the context. Second, good research may require a process of eliciting the attributions of the naive participants to the situation in order to explore the domain of causal categories that can be used in a specific context. Finally, these causal categories can be described in terms of attribution theory by dimensions such as internal-versus-external and stable-versus-unstable.

4

Parental Attributions of Childrens' Problems

Three studies have been done that attempt to measure
parental attributions of their childrens' problems. However, two
of the studies have serious methodological flaws that diminish
the importance of their findings.

Harris & Nathan (1973) and Wheeler (1978) have shown that
parents' perceptions of the source of a child's behaviour
problem conforms to the parents own locus of control (LOC). They
used the Source of Problem Questionaire (SOP), which is a
measure of parental perceptions of the causal locus of their
child's problems. The SOP states in the instructions:

> Children's problems arise form many sources. They may be
> due to heredity genetic factors, difficulties between
> parents, brain injury, traumatic experiences, inborn
> temperament, parents with emotional difficulties, a bad
> school situation, etc.(Harris & Nathan, 1973, p. 182)

Parents are asked to write down their personal evaluation of the
source of their child's problem. The responses are then rated by
judges into either an External or Internal category. Internal is
defined as referring to the parental relationship or to
characteristics of the parents. External (to the parent) is
defined as causes which are physical or intrinsic to the child
(e.g., brain damage, temperament, never learned to control
self). Harris & Nathan suggest that child-rearing strategies are
a result of the parents LOC. Parental LOC extends to the way
parents deal with a child's behaviour problems. Internal parents

viewed child behaviour as a direct consequence of their parenting behaviour, while External parents viewed child behaviour to be outside of their parenting efforts. Wheeler also found that mothers SOP orientation was related to treatment orientation. Mothers with an external SOP expected child-focussed treatment; internal SOP mothers expected family-focussed treatment. If the mother perceives her own influence on, or responsibility for, the child's problem then this indicates that she will be receptive of a family orientated treatment.

One problem with the SOP studies is that the internal-external orientation, as they define it, is just an extension of the LOC definition. Therefore these are not two independent variables. Rotter (1975) makes the point that LOC is not a transituational personality trait and that expectancies of personal control may vary in different contexts. House (1976) would suggest that the relation of LOC to attributions is not straightforward; that internal-external LOC does not directly correspond to internal-external attributions. In the above studies the parents' LOC and attribution of the problem do correlate because these researchers have defined the attributional locus in direct terms of parents' locus of control.

This problem is further highlighted by the fact that the source of the child's problem is defined in reference to the parents and not to the child. An internal orientation refers to

parental responsibility and efforts, whereas an internal cause, in reference to the child, would refer to a personal disposition or characteristic of the child. In fact the list of causal attributions indicative of an external orientation include person-based attributions described as internal attributions in other studies.

Another problem with the SOP studies is that the internal-external dimension of the SOP has confounded stability, control and responsibility within this one dimension. Within the external SOP the causes of "brain damage" and "learned problems" are expected to differ in terms of the stability of the causes. In fact, the external category has included both poles of the biosocial-social learning causal dimension (Farina, Fisher, Getter & Fischer, 1978), and these two perceived causes (brain damage and learned problems) have very different affects on a person's actions towards (e.g., self-help) and perceptions of (e.g., blame or stigma attached) personal or other peoples problems (Farina et al., 1978; Fisher & Farina, 1979). An internal orientation may include responsibility for the problem but not control. Parents may feel they should be responsible for the problem but also feel they have no control, or they may have control over the child's behaviour but feel that the child should be responsible (e.g., self-directed). Finally, it is clear that the external orientation includes attributions of both personal (e.g., learned problem) and situational (e.g., peers influence, school effects) factors. What is needed is to

define parents' perceptions of the source of the child's problems in terms of causal categories that vary across the attributional dimensions. This should be done in terms of causes internal or external to the child.

Curry & Wright (1980) focus on the relationship of adults perceptions of the locus of problem to their recommendations for treatment, using stories describing different behavioural problems of children (e.g., fighter vs. shoplifter). They found a significant correlation between ratings of a person-based locus of the problem with recommendations of a person-based treatment. They note, however, the difficulty in "translating abstract attributions into concrete recommendations" (Curry & Wright, 1980, p. 1042). They suggest the relation between recommendations and problem locus could be due to the recommendations being forced into a structured internal-external concept by the format of the responses. As found with the SOP and LOC relation, the relation between locus of problem and treatment is confounded by the fact that the respondents' recommendations are pre-defined in terms of an internal-external dimension. A relation between treatment recommendation and attribution type is expected, but in the above cited cases the validity of this remains to be demonstrated (Curry & Wright, 1980).

Summary

Parent-training research has indicated parental attitudes
are related to the cause, maintainence and identification of
child maladjustment. Secondly, the theoretical basis of
parent-training suggests that parents' attitudes are important
in the success that parents have in changing their child's
maladjusted behaviours. Finally, researchers evaluating
parent-training programmes are searching for specific parental
attitudes that account for parent and child behaviour change.

The focus on the types of parental attitudes that Rotter
(1973), Patterson's programme of parental training (Patterson,
Reid, Jones & Conger, 1975) and other parent training studies
suggest are important, is similar to the constructs involved in
helping-professionals' attributions of causes of client
problems. Kopel and Arkowitz (1977) directly refer to the
importance of clients attributions in training them as
therapists, as in programmes such as those of Patterson and
Gullion (1968). Bugental, Whalen & Hinker (1977) recognized the
importance of the attributions of the participants in behaviour
change programmes, in order to maximize change. This suggests
that for parent-training it is necessary to consider and
identify parents' attributions in order to modify the programme
to be able to change parental attitudes and behaviours.

In spite of the importance of delineating the nature of
parent-child relations, in the literature of the last 80 years,

"studies of parents' attributions regarding their own children are conspicuously absent" (Beckman, 1976, p. 212). Part of the problem is that types of parental attributions have not been described. What is needed is a measure of parental attributions of child behaviour.

Purpose of present study

Research has indicated that it is important to assess the relation between parental attributions of cause of child behaviour, the child behaviour and the parent treatment of the child. There have been few studies and no instruments that directly assess the parents' attributions of causes of the child's problem behaviours. The Taplin Checklist was developed to meet the need for this type of measure. The purpose of the present study then is to do a systematic analysis of the Taplin Checklist .

The subjects in the present study were parents who had a child in a treatment programme. Medway (1979) stressed the importance of in vivo studies, and Fiedler (1982) has indicated that parents' attributions of their own childrens' behaviours may very well be different from adults' evaluations of the causes of childrens' problems in general.

The present study follows the lines of the Selby, Calhoun & Johnson (1977) study in order to initially map out parents' attributions. The major purpose in using factor analysis to

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examine the psychometric characteristics of the Taplin Checklist
is to identify categories of parental attitudes toward their
child. The Taplin Checklist contains items reflecting parental
perceptions that seem to involve relevant attitudinal areas
described by research (e.g., responsibility, discipline,
prognosis, causal location). The variety of content described by
the Taplin Checklist items demands some sort of grouping
procedure. Given that these items measure some
clinically-relevant parental attitudes, we would expect to see
sensible groupings of these attitudes. The specific questions to
be answered in the present study are the following. First, can
the Taplin Checklist be factored into identifiable categories of
parental attitudes? Second, do these attitude factors represent
specific attributional categories? Finally, can this
questionnaire provide useful clinical and theoretical
information.

II. Method

Samples and Subjects

The subjects for this study were parents of children with behaviour problems, who were treated at two different agencies: the Delta Family Services Society (DFSS), Delta, B.C., and, the Oregon Social Learning Center (OSLC), Eugene, Oregon. The potential subject pool (N=238) consisted of 102 cases treated at DFSS from 1978 to 1981, and 136 cases treated at the OSLC between 1972 and 1976. Only those cases that had both father and mother present (i.e., two parent families) were selected. All single-mother (N=77) or single-father (N=1) parent families were excluded. Cases where there was no Taplin Checklist filled out by either the mother or the father, and were missing a substantial amount of demographic information were also excluded (N=12). The breakdown of cases for DFSS and the OSLC are shown in Table 1. The final subject pool consisted of 148 pairs of parents, 74 from DFSS and 74 from the OSLC.

The Taplin Checklist was collected for 111 boys (75%) and 37 girls (25%). The children's average age was 10.1 years, with a range of 2 to 17 years. The fathers' average age was 38.3 years, the range from 24 to 58 years; the mothers' average age was 35.3 years, the range from 22 to 59 years. Demographic

information collected at both agencies is shown in Table 2. The other demographic information obtained particular to the sample is shown in Table 3 (DPSS) and Table 4 (OSLC).

Data Collection

DPSS is a private agency which offers a variety of psychological services to families in need of assistance and are referred by the government social welfare Ministry in Delta. As part of DPSS services, the Outreach Programme provides in-home professional and para-professional psychological services for parents experiencing child-management problems. A Family Worker would contact the family to arrange an agreement for a period of assessment only. The assessment procedure covered 2-3 weeks and included the parents filling out a number of assessment instruments. These included a marital inventory, measures of behaviourally-based child maladjustment, and parent and child attitude questionnaires including the Taplin Checklist. Some of these measures were also collected at termination and at 6- and 12-month follow-ups to provide outcome information. A more complete description of the assessment procedure is provided in Vincent (1979).

The OSLC is a private agency which serves two purposes. First, it is funded to research parent-child interactions, particularly those that maintain the problem behaviours of children, as well as to examine the effectiveness of teaching

parents,methods to modify their child's negative behaviours. Second, it provides the community with psychological service for parents with problem children, referred from a variety of sources. This programme (and earlier and affiliated programmes) have generated a considerable amount of research in the past decade on socially aggressive and delinquent children and adolescents (Patterson & Reid, 1973; Taplin & Reid, 1977; Patterson & Plieschman, 1979).

The OSLC subjects represent four groups that have been collected for a number of research projects (social aggressive group, replication social aggressive group, stealer group, multiple offender group).[1] OSLC families had been referred to the center by a variety of sources including Juvenile Court, Mental Health, Children's Services. Contact was made with the family to arrange an intake meeting and the above information was collected. If the family met the primary criteria for inclusion and agreed to home observation, telephone interviews and attendence in therapy, a set of baseline proceedures were started. This included a series of five home observations, a daily telephone interview, and collection of other clinical measures including the Taplin Checklist. The treatment procedure is described by Plieschman and Conger (1976), and Weinrott et al. (1979).

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The Taplin Checklist

The Taplin Checklist consists of a list of 21 statements that describe parental perceptions of prognosis, length of problem, evaluation of child, environmental influences, dispositional causes, parental responsibility, discipline, and cure. It asks the parent to indicate his/her level of agreement with each statement on a seven point scale (very strongly agree, strongly agree, agree, neutral, disagree, strongly disagree, very strongly disagree). The 21 items are shown in Appendix A.

Statistical Procedure and Method

Factor analysis was done by a principle components factor analysis with a varimax rotation procedure (BMDP4M). These procedures used statistical programmes for data analysis from the BMDP Statistical Software package (1981). The factor analytic solution (number of factors and factor definition) was determined by the following procedures and criteria. The number of factors was decided by: (1) factors with eigenvalues greater than unity were considered, (2) the eigenvalues were plotted to check for breaks in the plot (scree and discontinuity tests), (3) the increases in communalities and decreases in residual correlations were examined, and (4) solutions with a different number of factors were rotated and the conceptual properties of each solution were examined. Factor definition was decided by

using factor loadings of +/- .40 as major factor definers and above +/- .30 as minor factor definers, keeping in mind the decrement of the loadings over factors. This information is clearly shown by plotting the factor loading values, identified for each variable, for each factor in a particular solution (i.e., an inside-out plot). These plots are shown over the series of factor solutions for each data set (Figures 1.2 - 1.5, 2.2 - 2.7, 3.2 - 3.7).

Three full (missing data filled-in) data sets were used (mother and fathers jointly, mothers separately, fathers separately). In the first set mothers' and fathers' responses on the Taplin Checklist are identified separately (i.e., M1-M21, F1-F21), and thus there are 42 variables (per case) that are factored. In the second and third data sets, mothers' and fathers' responses are treated in separate sets and thus there are 21 variables (per case) that are factored.

Missing data was estimated by a maximum likelihood procedure (BMDPAM).[1] There are differences between the first data set and the second and third data sets due to differences in the estimation procedures. In the first data set the procedure of estimating a father's missing score could use mother's score on that variable as a predictor variable (and

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[1]Predictor variables included: ages of child and parents; sex of child; parenthood status of child in relation to mother and father, marital status (dummy-coded); number of current agencies involved; and, the other Taplin items.

vice versa). [1] In the second and third data sets, since parents
were treated separately, estimates of missing values could only
come from within that data (e.g., predictive information for a
mother's missing score could not use father's score). [1]

The relation between mother's factors and father's factors
was examined by two methods. First, the correlation between
factor scores across samples was calculated. Second, the degree
of similiarity of factors between the mother's and the father's
sample factor solutions was calculated by using the Wrigley
Neuhaus formula (In H. Harman, 1976, pp. 331-347). This provides
a coefficient of congruence between factors. This formula is
similar to a product-moment coefficient in that it includes a
summation over the 21 variables the cross-products of the factor
loadings of the two factors being compared. These two measures
give some indication of the similiarities and differences
between the two separate representations of the same set of
variables.

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[1]It is noted that in the first procedure mothers' and fathers'
inter-item correlations could be increased by this method.
However, this method was used because often the
father-mother-same-item correlation was the highest correlation,
and thus provided the best predictive information.
[1]It is noted that an alternate procedure of using the two
samples as the basis of separate data sets and then
cross-validating the factor structures for mothers and for
fathers could be done. However,it was felt that the increased
stability of the solution by using a larger data set was more
beneficial at this exploratory stage. An initial factor analysis
of the incomplete data sets (i.e., with missing data) for the
four groups (OSLC mothers, fathers; DPSS mothers, fathers)
indicated that there were more mother-father differences than
sample differences.

III. Results

Characteristics of Taplin items

The proportion of missing data for each item for each group is shown in Table 5. The means and standard deviations of scores on Taplin items for the full data sets (estimates filled-in) are shown in Table 6.

Results indicate significant mother and father differences on items T2 ($t=2.12$, $p=.035$), T4 ($t=2.03$, $p=.043$), T14 ($t=2.22$, $p=.027$) and T21 ($t=3.29$, $p=.001$). Mothers had higher scores on T2, while fathers scored higher on T4, T14 and T21. There were significant differences between variances of the groups for items T2 ($F=5.72$, $p=.018$), T15 ($F=3.91$, $p=.049$), T20 ($F=4.34$, $p=.038$) and T21 ($F=7.89$, $p=.005$). [1]

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[1] A Bonferroni correction procedure could be applied to the significance testing of these results. This procedure assumes independence of items, however, in this case the items are not independent. These results are reported because they are part of the decision about whether mothers' and fathers' responses are to be treated separately or are to be pooled together.

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Factor Structure

The first psychometric problem is whether mothers and fathers share the same attitudinal factor structure on this questionnaire. Results indicate that mothers and fathers have significantly different means and variances on a number of questionnaire items. It could be that the relation between items for mothers and for fathers is the same (i.e., the covariances are the same) but they have different means and standard deviations. If we then pool mothers and fathers together, the correlations between items can be artifically affected due to group mean differences. [1] If mother's and father's factor structures are the same we would expect, if we identify mothers' and fathers' Taplin responses separately (i.e., M1-M21 and F1-F21) and factor the 42 variables, to produce factors with mother and father same item variables loading on the same factors (e.g., M17 and F17 on the same factor). Examination of these results indicates some problems.

Factor analysis produced 15 factors with eigenvalues over 1.0, accounting for 70% of the variance (Table 7.1). The plot of the eigenvalues (Figure 1.1) indicates breaks at 5 and 8 factors. The decomposition of factors over successive factoring is shown in Figures 1.2 to 1.5. [1] Rotating 5 factors (Figure

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[1]The correlations between M1-M21 and F1-F21 are shown in Table 7.2.

[1]The numbers (e.g., 17) refer to the Taplin Checklist item number. A bar over the number indicates a negative factor loading value. Mother items (M1-M21) are located to the left of the line, Father items (F1-F21) to the right of the line.

1.2) indicates a large general factor (I) and two specific factors (II & III) that contain similiar variables for both mother and father identified items. Rotations of 6 to 8 factors (Figures 1.3 - 1.5) indicates that a factor of T15, T16, T19 and T20 is stable to rotation 7, but the other factors quickly become separate mother or father factors or under-defined factors. In a 5 factor solution the first factor (I) is an example of when there are too few factors the variable variance is squeezed on to factors that should be identified separately. The decomposition of factors indicates one well-defined factor common to mothers and fathers, and other ill-defined factors that are represented by mother or father variables separately. Since the resulting factor definitions are not parsimonious and do not make clear conceptual sense it was decided to factor mothers' and fathers' scores separately.

