

**THE UNIVERSITY OF CALGARY**

**A Typology of Interpersonal Schemata:  
Parents' Schematic Representations of their Children**

**b y**

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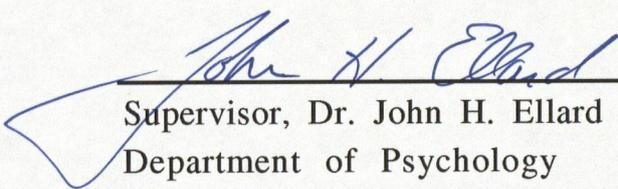
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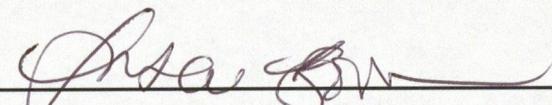
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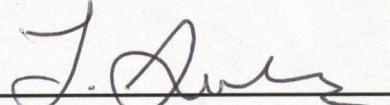
**THE UNIVERSITY OF CALGARY**

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## ABSTRACT

Four interpersonal schemata parents may adopt to organize positive and negative information regarding their children were investigated. Parents ( $N=59$ ) of school-aged children volunteered to complete 3 questionnaires (preliminary, positively primed, and negatively primed). A unitary positive (UP), unitary negative (UN), complex-unresolved (CU), bivalent separated (BS), and indifferent (IN) typology was developed using positive and negative trait ratings. As expected, UP parents had predominantly positive views of their children. Conversely, UN parents' views had little positive content. Results also showed that CU parents' schemata involved an integration of positive and negative traits. BS type parents appeared to maintain separate positive and negative schemata of their children. Finally, IN parents evidenced marginally less commitment ( $p = .06$ ) than other types suggesting greater indifference towards their child. However, equivocal or marginal findings on a number of measures suggest limitations of the results or difficulties due to a self-selected sample and/or social desirability pressures.

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## INTRODUCTION

Understanding the people with whom we come into contact is a difficult task (Jones, 1990). The task may become more formidable in close, intimate relationships (e.g., child, spouse). Given that daily contact inevitably leads to greater amounts of information requiring assimilation or accommodation into our conception, understanding the people with whom we have the most contact may be an even more difficult task. Neuberg and Newsom (1993), for example, have argued that greater amounts of positive and negative information, requires the need for greater cognitive structuring to handle incoming information.

Moreover, the experience of inconsistency in those around us is inevitable. As Jones (1990) eloquently stated:

If everyone behaved with complete consistency over time, and if all the information we received about another person were mutually reinforcing, the process of forming impressions would be fairly simple and straightforward. But, alas, people contradict themselves from time to time, they can violate our expectancies. . . (p. 27)

Commitment to a close individual (e.g., parent-child, spousal relationships) likely augments the inconsistency of behaviour that we experience from that individual. We see individuals to whom we are committed, in more roles, under more circumstances, and in more varied contexts than those who have less contact with us. Increased contact only affords the opportunity to collect more potentially

inconsistent information, and to resolve more contradictions in the perception of the other.

Commitment, however, also brings additional considerations. Parents, with a deep commitment to their children, for example, have an explicit responsibility to care for, love, and raise their child (Brickman et al., 1987). Meanwhile, the child may act inconsistently and parents must still struggle with their understanding of the child - why he or she does the things he/she does. The commitment, inherent in most parent-child relationships, also creates a new type of pressure. The motivation to view the child in positive terms (Brickman, Janoff-Bulman, Rabinowitz, 1987; Kelley, 1983) is a product of the large investment parents make in their children and the resultant cognitive dissonance pressures (Aronson, 1988). This is true within intimate, committed relationships as well (Holmes, 1991). The result of the influence of commitment on the perception of the child may be a positivity bias. With greater perceived commitment, greater justification needs to be garnered to support that commitment. For instance, in the realm of romantic attachments, Holmes (1991) argues that a particular orientation, or representation, of your partner can reduce perceived risk/vulnerability by *resolving uncertainty*. If one constructs a representation of the partner that is highly positive, uncertainty regarding trust may be partially resolved (Murray & Holmes, 1993).

There are reasons to suggest a positivity bias is not the only consequence of commitment pressures. What if the child's behaviour directly contradicts one's conceptualization? The maintenance of a

positively biased representation of the child would not necessarily be adaptive or feasible under all circumstances. In fact, the maintenance of a positive representation may require the invocation of elaborate cognitive distortions (i.e., illusions) beyond what might be adaptive, causing the parent to hold truly unrealistic views of the child (e.g., Would a parent cling to a positive view of a child who is continually arrested for arson?).

Furthermore, if a positive bias is impossible, or unwarranted, then is dissolution of the relationship the only alternative? Commitment to the child precludes this solution for most parents. The parent must remain in the relationship and somehow come to terms with the situation. Consequently, parent-child relationships, and other relationships involving high levels of commitment, represent unique sets of circumstances that may require creative interpersonal solutions.

The present study investigated possible ways that individuals organize information regarding significant others (e.g., child, spouse). Specifically, the investigation explored the organization and/or integration of positive and negative elements within an individual's schematic representation of the significant other. Positive and negative evaluations constitute important organizing dimensions in a variety of areas of research including self (McNulty & Swann Jr., 1994; Showers, 1992b; Taylor, 1991), general attitudes (Thompson, Zanna, & Griffen, in press), and person perception (Osgood et al., 1957; Rosenberg et al., 1968). For purposes of this initial investigation, parents' understanding of their children was the research focus. The

remainder of the introduction refers to parent (as the observer) and child (as the observed).

### **Review of Schema Theory**

Schema theory provided a conceptual framework for the construction of potential parental representations of the child. It was not the intention of this study to provide a strong argument for the existence of schemata constructs, but instead the notion of schemata provided an heuristic for guiding the research.

Schemata are considered one way in which we understand those around us (Baldwin, 1992)<sup>1</sup>. Segal (1988) defined schema as "organized elements of past reactions and experiences that form a relatively cohesive and persistent body of knowledge capable of guiding subsequent perception and appraisals" (p. 147). Schemata may also be defined as cognitive structures based on attributes, and relations between attributes, for a given stimulus object, combined so as to maximize ease and efficiency of information processing (Fiske & Taylor, 1991; Wilcox & Williams, 1990). Safran et al. (1990) described self-schemata as developing out of an attempt to explain one's own behaviour. In like manner, parents may attempt to explain the behaviour of their children and may develop a schema to account for what they know, or believe, about the child. In many ways, schemata are similar to mental models (Holmberg & Holmes, in press). Mental models consist of cognitive, affective, and evaluative components that help organize information around a stimulus object.

The organization of information in the form of interpersonal schemata is most effective when that organization is simple (Neuberg & Newsom, 1993). Interpersonal schemata that are simple, well-defined, relatively homogeneous, and distinct, are best able to "reduce one's cognitive load" (Neuberg & Newsom, 1989; p. 113). Jones (1990) stated that the goal of perceivers is to achieve the simplest possible view of the world.

Much of the research on schemata has focused on self-schemata; that is, how individuals understand themselves (e.g., Fiske & Taylor, 1991; Markus, 1977; Markus & Nurius, 1986; Simpson, et al., 1993). Consistent with discussions of self-schemata is the notion that an individual can possess more than one self-representation (Fiske and Taylor, 1991). Oyserman and Markus (1990) also contend that an individual can possess both negative and positive schemata. This idea is consistent with the proposed mechanism in the present study, which introduced positive and negative dimensions as organizing structures. Specifically, the dimensions of positive and negative represent straightforward, simple ways to organize information. Thus, the present study predicted that the dimensions of positive and negative would be important schematic frameworks around which parents might organize their representations of their children.

In summary, schemata can provide a flexible organization able to accommodate and assimilate numerous aspects of the child. Individuals are motivated to construct representations so that they are simple, and reduce complexity, thereby allowing one to interpret more easily the world around him/her. Furthermore, the dimensions

of positive and negative are considered meaningful dimensions for organizing information (Oyserman and Markus, 1990; Showers, 1992b; 1992c; Taylor, 1991). These considerations are important for the development of the hypothesized typology.

### **Schematic Simplicity: The Assimilation Process**

Cognitive psychology and Gestalt theory both have focused on the principles of cognitive simplicity, which states that people do not like complex, ambiguous worlds. Instead, people prefer to perceive the world in more coherent, organized ways (regardless of the actual meaning). Fiske and Taylor (1991) describe this as the "Cognitive Miser" perspective, referring to the notion that people both prefer to perceive the world as comprehensible and have limited capacities to weigh all information and therefore take short-cuts and make generalizations, that aid in the perception and understanding of the world. Neuberg and Newsom (1989) referred to this tendency as a "Personal Need for Structure", and argued that it can be considered an individual difference variable. There are those who prefer to reduce information to more manageable cognitive sets (structure), and those who are comfortable with greater ambiguity and complexity.

As previously argued, there may be an inherent motivation to view a child in positive terms due, in part, to the magnitude of the commitment. This pressure, combined with schematic considerations for simplicity, may reduce the complexity of the representation. This reduction may take the form of resolving inconsistencies in positive and negative behaviour by simply adopting one valenced view or the

other. That is, the parent may reduce the schematic representation to an all-positive, or all-negative, conception. Although it may seem a complex cognitive manipulation to accomplish, Showers and Cantor (1985) argue that people in complex, personally involving situations can demonstrate remarkable cognitive flexibility in interpreting various situations.

Other motivational factors support the simplicity of a unitary positive or unitary negative schema. For instance, Gestalt theorists have emphasized the need for people to resolve perceptual clutter with neat, clean contours and borders. The Law of Pragnanz, which describes a process of creating "the most stable, consistent, and simple forms possible within a given visual array" (Coren & Ward, 1989; p. 315), captures this notion of resolving perceptual clutter. People generally desire, and are willing to project onto a given stimulus set, distinct contours, borders, and perceptual organizational categories in order to allow them to efficiently and effectively process information. Jones (1990) discusses the tendency of observers to integrate information about actors as one of resolving the observed into a "coherent Gestalt or pattern" (p. 33).

It may be easier to evaluate others, if they are schematically represented in 'black or white' terms rather than various 'shades of gray'. Similarly, it may be beneficial for parents to perceive their children as all good or all bad and not as a schematic Ganzfeld<sup>2</sup>. The complexity of the relationship between parent and child may require short cuts to resolve the infinite variety of decisions that could be reached. Reducing schematic representations to essential elements

(e.g., positive versus negative representations) is one such cognitive short-cut (Fiske & Taylor, 1991). People make use of cognitive short-cuts continuously to reduce ambiguity and allow them to process information more easily. Processing information about, and understanding one's children, is certainly a task that might benefit from cognitive short-cuts.

The existence of a unitary positive or unitary negative schema requires active maintenance. Information consonant with the schema is readily incorporated, assimilated into existing structures. Evidence contrary to the dominant schema requires more cognitive effort to process. Such a process may be similar to the self-impression management processes suggested in positive illusions (Taylor, 1989; Taylor & Brown, 1988). In order to maintain less complex, simpler interpersonal schemata, it would, at times, be necessary to distort, ignore, minimize, or otherwise creatively interpret information that is inconsistent with the cognitive organization of choice. Thus, a parent might turn a blind eye to one aspect of the child in order to perceive the child in a particular light.