Father Factor Structure

Factor results of factoring fathers' Taplin scores indicates 8 factors with eigenvalues above 1.0 (Table 8.1), accounting for 67% of the variance. The eigenvalue plot (Figure 2.1) reveals slight breaks between 5 and 6 factors, and 8 and 9 factors. Slope changes would suggest stopping at either 5 or 8 factors. The communalities are shown in Table 8.3. Varimax

rotation was done for 4 to 8 factors solutions. [1]

The redistribution of factor loadings on the variables through added factors (Figures 2.2 - 2.7) indicates some interesting trends. After 6 factors the decomposition of factors is more pronounced; it is only at 5 and 6 factors solutions are the factors stable. A six factor solution was chosen (57% of total variance) (Figure 2.8). The factors consist of: Factor I -- early indication of problem, Factor II -- parental responsibility, Factor III -- poor prognosis and internal cause (physiological), Factor IV -- internal cause (psychological), Factor V -- learned problems, Factor VI -- others' responsible.

An acquiesence response set (ARS) was calculated (i.e., agreement endorsement, Zuckerman, Nortin & Sprague, 1958; Schludermann & Schludermann, 1974). The correlation of ARS to factor scores are shown in Table 10. Factor IV was significantly and substantially correlated to ARS (r=.52), other factors and ARS correlations were negligible. This high correlation is due to Factor IV being defined by nearly all positively loaded items.

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[1]Complete results are shown in Tables 8.1 to 8.5. Unrotated factors' eigenvalues and percentage of variance accounted for are shown in Table 8.1. The correlation matrix in Table 8.2. The changes in communalities over succesive factoring in Table 8.3. The unrotated factor structure in Table 8.4. The varimax rotation of six factors in Table 8.5.

Factor analysis of mothers' Taplin scores produced 8 factors with eigenvalues over 1.0, accounting for 64% of the variance (Table 9.1). The plot of the eigenvalues (Figure 3.1) indicates a slight break between 4 and 5, 5 to 8 are linked together on the same slope, and there is a slight change in the slope at factor 10. Communality estimates are shown in Table 9.3. Varimax rotations were done on 4 to 8 factors. [1]

Factor loadings and factor decomposition on the variables (redistribution of variable variance identified by factors through successive factoring) (Figures 3.2 - 3.7) indicates 3 stable factors through all levels, with other stable factors appearing out of Factors III and IV at rotation stage 4 at successive levels. Seven factors are stable at rotation stages 7 and 8. However, a six factor solution appears to provide the clearest and most well-defined factors. The six factors (54% of the total variance) (Figure 3.8) are defined as: Factor I -- early indication of problem, Factor II -- parental responsibility, Factor III -- internal causes (physiological), Factor IV -- external causes (other people), Factor V -- poor prognosis, Factor VI -- solution is to act on child.

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[1]Complete results are shown in Tables 9.1 to 9.5. Unrotated factors' eigenvalues and percentage of variance accounted for are shown in Table 9.1. The correlation matrix in Table 9.2. The changes in communalities over succesive factoring in Table 9.3. The unrotated factor structure in Table 9.4. The varimax rotation of six factors in Table 9.5.

The correlation of ARS to factor scores indicates that Factor IV is significantly and substantially related to ARS (r=.56) (Table 10).

Factor Score Correlation and Factor Congruence

The factors of the mother's and father's solutions describe an identical set of variables. The question is whether the factors (constructs) representing the variables are similiar across samples, and if not similiar how are they different? Assessing the relation between factor solutions from the correlation of factor scores is difficult because we do not know if the relation is due to similiarities and differences between factor constructs (i.e., what the factors are measuring), or is due to similiarities and differences between parents' perceptions of their child on those constructs. By considering the results from both procedures we can attempt to examine this problem. This information can be examined through four possible situations described by high versus low correlation (HR/LR) and high versus low congruence (HC/LC). In the HR-HC situation the constructs being measured by the factors are similiar and the parents' perceptions of the child's attributes on that construct are in agreement. This lends credence to the similiarity of the factors. In the LR-LC situation the factors are disimiliar but we do not know if the parent's perceptions are different on one particular construct because we do not have a similiar measure

of that construct. In the LR-HC condition the constructs are similiar but the parents perceive the child differently on that construct. The HR-LC situation is more difficult to understand. Is the high correlation due to a relation between two separate constructs: mothers' perception of "x" is related to fathers' perception of "y", and "x" and "y" are different? Or are the constructs really similiar (and the parents agree on that construct) but the variables have different meanings to mothers and fathers, and thus the factors load on different variables to measure the same thing?

The results of the correlations between mother's and father's factor scores (shown in Table 11) indicate significant and substantial correlations between FFI and MFI, FFII and MFII, and FFIII and MFV. [1] Of all comparisons only Factors I and Factors II are clearly unrelated to any other factor scores, other than themselves. There are significant and moderate correlations between FFIII and MFIII, and FFIV and MFIV. There are significant correlations between FFV and MFIII, and FFVI and MFVI. [1]

The degree of similiarity between the factors of the two solutions is indicated by coefficients of congruence shown in

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[1] Factors are denoted as FFI (Fathers' Factor I) or MFI (Mothers' Factor I).
[1] Significant correlations are defined as at the p = .01 level, and are those correlations above r = .19. Substantial correlations are defined as those above r=.35, and moderate correlations are those above r=.25.

Table 11. [1] It is clear from these results that Fathers' Factor I and MFI, as well as FFII and MFII, are very highly similiar to each other and relatively dissimiliar to the other factors. This would suggest that Factor I and Factor II are invariant across samples. Fathers' Factor IV and MFIV also appear to be very similiar (they share T5, T10, and T13 as high loadings). Fathers' Factor III is equally related to MFIII and MFV; in the first case the content area of internal cause (T7, T8 & T9) is shared, in the second case the content area of poor prognosis· (T7 & T17) is shared. Fathers' Factor V is not highly related to any of the Mothers' Factors. Both MFVI and FFVI are most similiar to each other, although FFVI is also moderately related to MFV.

Examination of the correspondence between the correlation and congruence matrices (superimpose one on the other) indicates that the pattern of high and moderate levels of correspondence between the factors, seen in the correlation and congruence coefficients, are very similiar. Factors' I relation and Factors' II relation show a substantial degree of correspondence in both indices. The moderate levels of correspondence are also matched. Comparison of the factor solutions for these two data sets would suggest that mother's and father's factor structures

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[1]The coefficients range from -1.0 to +1.0. Harman (1976) suggests there are no absolute levels for these coefficients that indicate significant correspondence. Thus the extent to which factors are related to one another is relative to the level of congruence in the other factor comparisons. It should be noted that the comparisons in the .30's range may only have one variable that the factors share as a high loading and therefore are not considered moderate levels of congruence.

share some similiarities. But other than the high correspondence between Factors I and between Factors II, there is a lack of simple one-to-one correspondence between factors. This would indicate that the separate consideration of the parent's responses is appropriate. The pattern of correspondence between factors does, however, suggest important conceptual similiarities and differences between factors that is useful in understanding the relation of factors to attributional dimensions.

IV. DISCUSSION

These results seem to indicate that the major purpose of the present study to simplify the pattern of relationships and identify the conceptual domain of the Taplin Checklist has been accomplished. First, the results suggest that the items of the Taplin Checklist can be factored into distinct groups of different parental beliefs about their child. Second, some of the factors represent types of causal categories that parents use to explain their child's problem behaviours. Furthermore, some of the characteristics of these factors can be described in terms of an attributional framework. However, the checklist measures other parental beliefs, although these beliefs are related to perceptions of cause.

In the following discussion of factor characteristics it must be remembered that the factors define or represent (in a smaller order of dimensions) the variables. If variables share some common variance (i.e., are correlated) and a factor represents those variables that have shared variance (i.e., is loaded on those variables), then the factor is defined by the construct represented and is shared by those variables. And the factor's characteristics are different from the constructs represented by variables on which the factor has low loadings.

The next two sections identify and define fathers' and mothers' factors. Analysis of mothers' and fathers' responses

indicates that, except for two factors, there are some
differences in factor structures, which leads to the separate
consideration of their results. This concurs with past research,
where mothers' and fathers' attitudinal factor structure have
been found to share some similiar characteristics but are
different enough to warrant separate consideration (e.g.,
Nichols, 1962; Dielman, Barton & Cattell, 1973; Schludermann &
Schludermann, 1970). The similiarity of conceptual
characteristics of factors to results found with therapists'
attributions are noted. The third section relates the factors to
attributional dimensions. The final section considers
suggestions for future research.

Taplin Checklist Factor Characteristics

Fathers' Factors

Fathers' Factor I items contain two major aspects: (1) a
belief about when the problem started, and (2) an evaluation
about how serious the problem is (e.g., "not a good baby",
"suspicious about child", "serious problems"). This factor
definitely refers to chronicity of problem, and partially
implies severity and stability of the problem. Johnson, Calhoun
& Boardman (1975) found in clinicians' ratings of causal
attributions that chronicity and severity led to ratings of more
stable causes for a psychological problem. Calhoun, Pierce &

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Dawes (1973) also found a positive relation between attribution of severity of psychological disturbances and symptom duration of the disturbance. The trouble with this factor, although this relation is clear when all the items are considered together, it is also artifically produced by having both types of content referred to within a single item.

Factor II refers to one content area, parental responsibility, where the parent is stating the degree to which they percieve themself, spouse, the spouse and self relationship, and their child-rearing practices to be blamed for or to be responsible for the child's problem. This refers to an external cause of the child's problem, with indeterminate stability and intentionality, and also out of the child's control. This Factor corresponds to the internal category of the SOP Questionaire (Harris & Nathan, 1973).

Factor III involves items that refer to poor prognosis ((e.g., "doubt he can be changed", "end up in an institution"), internal cause (e.g., something wrong inside"), and maladjustment (e.g., not a normal boy). Research on therapists' attributions (Calhoun, Peirce, Walker & Dawes, 1974; Shenkel, Synder, Bateson & Clark, 1979, Synder 1977) support the idea that attributed person-based problems are thought to be harder to treat and more severe. Cann, Calhoun & Selby (1980) also found that high expectations for similiar future delinquent behaviour (i.e., poor prognosis) are related to internal causes of behaviour.

Factor IV has items that deal with internal psychological aspects that are the causes of the behaviour difficulties. This is seen in reference to "frustration in not getting what he wants" and "something wrong inside". This factor also implies a lack of psychological controls (e.g., impulsive behaviour) evidenced in that it "is easy for other children to get this child into trouble". This element of lack of control or outside of parental control is also seen in the ineffectiveness of discipline in controlling this child (T14). The relation between internal causes and difficulty for treatment and control has been noted above. This factor involves internal causes of an indeterment stability, but also the causes are slightly more in the child's control and responsibility than in Factor III.

The important content of the items of Factor V refers to the child has learned the problem (e.g., "learned bad behaviour gets him what he wants") and what he needs is to be disciplined (e.g., good spanking best medicine). This factor suggests a parental behavioural intention and also implies that the cause is dispositionally based (i.e., child has learned the problem thus he needs to be corrected (spank him)).

The lack of items on Factor VI make this factor difficult to define. One common theme that can be suggested is that the problem is seen as somebody else's fault, the parent is not taking responsibilty. The problem is either due to other people causing the problem (e.g., others picking on him) or is out of the parents sphere of influence (e.g., medication needed). This

also diminishes the child's responsibility. The locus and stability of cause is undetermined.

Factor V and Factor VI can be best understood at rotation 5 (Figure 3.2) where they are compressed into one factor. The focus of this factor is twofold: (1) the child has learned the problem, and (2) the solution is to act on the child (punish him?) (e.g., "good spanking best medicine", "adequate medication").[1]

Mothers' Factors

Mothers' Factor I contains the same items as fathers' Factor I. The prime focus of this factor is on chronicity of the child as a problem, implying stability of the problem, and secondarily focusing on a severity evaluation. However, it is interesting to note that when the items were identified separately as mother and father responses, the items T1 to T4 did usually line up on the same factor and were stable over most of the series of rotations.

Factor II is exactly the same as father Factor II. This was also found when mothers' and fathers' scores were identified separately and factored together (Figures 1.2 - 1.5), and was stable over a number of rotations. This factor deals with parental assumption of responsibility for the cause of the

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[1]It is possible that the relation between T14 and T21 is partially due to the common reference to medication.

child's problems.

Factor III is similiar to fathers' Factor III, but for mothers it is much more clearly defined as an internal physiological cause of the child's problem. This involves three aspects, reference to: (1) an internal physiological cause (e.g., "brain damage", "something wrong inside", "adequate medication"), (2) a poor prognosis (e.g., "end up in an institution"), and (3) maladjustment (e.g., not normal). This factor most clearly represents the relation found between negative expectations of treatment outcomes and future behaviours, attributions to dispositional characteristics, and severity of problem (Calhoun et al., 1973; Calhoun, Selby, & Wroten, 1977; Cann et al., 1980; Synder, 1977). This implies an internal and stable cause, but out of parental and child control and responsibility.

The items defining Factor IV focus on external causes of the child's behaviour, excluding family influences. This includes perceiving that others (authorities) pick on him and peers are influencing the child to get into trouble. This implies that the child is, in some sense, a "victim" of others' actions. This also involves the notion that the child does not have strong enough controls over his responses to others' actions (e.g., "he gets frustrated", "easy for other children ..."). This factor is descriptive of an external cause, and is out of the parents and child's responsibility and control.

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Factor V has items that specifically deal with prognosis. First, the child is seen as being out of the parents control or influence (e.g., discipline is useless in helping or controlling child). Second, the child's problem cannot be changed (e.g., "doubt the child can be changed").. Therefore there is an expectation of a poor outcome (e.g., "end up in an institution"). Whereas in fathers' Factors III and IV prognosis is associated with items that pertain to attributional characteristics, here prognosis is identified separately.

Factor VI is loaded by two items which focus on perceived cure or solution to the problem (e.g., "good spanking is best medicine", "with adequate medication problem would be solved"). This seems to suggest that the solution is to act on the child: to do something to the child (to punish him?). This implies that the problem is dispositionally based, and is undifferentiated as to psychological or physiological cause.

Factors and Attributional Dimensions

Some of the factors identified in the present study represent the attributional categories classified by the dimensions of internal versus external, and stable versus unstable (Weiner et al., 1971). Also , other dimensions help to differentiate factors, such as intentionality and responsibility (Rosenbaum, 1972; Synder, 1976) and focus (Orvis et al., 1976). These dimensions identify an attributional space. Since these

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factors often involve two or more attributional aspects, it can be seen that the factors identify positions in this space.

The stability dimension is primarily identified by fathers' and mothers' Factor I (early indication of problem), if chronicity of problem is taken to imply stability of cause. Second, if prognosis refers to stability of problem (i.e., expectation of continued problems) this might also imply stability of cause (e.g., FFIII and MFIII and MFV). Third, mothers' Factor III refers to "brain damage" which is a stable cause.

Internal causes are seen in fathers' Factor III (an unidentified internal cause) and FFIV (an internal psychological cause). Mothers' Factor III refers to an internal physiological cause.

External causes are seen in fathers' and mothers' Factor II which deals with parental cause of the problem, in Mothers' Factor IV defined by other people causing the problem and possibly by Fathers' Factor VI (others responsible). The difference between Factor II and Mothers' Factor IV corresponds to the difference on the focus dimension (focal vs. contextual) that is used to describe the external side (Orvis et al., 1976). Factor II refers to focal external causes, that is external causes closely related to the child's behaviour: those within the family. Mother Factor IV pertains to external causes and influences outside the immediate relations of the child, that is external contexts outside the family.

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The positions of these factors on the two dimensional space indicates some differences between factors. An internal-stable cause is seen specifically in mothers' Factor III, an internal physical cause with poor prognosis. Fathers' Factors I and III also imply this position. However, the other positions in this space are not so clearly identified. If intentionality and responsibility imply instability, as Werner, Russill & Lerman (1978) suggest then other factor positions can be tentatively suggested.

Fathers' Factor IV refers to an internal psychological cause, and implies more child responsibility and thus instability. The difference in stability between an internal physiclogical cause (mothers' Factor III) and an internal psychological cause (fathers' Factor IV) is congruent with a common-sense belief that the latter cause is much easier to change than the former. The same argument would suggest that parental responsibility (Factor II) is a less stable cause than external others (mothers' Factor IV) because the former implies responsibility and direct control. However, these differences are speculative and further research is needed to identify the above relationships. Furthermore, what is important is that there are some positions that are not adequately identified by the Taplin Checklist (e.g., external x unstable causes).

The Conceptual Domain of the Taplin Checklist

The above discussion outlines the types of content that the Taplin Checklist covers. The results of the factor congruence analysis and the relation of factors to attributional dimensions would indicate that some factors cover more than one conceptual area. In summary, the following conceptual areas are included in the Taplin Checklist: chronicity of problem is covered in Factor I, parental responsibility by Factor II, internal psychological cause by FFIV, internal physiological cause by MFIII, external (others) causes by MFIV, poor prognosis by FFIII and MFV, and a belief about the method of solving the problem by FFV and MFVI. These content areas, however, are not simply and clearly defined by the factors.

There is a simple hierarchial relation between some of the factors and attributional dimensions. The category of external causes can be divided into those pertaining to the parents (FII) and those outside the family (MFIV and possibly FFVI). The internal category can be divided into physiological causes (FIII) and psychological causes (FFIV). Research on therapists' attribitutions would suggest that these categories are related differently to perceptions of the outcome and method of solving the problem.

The correspondence between MFIII and FFIII, and MFIV and FFIV also describe another similiar conceptual relation. Factors III imply a physiological cause. The congruency between MFIV and

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FFIV is due to their common reference to the lack of
self-control by the child, either seen as an internal (e.g.,
frustration) cause (FFIV) or as an external (others influencing
him) cause (MFIV). Fisher and Farina (1979) describe a
biosocial-social learning continuim that explains mental
disorders as a disease or as a pattern of learned behaviours.
Factors III and Factors IV seem to represent categories at
either end of this continuim.

Summary and Recommendations

The original purpose of the Taplin Checklist was to measure
parental beliefs of situational or dispositional causes of their
child's behaviour. It would seem that the Taplin Checklist
measures this area but also includes other content areas. The
results of this study would not suggest that the Taplin
Checklist simply measures dispositional or situational causes.
It does, however, identify categories of causal beliefs that are
related to this dimension. For example, Factor II represents
situational causes (parental) and Factors III represent
dispositional causes.

If the Taplin Checklist is to be kept but redesigned to
meet the OSLC purpose, one suggestion would be to keep a subset
of the Taplin Checklist by deleting those items that do not
directly pertain to causes of behaviour. Items that refer to
chronicity (T1, T2, T3 & T4), prognosis and control (T6, T17 &

T18), discipline (T14) and also T5 (undetermined content) could be excluded in subsequent derivation of scales. The items representing parental responsibility and cause of the child's problem (T15, T16, T19 & T20) could constitute one category measure. The representation of causal categories such as physiological (T6, T11 & T21), psychological (T10, T12), and other people (T9 & T13) would depend upon the results of a factor analysis of the remaining items.

Another suggestion is to choose from the Taplin Checklist, on an a priori basis, those items that represent the biosocial-social learning continuum. Fisher and Farina's (1979) questionnaire would provide some guidelines for that choice.

There are a number of problems with the continued use of the Taplin Checklist. First, it would seem that attributions are more complex than a simple dispositional-situational dichotomy as first assumed in the Taplin Checklist. Second, these two categories contain sub-categories that have important differences in their relation to parental behaviours, other parental attitudes and perceptions of their child, and the outcome of the problem. Third, in examining the constructs that some of the factors seem to represent it seems that these constructs involve some other related constructs. For example, Father's Factor III could represent the concepts of "poor prognosis" and "internal causes". In other research, however, these variables have been examined separately. Furthermore, there are some attributional categories not represented by the

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Taplin Checklist. The Taplin Checklist is not sufficient for the clear identification of important variables in this area of research on parental attributions.

The preceding discussion does not imply that the Taplin Checklist has no clinical usefulness. Fishbein and Ajzen (1975) outline the importance of the single-response format in providing attitudinal information. These items can be used to provide individual bits of information that have clinical relevance for a particular case. For example, it could be important to know if parents are not agreeing to items pertaining to their own responsibility. However, for research in the area of parental attributions, the Taplin Checklist must be redesigned or other methods developed. Two possible directions for this research are as follows.

If the purpose is to cover the domain of parental attributions of the causes of childrens problem behaviours, then the content covered and the number of items of the Taplin Checklist should be expanded. A possible source of items could come from examining the items and causal categories described in attributional research (e.g., Freize, 1976; Orvis et al., 1976; Selby et al., 1977). Another source would be the parent attitude research literature. For example, Foster (1971) listed eight categories of parental ideas about the causes of children's behaviours: possession by the devil, heredity, emotional illness, deprivation of affection, ignorance or cannot learn, brain damage, poor role-models, and parents demand too much or

too little. Gildea et al. (1961) examined the role of parental responsibility and their explanations of behaviour in child adjustment, and also found that mothers who perceive multiple causes of their child's behaviour had better adjusted children. (There is a wealth of material in parent attitude research that has been ignored by behavioural researchers.) The purpose then would be to find groups of items defining one causal category.

If the purpose is to measure the parents' attributional beliefs about the child's problem, then it could be appropriate to use an attributional measure that describes the characteristics of the parents' attributions. Russell (1982) has developed a three factor questionnaire (Causal Dimension Scale) measuring the locus of causality, stability, and controllability in reference to a particular cause or particular behaviour. This questionnaire could be easily translated so that the parents responded in reference to the locus of cause, stability, and controllability of the child's problem behaviours. [1]

In summary, the development of research on parental attributions of the causes of children's behaviours should be done in the context of the original purpose of the Taplin Checklist: the measurement of parental attitudes that influence parent-training performance and parent-child relations. The Taplin Checklist is a good initial attempt in measuring parental

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[1]One interesting area of research would be to develop categories of causes used by parents to explain children's behaviours, and then have these categories defined in terms of attributional dimensions by a questionnaire similar to Russell's (1982) Causal Dimension Scale.

attributions, but redesign is necessary if the complexity of
parental attributions is to be measured. The relevance of
research in this area, and perhaps most clearly reflecting the
original purpose of the Taplin Checklist, is most succinctly
stated by Bugental, Whalen and Hinker (1977):

> that change strategies (behavioural management,
> educational programs, psychotherapy, medical
> intervention) have implicit attributional textures which
> interact with the attributional network of the
> individual to influence treatment impact. (Bugental et
> al., 1977, pp. 881-882)

Successful outcomes may depend on initially matching parents'
attributional orientation to a programme with a similiar
orientation, or focusing on changing parental attributions in
which the causal attributions are the intervention targets
(Bugental et al., 1977). In order to do this, development of a
measure of parental attributions is still necessary.

TABLE 1. SAMPLE SIZES.

	DFSS	OSCL	ALL
Start Total	102	136	238
Mothers - no data	1	0	1
Fathers - no data	6	5	11
Single-mothers	21	56	77
Single-fathers	0	1	1
Finish Total	74	74	148

TABLE 2. TOTAL SAMPLE DEMOGRAPHICS.

	n	Mean	SD	Range
Age of Child	148	10.1	3.8	2 - 17
School Grade	122	4.7	3.6	0 - 12
Age of Father	136	38.3	7.7	24 - 58
Age of Mother	137	35.3	7.6	22 - 59

Sex of Child   111 males   37 females

Child Status Father   83 natural 14 adopted

                            16 foster   26 step 5 other

Child Status Mother   104 natural 12 adopted

                            16 foster   11 step 1 other

Marital Status   134 married 3 separated

                            3 divorced 8 other

Number of Current Agencies   40-zero 31-one 21-two

                            4-three 1-four 1-five 1-six

TABLE 3. DPSS DEMOGRAPHICS.

	n	Mean	SD	Range
Age of Child	74	11.0	4.4	2 - 17
School Grade	72	5.5	4.0	0 - 12
Age of Father	73	40.5	7.9	24 - 58
Age of Mother	73	37.7	7.6	22 - 59
Father Education	73	11.7	2.5	6 - 21
Mother Education	73	11.6	2.2	7 - 16

Sex of Child   49 males   25 females

Child Status Father   37 natural   8 adopted

                      16 foster   10 step   1 other

Child Status Mother   45 natural   7 adopted

                      16 foster   3 step   1 other

Marital Status   67 married   1 separated

                       1 divorced 5 other

Income   0 =$5,000   0 =$10,000   8 =$15,000

         13 =$20,000   12 =$25,000   7 =$30,000

         18 =$35,000   14 =$35,000

Number of Current Agencies   40-zero   17-one   13-two

                      2-three   1-five   1-six

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TABLE 4. OSLC DEMOGRAPHICS

	n	Mean	SD	Range
Age of Child	74	9.2	2.9	3 - 14
School Grade	74	3.6	2.3	0 - 8
Age of Father	63	37.5	6.7	27 - 56
Age of Mother	64	32.4	6.4	24 - 52

Sex of Child   62 males   12 females

Child Status Father   46 natural 6 adopted

                                   0 foster   16 step 0 other

Child Status Mother   59 natural 5 adopted

                                   0 foster   8 step 0 other

Marital Status   67 married   2 separated

                                   2 divorced 3 other

Father Eductation   0 class-1   6 class-2   3 class-3

                                  28 class-4 19 class-5   8 class-6

                                  4 class-7

Mother Eductation   0 class-1   3 class-2 10 class-3

                                  37 class-4 15 class-5   4 class-6

                                  0 class-7

Table 4 (contd.).

Father Occupation   11 class-1   3 class-2   20 class-3

                                 16 class-4   1 class-5   10 class-6

                                  8 class-7   2 class-8   1 class-9

Mother Occupation   51 class-1   4 class-2   5 class-3

                                  6 class-4   2 class-5   4 class-6

                                  0 class-7   0 class-8   0 class-9

Number of Current Agencies   14-one   8-two   2-three   1-four

                              2-three   1-five   1-six

Note: OSLC parents' occupational and educational status
was classified on Hollingshead's (1975) system, with
class 9 representing the highest occupational status and
class 7 representing the highest educational status.

TABLE 5. MISSING DATA.

Item	Fathers N	Fathers %	Mothers N	Mothers %
T1	34	23	24	16
T2	31	21	21	14
T3	30	20	20	14
T4	14	9	13	9
T5	17	11	22	15
T6	4	3	4	3
T7	2	1	5	3
T8	0	0	1	1
T9	4	3	4	3
T10	1	1	3	2
T11	3	2	3	2
T12	1	1	4	3
T13	0	0	4	3
T14	2	1	3	2
T15	8	5	9	6
T16	4	3	9	6
T17	2	1	4	3
T18	2	1	3	2
T19	5	3	10	7
T20	6	4	10	7
T21	2	1	6	4

(Note: for each sample total n = 74)

TABLE 6. TAPLIN CHECKLIST ITEM STATISTICS.

Items	Fathers Mean	SD.	Mothers Mean	SD.
T1	5.0	1.6	5.0	1.7
T2	3.1	1.6	3.5	1.9
T3	3.5	1.7	3.8	1.9
T4	3.2	1.8	2.7	1.9
T5	4.9	1.7	3.8	1.6
T6	3.0	2.0	3.2	2.2
T7	2.5	1.8	2.5	1.8
T8	5.6	1.7	5.5	1.7
T9	2.0	1.4	1.9	1.5
T10	4.7	1.8	5.0	1.7
T11	3.4	1.9	3.7	2.0
T12	3.7	1.8	3.9	1.9
T13	4.8	1.6	4.9	1.8
T14	2.9	1.6	2.4	1.6
T15	4.0	1.5	4.2	1.6
T16	3.8	1.6	3.8	1.6
T17	2.1	1.4	2.2	1.5
T18	4.0	1.9	3.0	2.0
T19	2.9	1.9	3.0	2.0
T20	4.2	1.5	3.9	1.8
T21	2.7	1.7	2.1	1.5

TABLE 7. l. EIGENVALUES - MOTHERS AND FATHERS.

Factor	Variance Explained	Cumulative Percentage of Total Variance (%)
1	4.85	11.6
2	3.86	20.8
3	2.83	27.5
4	2.04	32.4
5	1.98	37.1
6	1.86	41.5
7	1.70	45.5
8	1.54	49.2
9	1.47	52.7
10	1.41	56.1
11	1.32	59.2
12	1.27	62.2
13	1.15	65.0
14	1.08	67.6
15	1.01	70.0
16	.91	72.1
17	.87	74.2
18	.83	76.2
19	.81	78.1
20	.75	79.9
21	.74	81.6
22	.70	83.3
23	.63	84.8
24	.57	86.1
25	.55	87.5
26	.54	88.8
27	.51	90.0
28	.49	91.1
29	.47	92.2
30	.40	93.2
31	.37	94.1
32	.35	94.9
33	.32	95.7
34	.31	96.4
35	.28	97.1
36	.24	97.6
37	.22	98.1
38	.20	98.6
39	.18	99.1
40	.15	99.4
41	.14	99.7
42	.11	100.0

TABLE 7.2. MOTHERS & FATHERS (JOINTLY) ITEM CORRELATION

Correlation Matrix

Item	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11
P2	-39										
P3	-30	67									
P4	22	-32	-28								
P5	-06	10	12	00							
P6	-06	41	38	-18	16						
P7	-07	14	08	-17	12	28					
P8	20	-19	-20	08	-13	-39	-30				
P9	-04	07	11	-01	-06	02	22	-13			
P10	-10	26	30	-06	28	21	26	-07	15		
P11	-05	23	29	-26	18	34	32	-35	19	25	
P12	-11	05	23	-04	22	10	04	-15	14	20	20
P13	07	-05	-05	09	29	-00	19	02	10	10	21
P14	12	-19	-21	11	16	-03	-08	09	08	-18	-01
P15	-06	13	14	-02	-06	-00	-17	18	08	15	-05
P16	-03	06	07	-12	-18	-02	-04	06	06	-02	06
P17	-26	18	16	-19	18	21	37	-43	34	16	33
P18	-05	18	23	01	19	07	26	-10	03	18	33
P19	02	-04	-03	-03	04	04	-04	-01	19	-03	19
P20	04	-10	-05	12	18	13	12	-22	-08	-07	-05
P21	-12	-04	-04	-00	08	01	08	05	27	10	17
M1	48	-19	-11	-01	-13	-03	-03	23	-05	01	-06
M2	-23	28	23	-29	00	15	-01	-08	-15	10	14
M3	-08	10	13	-26	06	06	-12	-05	-04	10	08
M4	17	-12	-23	39	04	-07	04	10	12	-07	-12
M5	-25	16	17	-10	31	15	03	-10	02	21	14
M6	-08	18	24	-24	10	41	15	-16	-19	11	27
M7	-04	09	-00	-13	-01	30	37	-14	19	10	33
M8	-00	00	-08	-16	-06	*36	-18	39	-10	-05	-19
M9	-08	-04	14	-06	-01	-05	-01	10	20	13	05
M10	05	14	22	-14	01	02	-04	-00	-03	17	04
M11	-00	10	06	00	10	15	15	-09	14	13	24
M12	04	10	30	-27	01	11	00	03	01	10	18
M13	17	-04	06	05	16	17	15	-09	14	00	09
M14	02	-18	-03	-10	08	-13	-07	16	08	-03	-02
M15	-07	-08	08	-05	-13	-10	-07	15	07	05	04
M16	-01	-19	01	-04	04	-04	-02	03	04	05	04
M17	-12	02	01	-13	-07	15	20	-18	16	-01	24
M18	-09	10	09	-09	-02	18	20	-10	12	01	27
M19	10	-15	-07	00	09	-07	-12	10	08	05	-04
M20	09	01	-02	04	07	00	12	-21	-02	05	05
M21	-02	-14	-16	-05	03	05	-06	07	05	-04	09

(Note: correlation coefficients (.xx))

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Table 7.2 (contd.)

Correlation Matrix

Item	P12	P13	P14	P15	P16	P17	P18	P19	P20	M1	M2	M3
P13	-01											
P14	14	08										
P15	08	06	11									
P16	18	07	19	48								
P17	09	06	-10	-20	-10							
P18	14	14	-20	-02	05	25						
P19	14	08	03	37	48	11	06					
P20	-01	-02	-02	-43	-37	08	02	-32				
P21	16	08	15	07	-04	-02	-01	07	02			
M1	-13	02	-12	07	06	-13	02	-03	-03	00		
M2	14	01	-18	19	10	10	-06	23	-14	05	-29	
M3	06	-11	-11	16	01	08	-11	14	-15	11	-19	53
M4	-05	08	-02	-12	-04	-04	07	06	-03	-06	26	-43
M5	-02	04	-17	00	-14	15	21	08	08	14	-08	01
M6	-09	06	-07	08	-03	09	09	-05	01	05	-04	22
M7	-07	14	06	-01	-05	18	21	07	-02	-02	-11	06
M8	-13	-01	-02	-00	06	-19	-11	01	-19	09	16	09
M9	-12	17	-09	15	-01	07	06	03	-20	09	-10	09
M10	-09	05	-13	10	00	07	-04	07	-11	-15	07	09
M11	02	-01	08	-02	-08	08	17	-10	07	01	-08	02
M12	18	-04	-08	07	-12	-01	02	01	-12	09	-08	31
M13	-03	37	03	-14	-07	13	15	11	15	03	05	07
M14	05	14	30	06	10	-01	-01	05	-06	-03	-07	-02
M15	13	-09	15	24	29	-15	12	21	-28	14	05	-03
M16	18	01	17	29	20	-05	13	29	-27	-01	-00	01
M17	-10	-01	-09	-01	04	37	27	11	03	-06	-10	-03
M18	-03	01	00	-11	-01	29	32	07	16	02	-10	02
M19	20	01	03	25	20	-06	-04	46	-32	-05	08	03
M20	-04	-07	-10	-29	-18	09	15	-22	37	-11	-08	-09
M21	03	11	20	09	07	08	-04	-01	07	28	-11	08

Table 7.2 (contd.)