Research suggests that individuals often maintain illusions because such illusions are adaptive (Janoff-Bulman, 1989; Baumeister, 1989; Taylor, 1989; Taylor, 1983; Taylor & Brown, 1988; Taylor, et al, 1989; Synder, 1989). In fact, Jones (1990) suggests that the goal of cognition is to "extract or impose meaning on the stimulus world" (p. 90). This pursuit of meaning does not suggest that the individual is delusional, but merely that reality might be looked at in a particular way because a different view would yield a less positive picture

(Taylor, 1983). Extracting or imposing meaning allows one to interpret negative information about himself/herself in the best possible light, rather than having to deny or repress knowledge of that information. Similarly, constructions of meaning might assist a parent in maintaining a singularly positive, or negative, schema regarding his/her child.

In general, individuals are motivated to see themselves in the best possible light (Taylor, 1989; Taylor & Brown, 1988), a motivation that allows the individual to feel better about himself/herself. Concentrating on successes rather than failures, explaining away failure as a momentary lapse of attention, and other such attention and information processing approaches allow one to maintain a positive view of oneself. Taylor and Brown (1988) argue that such a self-view promotes mental health within the individual. Perhaps parents share a similar motivation to see their children positively. If a parent believed that his/her child was good, then this could result in a favorable impression of oneself in regard to parenting skill.

However, the development of a singularly positive schema may only be one possible avenue for conceptual closure. Such a prediction allows for the antithesis. The current study proposed the possibility of the development of an all negative schema, without the corresponding positive schema. Now, all positive information must be filtered out and dealt with in such a way that it does not affect the negativity of the schematic representation of the child. It is likely that such a conclusion is considerably more infrequent than the other proposed types.

Maintaining a unitary positive, or a unitary negative schema is reminiscent of the attitudes of high or low trust individuals (Boon & Holmes, 1994). High trust individuals maintain trust through the use of cognitive distortions. Evidence contradictory to trust is reinterpreted, or downplayed, so as to minimize the damage it might cause in the trust for that partner (Holmes, 1991). Related processes of downward comparisons, selective attention, and confirmatory biases (Taylor & Brown, 1988) are also useful for maintaining the conception. Such processes are assumed in low trust individuals, as well; however, the valences are reversed so that negative views are reinforced. Such creative control and interpretation of the facts, are assumed to contribute to the maintenance of the schematic polarization predicted of some parents.

### **Schematic Simplicity: The Reconstructing Solution**

If parents are motivated to maintain positive representations of their children, they may be forced to use creative cognitive strategies to remove or ignore negative aspects out of the schema. But what if it is undesirable to remove negative information from the positive schema and simply dismiss it? Showers (1992b) suggested that individuals are able to compartmentalization positive and negative aspects of self-representation. This compartmentalization allows the individual to develop a positive view, unblemished by contradictory (i.e., negative) information; a view that is supported by Taylor et al. (1989):

Negative information that has more enduring implications for the self may be cordoned off from the rest of the self-concept through negative self-schemas or pockets of incompetence that are domain-specific and enable people to prepare for or avoid situations in which their liabilities or lack of talent would be tested. (p. 127)

The separation of positive and negative dimensions schematically, may resolve tension. The tension experienced by parents may be the result of the simultaneous existence of both positive and negative characteristics (Showers, 1992b; 1992b). Tension may also mount from the existence of cognitive complexity (Neuberg & Newsom, 1993), and/or ambivalence (Gerson, 1984; Sincoff, 1990). While positive and negative information remain integrated there is potential for ambiguity, or tension, regarding the simultaneous existence of diametrically opposed information. Conversely, once the two stimuli are made independent, the tension may no longer exist. Therefore, a positive schema would still be available to justify commitment, but a negative schema would also exist to account for negative behaviour from the child.

Thus, various forces act to separate positive and negative information and form independent schemata of the child. This process is not unlike the pockets of incompetence suggested by Taylor et al. (1989), or the compartmentalization of positive and negative suggested by Showers (1992b). Within this formulation, the negative is not integrated with the positive and thus each is allowed to develop unrestrained by integration of opposing information.

The separation of positive and negative dimensions describes a process different from the unitary processes described previously. In this representation, the parent's representation of the child is not limited to only a positively or negatively biased schema. The parent also does not integrate positive and negative information to form a mixed valence impression. Instead, cognitive pressures conspire to separate the positive and negative aspects of the child into two independent schemata.

There is preliminary support in other areas that suggest positive and negative dimensions. Taylor (1991) discovered a lack of symmetry in adjustment to generic positive and negative events that caused her to question the assumption that positive and negative represent end points of a single continuum. A similar conclusion was reached by Mazur et al. (1992) in their analysis of the cognitive errors and positive illusions of children in divorce situations. Their research demonstrated the possibility that positive illusions exist, and operate, independently of negative distortions, thus arguing for the existence of separate positive and negative dimensions of cognitive process.

The psychoanalytic concept of splitting appears closely related to schematic representation described above. Splitting has a long history dating back to the late nineteenth century when the concept was referred to as 'double consciousness' (Grotstein, 1981). It is often described as a process developed in infancy, or early childhood, as a method for making sense of the world (Grotstein, 1981). Splitting organizes information into good and bad, or dichotomies, that allow the infant to understand the world more easily. The act of splitting is

hypothesized to be either an active, or passive, process but, if utilized enough through infancy, may become a defensive strategy (Grotstein, 1981). Manfield (1992) argues that all people use splitting at times, but that the measure of pathology concerns the degree to which it is relied upon as a mechanism to manage internal conflict. Grotstein (1981) also believes that splitting represents both a universal phenomenon in our daily lives, and a pathological defense mechanism. The primary function of splitting is believed to be the reduction of ambivalence (Gerson, 1984). The separation of opposing information is predicted to reduce the psychic tension created by of the coexistence of dichotomous information (e.g., positive and negative).

Splitting is characterized by uncontrolled extremes of thinking (Manfield, 1992; Siegal, 1992). Siegal (1992) argues that splitting, within intimate relationships, will ultimately lead to 'chaos', because of the extreme conceptual swings of one partner's view of the other. The related type in the present formulation was not predicted to result in poorer interpersonal functioning, however, it was not the intention of the present study to measure the success, or pathology, of the parental relationship.

Splitting has been characterized as both a neurotic defense mechanism and a part of daily life. Should evidence of an independent positive and negative schema type be supported in the current study, it would be necessary to explore further the concept's implications for parental functioning and pathology.

### Summary of Schematic Simplicity Processes

The invocation of cognitive simplicity was predicted to take the form of a cognitive reduction in an interpersonal schema. In order for the complexity to be effectively resolved, the present study hypothesized that the new schematic structure was organized around positive, or negative, traits; dimensions which Showers (1992c) considers important organizing dimensions. Such a process could be considered 'schematic closure', the parent's conception is resolved, or 'closed', around the positive, or negative traits, he or she chooses. In so doing, consistency can be *imposed* on the child.

In summary, cognitive simplicity can be achieved through two related processes. On the one hand, the assimilation of information into a unitary conception (e.g., positive or negative) can result in a less complex representation. Alternately, compartmentalizing the positive and negative into independent representations can reduce complexity without sacrificing one aspect (e.g., negative information) for another (e.g., positive information). This overview is consistent with Neuberg and Newsom (1993) who suggest that cognitive simplicity can be achieved by 1) ignoring information, or 2) structuring information to maximize simplicity.

### Schematic Complexity: When Simplicity is not Possible

Within self-concept theory, Showers (1992c) has developed the notion of evaluative integration, which refers to the combination and association of opposite valenced items of information. Such a process results in a cognitively more complex representation than the

alternative that is referred to as compartmentalizing (Showers, 1992b). Showers (1992b, 1992c) has presented research to suggest that evaluative integration results in self-concepts with differentiating knowledge along both positive and negative dimensions.

Motivationally, Showers (1992c) stated that those who adopt an evaluatively integrative view of self may do so in order to buffer the impact of negative self-knowledge. Individuals invoking evaluative integration buffer the impact of positive events with associated negative events, and similarly, positive information buffers the impact of negative information. On the other hand, individuals who compartmentalize positive and negative information, invoking cognitive simplicity, are less protected by opposite valenced associations, and are prone to more extreme emotional responses (Showers, 1992b).

For parental views of the child, an evaluative integrated representation of the child would also reduce the impact of opposite-valenced information. If a parent believed there were certain negative qualities regarding the child that could not be overlooked he/she may integrate these negative characteristics among the positive characteristics. As suggested above, this procedure would serve to buffer both positive and negative reactions and insulate the parents' reactions. The parent no longer is abjectly discouraged by negative behaviour but this is accomplished at the expense of positive affectivity.

Results of Neuberg and Newsom's (1993) work on the theoretical construct of Personal Need for Structure suggest that some individuals

are more comfortable with ambiguity than others. Such individuals do not experience as great a pressure towards cognitively structuring experience into simpler, manageable structures. This description is consistent with the mixed valenced organization of self-representation presented by Showers (1992c). The evaluative integrative type may represent a type less affected by the need for personal structure as described by Neuberg and Newsom.

Finally, Siegal (1992) believes that the healthy representational world includes a matrix of positive and negative, good and bad. Such a matrix is predicted to allow for expression of affect (e.g., frustration or anger) without completely erasing evidence of opposing cognition. This also describes a process similar to Showers (1992c) where oppositely valenced information provides a mutually reinforcing buffer.

### **Development of Interpersonal Schemata**

A general developmental perspective may aid in the understanding of the existence of interpersonal schemata. The development of trust within relationships, as described by Holmes (1991), is helpful in illuminating the development of various representational alternatives a parent may conceive for his/her child. Although not parallel in their evolutions, the development of trust in intimate relations and parent-child relationships may follow similar courses. Levinger (1983) suggests that parent-child relationships deserve study independent of marital, friendship, or other disparate

relationships, but does not discount the value of considering interpersonal research from frameworks developed in related areas.

The early stages of trust involve an "unreflective positive feeling" for the other individual. Certainly, in most parent-child relationships the parent begins with a positive bias towards the child (Stern, 1991); an asymmetry that Levinger (1983) believes is unrivaled in other relationships.

Conversely, a parent may formulate a pre-conception of the child that is negatively valenced. A parent who believes that the anticipated birth will bring complications to an already tenuous marriage, for instance, may have a negative bias towards his/her child (Levinger, 1983). There are other reasons, ranging from economic (e.g., cannot afford the child), practical (e.g., the husband and wife need to be mobile for career commitments), to familial (e.g., there are already a number of children in the home already; or, the previous children have proven to be difficult), which may result in a predetermined negative schema regarding one's child.

Alternately, a parent may enter the relationship with no preconceived schematic organization about his/her child (i.e., without a positive, or negative, bias). Stern (1991) suggested that a parent may not wish to burden the child (and indeed him or herself) with a host of expectations and other well-formed opinions that may, or may not, be realistic. Such a parent would not view the child in positively, or negatively, biased terms.

The next stage, described in the evolution of trust (Holmes, 1991), is the "evaluative stage". At this stage, the imperfections of the

partner are exposed, and previous impressions are reevaluated. Holmes (1991) suggests that it is at this point that a process of 'uncertainty reduction' occurs, whereby ambiguity of emotion regarding the reconciliation of positive and negative characteristics is faced. For parents, the evaluative stage is a stage where contrasting information of positive and negative characteristics of the child are presented and require reconciliation. For a parent who has not entered the relationship with the child with either a positive or negative bias, an evaluative stage would likely confront the parent eventually. Experiences with the child's negative and positive tendencies combined with pressures towards cognitive simplicity may force the parent to reconsider the organization of positive and negative characteristics regarding the child. The reconsideration may result in any one of the predicted types being manifested.