Correlation Matrix

Item	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14
M4	-39											
M5	18	05										
M6	09	-17	16									
M7	01	-07	14	27								
M8	08	12	-01	-16	-30							
M9	11	-02	19	15	11	15						
M10	09	-11	13	12	07	13	30					
M11	03	-00	03	30	32	-26	11	-04				
M12	13	-20	04	12	-01	02	17	25	-02			
M13	-03	-04	20	12	17	-05	12	08	06	08		
M14	-08	13	-09	03	08	11	10	-01	07	09	-06	
M15	14	-08	-00	06	02	04	12	03	02	19	-10	08
M16	14	04	-01	-01	09	05	17	01	07	12	03	13
M17	-04	-14	03	08	35	-14	14	02	14	09	08	09
M18	-03	-02	25	26	24	-11	08	08	17	04	17	07
M19	00	05	-02	-10	04	-00	04	-00	-13	-05	-04	05
M20	-14	-02	12	-09	00	-08	-18	-22	05	-04	22	-03
M21	-02	-01	07	22	15	-07	07	-05	29	-04	14	28

Item	M15	M16	M17	M18	M19	M20
M16	67					
M17	-04	-02				
M18	05	-03	42			
M19	26	49	-08	-23		
M20	-22	-30	09	24	-32	
M21	-01	-00	-05	14	-06	-02

TABLE 8.1. EIGENVALUES - FATHERS.

Factor	Variance Explained	Cumulative Percentage of Total Variance (%)
1	3.74	17.8
2	2.51	29.7
3	1.82	38.4
4	1.42	45.2
5	1.37	51.7
6	1.18	57.3
7	1.03	62.2
8	1.01	67.0
9	.87	71.2
10	.79	74.9
11	.72	78.4
12	.69	81.6
13	.65	84.7
14	.57	87.4
15	.52	89.9
16	.46	92.1
17	.41	94.1
18	.39	95.9
19	.32	97.5
20	.27	98.8
21	.25	100.0

TABLE 8.2. TAPLIN ITEM CORRELATIONS - FATHERS.

Item

	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11
T2	-41										
T3	-34	68									
T4	30	-36	-29								
T5	-10	15	15	-05							
T6	-09	4-	35	-15	19						
T7	-15	18	06	-18	14	28					
T8	25	-22	-18	11	-16	-38	-30				
T9	-08	12	08	-04	-06	04	25	-13			
T10	-07	26	27	-06	28	21	26	-07	16		
T11	-09	22	27	-24	18	35	32	-36	20	25	
T12	-15	14	26	-04	21	10	04	-15	13	20	19
T13	02	-02	-09	07	29	01	19	02	11	10	21
T14	02	-12	-12	09	12	-00	-08	09	10	-19	-05
T15	04	07	12	01	-09	02	-16	18	08	13	-06
T16	-01	05	08	-11	-19	-01	-04	06	05	-02	07
T17	-35	22	16	-23	17	21	37	-41	34	16	33
T18	-02	11	17	-02	19	06	25	-10	04	18	33
T19	02	-06	-05	-05	04	05	-02	-01	16	-05	19
T20	-06	-08	-08	09	19	10	11	-21	-08	-06	-07
T21	-05	-02	-05	-03	09	03	08	05	28	10	16

	T12	T13	T14	T15	T16	T17	T18	T19	T20
T13	-01								
T14	17	07							
T15	11	04	16						
T16	17	07	17	50					
T17	09	05	-09	-18	-01				
T18	14	13	-17	-00	04	24			
T19	14	09	07	37	50	11	03		
T20	-02	-01	-02	-42	-40	07	-02	-35	
T21	16	08	15	07	-05	-02	-00	06	04

(Note: correlation coefficients (.xx))

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TABLE 8.3. COMMUNALITIES - FATHERS.

Communalities obtained from successive factors.

Item	Factors					
	3	4	5	6	7	8
T1	33	34	47	47	67	71
T2	68	17	71	72	73	75
T3	65	74	74	74	74	74
T4	32	36	38	39	49	55
T5	28	56	56	63	73	73
T6	33	35	35	44	63	80
T7	42	49	51	52	52	55
T8	37	44	46	61	68	69
T9	26	35	43	66	68	68
T10	23	37	46	60	61	61
T11	49	50	53	53	56	57
T12	20	33	41	42	44	73
T13	32	34	39	39	61	72
T14	16	21	57	64	65	66
T15	60	63	64	64	64	65
T16	62	64	65	70	70	70
T17	41	61	62	62	64	69
T18	20	20	46	46	47	65
T19	50	56	56	63	63	64
T20	51	52	58	60	61	61
T21	18	21	39	62	63	64

(Note: coefficients (.xx))

TABLE 8.4. UNROTATED FACTOR LOADINGS - FATHERS.

Item	Factors 1	2	3	4	5	6	7	8
T1	-489	047	309	095	-369	-046	446	-195
T2	659	062	-492	174	030	096	-071	-146
T3	615	122	-507	292	-029	059	034	051
T4	-431	-089	350	217	-136	-083	317	255
T5	381	-169	322	532	-008	-268	-312	-011
T6	578	-052	-088	120	014	-299	440	-415
T7	540	-183	314	-265	-113	111	000	-183
T8	-565	250	-042	268	-127	381	-174	-068
T9	330	196	341	-294	286	479	146	033
T10	469	054	090	367	-306	370	127	003
T11	642	099	270	-091	-156	-085	151	-104
T12	349	257	113	360	280	-096	154	534
T13	148	083	542	150	-208	-059	-464	-334
T14	-135	260	375	226	597	-268	-066	-110
T15	-035	770	-071	181	-064	035	078	-083
T16	038	783	-043	-166	-036	-244	-040	036
T17	613	-124	151	-448	072	-041	-150	213
T18	374	001	244	042	-514	004	-069	426
T19	096	665	226	-246	-020	-267	-009	031
T20	035	-696	146	129	233	-156	061	042
T21	122	108	389	181	421	478	124	-102

(Note: factor loadings (.xxx))

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TABLE 8.5. ROTATED FACTOR LOADINGS - FATHERS.

Factors

Item	I	II	III	IV	V	VI
T1	-56	07	-29	20	-08	-16
T2	82	02	11	16	05	-02
T3	82	06	01	21	10	-08
T4	-52	-11	-27	10	13	-08
T5	05	-23	11	42	62	-10
T6	39	-02	36	18	30	-19
T7	05	-11	57	35	-08	23
T8	-20	13	-71	02	-16	15
T9	04	14	30	05	-06	74
T10	32	-04	-09	66	04	22
T11	16	16	52	44	14	09
T12	25	15	03	10	54	16
T13	-30	08	13	46	25	10
T14	-18	16	-05	-36	65	19
T15	12	70	-32	08	13	07
T16	04	82	04	-07	07	-06
T17	18	-02	74	10	-07	17
T18	-00	06	22	63	-06	-09
T19	-15	73	24	-00	14	-02
T20	-10	-70	19	-09	23	-07
T21	-02	-06	-08	05	26	73

(Note: factor loadings (.xx))

TABLE 9.1. EIGENVALUES - MOTHERS.

Factor	Variance Explained	Cumulative Percentage of Total Variance (%)
1	2.82	13.4
2	2.53	25.5
3	1.98	34.9
4	1.50	42.1
5	1.30	48.2
6	1.21	54.0
7	1.13	59.4
8	1.00	64.1
9	.93	68.9
10	.85	72.6
11	.80	79.8
12	.72	79.8
13	.65	83.0
14	.61	85.9
15	.58	88.6
16	.56	91.3
17	.50	93.7
18	.47	95.9
19	.36	97.0
20	.27	98.9
21	.24	100.0

TABLE 9.2. TAPLIN ITEMS CORRELATIONS - MOTHERS.

Item

	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11
T2	-32										
T3	-20	53									
T4	25	-43	-38								
T5	-08	00	19	03							
T6	-08	25	13	-17	16						
T7	-09	04	-02	-06	17	28					
T8	12	10	12	11	-05	-18	-30				
T9	-06	13	14	03	12	14	12	15			
T10	04	12	12	-11	11	12	07	13	30		
T11	-08	06	04	-01	05	30	31	-25	11	-03	
T12	-10	31	16	-20	05	14	00	02	17	25	-02
T13	05	03	-04	-02	17	13	17	-04	12	08	06
T14	-09	01	-08	13	-02	04	08	11	11	-00	06
T15	06	-03	13	-04	-00	08	-02	10	16	07	00
T16	-01	00	11	06	02	-01	07	10	20	03	06
T17	-08	-04	-04	-14	05	08	34	-13	15	02	14
T18	-07	01	-03	-04	25	07	24	-11	08	10	18
T19	06	02	-01	05	03	-09	04	06	06	00	-10
T20	-05	-14	-19	-00	09	-09	00	-09	-20	-21	06
T21	-12	11	02	-04	10	25	15	-08	08	-04	28

	T12	T13	T14	T15	T16	T17	T18	T19	T20
T13	07								
T14	09	-07							
T15	20	-10	09						
T16	13	03	12	65					
T17	09	06	08	-07	-04				
T18	06	18	06	04	-02	41			
T19	-07	-03	07	25	48	-05	-19		
T20	-06	19	-02	-35	-30	07	21	-31	
T21	-03	12	27	02	00	-06	10	-03	-04

(Note: correlation coefficients (.xx))

TABLE 9.3. COMMUNALITIES - MOTHERS.

Communalities obtained from successive factors.

	Factors					
Item	3	4	5	6	7	8
T1	25	33	33	45	52	56
T2	67	69	69	70	70	71
T3	56	57	57	58	62	64
T4	48	49	60	60	60	61
T5	14	21	21	31	59	63
T6	34	37	39	51	51	59
T7	48	49	54	54	55	61
T8	24	39	57	59	61	62
T9	29	41	47	47	50	56
T10	16	43	44	48	61	63
T11	34	46	47	48	50	52
T12	25	34	34	37	39	64
T13	14	23	24	39	48	51
T14	12	13	42	71	71	72
T15	56	57	60	61	61	78
T16	67	68	72	72	79	82
T17	27	34	47	66	69	74
T18	36	48	50	57	61	62
T19	40	43	49	49	54	64
T20	44	46	46	48	61	67
T21	17	34	63	64	65	65

(Note: coefficients (.xx))

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TABLE 9.4. UNROTATED FACTOR LOADINGS - MOTHERS.

Item	1	2	3	4	5	6	7	8
				Factors				
T1	-377	155	295	271	012	-353	-264	194
T2	596	080	-557	-121	088	045	056	-072
T3	531	213	-486	-038	-050	-093	217	-129
T4	-456	074	519	105	324	-078	018	-103
T5	301	-181	139	260	038	-312	531	-200
T6	538	-208	055	-197	135	-338	-249	141
T7	422	-377	396	-103	-219	-070	-125	-252
T8	-093	455	-158	387	419	153	149	-106
T9	462	174	207	355	243	-008	-164	-253
T10	363	154	-043	523	119	-184	-368	-111
T11	357	-355	295	-346	083	-107	-161	105
T12	454	133	-168	295	-003	184	-135	496
T13	186	-276	160	308	074	-387	306	186
T14	156	059	300	-130	531	546	017	-027
T15	310	594	339	-051	-183	070	070	411
T16	309	608	451	-097	-208	058	257	163
T17	270	-371	252	249	-359	445	-162	-218
T18	299	-445	271	350	-117	268	195	098
T19	066	542	312	-188	-233	-073	212	-329
T20	-260	-600	-087	146	042	131	363	253
T21	319	-186	196	-402	545	-061	106	051

(Note: factor loadings (.xxx))

TABLE 9.5. ROTATED FACTOR LOADINGS - MOTHERS.

Item	Factors					
	I	II	III	IV	V	VI
T1	-54	07	-16	23	-18	-20
T2	81	-01	07	11	-12	10
T3	71	13	00	18	-16	-08
T4	-72	04	-07	07	-13	24
T5	-01	-04	23	49	08	-10
T6	25	02	59	29	-09	04
T7	-01	09	58	13	42	-06
T8	02	07	-58	26	-23	35
T9	10	24	-00	55	12	29
T10	17	09	-16	64	03	01
T11	02	-00	67	02	11	14
T12	42	12	-16	30	21	12
T13	-13	-16	24	52	06	-14
T14	-05	09	03	-09	14	82
T15	05	77	-03	07	06	08
T16	-02	84	03	05	08	08
T17	05	-02	07	02	81	01
T18	-09	-15	14	26	67	09
T19	-10	68	01	-09	-09	-08
T20	-16	-62	02	-08	25	-03
T21	04	-06	56	06	-21	52

(Note: factor loadings (.xx))

TABLE 10. CORRELATION OF ABS TO FACTOR SCORES.

Factor	ABS Fathers	Mothers
I	-00	08
II	11	14
III	10	14
IV	56 a.	52 a.
V	16	15
VI	-00	07

(a. p=.001)

TABLE 11. FACTOR SCORES CORRELATION MATRIX.

	Mothers					
Fathers	I	II	III	IV	V	VI
I	45	02	03	09	-02	-07
II	04	43	-05	00	01	07
III	02	-12	27	00	39	-15
IV	-12	04	15	28	13	10
V	02	08	20	-10	-10	06
VI	-02	08	02	03	03	21

(Note: For a two-tailed test of significance
r=.16 at p=.05, and r=.19 at p=.01.
Correlation coefficients (.xx))

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TABLE 12. FACTOR CONGRUENCE MATRIX.

		Mothers				
Fathers	I	II	III	IV	V	VI
I	94	09	22	18	08	-04
II	09	94	-06	07	-05	17
III	22	-09	69	09	67	-13
IV	13	00	39	76	35	-15
V	14	08	34	35	09	44
VI	14	14	22	37	14	59

(Note: Congruence coefficients (.xx))

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Figure 1.1.
Eigenvalue plot
mothers and fathers