Therefore, three related processes were predicted in the development of interpersonal schemata to organize positive and negative dimensions regarding the child. Principles of schematic simplicity encourage the creation of unitary types through the assimilation and consolidation of only positive, or only negative, information. Alternately, information might be reorganized, reconstructed to form both a positive and negative representation of the child. Finally, schematic simplicity may be omitted in the interest of an integrated conception of positive and negative.

## The Typology

The developmental path of a schematic orientation towards the child was not explored in the present study. The exposition of the possible relationship of the development of trust to the development of schematic closure was used to provide a framework for the understanding of the creation of the typology used in this investigation. The intention of the current study was to provide support for the existence of the schematic types regardless of their developmental evolution. The types, described below, represented theoretical formulations by the author, based on a consideration of indirect evidence, and have not been examined previously.

**Unitary Positive.** One hypothesized type is the Unitary Positive (UP) type. In this formulation the schemata are organized around positive traits and information regarding the child. As previously mentioned, the evaluative stage (Holmes, 1991) may be the point of schematic closure wherein the schema is "closed" around a particular aspect of the child. For some parents this stage may be irrelevant as the positive bias, experienced from the child's birth, is not altered. The parent continues to view the child in positive terms and the schematic closure they face is simply the resolution of the positive traits into a secure, positive schema. Such a conception would also serve to justify the extended commitment to the child.

The UP schema forfeits all other conceptualizations for a unitary, positive view. The child is viewed in positive terms, and future negative information is minimized, denied, distorted, or otherwise manipulated in order to maintain a strong positive view of the child.

The UP view likely does not represent an objective understanding of the child, as most parents do not adopt such an objective view of their children (Stern, 1991).

In fact, Showers (1992b) argues that the actual existence of negative information is not important. The organization of such information, on the other hand, is the determining factor for whether the self is viewed negatively (Showers, 1992b). Therefore, the child may actual behave poorly in some circumstances, but this is not as important as the manner in which the parent incorporates the information into the conception.

A positive view of the child is likely a frequent orientation (Stern, 1991). A UP perspective, and in a similar way, a high trust individual, is likely to be more charitable and make more positive attributions, a situation that Holmes (1991) describes as the more preferred adaptation.

The development of a UP schema can be compared to the literature on the 'Psychology of Inevitability' (Aronson, 1988). Basically, people prepare for events they perceive as inevitable by 'making the best of it'. In a classic study by Darley and Berscheid (1967; cited in Aronson, 1988), volunteers were led to believe they would be meeting and talking with a particular person. Information containing both pleasing and displeasing characteristics of the person whom they would meet, were provided to subjects. When the participant thought the meeting was inevitable, they enhanced the positive aspects, and de-emphasized the negative, in order to create a more positive expectation of the ensuing interaction. This situation is

analogous, in some respects, to the inevitability of having a baby. The expectation of the baby is likely tempered by positive (e.g., "our first child", "it will be fun to play with the child", etc.) and negative (e.g., "I hope the baby isn't up all night crying", "we can't afford the child", etc.) thoughts, but parents likely emphasize the positive characteristics and expectancies to the exclusion of the negative and in so doing set up a situation for a UP schema.

**Unitary Negative.** In contrast to the UP typology, a second, polar opposite, type proposed was Unitary Negative (UN). The UN type may develop from the parent's inability to effectively minimize negative information about the child. Alternately, the parent may recognize difficulties in parenting skills, or potential problem-behaviour in the child, and adopt a defensive pessimism style of coping (Cantor & Norem, 1989; Norem & Illingworth, 1993; Polak & Prokap, 1989). Such a style of coping involves lowered expectations in order to prepare for future events, and cushion any associated anxiety. A parent who doubted in the child's ability to interact positively with his/her environment, might have adopted a defensive pessimism style to help cope with perceived, or actual, problematic behaviour.

Cantor and Norem (1989) reported that a defensive pessimism style affected only those areas relevant to the anxiety and did not generalize to other areas of the individual's life. Showers (1992a) has also demonstrated that those with a defensive-pessimistic style of coping perform better with a focus on the negative and perform worse if they are encouraged to reflect on positive outcomes. It is possible that some parents are better able to parent if they assume the worst

in their children. Showers (1992c) suggests that such an approach can serve two goals: 1) preparing oneself for failure (self-protective goal); and, 2) increasing effort towards doing well (motivational goal). In the context of parent-child relationships, this approach with the child may serve a protective goal in limiting the effect of the child's negative behaviour upon one's self-concept (e.g., "I'm not a bad parent - he's just a rotten kid"). With regard to the second goal suggested by Showers, a parent may work hard at being a good parent because of the adoption of a negative view (e.g., "I'm going to have to be a super parent in order to do anything with this little monster")<sup>3</sup>.

Further support for a UN conception is garnered from self-verification theory. McNulty and Swann Jr. (1994) suggest that people may seek information consistent with their self-concepts. Swann et al. (1992) reported that marital commitments are strengthened in relationships where a spouse, with a negative self-concept, received negative feedback from his/her partner. In fact, the strength of the marital commitment was contingent upon the negative reciprocal nature of self-concept and social feedback. McNulty and Swann Jr. (1994) conclude that the desire for positivity is not a universal pressure, and that some individuals desire negativity if it is considered to be consistent with self-knowledge. Parents may also prefer to be in touch with negative aspects of their children if they believe those aspects are relevant and accurate. Therefore, a UN perspective may be an adaptive approach to a difficult situation (e.g., the parent of a young offender may adopt a UN schema because of an inability to maintain any other representation).

In addition, certain scripts and expectations may play a role in biasing a parental conception towards the negative (Stern, 1991). Concerns over unrealistic expectations of the child, financial or marital difficulties as a result of the child, or other circumstances may negatively bias a schema (Brickman, Janoff-Bulman, & Rabinowitz, 1987; Levinger, 1983).

In other cases, the UN type may be a response to ongoing harm and distress suffered by the parent. Some children may be excessively difficult to the point where an objective evaluation of the child is heavily weighted with negative information.

In any event, as with UP and negative information, positive information is minimized, distorted, or denied in order for Unitary Negative to maintain the negative conception. Showers (1992b) has also suggested the possibility that the compartmentalization of positive and negative information does not necessarily favour positive information. Negative information may assume more relative importance than positive information and therefore dominate one's cognitive set.

The proposed structure of the UP and UN schemata was also consistent with a simple structure conceptualization (Neuberg & Newsom, 1993) and paralleled high and low trust individuals within Holmes' (1991) formulation. Unitary Positive and UN types represented homogeneous schemata that were well-defined, and distinct from other forms of schemata.

**Bivalent-Separated.** Next, a type was proposed whereby the negative and positive information were separated because of the

desire to maintain cognitive simplicity without concomitant illusional, or delusional distortions of the information. Individuals who are Bivalent - Separated (BS) have a coherent positive conception that is similar to Unitary Positive. This positive conception is highly positive and generous towards the child. Individuals who are BS, also develop a completely negative conception of the child where all negative information is assimilated. This conception resembles the Unitary Negative type. These two polar opposite conceptions are maintained by the daily good and bad behaviours of a child. The determination of which conception is active is contextual. During good times between the parent and the child the positive schema will be active. During bad times, on the other hand, the negative schema will be the dominant schema. It is important to note that the BS type is likely aware of the two different views of the child; two conceptions which never operate concurrently. The schematic connection between positive and negative information is very limited, in that, while one is active the other conception, or schema, lies dormant.

The mechanism of activation for either the positive or negative schema of Bivalent - Separated is a matter of accessing an element contained within the matrix of the schema (Showers, 1992b; 1992c). In other words, the existence of a positive schema and a negative schema is not problematic from a schematic perspective. Each conceptualization simply represents a matrix of traits and information about the child. The activation of either matrix depends on the context and use of the information stored within it. As Segal (1988) explains,

activating one of the elements in the structure should increase the accessibility of neighboring elements that are also [related].

Phenomenologically, this may be experienced by an individual as a sudden coming to mind of various . . . descriptors in response to some external or internal stimulus. (p. 150)

It should also be noted that while one schematic orientation is operative, information is interpreted with a bias towards that particular orientation. For instance, a positively primed BS would be able to creatively reinterpret some acts of harm from the child to a certain point. Prior to when that threshold is reached, the negative behaviour from the child would likely not activate the elements within the negative schema. Segal (1988) also states that a schema may become more accessible with more frequent activation. The schema then becomes more likely to be used in the future. Therefore, BS would experience one schema (i.e., the positive or negative schema) more or less than the other, dependent on the frequency of activation.

Linville (1987) describes a similar process of spread of activation when initial components of a schema have been activated. She has referred to the activation of a particular aspect of self as the "spillover process". In this formulation, activation of a particular aspect of self is dependent on the immediate context and will involve both thoughts and affective reactions relevant to the schema accessed. This process is again alluded to by Holmes (1991) who discussed the possibility of activating positive, or negative, elements of an associational network without priming opposite-valenced feelings.

The BS types are similar to the UP and UN types in that they represent a homogeneous, well-defined, distinct example of simple structure (Neuberg & Newsom, 1993). In contrast to the unitary constructs, however, the structure for BS likely represents a more flexible combination of cognitive sets. Schema-inconsistent information need not be distorted, ignored, or otherwise manipulated in individuals with the BS typology, as schema-inconsistent information merely represents information oppositely valenced to the currently dominant schema.

**Complex-Unresolved (Aschematic).** A fourth type proposed for the above typology was Complex-Unresolved (CU). This type was characterized by a parent who has not, or cannot, progress to the schematic closure of the other types. This CU type integrated all information regarding the child into a matrix of positive and negative. In other words, the organization of information was unrelated to the valence (i.e., positive or negative) so that a mixed organization resulted (Showers, 1992b). Such a schematic orientation would be partially influenced by 'Personal Need for Structure' - a concept which Neuberg and Newsom (1993) argue is an individual difference variable. Personal need for structure, as previously discussed, represents an individual's need to attempt "to structure the world into a simplified, more manageable form" (p. 113).

Without a clear structure, or cognitive set, the CU type was considered aschematic<sup>4</sup> (Wilcox & Williams, 1990) on the organizing dimension of positive and negative. Fiske and Taylor (1991) define schemata as conceptually driven processes. For the CU type, there

existed no dominant conceptual positive/negative framework. The child was viewed as a changeable entity composed of behaviour, positive and negative, that must be continuously evaluated in order to determine, as accurately as possible, the exact nature of the person. Thus, CUs were vigilant towards the child and watchful for any signs that can help reduce the complexity of the conception into a more workable model of both positive or negative.

Such an argument cannot account for other schematic representations a parent may hold for the child. For instance, it was possible that the parent is aschematic with positive and negative dimensions but schematic with regard to some unidentified organizing dimension (e.g., social acumen, popularity, athletic skill). Nevertheless, the dimension that the parent might be schematic for contained an integrated network of positive and negative characteristics.

This conceptual complexity served to moderate, or buffer, the reactions of CU such that they do not demonstrate extreme affect as would UP, UN, or BS (Neuberg & Newsom, 1993; Showers, 1992c). This prediction was consistent with Linville's (1982) complexity - extremity hypothesis which stated that greater complexity is associated with less extreme judgments in both positive and negative directions.

In comparison to the UP, UN, and BS types, for whom schema-consistent thought activates other, similarly valenced information contained within that associative network, the CU network integrated positive and negative so that accessing a positive element within the

network was equally likely to be associated with other positive, or negative, activation (Showers, 1992c).

The CU type might also be compared to an Uncertain individual within Holmes' (1991) theoretical formulation of trust. The uncertain individual is vigilant for information to help make diagnostic decisions regarding the partner. However, Holmes (1991) suggests that the lack of consolidation in the conception may serve to amplify affective reactions. If an uncertain individual is vigilant for both positive and negative information, they may be more likely to show affective extremity when confronted with valenced information. This contradicts the prediction of Showers and Linville who state that affective extremity is reduced through the buffering of positive and negative information.

### The Typology Concept

It is not the intention of the current study to argue definitively for the existence of discrete types. There are a number of potential difficulties with the typology concept in the current project. First of all, the types may be discrete and exclusive, but context-dependent (e.g., UP with regard to the child in academic settings, but UN with the child in athletic situations; or, a parent may be CU with the child when other children are present but BS with the child when at home). Secondly, the types may be discrete and exclusive, but person-dependent, or relationship dependent (e.g., BS with one child and UP with the other; or, UP with one's spouse and UN with the children). Third, the categories may not represent stable, enduring

representations. A parent who presents as UN at time 1 may not be UN by time 2. Finally, to discuss the interpersonal schemata in terms of discrete categories may be misleading. It is entirely possible that each category represents a continuum along which the parent falls. There are likely other concerns about the typology concept that have not been addressed. Furthermore, the intention of the current study is not to provide evidence or refutation of any argument in this vein; rather, the intention is to provide preliminary support for each typology.

The proposed typology could be characterized as a product of both perceiver motivations and variations in the patterns of a given child's behaviour. For instance, various arguments have been provided that suggest motivational reasons why a parent might adopt one view of the child versus another (e.g., defensive pessimism) but the development of a schematic orientation could also be behaviourally anchored. If a child consistently behaves in a certain manner (i.e., positively or negatively) then the development of a particular schematic orientation may be fostered. However, this distinction has important implications for the typology. If the determination of the parental schema is useful for professionals it is necessary to better understand the processes involved in the formulation of that parent's representation. Simply knowing that a parent perceives of a child in a UN fashion provides no information about the child's *actual* behaviour nor about the parent's motivational reasons for adopting a UN perspective. Some research has already suggested that parental referrals of problem-children do not

necessarily reflect abnormal behaviour on the part of the child (Lobitz & Johnson, 1975).

### **Ambivalence and Bivalent - Separated**

Bivalent-separated is not intended to represent a special case of attitudinal ambivalence. Ambivalence is a phenomenon born of the simultaneous awareness of good and bad (Grotstein, 1981; Kaplan, 1972; Peterson, 1987; Sincoff, 1990; Thompson, Zanna, & Griffen, in press; Wright & Ellard, 1992), and thus, tension is created by the coexistence of opposing cognitions (e.g., love and hate). Bivalent - Separated represents a resolution of such conflicting emotions and cognitions. Instead of suffering the psychic tension of the joining of positive and negative, the understanding of the other individual is polarized into an all positive schema and an all negative schema.

The present theory did not preclude the existence of ambivalence in parents' attitudes towards their children. Instead, such ambivalence would be subsumed under Complex - Unresolved. The CU type's integrated conception consists of an intermixing of positive and negative. It was hypothesized that such a situation was somewhat stressful in the lack of resolution and the incongruity of positive and negative. Brickman (1987) also argued that the integration of positive and negative may mask ambivalence. The hypothesis that CU involves some degree of ambivalence introduced the possibility that response amplification (Carver et al., 1979) may play a role in amplifying CU responses towards the child which, in turn, led to a polarity of response. Therefore, it was the goal of the

present study to demonstrate that assessments of ambivalence could be used to separate Complex-Unresolved from Bivalent-Separated types. Furthermore, evidence of extremity in responding would be important for delineating the effects of the CU schemata given competing hypotheses about the effects of integration of positive and negative information.

### **Overview of Present Investigation**

To provide support for the proposed typology, a questionnaire study was conducted concerning parents' cognitive representations of a target child, chosen by the parent. Each participant completed three questionnaires.

The first questionnaire, the Preliminary Questionnaire (PQ), contained a section intended to create a measure of participants' identification with the particular types (i.e., UP, UN, CU, and BS). Following this section, the PQ contained an item requesting the participants' perception of the degree conflict escalates with the child. It was predicted that UN and BS types would have a greater escalation of conflict given the negative content of the schematic representation. A UP type, on the other hand, would not perceive of the child in negative ways and would not experience equivalent escalation in conflict situations. The UP group was predicted to report less escalation of conflict than the CU group.

Participants also rated the degree of perceived commitment towards the child. This section determined whether any differences in commitment were predictive of schema-type. Specifically, it was

predicted that if any group differed in the degree of commitment, it would be the more complex group, CU.

Next, participants considered a series of hypothetical scenarios regarding the child. Following each scenario a list of alternative parental reactions were presented that the parent rated for similarity to his/her potential reaction. Each alternative was derived on the basis of how a particular type would respond. For instance, if presented with a scenario in which the child had misbehaved, a UP would be likely to make a charitable attribution in order to preserve his/her positive schema. When presented with such a scenario, a UN parent on the other hand, would more likely respond with reprimands. The CU parent, because of a data-driven representation, would likely respond with a request for more information, or prefer to reserve judgment, in ambiguous situations. Finally, the reaction of a BS parent presented with a scenario involving misbehaviour on the part of the child, would depend on the current schematic orientation (i.e., positively biased, or negatively biased). For each hypothetical scenario two predictions were made: First, the type, for whom the item was constructed (i.e., UP, UN, BS, or CU), should endorse that alternative to a greater extent than the other types; Second, the type, for whom the item was constructed, should endorse the item to a greater extent than the other alternatives.

A measure of child behaviour was obtained through the adaptation of a child-behaviour checklist developed by Furey & Forehand (1983). The scale included positive and negative behaviours that the participants rated for the degree the behaviour was perceived

as pleasing or displeasing. Participants also determined the frequency of the behaviour during the previous week. It was predicted that a UP type would report more behaviours as pleasing than the other groups. Specifically, the UN group was expected to view the list with a negative bias, and rate more behaviours as displeasing. It was anticipated that the CU type would evaluate each behaviour on the basis of his/her experience with the child (i.e., more for the merits of that particular behaviour) and subsequently have a more balanced view of the behaviours. The BS type, in the absence of a specific positive or negative prime, was predicted to respond with a positive bias (i.e., the positive schematic representation), and therefore, rate the behaviours as more pleasing than would the CU or UN types.

The second and third questionnaires were counter-balanced in terms of their presentation. The Positively Primed Questionnaire (PPQ) required the participants to consider the positive aspects and attitudes regarding the children. The other questionnaire, the Negatively Primed Questionnaire (NPQ), required the participants to consider the negative aspects and their negative attitudes regarding the child.

Baldwin et al. (1990) suggested that an alternative explanation of ostensible priming effects is simply the activation of an affective process. Thus, a measure of mood was included in this study to determine participants' mood state before beginning both the PPQ and the NPQ. The same measure of mood was included at the completion of the PPQ and the NPQ in order to determine any effect the questionnaire had upon the participants' mood.

The priming task in the present study was completed immediately after the time 1 mood measure. For the PPQ, participants were required to recount, in detail, a specific positive incident that had occurred with the child. The NPQ narrative passage required the participant to recount a specific negative incident with the child. It was expected that the recounting of an incident would necessitate an associative process among positive (or negative) elements of the participants' representation, and as such, prime a BS participant in the given direction. Both the UP and UN types would remain unaffected by a valenced prime as neither have alternate representations to be activated.

Undergraduate students in psychology were recruited to code the narrative passages into a total word count, and a rating of the positive and negative child-relevant content of the passage. Participants' schematic in the direction of the prime were predicted to have more material to recount, and consequently, use more words. For instance, a UP type would have a great deal to say in recounting a positive incident but very little to recount in a negative passage. The UN was predicted to use the most words on the negative passage and the least words on the positive passage. The BS represented a type that was schematic on both the positive and negative dimensions and should therefore use as many words as the UP type on the positive passage and as many words as the UN on the negative passage. The CU type was predicted to fall between the other types on both positive and negative passage word counts.

As a partial check on the priming effect of the narrative passages, ratings of positive or negative content in each passage were evaluated. In this case, BS was predicted to demonstrate equivalent positive and negative content to the UP on the positive passage, and equivalent positive and negative content to the UN on the negative passage. The UP type was predicted to have higher positive than negative content on both passages, just as the UN was predicted to demonstrate higher negative content on both the positive and negative passages. The CU type should have demonstrated some susceptibility to the priming such that they reported more negative than positive content on the negative passage, and more positive than negative content on the positive passage.

Another section required participants to generate as many single-word, trait, descriptions of the child as possible that were in the given direction of the prime (i.e., generate positive traits after the positive prime). This section was expected to demonstrate the ability of the UP group to display a greater number of traits on the positive section while not generating as many adjectives on the negative section. The BS drew on a positive schema for the completion of the positive section and drew on a negative schema for the negative section, and as such should have performed like the UP or UN, respectively. The CU type was anticipated to have reported more words than a schema-inconsistent participant would be able (e.g., more negative words than the UP) but not as many words as the schema-consistent types (e.g., less words than the UP or BS on the positive passage).

A series of neutral sentence stems completed by participants gauged the effect of the prime on their thinking regarding the child. Undergraduate raters provided positive and negative content ratings for this section, as well. It was predicted that following a positive prime, the UP and BS types would be rated with greater positive content than the other groups. The CU type should have been slightly susceptible to the prime (and normative pressures) and presented positively but not to the same extent as the schematically biased UP and BS types. Finally, the prime should not have significantly affected the UN type who had no positive material to access and should have demonstrated the least positive content and the most negative content.

Upon receipt of the negative prime, the BS type was predicted to have responded, on the sentence completion items, with as much negative content as the UN who would demonstrate more negative content than either the CU or UP types. The UP was expected to be unaffected by the negative prime and demonstrate greater positive content than the other types. Again, the CU type was predicted to respond with more negative content but not to the extent of the UN or BS types.

A homogenous set of traits, consistent with the prime (e.g., positive list with the PPQ) was rated for the degree of descriptiveness for the child. The UP and BS types were predicted to respond with higher, and more consistent, ratings for the positive list than the other types. The UN was predicted to rate less positive words as descriptive of their children, while the CU would rate each word on the basis of its merit towards the child and demonstrate more variability in

responding, resulting in a score that was lower than the UP and BS but higher than UN. For the negative trait list, the UN and BS were predicted to demonstrate significantly higher ratings of descriptiveness, greater than the CU type who rated the list with more variability, but higher than the UP type who was predicted to discount all negative traits regarding the child.

The Information Saliency section attempted to determine what information the parent would select for purposes of bolstering their representation. It was predicted that UP would always attempt to bolster their positive schema by selecting positive information, regardless of the prime. The UN parents were predicted to select the negative information as it was consistent with their schematic representation, regardless of any previous prime. The BS were expected to be susceptible to the influence of a prime and select information consonant with that prime (i.e., select positive information after the positive prime, and negative information after the negative prime). The CU were expected to be more moderate in their selection, choosing, instead, both positive *and* negative information.