Figure 1.2.
Factor 5 Loadings Plot
mothers and fathers

Figure 1.3.
Factor 6 Loadings Plot
mothers and fathers
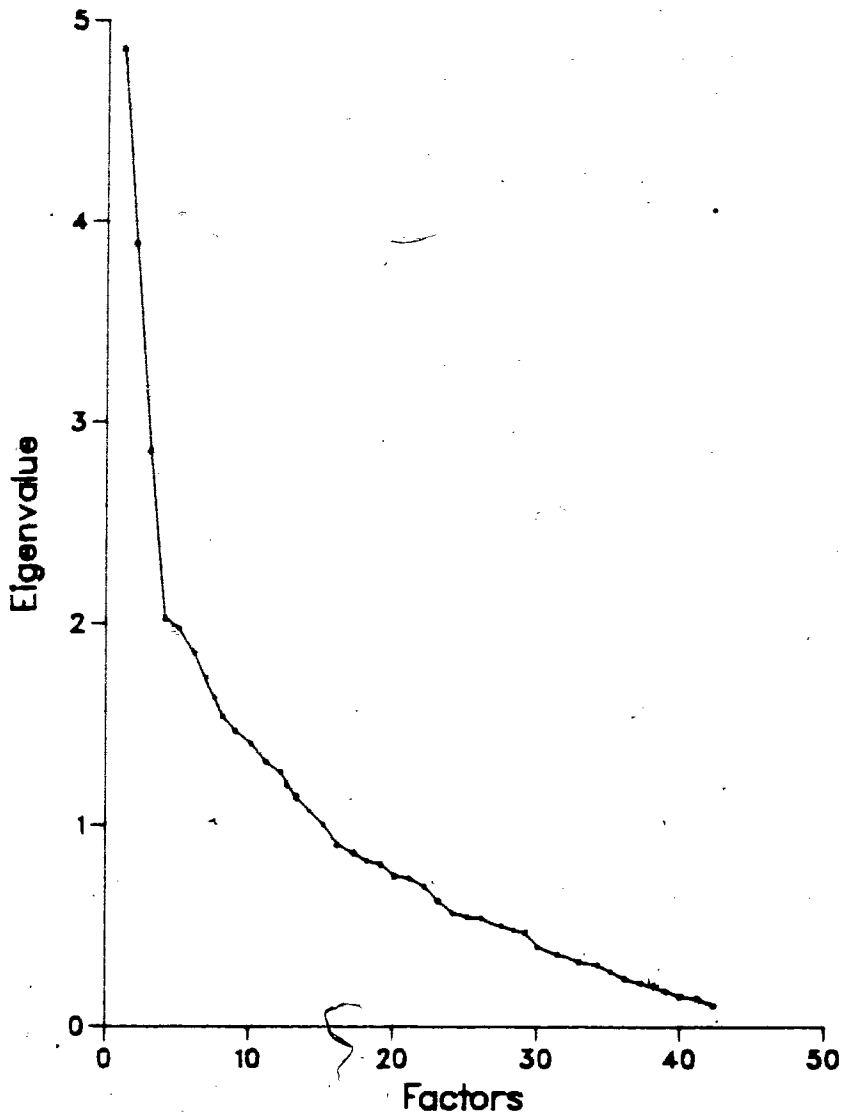
Figure 1.4.
Factor 7 Loadings Plot
mothers and fathers
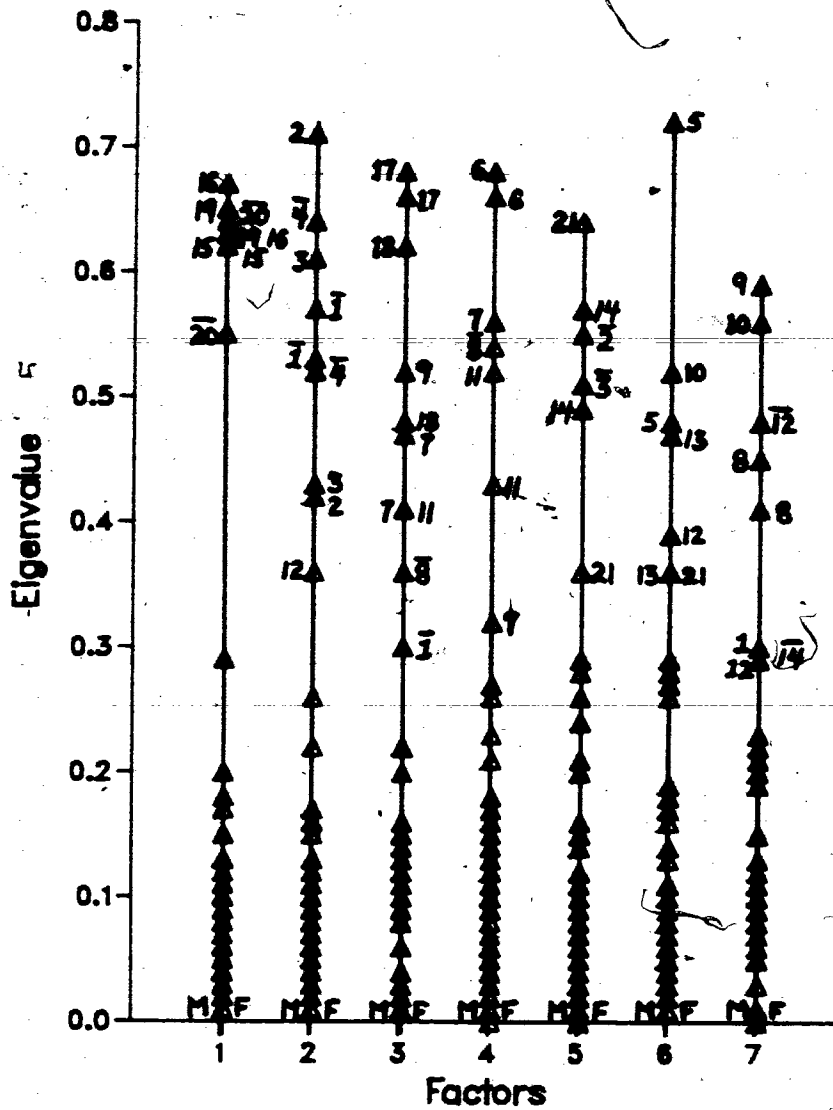
Figure 1.5.
Factor 8 Loadings Plot
mothers and fathers.
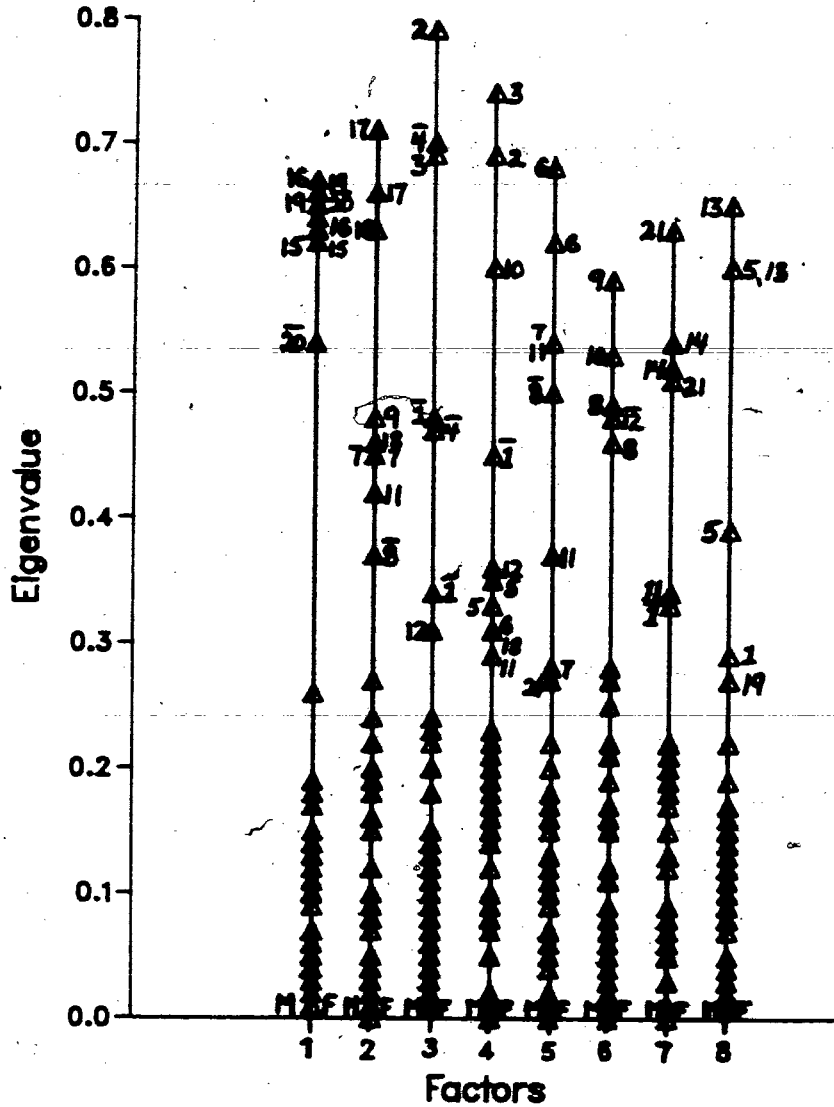
Figure 2.1.
Eigenvalue plot
fathers
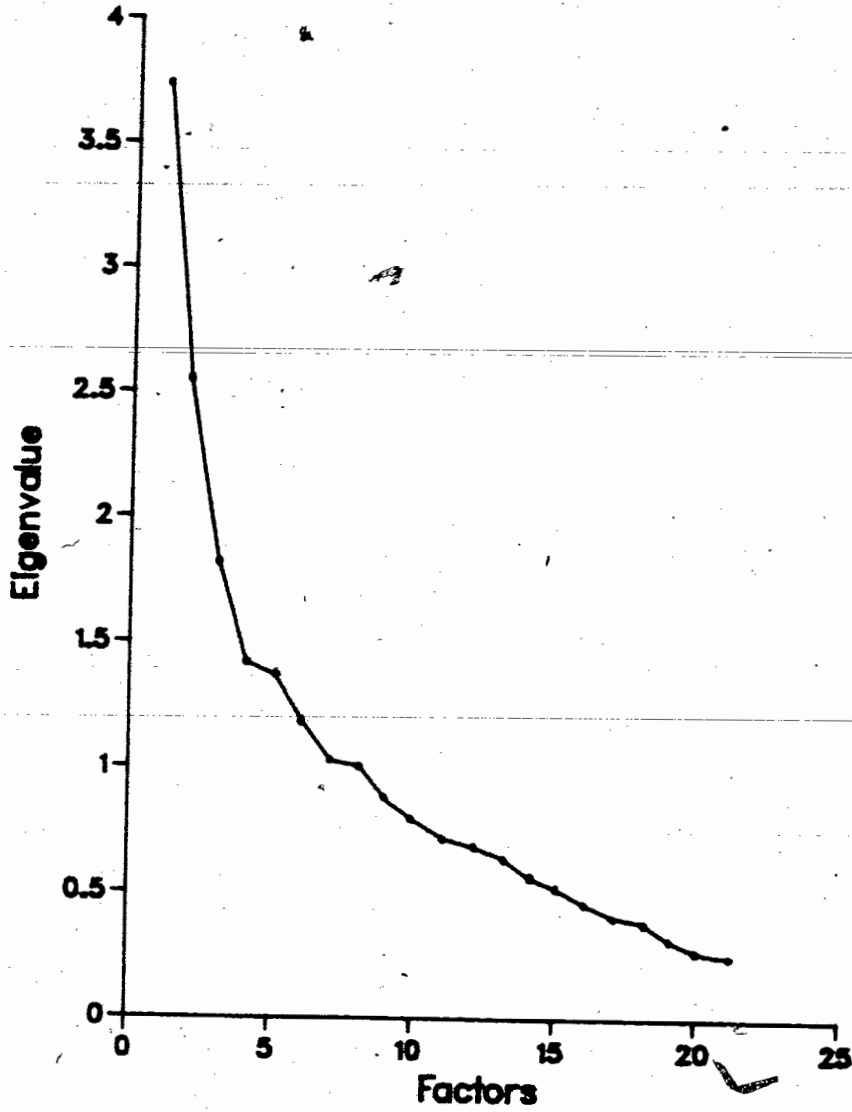
Figure 2.2.
Factor 3 Loadings Plot
fathers
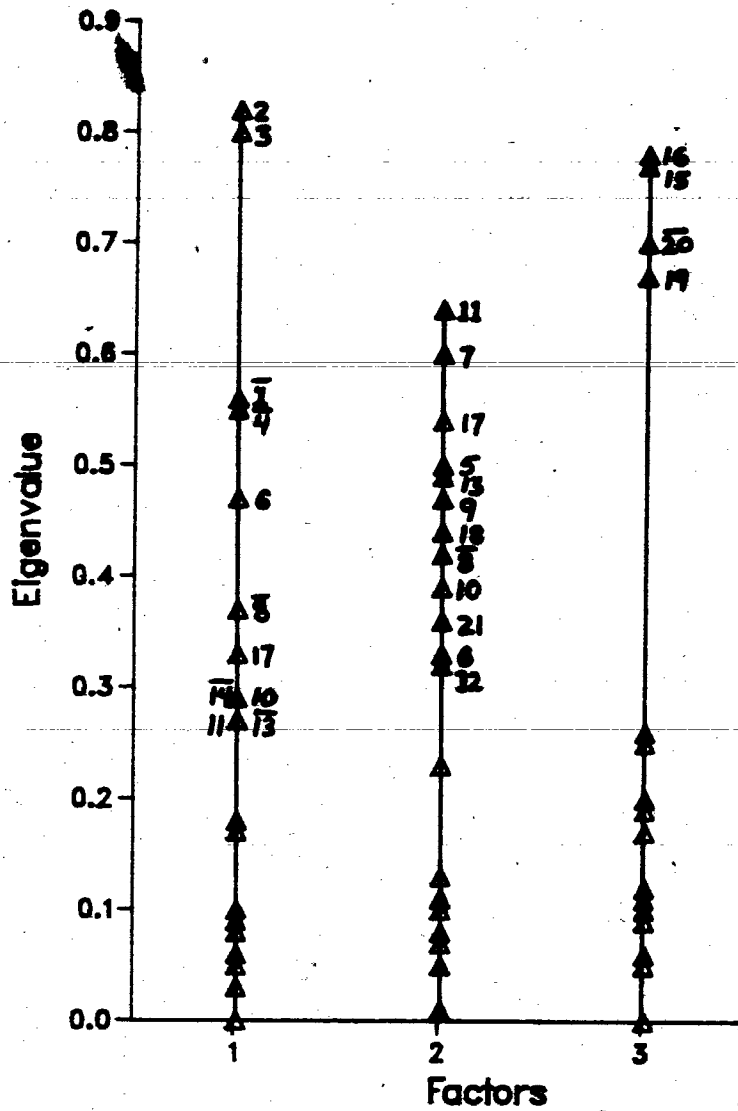
Figure 2.3.
Factor 4 Loadings Plot
fathers
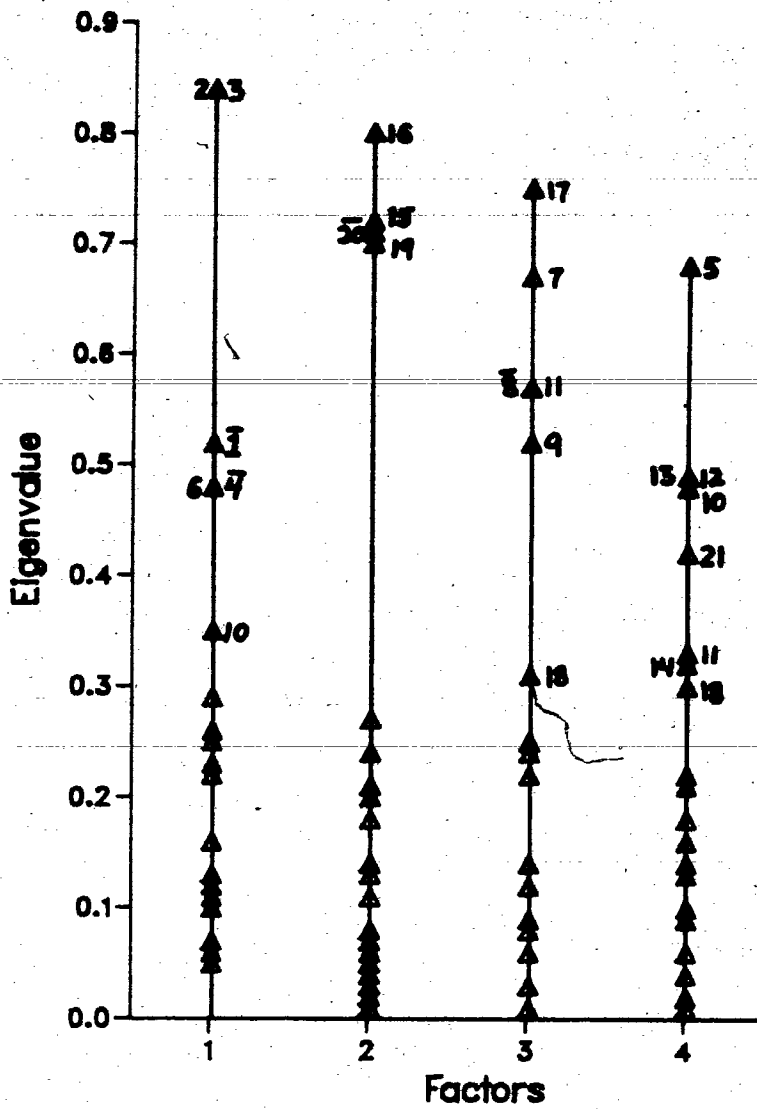
Figure 2.4.
Factor 5 Loadings Plot
fathers
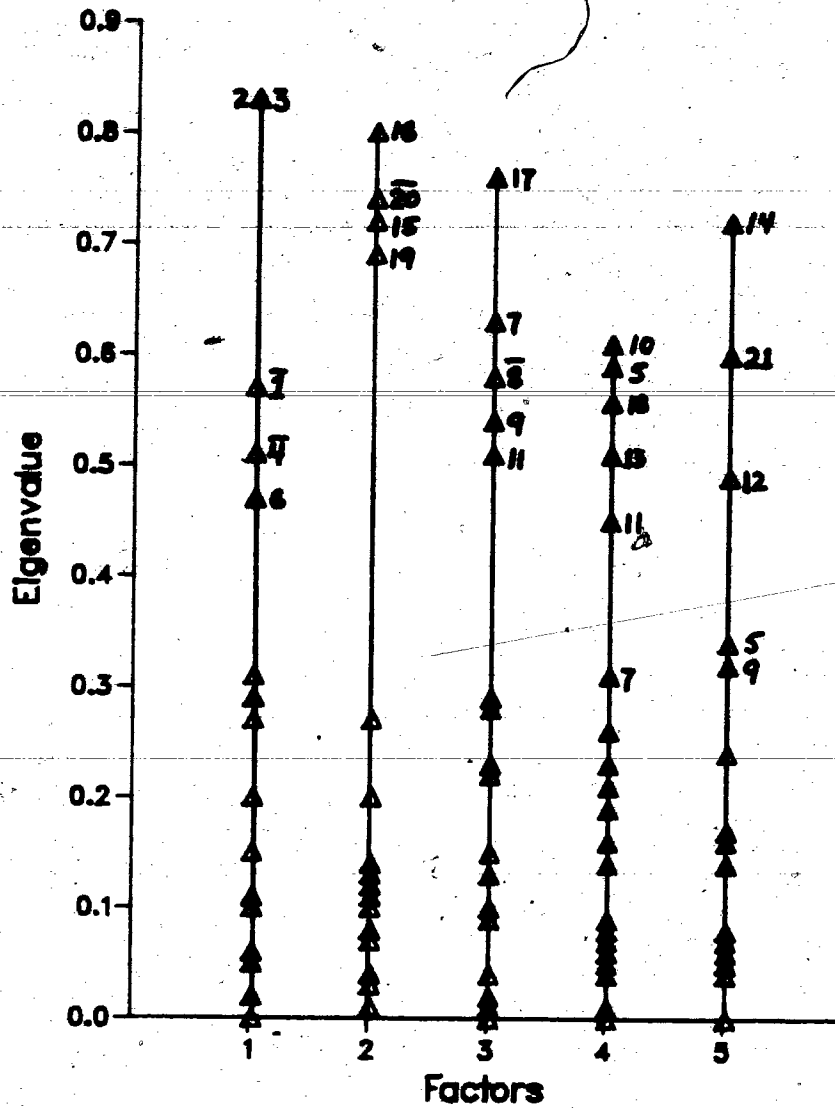
Figure 2.5.
Factor 6 Loadings Plot
fathers
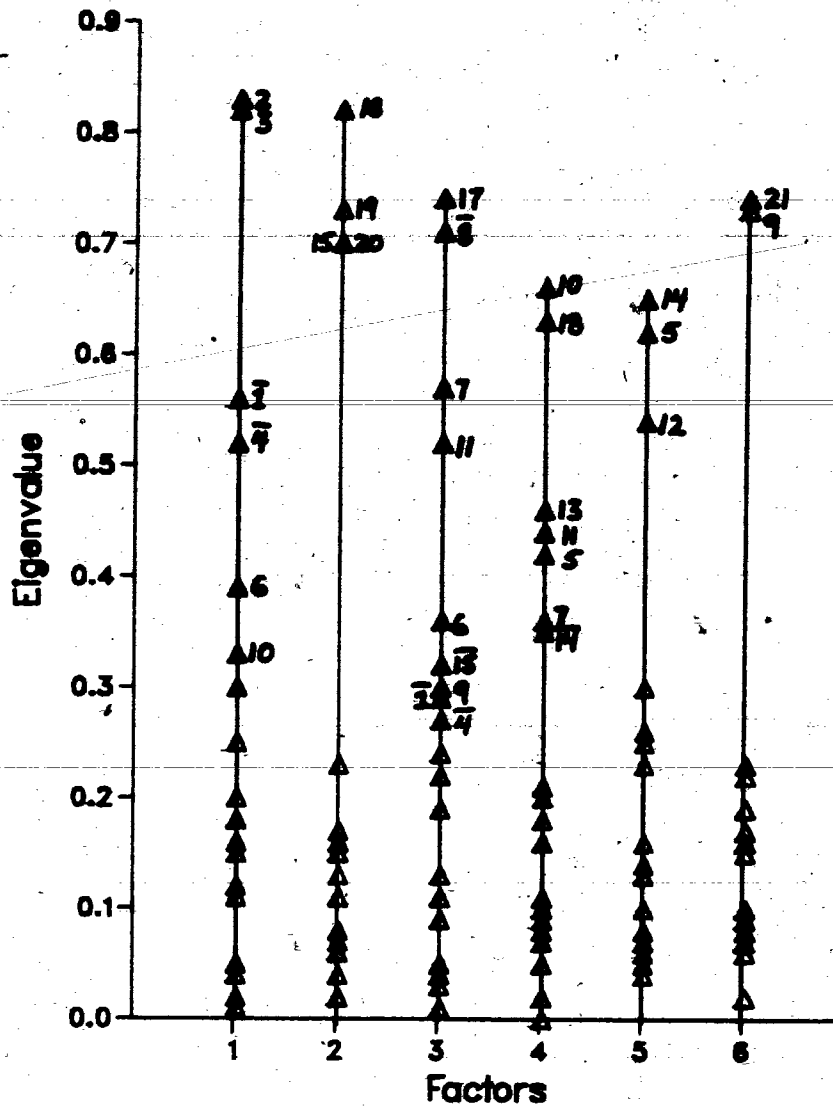
Figure 2.6.
Factor 7 Loadings Plot
fathers
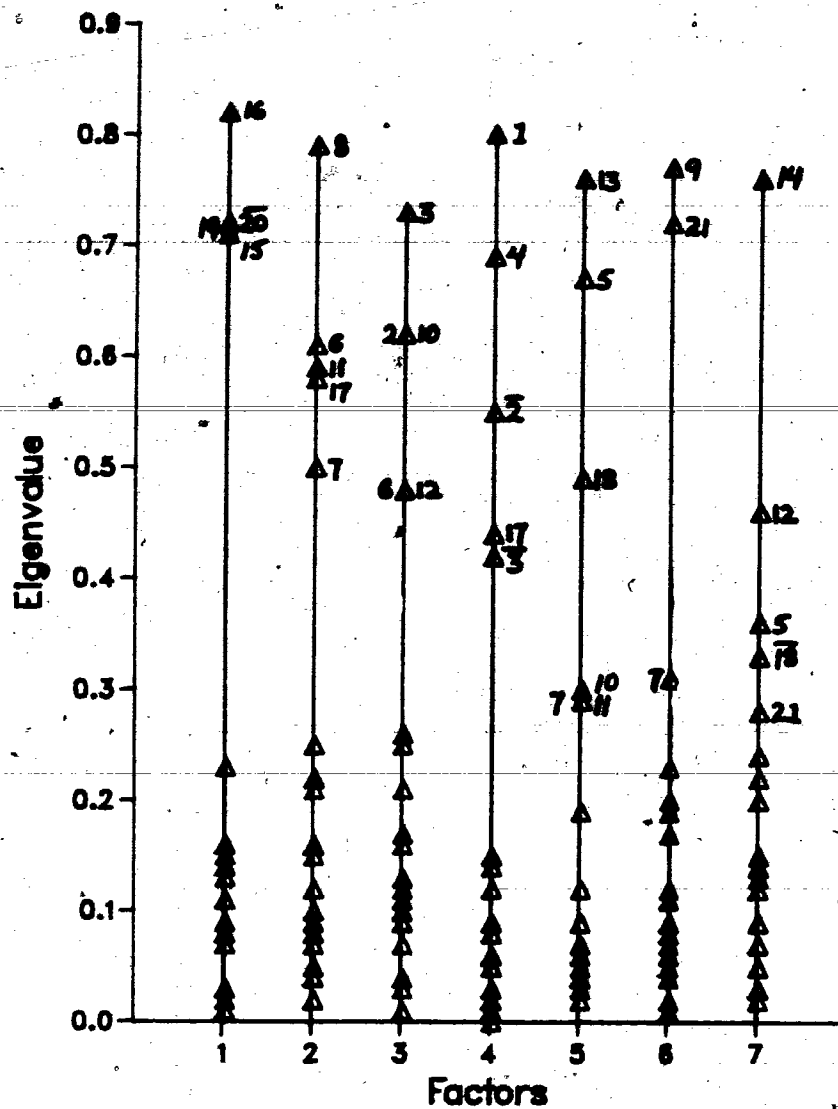
Figure 2.7.
Factor 8 Loadings Plot
fathers
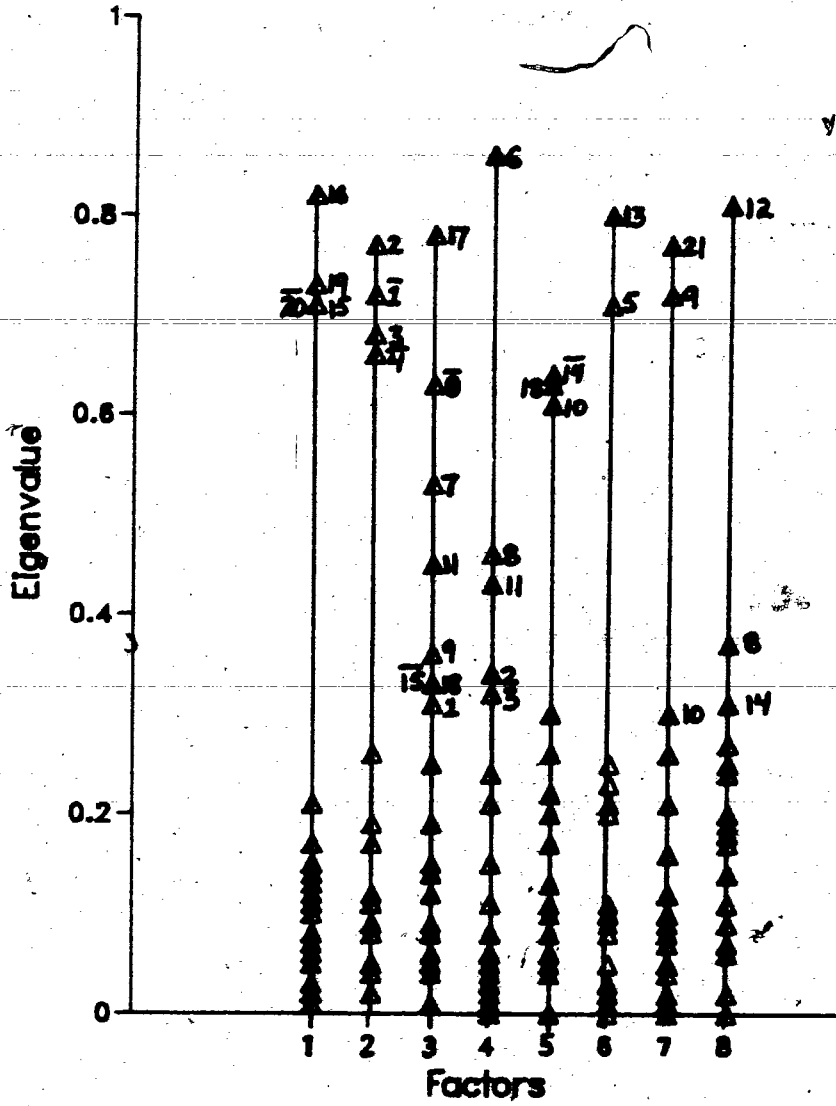
FIGURE 2.8. FACTORS STRUCTURE: FATHERS