Finally, a rating of ambivalence was obtained on the basis of a measure presented in Thompson et al. (in press). Ambivalence was expected to be related to the CU type, because it more closely approximated the theoretical definition of ambivalence as the result of coexistence of positive and negative feelings regarding the stimulus object. Moreover, the schematic representations of the UP, UN and BS types did not allow for the simultaneous existence of positive and negative views, and therefore should have evinced the least

ambivalence. This measure represented a significant test of the BS concept, as the resolution of positive and negative traits into separate and distinct schemata was predicted on the basis that such a resolution should resolve tension rather than creating it.

## METHOD

### Participants

The sample was a convenience sample based on responses from interested participants. Participants were solicited from 4 major sites: staff and faculty from the University of Calgary ( $n = 48$ ), Mount Royal College ( $n = 16$ ), and Southern Alberta Institute of Technology ( $n = 7$ ), as well as parents from the Beddington Community Centre out-of-school program ( $n = 12$ ). Eligible participants were parents of children, currently living at home, who were aged 5 to 17 years of age<sup>5</sup>. Participants were invited to volunteer by means of advertisements and direct memoranda. Of approximately 100 parents who expressed interest in the study, a final sample of 83 parents participated. Of the 83 participants, complete data was obtained for 69 participants. Only participants who had completed all three parts of the questionnaire were included in subsequent analyses. A description of the sample, including comparisons between the full sample and those participants completing all 3 questionnaires, appears in Table 1. Participants were not paid for participation.

Analyses comparing the complete and incomplete groups were carried out with a oneway Analysis of Variance (ANOVA), the Kruskal - Wallis (K-W) oneway ANOVA (for non-parametric data), or chi-

Table 1  
Demographics of Participants

	Percentage of Sample	
	Complete ( <u>n</u> = 69)	Incomplete ( <u>n</u> = 14)
Biological Mother	75.4	78.6
Biological Father	20.3	21.4
Adoptive Mother	0.0	0.0
Adoptive Father	0.0	0.0
Step-Mother	1.4	0.0
Step-Father	2.9	0.0
<b>Marital Status**</b>		
Married	75.4	35.7
Divorced	13.0	21.4
Widowed	0.0	0.0
Separated	5.8	35.7
Common-Law	5.8	0.0
Never Married	0.0	7.1
<b>Weekly Contact with Child</b>		
1-5 hours	4.3	0.0
6-10 hours	8.7	0.0
11-15 hours	18.8	28.6
16-20 hours	18.8	14.3
20-30 hours	17.4	21.4
greater than 30 hours	31.9	35.7
<b>Medical Problems with Child</b>		
Yes	8.7	21.4
<b>First Language of Participant</b>		
English	87.0	100.0
<b>Mean age of Child (SD)</b>		
Child's Age	11.93 (3.94)	10.21 (2.91)
<b>Gender</b>		
Male Child	42.0	42.9
Mother	76.9	78.6

Note. \*\* indicates significant difference between Complete and Incomplete samples ( $p < .01$ )

square test of independence. The groups (complete versus incomplete) differed significantly on marital status,  $\chi^2 = 19.03$ ,  $p < .005^6$ . This difference suggested that more people in the complete group were married than the incomplete group, while more people in the incomplete group were separated or divorced than in the complete group. Such a difference could reflect varying time constraints within the two samples. For instance, single parents may not have as much time to carry through and complete the study and therefore are over-represented in the incomplete sample. No other demographic measure differed across the groups.

### **Procedure**

Participants were solicited through advertisements and direct memoranda sent to departments and faculties. Interested participants were asked to contact the primary investigator. After identifying themselves, each participant received the Preliminary Questionnaire (PQ; Appendix D). Included with the PQ was the "General Information for Participants" sheet (Appendix A), the "General Instructions for Completing the Questionnaires" Sheet (Appendix B), and the consent form (Appendix C). When the participant had completed and returned the PQ, either the Positively Primed Questionnaire (PPQ; Appendix E) or the Negatively Primed Questionnaire (NPQ; Appendix F) was assigned as the next questionnaire. This counterbalancing procedure resulted in 49.4 percent of the sample receiving the NPQ immediately after the PQ. Participants received only one questionnaire at a time. On average, the second questionnaire was sent 10.53 days after the PQ

(range from 1 to 39 days). On average, the last questionnaire (i.e., either the PPQ or NPQ) was sent 12.00 days after the second questionnaire (range from 3 to 42 days). All parents were instructed to identify one of their children and consider only that child when completing the questionnaires.

### Measures

**Preliminary Questionnaire.** This questionnaire was designed to collect information concerning the participants' beliefs, or feelings, regarding the child. Unlike the PPQ or NPQ, no prime (e.g., positive or negative) was included on this questionnaire. Therefore, the schema valence of the BS types was unknown. In most instances, it was reasonable to assume that BS types operated within the positively biased schema, that is, the schema that is viewed as most adaptive. This effect would likely be bolstered by normative pressures which would encourage greater positive, than negative, disclosures. A description of the specific sections of the PQ follows.

**Typology.** This section required participants to consider 24 statements regarding feelings or thoughts they might have for their child. Each statement was rated on 7 point, Likert type scales for the degree to which the item accurately reflected parents own thoughts or feelings regarding their child. Items for this scale were generated in a procedure similar to that of Scharfe and Bartholomew (1994). Narrative passages were generated (Appendix G) to describe each of the 4 hypothesized interpersonal schemata (i.e., UP, UN, BS, and CU). These passages were then modified and broken into independent

items which could be rated. This procedure resulted in 4 sets of 6 items, each set representing items for a specific hypothesized type.

**Interpersonal Dynamics.** Information concerning escalation of conflict, perceived commitment to the child, and parental reactions to hypothetical scenarios was collected using 7 point scales.

**Child Behaviour Checklist.** Participants next completed a checklist of child behaviours by rating the frequency of occurrence (i.e., never, rarely, sometimes, frequently), and the degree (on 7 point scales) the stated behaviour was perceived as positive or negative (i.e., extremely, moderately, or minimally displeasing, neutral, minimally, moderately, or extremely pleasing). The checklist was based on a similar scale developed by Furey & Forehand (1983).

**Demographic Information.** Finally, demographic information was collected on the age and sex of the child, marital status of the parent, parental relationship of the parent to the child (e.g., biological or adoptive parent), presence of other children in the home, first language, average weekly contact with the child, and any special medical conditions the child might have.

**Positively Primed Questionnaire.** The PPQ explored the positive aspects of the participant's perception of the child. Unless otherwise indicated, all items in this questionnaire were positively primed in order to maintain a positive perspective throughout the questionnaire.

**Measure of Affect (Time 1).** At the beginning (Time 1) and end (Time 2) of the questionnaire, the participant was asked to rate each of 18 adjectives (both positive and negative) on a 5 point

scale for the degree to which the adjective described the participants' mood at the *present moment*. This measure was adapted from the measure of positive and negative affect (PANAS) by Watson, Clark, and Tellegen (1988). Participants did not receive the same order of presentation of the affect adjectives from Time 1 to Time 2.

**Narrative Prime.** Next, parents were asked to recall a positive incident regarding the child and write an account of it. The narrative prime was intended to get the parent thinking positively about the child.

**Trait Generation.** Respondents then attempted to generate as many positive, single-word descriptions of the child as they could.

**Sentence Completion.** Next, participants were asked to complete 4 sentences when only given the stem. The sentence completion task was intended to gain more information about the parent-child relationship and the items were intended to be neutral in content (e.g., "My child always. . . "). Three of the items referred to the child directly and the fourth item referred to general attitudes about parents (i.e., "Other parents . . . ") or general attitudes about children (i.e., "Kids . . .").

**Trait Rating.** Participants rated the descriptiveness of 10 trait adjectives for their child on 7 point scales. Traits for use in this section were generated in informal discussion with parents and others interested in the study. From a large list of both positive and negative traits, 10 positive and 10 negative traits, that appeared to represent extreme opinions, were selected.

**Information Salience.** This section provided participants with 4 pieces of information that a parent might learn about their child. Two of the items of information were positive (e.g., "Your child got the highest mark on an exam at school") and two were negative (e.g., "Your child stole something from another student at school"). The participant was required to consider all the information and decide which two pieces (of the 4 presented) he/she would be most interested to learn. This section would result in the participant choosing either 2 positive pieces of information, 2 negative pieces of information, or 1 positive and 1 negative piece of information.

In order to control for the degree of importance, or intrinsic interest of items, a scaling study was conducted. Items for inclusion in this scaling study were generated through discussion with parents and other interested individuals. A list of 20 items were generated (10 negative, 10 positive) that were considered to be of interest to parents regarding the behaviour of their child. This list was presented to participants (see Appendix H) in order to obtain a rating of the importance of the item, and the degree the item is positive or negative. The sample ( $N=16$ ) of parents was selected from the University of Calgary students and staff on a convenience basis. All participants in this scaling study were parents of school aged children currently living at home and no participant in the scaling study participated in the subsequent questionnaire study.

The mean age of children reported in the scaling study was 11.75 ( $SD = 2.96$ ). Male children in the scaling study accounted for

62.5% of the sample. The participants were represented by 37.5% biological fathers, 56.3% biological mothers, and 6.3% step-fathers.

From the data collected in the scaling study, 4 positive and 4 negative items were selected for inclusion in the questionnaire study. Those items were selected from items that achieved at least an 80% rating of moderate to extreme importance, and a rating of at least 80% for quite, or extremely positive (or negative). This procedure was intended to select a relatively homogenous grouping of items.

Predictions for this section were based on notion that people will seek out confirmatory evidence to bolster their beliefs in much the same way as they do to bolster self-concept (Swann Jr. & Hill, 1982).

**Ambivalence.** A measure of ambivalence, adapted from Thompson, Zanna, and Griffen (in press) was included. Participants completed 3 questions concerning their attitudes, feelings, and thoughts about their child.

**Measure of Affect (Time 2).** The second measure of affect was the last measure taken on this questionnaire and was intended to measure any change in affect as a result of completing this questionnaire.

**Negatively Primed Questionnaire.** This questionnaire was identical to the PPQ with the exception that the participant was primed negatively. Unless otherwise indicated, this questionnaire examined the negative aspects of the participants' perceptions of their children.

**Measure of Affect (Time 1).** This measure appeared in identical fashion to that in the PPQ except that the order of

presentation of the two mood checklists was reversed (i.e., the Mood Checklist that appeared first on the PPQ appears at Time 2, or last, on the NPQ).

**Narrative Prime.** Next, participants were asked to recall a positive incident regarding the child and write an account of it. This was intended as a prime to get the parent thinking negatively about the child.

**Trait Generation.** The following section had the respondents attempt to generate as many negative, single-word descriptions of the child as they were able.

**Sentence Completion.** This section was identical to the PPQ except that the sentence stems were different. The stems were intended to remain neutral for NPQ.

**Trait Rating.** Next, participants rated the descriptiveness of 10 trait adjectives for their child on 7 point scales.

**Information Salience.** This section was also presented in exactly the same manner as the PPQ with the only difference being the use of different pieces of information for the parent to consider.

**Ambivalence.** In order to approximate the measure suggested by Thompson, Zanna, and Griffen (in press), the participant completed 3 questions concerning their negative attitudes, feelings, and thoughts about their child.

**Measure of Affect (Time 2).** The second measure of affect was the last measure taken on this questionnaire and was intended to measure any change in affect as a result of completing the NPQ.

### **Rating Procedures**

Three undergraduate students in psychology were recruited to serve as raters. Raters were responsible for determining the number of words used in the Narrative Priming Sections of the PPQ and NPQ. Raters also provided a positive and negative content score for the narrative passage and the sentence completions. This consisted of a rating on a 4 point scale (Appendix I). Thus, each open-ended section on the questionnaire was translated into a word count and a rating for positive content, and a rating for negative content. Inter-rater reliability was determined via intraclass correlation coefficients (Balzer, 1985; Cardinet, Tourneur, & Allal, 1976) calculated for each pair of raters on every rated item. Intraclass correlations and average intraclass correlations are shown in Appendix J.

Raters attended a 1 hour training session in which hypothetical examples were scored that were designed to cover all combinations of possible ratings. Discussion resolved and clarified all methods of rating until raters were comfortable with the rating procedures. Word count measures reflect only words written to describe the event and corresponding reactions. The word counts do not reflect any additional commentary from the participant (e.g., "I had a hard time doing this part").

Maintaining a minimum average inter-rater reliability of 0.50 results in 72.22% of the ratings meeting, or exceeding minimum reliability. Rating scores for the PPQ Narrative Passage positive (0.27), and negative (0.45) content scores, PPQ sentence completion item 3 positive (0.14), and negative (0.17) content ratings, and the NPQ

Narrative Passage negative content rating (0.29) did not meet the minimum required reliability for inclusion in subsequent analysis.

## RESULTS

### Data Analysis Overview

Prior to analyses, all data were analyzed for accuracy of data entry, missing data, outliers, and fit between the data distributions and appropriate assumptions. Wherever relevant, acceptable error rates were set to an alpha of 0.05. Multivariate Analysis of Variance (MANOVA) results were evaluated with reference to the Pillais-Bartlett tests statistic in consideration of the recommendation that this statistic is best for small samples (Olson, 1976). Normality was assessed on variables via the Kolmogorov - Smirnov Goodness of Fit Test and heterogeneity of variance was assessed via the Levene Test of Homogeneity of Variance, or the Bartlett Box  $F$  test.

Sets of contrasts were derived to test *a priori* predictions. Unless otherwise specified in Appendix P, all contrasts sets are orthogonal. In the absence homogeneous variance, all *a priori* tests and follow-up tests used a separate variance approach. The use of transformations of the data to correct violations of statistical assumptions would significantly impair interpretation of the results (Maxwell & Delaney, 1990) and were not considered.

In the preparation of scale scores, subscales were not calculated for participants who completed fewer than 70% of the items contributing to that respective subscale. These participants were assigned a missing value score for that particular scale only.

Due to the exploratory nature of this study, the small sample sizes, coupled with the number of tests conducted, an adjustment of the error rate (alpha) was considered to be overly conservative as it would have limited the usefulness of the findings. Nevertheless, it was important to take into consideration the effect of such a procedure. The error rate per experiment (Howell, 1992) in the present study indicated that approximately 4.5 tests would reach statistical significance ( $p < .05$ ) by chance alone<sup>7</sup>.

The overall statistical approach for the present study was to test *a priori* predictions through sets of contrasts. Contrast analyses that did not reach statistical significance were not reported in the main body of the Results section, but can be found in Appendix P. In the event that predictions were not supported, omnibus ANOVA style analyses, and ensuing follow-up tests, were utilized, in order to explore the data for potentially significant, and relevant, findings. Where, *a priori* predictions were not made, analyses follow the omnibus approach with appropriate follow-up tests to explain main effects. Unless otherwise stated, a pooled variance estimate was used to test all contrast and follow-up effects. Where there were violations of the assumption of homogeneous variance, a separate variance estimate approach was used.

### **Typology**

Section I of the Preliminary Questionnaire (PQ) was comprised of 24 items. The section contained items intended to represent the four hypothesized types (i.e., Unitary Positive [UP], Unitary Negative [UN],

Complex-Unresolved [CU], and Bivalent-Separated [BS]) with 6 items per type. A reliability analysis of the 4 scales revealed reliability coefficients ranging from an estimated alpha of 0.57 (UN subscale) to a

Table 2  
Statistics for Typology Scale

	<u>M</u>	<u>SD</u>	<u>n</u>	<u>alpha</u>
UP	5.07	0.78	69	0.65
UN	1.50	0.54	69	0.57
CU	2.87	1.16	68	0.66
BS	2.17	1.15	69	0.86

high of 0.86 (BS subscale). Reliability analyses revealed that three items did not contribute significantly to their respective subscales, and were subsequently excluded. Item 12 ("My child is the worst") had zero variance and was dropped from the Unitary Negative subscale. Item 1 ("My understanding of my child is a *mix* of his/her good and bad qualities.") and item 23 ("I can't say my child is extremely good or extremely bad") which did not correlate highly ( $r = 0.14, 0.18$  respectively) with the subscale total of the CU subscale, were excluded from further analyses. All other subscales demonstrated good internal consistency and were left with the 6 items from the original scale. Mean scores were calculated for each participant on the 4 subscales. Means and standard deviations for the subscale are shown in Table 2.

Scores ranged from 1.00 to 7.00 with higher scores indicating greater identification with the respective type.

An examination of the correlation matrix for the subscale scores (see Table 3) indicated that the subscales were not sensitive to the theoretically derived types. Unitary Positive and UN schemata are conceptually dichotomous and mutually exclusive categories intended to represent polar opposite representations. However, the UN scale

Table 3  
Correlations Between the Types

	Unitary Positive	Unitary Negative	Complex- Unresolved	Bivalent- Separated
UP		-0.33**	-0.23	-0.45**
UN			0.31**	0.52**
CU				0.57**

\*\*  $p < .01$

correlated as strongly with the UP subscale as it did with the BS subscale ( $z(69) = 0.85, p > .05$ ). The negative correlation of the CU scale with UP, together with the additional strong, positive correlations of both CU and BS with the UN subscale, indicated problems with the conceptual formulation of the types and the theoretically derived scales.

An alternate method of categorizing participants was developed on the basis of operational definitions of the typology. This procedure utilized scores on the trait rating section of the questionnaires.

### **Trait Ratings**

Participants rated a list of positive adjectives on the Positively Primed Questionnaire (PPQ). An analysis of reliability indicated an internal consistency (alpha coefficient) of 0.88. The adjective 'Smart' was excluded from the scale due to poor item to total correlation ( $r = 0.14$ ). Factor analysis, using principal components extraction, indicated a singular factor structure. Scale scores were calculated as the mean of the items. Scale scores ranged from 1 ("Does not fit my child") to 7 ("Fits my child").

A list of negative traits was rated on the Negatively Primed Questionnaire (NPQ). Thus, the measure of positive trait ratings and negative trait ratings were completed independently of one another. The negative adjective list's internal reliability was estimated as 0.83. Factor analysis, using principal components extraction, revealed a singular factor structure. Scores for the negative trait scale were derived in the same manner as the positive trait scale.

For each participant, the standard deviation of the items contributing to the positive trait scale and negative trait scale were calculated. Those values for the overall positive trait and negative trait ratings appear in Table 4. The positive trait scores ranged from 1.67 to 6.89 (range: 5.22) while the negative trait scores ranged from 1.00 to 5.44 (range: 4.44).

Table 4

Mean, Median, Standard Deviations, and Participant Standard Deviation Means and Medians for Trait Rating Scales

	Positive Trait Scale ( <u>n</u> = 68)	Negative Trait Scale ( <u>n</u> = 60)
<b>Scale Ratings</b>		
<u>M</u>	5.68	2.31
<u>Mdn</u>	5.78	2.10
<u>SD</u>	0.87	1.00
<b><u>SD</u> of Ratings</b>		
<u>M</u>	1.01	1.22
<u>Mdn</u>	1.00	1.27
<u>SD</u>	0.46	0.67

The independence of the positive and negative trait ratings (i.e., ratings completed at separate times, independent of one another) allowed for an operational definition of the typology based on a two step process. Participants were divided on the basis of median splits on the positive and negative trait scale scores. This procedure divided participants into four cells: a high positive/high negative (BS) cell (n = 9); a low positive/high negative (UN) cell (n = 22); a high positive/low negative (UP) cell (n = 24); and a low positive/low negative (undecided) cell (n = 14). The second step involved determining those participants who should be considered Complex-Unresolved. Theoretically, these participants were differentiated on the basis of

the degree of variability in their conception of the child. Thus, participants demonstrating standard deviations greater than the median standard deviation on both the positive scale and the negative scale were assigned to the Complex-Unresolved category. The final results for participant categorization are found in Table 5.

Table 5  
Distribution of Participants by Type

Type	Percentage of Total	<u>n</u>
Unitary Positive	30.5	18
Unitary Negative	15.3	9
Complex-Unresolved	28.8	17
Bivalent-Separated	11.9	7
Indifferent	13.6	8
Total	100%	59

Another way to understand the rationale for the typology procedure was through the schematic representation of the trait words themselves. Complex-Unresolved essentially represented an aschematic type. Without a schematic framework from which to interpret the list of adjectives as a whole, the CU type would demonstrate greater variability across ratings for each trait. The CU type considered each word independently, whereas, a schematic individual (i.e., UP, UN, & BS) would understand their child in terms of attributes. Their schematic representation allowed them to view the

list of adjectives as a *set of traits* rather than a list of *individual traits* (given that the list was intended to be relatively homogeneous). As such, the schematic types (i.e., UP, UN, and BS) should have demonstrated less variability across ratings on the individual items. This operational definition resulted in a schematic category which had not been hypothesized. This type was operationally defined by below the median scores on both positive and negative trait evaluations. Furthermore, the type was defined by the removal of participants who demonstrated above median standard deviations of the both scale scores. Such a description may be consistent with the report of a particular parenting style that is characterized by lack of commitment and a distinct emotional detachment (Bukatko & Daehler, 1992); a type referred to as the "Uninvolved parent" (p. 581). For subsequent analyses this group was referred to as the Indifferent group, and was excluded from specific contrasts unless otherwise specified. Excluding this group was necessary because the Indifferent group was not considered in the development of hypotheses for *a priori* analyses.

### **Interpersonal Dynamics**

Questions in this section were designed to gather information on various aspects of the parents' relationship, and parenting strategies, with the children. This information was collected on the PQ and, as such, did not prime the participants in a given direction.

**Escalation of Conflict.** The first question dealt with perceived escalation of conflict with the child. In line with predictions, the BS and UN groups did not differ significantly ( $t(54) = -1.45$ ,  $p = .153$ ). No

other contrast reached significance. The means and standard deviations for each group appear in Table 6. An omnibus ANOVA revealed no significant overall effect ( $F(4, 54) = 1.16, p = .3404$ ). The ANOVA source table appears in Appendix K.

Table 6

Mean and Standard Deviation for Escalation of Conflict Question

	UP	UN	CU	BS	Indiff
<u>M</u>	4.50	3.22	3.88	4.43	4.50
<u>SD</u>	1.92	1.79	1.50	1.13	1.51

Note. Lower scores indicated greater perceived escalation of conflict during conflict situations with the child.