Father's Factor Structure

Factor I

1. When this child was an infant, he was a good baby.   -.56
2. During his first two years of life, I felt that as
he got older, he would have serious problems of some kind.   +.83
3. My suspicions about this child grew when he began
talking and playing with other children.   +.82
4. I first had trouble with him starting only recently.   -.52

Factor II

15. He would have turned out much better if I had been
a better parent.   +.70
16. He would have turned out much better if my spouse had
been a better parent.   +.80
19. He would have turned out much better if my spouse
and I got along better with each other.   +.73
20. The way that my spouse and I raised this child has very
little to do with his problems.   -.70

Factor III

7. There is a good chance that he will end up in an
institution.   +.57
8. He is a pretty normal boy who just needs help in dealing
with some problems.   -.71
11. He gets into trouble a lot because there is really
something wrong inside him.   +.52
17. I doubt whether this child can be changed.   +.74

Factor IV

5. This child is different from his brothers and sisters.   +.42
10. He acts bad because he gets frustrated at not getting
what he wants.   +.66
11. He gets into trouble a lot because there is really
something wrong inside of him.   +.44
13. It is easy for other children to get this child into
trouble.   +.46
18. Discipline has been useless in helping or controlling
him.   +.63

Factor I

5. This child is different from his brothers and sisters. +.62
12. This child acts bad because he has learned that bad
behavior gets him what he wants from others. +.54
14. A good spanking would be the best medicine for him. +.65

Factor II

9. This child gets into trouble because the police, the
school, or the neighbours pick on him. +.74
21. With adequate medication most of his problems could be
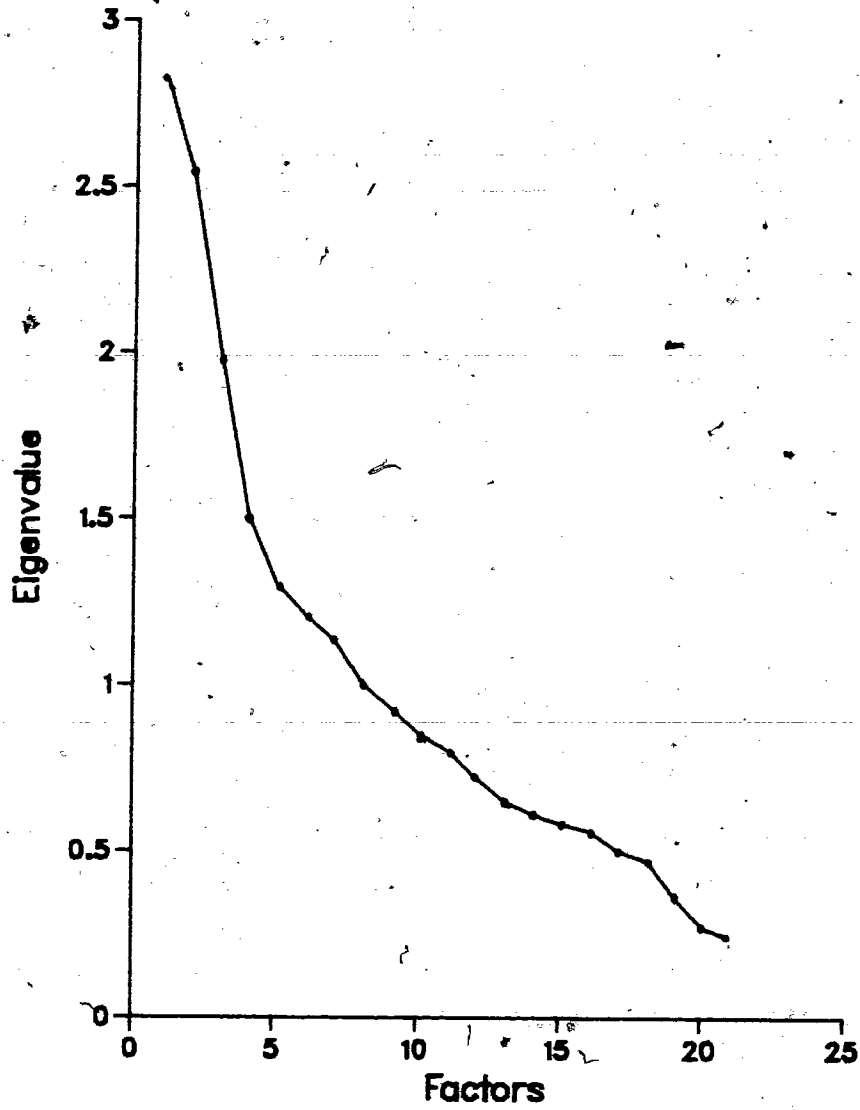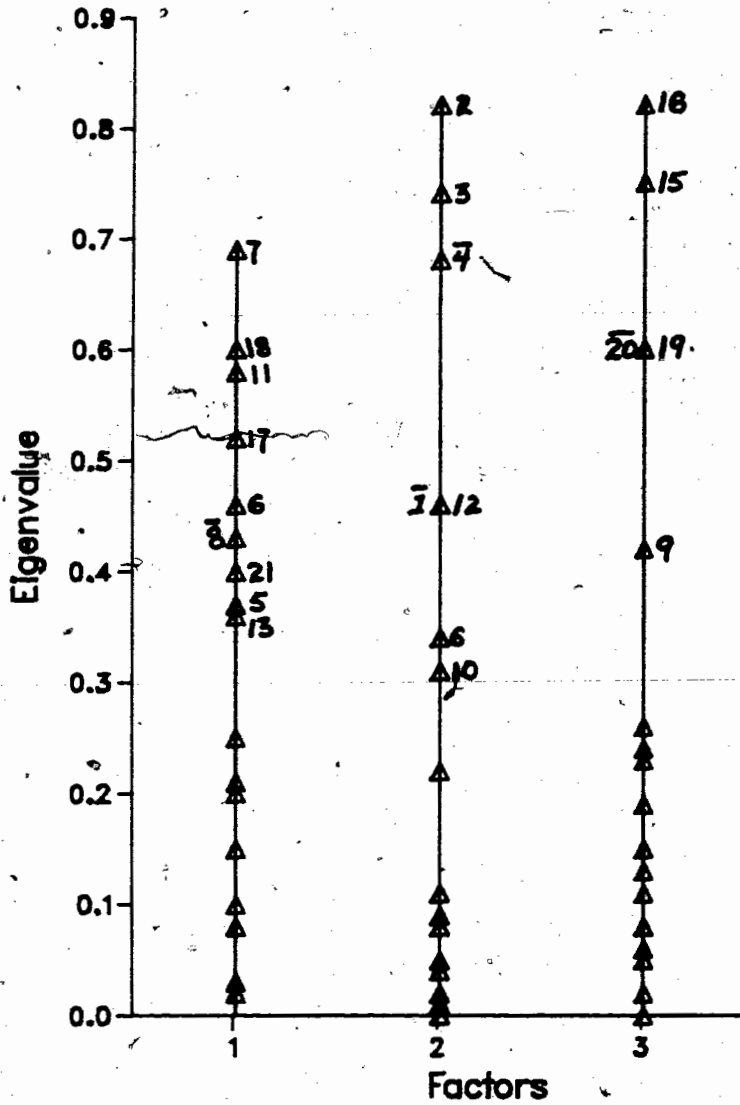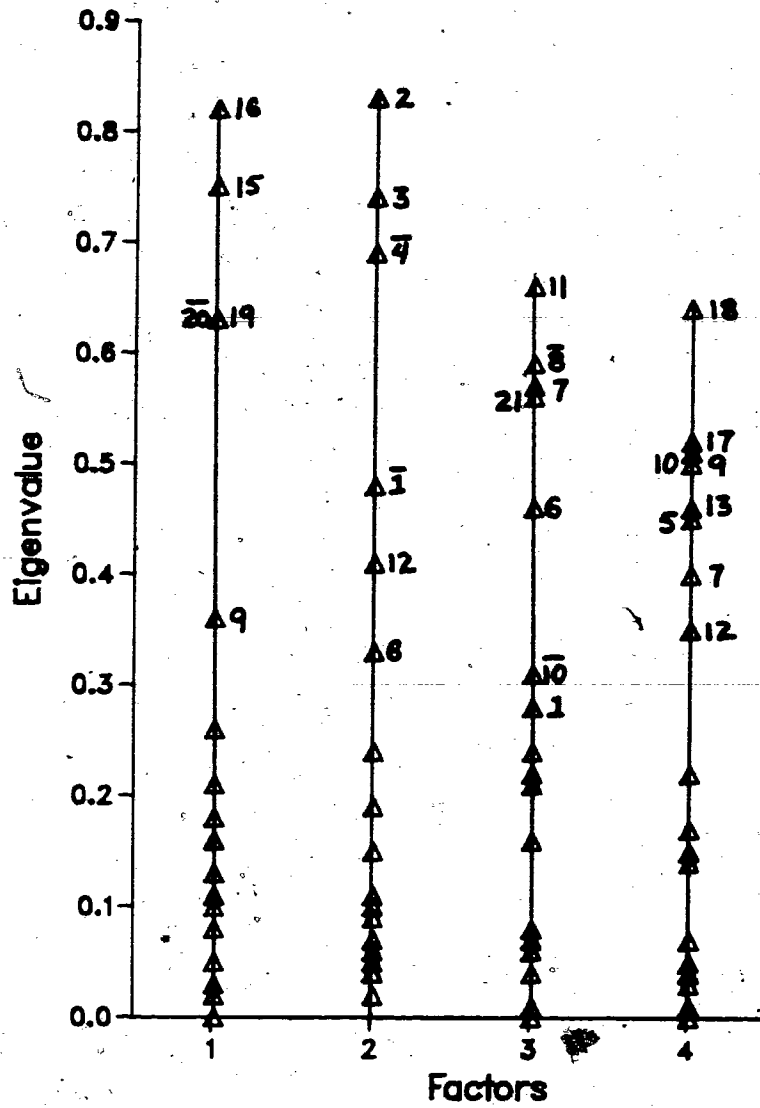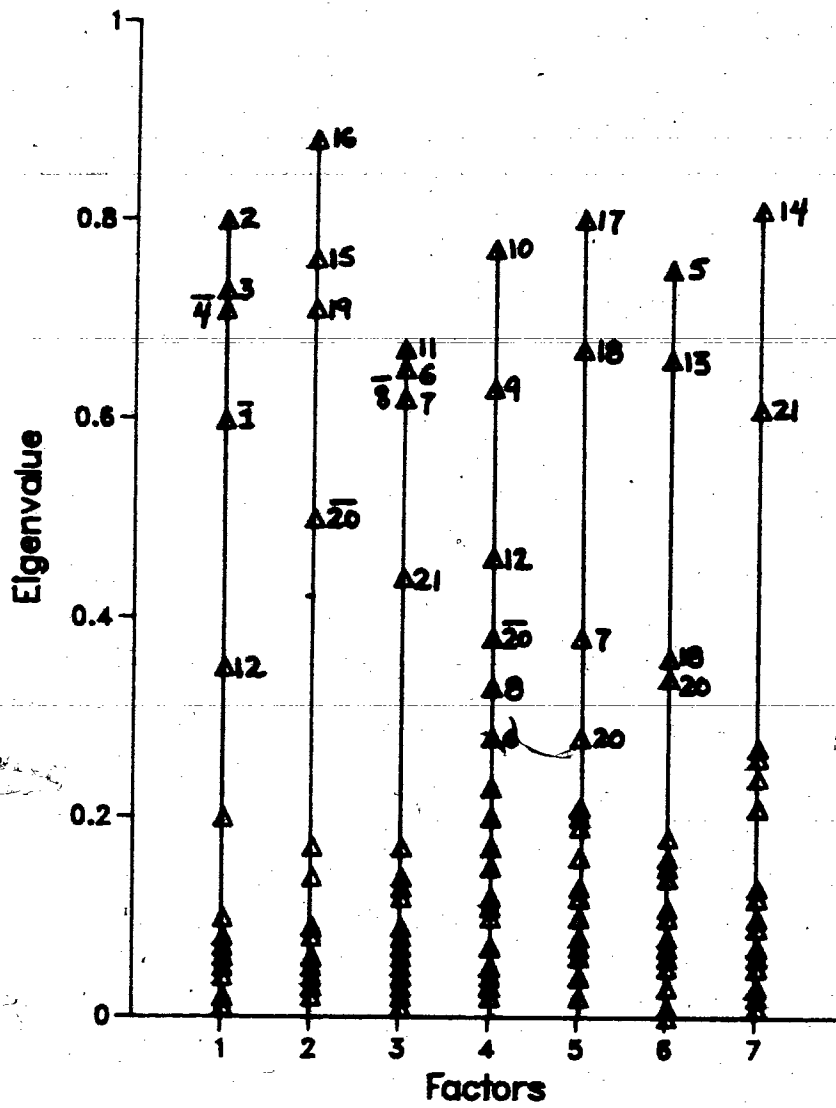solved. +.73