**Perceived Commitment to the Child.** The means and standard deviations for the question concerning parents' perceived commitment towards their children appear in Table 7. No other contrast reached significance. Examination of the univariate distribution did reveal a positively skewed distribution with restricted range. On a 7-point scale, the range of scores was from 4 to 7 with an overall mean of 6.22). A contrast employed to examine the Indifferent group as the group with the least perceived commitment was marginally significant ( $t(54) = 1.894, p = .064$ ). This contrast indicated that the CU group reported less commitment to the child than the other types. The overall, omnibus test was not significant

( $F(4, 54) = 1.45, p = .2311$ ). The source table for this ANOVA appears in Appendix K.

Table 7

Mean and Standard Deviation for Commitment to Child Question

	UP	UN	CU	BS	Indiff
<u>M</u>	6.33	6.22	6.12	6.71	5.75
<u>SD</u>	0.77	0.97	0.86	0.76	0.71

Note. Higher scores indicated greater perceived commitment to the child.

**Hypothetical Scenarios.** Questions 3 through 5 of this section each provided the respondent with 4 alternative reactions to a hypothetical situation. Each alternative reflected a reaction approximating a particular type. Participants rated how closely each alternative described how they would react in that circumstance. Two specific contrasts were tested for each type. The first contrast, a between-subjects test, examined whether the alternative was endorsed by the hypothesized type more than the other types (e.g., does the UP group endorse the UP reaction to a greater extent than the other types?) The second contrast, a within-subjects test, examined whether, within each type, the hypothesized group endorsed the reaction, keyed to that group, more than the other alternatives (e.g., Did the UP group endorse the UP reaction to a greater extent than the

other alternatives?) A separate variance approach was taken for all within-subject contrasts.

Table 8

Means and Standard Deviations for Interpersonal Dynamics, Question 3: "Report of Poor Behaviour during Parent-Teacher Interview"

		Item 3a <sup>a</sup>	Item 3b <sup>c</sup>	Item 3c <sup>b</sup>	Item 3d <sup>d</sup>
UP	<u>M</u>	4.47	6.28	3.56	4.22
	<u>SD</u>	2.21	0.89	2.38	2.21
UN	<u>M</u>	4.44	6.56	3.44	4.67
	<u>SD</u>	2.01	0.73	1.33	1.41
CU	<u>M</u>	4.44	6.59	3.12	3.12
	<u>SD</u>	1.59	0.62	1.27	1.87
BS	<u>M</u>	4.86	6.71	3.43	3.14
	<u>SD</u>	1.57	0.49	2.07	2.27
Indiff.	<u>M</u>	4.38	6.63	2.88	3.88
	<u>SD</u>	1.83	0.74	1.55	2.10

<sup>a</sup>indicates this response was intended to approximate a UP response ("there must be another explanation")

<sup>b</sup>indicates this response was intended to approximate a UN response ("I'll set my child straight!")

<sup>c</sup>indicates this response was intended to approximate a CU response ("I need to know more about situation")

<sup>d</sup>indicates this response was intended to approximate a BS response ("my reaction depends on how I've been feeling about my child")

The means and standard deviations for question 3 appear in Table 8. The first alternative for question 3, was intended to be a UP reaction and tested contrasts were not significant. The second alternative, a CU response, had a significant within subject contrast ( $F(1, 15) = 87.74, p < .001$ ), indicating that the CU group endorsed the CU response to a greater extent than the other alternatives. The third alternative was a UN response which yielded a significant within-subject contrast ( $F(1, 8) = 9.14, p = .016$ ). However, the significant within-subject contrast indicated that the UN group endorsed the UN response to a lesser degree than the other alternatives. The last alternative was intended to be a BS response and revealed a marginally significant within-subjects contrast ( $F(1, 6) = 4.32, p = .083$ ), indicating the BS group endorsed the BS item to a lesser extent than the other response alternatives.

The means and standard deviations for question 4 appear in Table 9. The analysis for question 4 on the first alternative, a BS item, revealed no significant predicted contrasts. Alternative 2 was intended to be a UP response indicated that the UP group endorsed this item to a greater extent than the other types ( $t(52) = 2.80, p = .007$ ). The UP group also endorsed the UP item more than the other alternatives ( $F(1, 16) = 19.43, p < .001$ ). The fourth alternative was the UN item. The UN group endorsed the UN item less than the other alternatives ( $F(1, 8) = 11.70, p = .009$ ).

The means and standard deviations of question 5 appear in Table 10. The first alternative was the CU alternative and a significant within-subjects contrast ( $F(1, 16) = 10.12, p = .006$ ), indicating that the

Table 9

Means and Standard Deviations for Interpersonal Dynamics, Question 4: "Poor Behaviour from Child during Trip to Mall"

		Item 4a <sup>d</sup>	Item 4b <sup>a</sup>	Item 4c <sup>c</sup>	Item 4d <sup>b</sup>
UP	<u>M</u>	3.82	5.44	4.12	1.59
	<u>SD</u>	2.53	1.69	2.47	1.18
UN	<u>M</u>	4.44	4.00	4.56	2.78
	<u>SD</u>	2.13	1.58	1.51	1.48
CU	<u>M</u>	3.63	3.25	4.24	2.47
	<u>SD</u>	2.13	1.69	1.99	2.03
BS	<u>M</u>	4.43	5.00	3.57	2.29
	<u>SD</u>	2.07	1.41	1.99	1.89
Indiff.	<u>M</u>	4.00	4.57	3.71	2.43
	<u>SD</u>	1.83	1.40	1.60	2.44

<sup>a</sup>indicates this response was intended to approximate a UP response ("something must be bothering your child today")

<sup>b</sup>indicates this response was intended to approximate a UN response ("severely reprimand the child")

<sup>c</sup>indicates this response was intended to approximate a CU response ("decide sometimes going to mall with child does not work")

<sup>d</sup>indicates this response was intended to approximate a BS response ("become frustrated with child, wondering why he/she turned into a brat")

CU group endorsed the CU item to a greater extent than the other responses. Alternative 2 was a UN item and revealed a significant

Table 10

Means and Standard Deviations for Interpersonal Dynamics, Question 5: "Child has, Unexpectedly, Cleaned Kitchen"

		Item 5a <sup>c</sup>	Item 5b <sup>b</sup>	Item 5c <sup>d</sup>	Item 5d <sup>a</sup>
UP	<u>M</u>	5.65	1.82	1.65	5.22
	<u>SD</u>	1.46	1.47	1.66	1.80
UN	<u>M</u>	5.33	2.00	3.89	4.67
	<u>SD</u>	1.73	1.66	1.90	1.22
CU	<u>M</u>	4.88	2.00	2.35	5.12
	<u>SD</u>	2.18	1.46	1.50	1.73
BS	<u>M</u>	4.86	2.00	2.57	5.86
	<u>SD</u>	1.95	1.53	2.15	0.90
Indiff.	<u>M</u>	6.25	2.13	2.50	4.36
	<u>SD</u>	0.88	1.13	1.69	1.41

<sup>a</sup>indicates this response was intended to approximate a UP response ("that's just like my child")

<sup>b</sup>indicates this response was intended to approximate a UN response ("something weird is going on")

<sup>c</sup>indicates this response was intended to approximate a CU response ("I'm always learning new things about my child")

<sup>d</sup>indicates this response was intended to approximate a BS response ("depends on what kind of kid he/she had been that week")

within-subjects contrast ( $F(1, 8) = 12.77, p = .007$ ), demonstrating again, that individuals with this schema endorsed the UN item less than the other alternatives. The BS item was alternative 3 and a significant within-subjects contrast ( $F(1, 7) = 6.84, p = .035$ ) indicated that the BS group endorsed the BS item less than the other items. The last alternative was the UP item and a contrast of the within-subjects effect was significant ( $F(1, 16) = 15.85, p = .001$ ), indicating that the UP group endorsed the UP item to a greater extent than the other alternatives.

### **Child Behaviour Checklist**

Given that this section was included in the PQ, there was no prime to determine the schematic orientation of the BS parents. In the absence of a prime, however, it was expected that BS parents would be more likely to present positively given normative pressures for parents to present positive expectations regarding their child. Thus predictions for non-primed material allowed for a positive bias in the BS responses.

The scale was based upon a similar scale found in Furey & Forehand (1983). The Daily Child Behavior Checklist (DCBC) was intended to provide a reliable, and valid measure of daily child behaviour in a checklist form.

Scores on the modified DCBC ranged from 1 (Extremely Displeasing) to 4 (Neither Pleasing, nor Displeasing) to 7 (Extremely Displeasing). The alpha coefficient estimate of internal consistency (coefficient alpha) for the 38 item child behaviour checklist was 0.84

for the pleasing/displeasing ratings. On the basis of an examination of mean scores for each item, they were sorted as either pleasing or displeasing. Scores receiving a mean value greater than 4 were classified as pleasing, while mean scores less than 4 were classified as displeasing. Participants received a score for mean observed frequency of pleasing behaviours, and observed frequency of displeasing behaviours. Alpha coefficients for the negative scale (19 items; Cronbach's alpha = 0.82) and the positive frequency scale (19 items; Cronbach's alpha = 0.78) were acceptable. Finally, an overall

Table 11

Child Checklist Frequency Ratings and Pleasing/Displeasing Scores

	Pleasing/ Displeasing Score <sup>a</sup>		Pleasing Behaviour Frequency <sup>b</sup>		Displeasing Behaviour Frequency <sup>b</sup>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
	UP	4.85	0.71	3.94	0.43	2.84
UN	4.24	0.29	3.74	0.59	3.14	0.39
CU	4.18	0.32	3.49	0.47	3.16	0.50
BS	4.55	0.51	3.81	0.36	2.81	0.27
Indiff.	4.54	0.27	3.57	0.56	2.78	0.29

<sup>a</sup>Higher scores are more pleasing and lower scores are less pleasing (neutral at 4.0)

<sup>b</sup>Higher scores indicated greater observed frequency

pleasing/displeasing score was also calculated as the mean value of all items completed. The data are shown in Table 11.

The pleasing/displeasing measure was hypothesized to be related to the schema type of the parent. All contrasts were tested with a separate variance estimate. A specific contrast was used to test the prediction that the UP parents would view the behaviours as more pleasing than the other parents. This contrast was significant ( $t(20.3) = 2.71, p = .013$ ). Furthermore, the CU group's score did not differ significantly from a neutral score of 4.00 ( $t(16) = 0.57, p > .05$ ) which was consistent with the prediction that the CU group viewed the pleasing or displeasing behaviours without bias. Although the ordinal relationship of the means were consistent with predictions, other planned contrasts did not reach significance.

A marginally significant difference was discovered that indicated, as predicted, the BS and UP groups report a greater frequency of pleasing events than the CU and UN groups ( $t(54) = 1.83, p = .073$ ). Other predictions were not supported. The results of the frequency of displeasing behaviours revealed that the UN group did not report a greater frequency of displeasing events than the other groups ( $t(54) = 1.33, p = .189$ ).