Figure 3.1.
Eigenvalue plot
mothers

Figure 3.2.
Factor 3 Loadings Plot
mothers

Figure 3.3.
Factor 4 Loadings Plot
mothers

Figure 3.4.
Factor 5 Loadings Plot
mothers
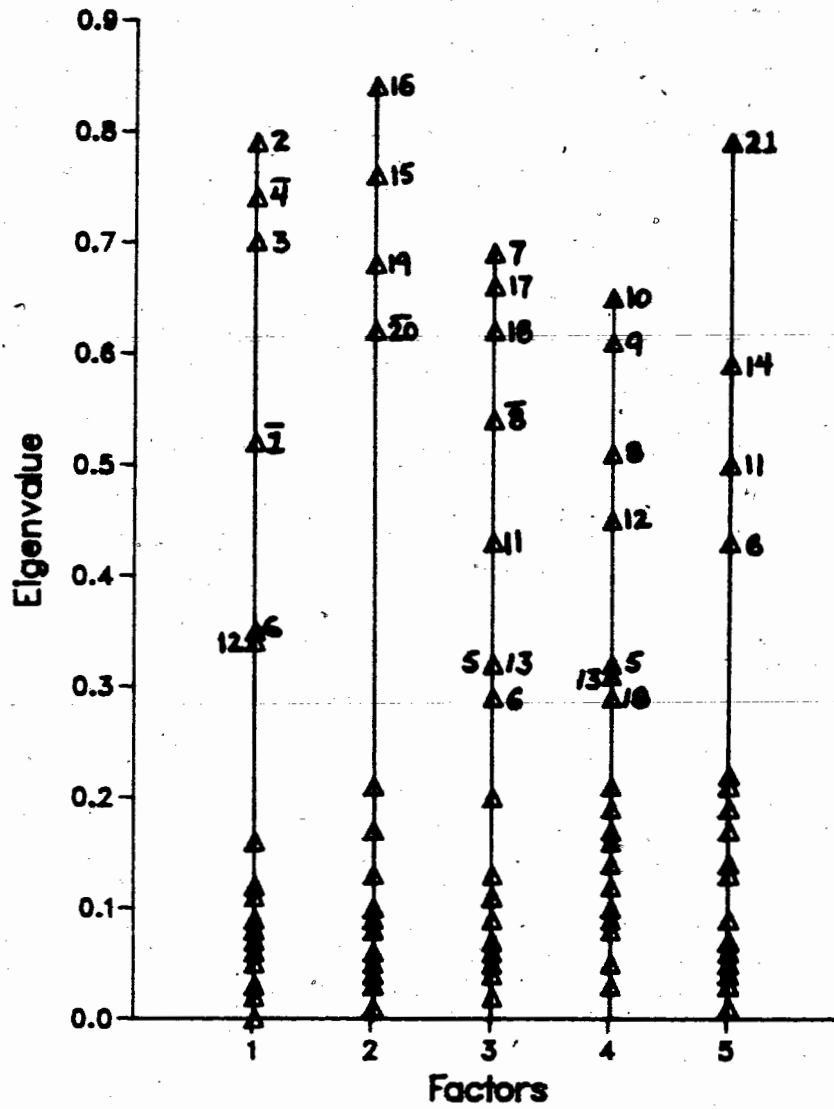
Figure 3.5.
Factor 6 Loadings Plot
mothers
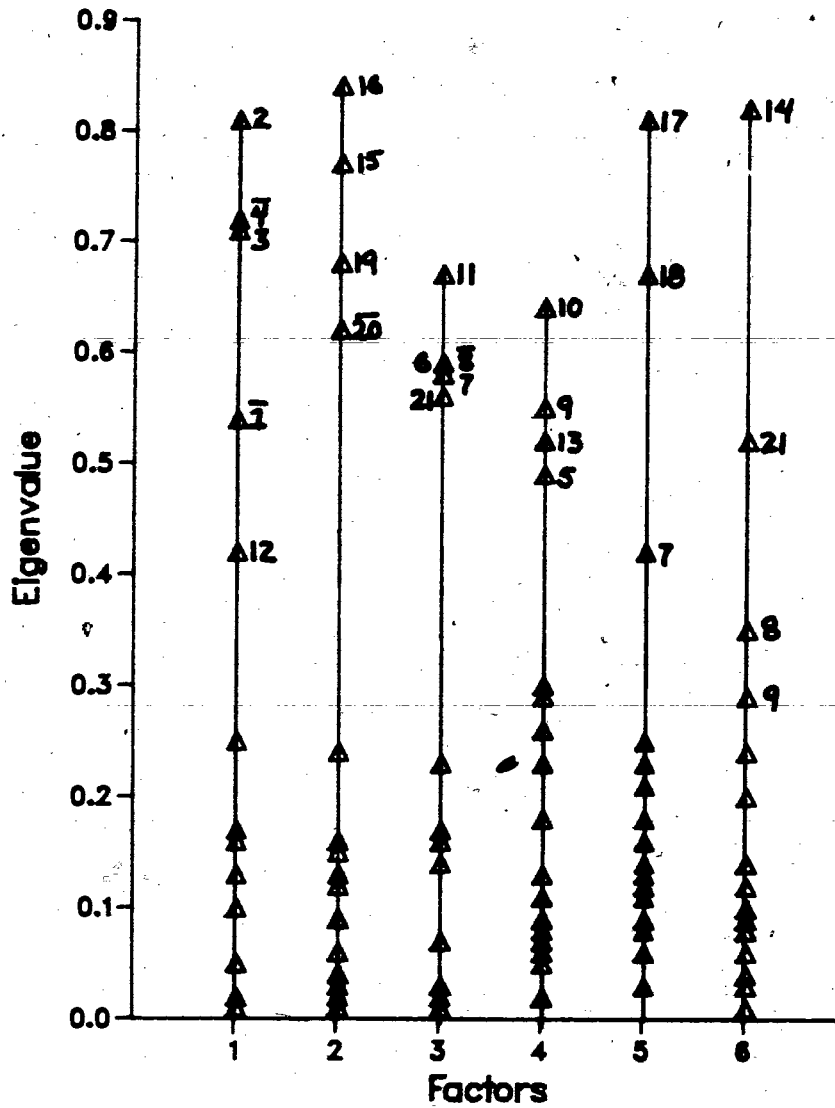
Figure 3.6.
Factor 7 Loadings Plot
mothers

Figure 3.7.
Factor 8 Loadings Plot
mothers

FIGURE 3.8. FACTOR STRUCTURE - MOTHERS

Mother's Factor Structure

Factor I

1. When this child was an infant, he was a good baby.   -.54
2. During his first two years of life, I felt that as he got older, he would have serious problems of some kind.+.81
3. My suspicions about this child grew when he began talking and playing with other children.   +.71
4. I first had trouble with him starting only recently.   -.72

Factor II

15. He would have turned out much better if I had been a better parent.   +.77
16. He would have turned out much better if my spouse had been a better parent.   +.84
19. He would have turned out much better if my spouse and I got along better with each other.   +.68
20. The way that my spouse and I raised this child has very little to do with his problems.   -.61

Factor III

6. At times I felt he might be brain-damaged or have some other medical illness.   +.59
7. There is a good chance that he will end up in an institution.   +.58
8. He is a pretty normal boy who just needs help in dealing with some problems.   -.58
11. He gets into trouble a lot because there is really something wrong inside him.   +.67
21. With adequate medication most of his problems could be solved   +.56

Factor IV

5. This child is different from his brothers and sisters. +.49
9. This child gets into trouble because the police, the school, or the neighbours pick on him.   +.55
10. He acts bad because he gets frustrated at not getting what he wants.   +.64
13. It is easy for other children to get this child into trouble.   +.52

Factor V

7. There is a good chance that he will end up in an institution.   +.42
17. I doubt whether this child can be changed.   +.81
18. Discipline has been useless in helping or controlling him.   +.67

Factor VI

14. A good spanking would be the best medicine for him.   +.82
21. With adequate medication most of his problems could be solved.   +.52

The Taplin Checklist

Instructions: Rate each of the following items on the seven-point scale to indicate your agreement or disagreement with how well the statements describe your child. Place a check ( ) in the box corresponding to your rating for each item.

1. When this child was an infant, he was a good baby.

2. During his first two years of life, I felt that as he got older, he would have serious problems of some kind.

3. My suspicions about this child grew when he began talking and playing with other children.

4. I first had trouble with him starting only recently.

5. This child is different from his brothers and sisters.

6. At times I felt he might be brain-damaged or have some other medical illness.

7. There is a good chance that he will end up in an institution.

8. He is a pretty normal boy who just needs help in dealing with some problems.

9. This child gets into trouble because the police, the school, or the neighbours pick on him.

10. He acts bad because he gets frustrated at not getting what he wants.

11. He gets into trouble a lot because there is really something wrong inside of him.

12. This child acts bad because he has learned that bad behavior gets him what he wants from others.

13. It is easy for other children to get this child into trouble.

14. A good spanking would be the best medicine for him.

15. He would have turned out much better if I had been a better parent.

16. He would have turned out much better if my spouse had been a better parent.

17. I doubt whether this child can be changed.

18. Discipline has been useless in helping or controlling him.

19. He would have turned out much better if my spouse and I got along better with each other.

20. The way that my spouse and I raised this child has very little to do with his problems.

21. With adequate medication most of his problems could be solved.

REFERENCES

1. Allport, G. Attitudes. An excerpt from an article in C. Murchinson (Ed.), Handbook of Social Psychology, Clark University Press, Worcester, Mass., 1935. In M. Fishbein (Ed.), Readings in Attitude Theory and Measurement. New York: John Wiley & Sons Inc., 1967.

2. Appell, M. J., Williams, C. M., & Fishell, K. N. Changes in attitudes of parents of retarded children effected through group counseling. American Journal of Mental Deficiency, 1964, 68, 807-812.

3. Atekson, B. & Forehand, R. Parental behavior training for problem children: An examination of studies using multiple outcomes. Journal of Abnormal Child Psychology, 1978, 6, 449-490.

4. Baumrind, D. Child care practices anteceding three patterns of preschool behaviors. Genetic Psychology Monographs, 1967, 75, 345-388. 24, 507-527.

5. Becker, W. C. & Krug, R. S. The parent attitude research instrument: A research review. Child Development, 1965, 33, 509-535.

6. Beckman, L. J. Causal attributions of teachers and parents regarding children's performance. Psychology in the Schools, 1976, 13, 212-218.

7. Berkowitz, B.P. & Graziano, A.M. Training parents' as Behaviour therapists: A review. Behaviour Research and Therapy, 1972, 10, 297-317.

8. Bugental, D.B., Whalen, C. K., & Henker, B. Causal attributions of hyperactive children and motivational assumptions of two behavior-change approaches: Evidence for an interactionist position. Child Development, 1977, 48, 874-884.

9. Burchinal, L.G., Hawkes, G.R., & Gardner, B. The relationship of parental acceptance and adjustment of children. Child Development, 1957, 28, 65-77.

10. Calhoun, L. G., Peirce, J. R., & Dawes, A. S. Attribution theory concept and outpatients' perceptions of the causal locus of their psychological problems. Journal of Community Psychology, 1973, 1, 52-53.

11. Calhoun, L. G., Peirce, J. R., Walters, S., & Dawes, A. S. Determinants of social rejection for help seeking: Locus of causal attribution, help source, and the mental illness label. Journal of Consulting and Clinical Psychology, 1974, 42, 618.

12. Calhoun, L. G., Selby, J. W., & Wroten, J. D. Situational constraint and type of causal explanation: The effects on perceived "mental illness" and social rejection. Journal of Research in Personality, 1977, 11, 95-100.

13. Cann, A., Calhoun, L. G., & Selby, J. W. Attribution for delinquent behaviour: Impact of concensus and consistency information. British Journal of Social and Clinical Psychology, 1980, 19, 33-40.

14. Cline, V.B., Richards, J.M. & Needham, W.E. A factor analytic study of the father form of the parental Attitude Research Instrument. The Psychological Record, 1963, 13, 65-72.

15. Cook, J.J. Dimensional analysis of child-rearing attitudes of parents of handicapped children. American Journal of Mental Deficiency, 1963, 68, 354-361.

16. Cowen, E.L., Huser, J., Beach, D. & Rappaport, J. Parental perceptions of young children and their relation to indexes of adjustment. Journal of Consulting and Clinical Psychology, 1973, 29, 97-103.

17. Cross, H.J. & Kawash, G.F. A short form of PARI to assess authoritarian attitudes toward child rearing. Psychological Reports, 1968, 23, 91-98.

18. Curry, J.F. & Wright, T.L. Adults perceptions of Children's Behavioural Disorders: Do attributions of locus of problems predict recommendations for treatment. Psychological Reports, 1980, 46, 1039-1043.

19. DeBoeck, P. An alternative factor solution to the mother's form of the Parental Attitude Research Instrument and the relationship of PARI factors with social class. Journal of Psychology, 1976, 94, 79-86.

20. Deilman, T.E., Barton, K., & Cattell, R.B. Relationships among family attitudes and child rearing practices. The Journal of Genetic Psychology, 1977, 130, 105-112.

21. Eyeberg, S.M. & Johnson, S.M. Multiple assessment of behaviour modification with families: Effects of contingency contracting and order of treated problems. Journal of Consulting and Clinical Psychology, 1974, 42, 594-606.

22. Fairbank, T.C. Relationships among parent training, parental attitudes and child behavior. (Doctoral Dissertation, California School of Professional Psychology, 1977) Dissertations Abstracts International, 1978, 38b. (Order no. 7732432, 154 pp.)

23. Farina, A., Fisher, J.D., Getter, H., & Fischer, E.H. Some consequences of changing people's views regarding the nature of mental illness. Journal of Abnormal Psychology, 1978, 87, 272-279.

24. Fiedler, K. The causal schemata: Review and criticism of research on a popular construct. Journal of Personality and Social Psychology, 1982, 42, 1001-1013.

25. Fishbein, M., & Ajzen, I. Belief, attitude, intention and behaviour: An introduction to theory and research. Addison-Wesley Publishing Co., 1975.

26. Fisher, J.D., & Farina, A. Consequences of beliefs about the nature of mental disorders. Journal of Abnormal Psychology, 1979, 88, 320-327.

27. Fleischman, M.J. & Conger, R.E. 'T.E.A.C.H.' Clinical manual: Specific techniques for management of aggressive children. Unpublished manual. Oregon Social Learning Center, Eugene, Oregon, 1976.

28. Forehand, R. & Atekson, B. Generality of treatment effects with parents' as therapists: A review of assessment and implementation procedures. Behaviour Therapy, 1977, 8, 575-593.

29. Forehand, R. & King, H.E. Non-Compliant children: Effects of parent training on behaviour and attitude change. Behaviour Modification, 1977, 1, 93-109.

30. Frieze, I.H. Causal attributions and information seeking to explain success and failure events. Journal of Research in Personality, 1976, 10, 293-305.

31. Gabel, H. D. Effects of parent group education and group play psychotherapy on maternal child-rearing attitudes. Dissertation Abstracts International, 1973, 33, 12-B, 6077.

32. Gildea, M.C.L., Glidewell, J.C., & Kantor, M.D. Maternal attitudes and general adjustment. In J. Glidewell (Ed.), _Parent attitudes and Child Behaviour._ Conference on Community Mental Health Research, Washington University, St. Louis. 1961.

33. Graziano, A.M. Parents as Behaviour Therapists. In M. Hersen, R.M. Eisler & P.M. Miller (Eds.), _Progress in Behaviour Modification_ (volume 4). New York.: Academic Press, 1977.

34. Harman, H.H. _Modern Factor Analysis._ Chicago, Ill.: Univ. Chicago Press, 1976.

35. Harris, S.L., & Nathan, P.E. Parents' locus of control and perceptions of causes of children's problems. _Journal of Clinical Psychology_, 1973, _29_, 182-184.

36. Heider, F. _The psychology of interpersonal relations._ New York: John Wiley & Sons, 1958.

37. Hinkle, D. E., Arnold, C. F., Croake, J. W., & Keller, J. F. Adlerian parent education: Changes in parents' attitudes and behaviours, and children's self-esteem. _American Journal of Family Therapy_, 1980, _8_, 32-43.

38. House, W.C. Effect of locus of control, expectancy confirmation-disconfirmation , and type of goal on causal attributions of failure. _Journal of Research in Personality_, 1976, _10_, 279-292.

39. Humphries, T.W., & Bauman, E. Maternal child rearing attitudes associated with learning disabilities. _Journal of Learning Disabilities_, 1980, _13_, 54-57.

40. Johnson, C.A. & Katz, R.C. Using parents' as change agents for their children: A review. _Journal of Child Psychology and Psychiatry_, 1973, _14_, 181-200.

41. Johnson, R.E., Calhoun, L.G., & Boardman, W.K. The effect of severity, consistency, and typicalness information of clinicians' causal attributions. _Journal of Consulting and Clinical Psychology_, 1975, _31_, 600-604.

42. Jones, E.E. & Nisbett, R.E. The actor and the observer: Divergent perceptions of the causes of behaviour. In E.E. Jones, D.E. Kanouse, H.H. Kelly, R.E. Nisbett, S. Valens & B. Weiner. _Attribution: Perceiving the causes of behaviour._ Morristown, New Jersey.: General Learning Press, 1971.

43. Judson, S. L., & Burden, R. L. Towards a tailored measure of parental attitudes: An approach to the evaluation of one aspect of intervention projects with parents of handicapped children. _Child Care, Health and Development_, 1980, _6_, 47-55.

44. Karoly, P., & Rosenthal, M. Training parents in behavior modification: Effects on perceptions of family interaction and deviant child behavior. _Behavior Therapy_, 1977, _8_, 406-410.

45. Kopel, S., & Arkowitz, H. The role of attribution and self-perception in behavior change: Implications for behavior therapy. _Genetic Psychology Monographs_, 1975, _22_, 175-212.

46. Kowalewski, J.P. An evaluation of behavior modification training for parents and parent effectiveness training as methods for affecting parent-child problem resolution and parental attitude change. (Doctoral Dissertation, University of Maryland, 1976) _Dissertations Abstracts International_, 1977, _37B_. (order no. 77-13029, 105pp)

47. Lillibridge, E.M. The relationship of a parent effectiveness training program to change in parent's self-assessed attitudes and children's perceptions of parents. (Doctoral Dissertation, United States International University, 1972). _Dissertations Abstracts International_, 1972, _32_, 5613A. (Order no. 72-10520, 124 pp)

48. Mannino, F.V., Kisielewski, J., Kimbro, E.L. & Morgenstern, B. Relationships between parental attitudes and behaviour. _Family Life Coordinator_, 1968, _17_, 237-240.

49. Marsella, A.J., Dubanoski, R.A. & Mohs, K. The effects of father presence and absence upon maternal attitudes. _The Journal of Genetic Psychology_, 1974, _125_, 257-263.

50. Medinnus, G.R. Research Implications of several parent-child concepts. _The Journal of Marriage and the Family_, 1959, _21_, 329-333.

51. Medinnus, G.R. The relationship between inter-parent agreement and several child measures. _Journal of Genetic Psychology_, 1963a, _102_, 139-144.

52. Medinnus, G.R. The relationship between parent attitudes and parent acceptance of the child. _Journal of Genetic Psychology_, 1963b, _103_, 117-121.

53. Medvay, P.J. Causal attributions for school-related problems: Teacher perceptions and teacher feedback. _Journal of Educational Psychology_, 1979, _71_, 809-818.

54. Mitchell, J., & McManis, D. L. Effects of P.E.T. on authoritarian attitudes toward child-rearing in parents and non-parents. _Psychological Reports_, 1977, _41_, 215-218.

55. Nichols, R.C. A factor analysis of parental attitudes of fathers. _Child Development_, 1962, _33_, 791-802.

56. O'Dell, S. Training parents' in Behaviour Modification: A review. _Psychological Bulletin_, 1974, _81_, 418-433.

57. Orvis, B.R., Kelley, H.H., & Butler, D. Attributional conflict in young couples. In J.H. Haney, W.J. Ickes & R.F. Kidd (Eds.), _New directions in attribution research_ (Vol. 1). Hillside, New Jersey: Lawrence Erlbaum, 1976.

58. Patterson, G.R. Retraining of aggressive boys by their parents': A review of recent literature and follow-up evaluation. _Canadian Psychiatric Association Journal_, 1974, _19_, 142-158.

59. Patterson, G.R., Cobb, J.A., & Ray, R.S. A social engineering technology for retraining families cf aggressive boys. In H.E. Adams & I.P. Unikel (Eds.), _Issues and trends in behavior therapy_. Springfield, Illinois: Charles C. Thomas, 1973.

60. Patterson, G.R. & Fleischman, M.J. Maintainence of treatment effects: Some consideratins concerning family systems and follow-up data. _Behaviour Therapy_, 1979, _10_, 168-185.

61. Patterson, G.R., & Gullion, M.E. _living with children: New methods for parents and teachers_. Champaign, Illinois: Research Press, 1968.

62. Patterson, G.R., & Reid, J.B. Intervention for families of aggressive boys: a replication study. _Behaviour Research and Therapy_, 1973, _11_, 383-394.

63. Patterson, G.R., Reid, J.B., Jones, R.R. & Conger, R.E. _A Social Learning Approach to Family Interaction (Vol.1): Families with Aggressive Children_. Eugene, Oregon: Castalia Publishing, 1975.

64. Paulson, M.J., Grossman, S. & Shapiro, G. Child-rearing attitudes of foster home mothers. _Journal of Community Psychology_, 1974, _2_, 11-14.

65. Peed, S., Roberts, M., & Forehand, R. Evaluation of the effectiveness of a standardized parent training program in altering the interaction of mothers and their non-compliant children. Behaviour Modification, 1977, 1, 323-350.

66. Peterson, D.R., Becker, W.C., Shoemaker, R.J. Luria, Z. & Hellmer, L.A. Child behaviour problems and parental attitudes. Child Development, 1961, 32, 151-162.

67. Reid, J.B. (Ed.) A Social Learning Approach to Family Interaction (Vol.2): Obsevations in home settings. Eugene, Oregon: Castalia Publishing, 1978.

68. Rickard, K.M., Forehand, R., Wells, K.C., Griest, D.L., & McMahon, R.J. Factors in the referral of children for behavioural treatment: A comparison of mothers of clinic-referred deviant, clinic-referred non-deviant and non-clinic children. Behaviour Research and Therapy, 1981, 19, 201-205.

69. Rosenbaum, R.M. A dimensional analysis of the perceived causes of success and failure. Unpublished dotoral dissertation, University of California, Los Angeles, 1972.

70. Rosenthal, R., & Jacobson, L. Teachers' expectancies: Determinants on pupils' intelligence. Psychological Reports, 1966, 19, 115-118.

71. Ross, A.D. Psychological disorders of children: A behavioural approach to theory, research, and therapy. New York.: McGraw-Hill, 1974.

72. Rotter, J.B. Social learning and clinical psychology. Englewood Cliffs, N.J.: Prentice-Hall, 1954.

73. Rotter, J.B. Social learning theory and clinical psychology. New York: Johnson Reprint Corp., 1973.

74. Rotter, J.B., Some problems and misconceptions related to the construct of I-E control of reinforcement. Journal of Consulting and Clinical Psychology, 1975, 43, 56-67.

75. Rotter, J.B., Chance, J., & Phares, E.J. (Eds.), Applications of a social learning theory of personality. New York: Holt, Rinehart & Winston, 1972.

76. Russell, D. The causal dimension scale: A measure of how individuals perceive causes. Journal of Personality and Social Psychology, 1982, 42, 1137-1145.

77. Schaefer, E.S., & Bell, R.Q. Patterns of attitudes toward child rearing and the family. _Journal of Abnormal and Social Psychology_, 1957, _54_, 391-395.

78. Schaefer, E.S., & Bell, R.Q. Development of the parental attitude research instrument. _Child Development_, 1958, _29_, 339-361.

79. Schludermann, S. & Schludermann, E. Conceptual frames of parental attitudes of fathers. _Journal of Psychology_, 1970a, _75_, 193-204.

80. Schludermann, S. & Schludermann, E. A methodological note on conceptual frames of parental attitudes of fathers (PARI). _Journal of Psychology_, 1970b, _76_, 145-148.

81. Schludermann, S. & Schludermann, E. Response set analysis of mother's form of Parental Attitude Research Instrument (PARI). _Journal of Psychology_, 1974, _86_, 327-334.

82. Schludermann, S. & Schludermann, E. A revised paternal attitude research instrument (PARI) Q4: methodological study. _Journal of Psychology_, 1977, _96_, 15-23.

83. Selby, J.W., Calhoun, L. G., & Johnson, R.E. Perceived causes of psychological problems: An exploratory study. _Journal of Community Psychology_, 1977, _5_, 290-294.

84. Shenkel, R.J., Synder, C.R., Bateson, C.D. & Clark, G.M. Effects of prior diagnostic information on clinicians causal attributions of a clients problem. _Journal of Counsulting and Clinical Psychology_, 1979, _47_, 404-406.

85. Shoben, E.J. The assessment of parental attitudes in relation tochild adjustment. _Genetic Psychology Monographs_, 1949, _39_, 101-148.

86. Siegleman, M. Loving and punishing parental behaviour and introversion tendencies in sons. _Child Development_, 1966, _37_, 985-992.

87. Sims, L.S. & Paolucci, B. An empirical reexamination of the Parent Attitude Research Instrument (PARI). _Journal of Marriage and the Family_, 1975, _37_, 724-732.

88. Sirridge, S.T. Parent training: Assessment of parent attitudes, parent management skills, and child target behavior. (Doctoral dissertation, University of Kansas, 1975). _Dissertations Abstracts International_, 1975, _36_, 3627B. (Order no. 76-1307, 133pp)

89. Stern, M. B. The relationship of parent effectiveness training to parent attitudes, parent behaviour, and child self-esteem. Dissertation Abstracts International. 1972, 32, 3-B, 1885-1886.

90. Synder, C.R., Shenkel, R.J. & Schmidt, A. Effects of role perspective and client psychiatric history on locus of problem. Journal of Counsulting and Clincical Psychology, 1976, 44, 467-472.

91. Synder, C.R. A patient by any other name revisted: Maladjustment or attributional locus of problem?. Journal of Counsulting and Clincical Psychology, 1977, 45, 101-103.

92. Taplin, P.S. & Reid, J.B. Changes in parent consequation as a function of family internention. Journal of Counsulting and Clinical Psychology. 1977,4, 973-981.

93. Tavormina, J.B. Basic models of parent counseling. Psychological Bulletin, 1974, 81, 827-835.

94. Tavormina, J. B. Relative effectiveness of behavioural and reflective group counseling with parents of mentally retarded children. Journal of Consulting and Clinical Psychology, 1975, 43, 22-31.

95. Vincent, M.I. Format for conducting the initial assessment of a family. Unpublished paper, November, 1979.

96. Vogel, M.D. Maternal attitude change toward self and child as a result of training in behavior modification. (Doctoral Dissertation, University of Maryland, 1975). Dissertations Abstracts International, 1975, 36, 3079B. (Order no. 75-29139, 125 pp)

97. Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, R.M. Perceiving the causes of success and failure. In E.E. Jones, D.E. Kanouse, H.H. Kelley, R.E. Nisbett, S. Valins & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior, New York: General Learning Press, 1972.

98. Weiner, B., Russell, D., & Terman, D. Affective consequences of causal ascriptions. In J.H. Harvey, W.J. Ickes & R.F. Kidd (Eds.), New directions in attribution research (Vol. 2), Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1978.

99. Weinrott, M.R., Bauske, B.W. & Patterson, G.R. Systematic Replication of a Social Learning Approach to Parent Training. In *Trends in Behaviour Therapy*. New York: Academic Press, 1979.

100. Wheeler, P.A. Locus of control and expectancies of parents applying for service at a children's clinic. (Doctoral Dissertation, Georgia State Univ., 1978). *Dissertations Abstracts International*, 1979, 39B. (Order no. 79-01819, 70 pp)

101. White, J.A. An assessment of the effect of a short-term parent-education program upon parental knowledge and attitudes toward child development, learning and behavior. (Doctoral Dissertation, North Texas State University, 1974). *Dissertations Abstracts International*, 1975, 35, 5701A-5702A. (Order no. 75-7073, 108 pp)

102. Witmer, H.L. Parental behavior as an index to the problematic outcome of treatment in a child guidance clinic. *American Journal of Orthopsychiatry*, 1933, 3, 431-434.

103. Wulf, K./M., & Bartenstein, E. Changing mother attitudes toward child rearing. *School Psychology International*, 1980, 7-9.

104. Zuckerman, M., Nortin, J. & Sprague, D.S. Acquiescene and extreme sets and their role in tests of authoritarianism and parents' attitudes. *Psychiatric Research Reports*, 1958, 10, 28-45.

105. Zuckerman, M., Barrett Ribback, B., Monashkin, I. & Nortin, J.A. Normative data and factor analysis on the Parental Attitude Research Instrument. *Journal of Consulting Psychology*, 1958, 22, 165-171.

106. Zunich, M. Relationship between maternal behaviour and attitudes toward children. *The Journal of Genetic Psychology*, 1962, 100, 155-165.

107. Zunich, M. The relation between parental attitudes toward child rearing and child behaviour. *Journal of Consulting Psychology*, 1962, 26, 197.

108. Zunich, M. Lower-class mothers' behaviour and attitudes toward child rearing. *Psychological Reports*, 1971, 29, 1051-1058.