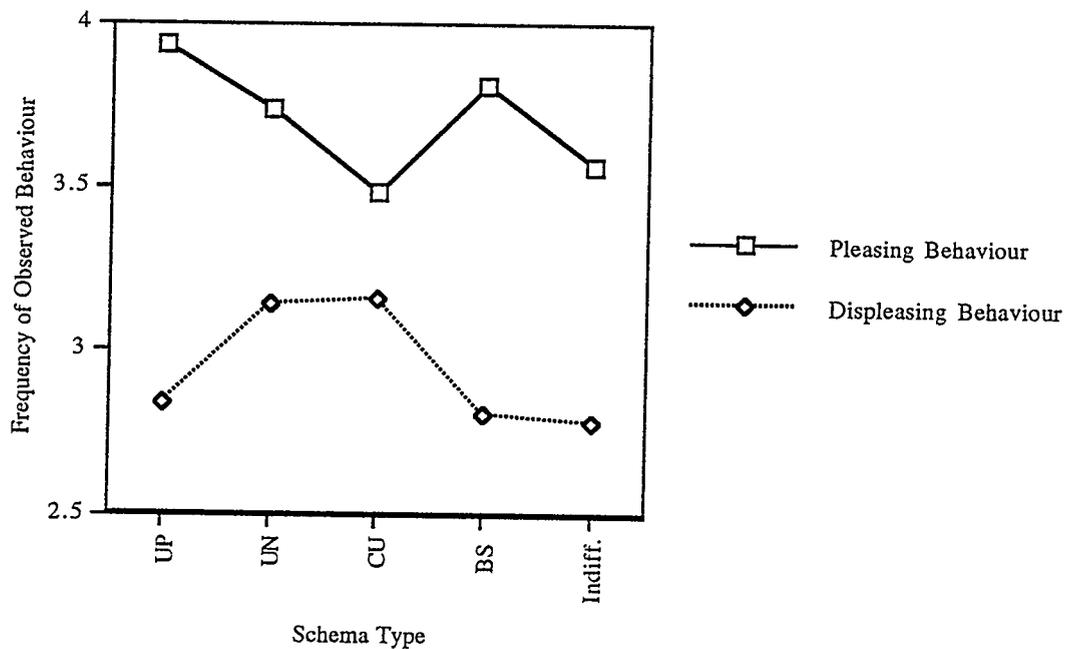
Univariate mixed-model ANOVA analysis of the pleasing and displeasing behaviour frequency data revealed no significant between-subjects (Type) effect ( $F(4, 54) = 0.70, p = .597$ ). However, a significant interaction ( $F(4, 54) = 5.62, p = .001$ ) and within-cells effect ( $F(1, 54) = 109.76, p = .001$ ) was found. The data are graphed in Figure 1. Univariate follow-up of the interaction effect revealed a

marginally significant type effect for frequency of displeasing behaviour ( $F(4, 50) = 2.4255, p = .0479$ ) and a non-significant type effect for the frequency of pleasing behaviour ( $F(4, 52) = 1.5812, p = .1932$ ). Source tables for the above analysis appear in Appendix L.

Follow-up testing revealed a significant pleasing and displeasing frequency difference for all groups. This difference consistently favoured a significantly greater report of pleasing, as compared to displeasing, behaviours. The UP ( $F(1, 17) = 88.66, p < .001$ ), UN ( $F(1, 8) = 11.50, p = .009$ ), CU ( $F(1, 16) = 5.13, p = .038$ ), BS ( $F(1, 6) = 38.09, p = .001$ ), and Indifferent group ( $F(1, 7) = 23.34, p = .002$ ) all demonstrated this effect.

Figure 1.

Frequency of Pleasing and Displeasing Behaviours by Type



### Measure of Affect

Four measures of participant mood were taken. Principal components factor analyses with varimax rotation were completed separately on all four scales. Results suggested a strong positive and negative affective factor on all four scales. Three of the four mood scales also revealed a third factor corresponding to a fearfulness

Table 12

### Eigenvalues and Percentage Common Variance on Factor Analyses of Mood Scales

	Positive Affect		Negative Affect		Fearfulness	
	Eigen- value	Percent Common Variance	Eigen- value	Percent Common Variance	Eigen- value	Percent Common Variance
PPQ <sup>a</sup>						
Time 1	7.89	43.8	2.64	14.7	1.77	9.8
Time 2	2.70	15.0	10.38	57.7	--	--
NPQ <sup>b</sup>						
Time 1	6.57	36.5	3.59	20.0	1.45	8.00
Time 2	6.92	38.5	4.06	22.5	1.33	7.4

Note. Only two factors (i.e., no Fearfulness Factor) were extracted for Time 2 of the Positively Primed Questionnaire

<sup>a</sup>Positive Primed Questionnaire

<sup>b</sup>Negatively Primed Questionnaire

measure. Eigenvalues and percentage of common variance accounted for are shown in Table 12. The items that contributed to the above factors, which were consistent across the mood measures, are shown in Table 13. The trait 'Tense' did not consistently load on any Factor and was not included in the factors listed in Table 13.

Table 13

Results of Factor Analyses on 4 Mood Scales

<b>Factor I:</b>	<b>Factor II:</b>	<b>Factor III:</b>
<b>Positive Affect</b>	<b>Negative Affect</b>	<b>Fearfulness</b>
Enthusiastic	Hostile	Afraid
Friendly	Irritable	Scared
Glad	Jittery	
Good	Nervous	
Happy	Sad	
Loving	Upset	
Pleased		
Proud		
Secure		

Scores on the subscales of positive affect, negative affect and fearfulness were calculated as the mean score of the items corresponding to the respective subscale. Values ranged from 1 to 5 with higher scores indicating stronger affect for the given subscale. Table 14 lists the results of the mood subscale calculations.

A repeated measures split-plot MANOVA of the positive affect data revealed a significant between-subjects (type) effect ( $F(4, 54) = 3.36, p = .016$ ) but not a significant within subjects effect ( $F(3, 52) = 1.58, p = .205$ ). The interaction term was not significant ( $F(12, 162) = 0.79, p = .665$ ). Oneway ANOVA analysis using a weighted means

Table 14

Mean, Standard Deviations, and Subscale Alpha Coefficient Estimates for Mood Subscales at Various Times

	<u>Positively Primed Questionnaire</u>									
	<u>Positive Affect</u>			<u>Negative Affect</u>			<u>Fearfulness</u>			
	<u>M</u>	<u>SD</u>	<u>alpha</u>	<u>M</u>	<u>SD</u>	<u>alpha</u>	<u>M</u>	<u>SD</u>	<u>alpha</u>	
Time One	3.50	0.79	0.92	1.40	0.65	0.86	1.15	0.44	0.92	
Time Two	3.57	0.85	0.94	1.29	0.66	0.95	1.17	0.53	0.82	
	<u>Negatively Primed Questionnaire</u>									
	Time One	3.35	0.74	0.91	1.35	0.52	0.88	1.14	0.31	0.73
	Time Two	3.43	0.74	0.92	1.34	0.48	0.90	1.20	0.49	0.82

solution, revealed a significant omnibus effect for the positive mood rating at Time 1 on the PPQ ( $F(4, 54) = 3.10, p = .0228$ ). Follow-up

tests used the conservative Scheffé multiple range test with alpha set to 0.10 (Howell, 1992). The Unitary Positive group had significantly greater positive affect than the Complex-Unresolved group at this time. This difference no longer existed at time 2. A similar analysis discovered a significant effect at time 1 ( $F(4, 54) = 2.63, p = .0442$ ) and time 2 ( $F(4, 54) = 2.83, p = .0335$ ) of the NPQ. The multiple range

Table 15

Means and Standard Deviations for the Positive Affect measure at Time One and Time Two of the Positively Primed Questionnaire

	Time One		Time Two	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
UP	3.83	0.64	3.77	1.04
UN	3.14	0.64	3.26	0.93
CU	3.07	0.89	3.33	0.84
BS	3.81	1.00	4.03	0.67
Indiff.	3.39	0.46	3.50	0.46

Note. higher scores indicate greater reported positive affect

procedure, Scheffé, did not reveal any significant between type differences with alpha set at 0.10 for either Time. Means and standard deviations for the positive affect measure appear in Tables 15 and 16.

For purposes of clarifying the lack of a significant between-subjects effect at time 2, post-hoc, separate variance within-subjects

analyses were conducted for each Group. These analyses compared time 1 positive affect to time 2 positive affect for the PPQ and the NPQ.

Table 16

Means and Standard Deviations for the Positive Affect measure at Time One and Time Two of the Negatively Primed Questionnaire

	Time One		Time Two	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
UP	3.62	0.66	3.75	0.73
UN	2.80	0.62	3.09	0.64
CU	3.23	0.87	3.10	0.74
BS	3.70	0.53	3.75	0.59
Indiff.	3.15	0.73	3.21	0.76

Note. higher scores indicate greater reported positive affect

One significant difference between the time 1 and time 2 positive affect scores was found. That difference showed that the Complex-Unresolved group felt significantly more positive affect at time 2 compared with time 1 on the PPQ ( $F(1, 16) = 5.89, p = .027$ ). No other significant differences were found.

Collapsed over the time variable, the oneway ANOVA was significant ( $F(4, 54) = 3.3624, p = .0158$ ). A contrast analysis of the oneway ANOVA effect demonstrated that the UP and BS groups reported more positive affect than the other groups ( $t(54) = 3.34, p = .002$ ).

### Narrative Passage

Participants completed two narrative passages, one regarding a positive incident with the child, and the other regarding a negative incident with the child. Three independent raters derived a word count and positive and negative content ratings for each passage. Means and standard deviations for the PPQ and NPQ Narrative passage word counts appear in Table 17.

Table 17

#### Word Counts Means and Standard Deviations for Narrative Passages

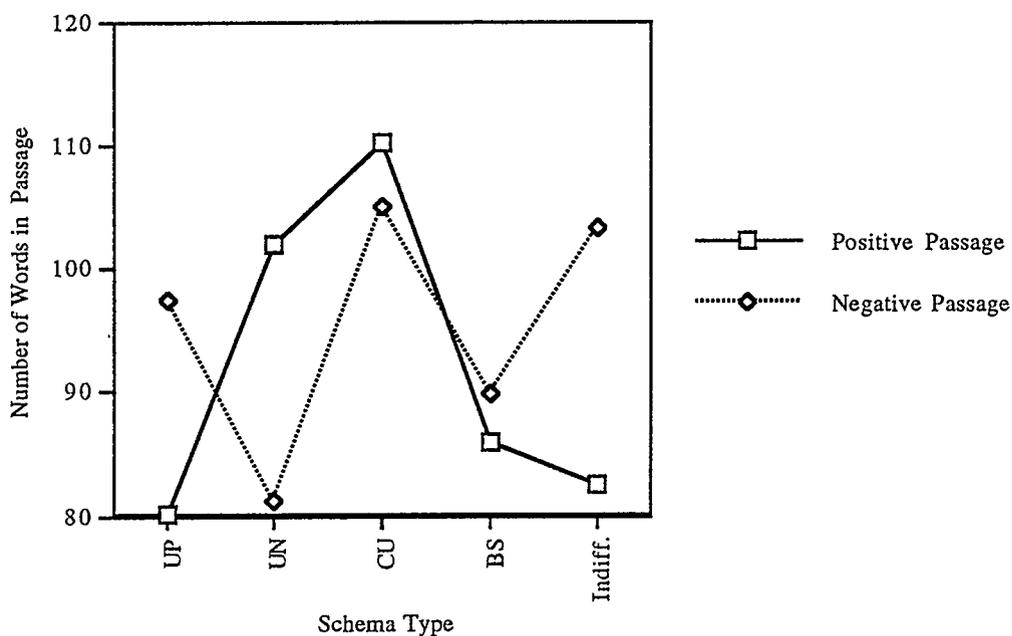
	Positively Primed Passage		Negatively Primed Passage	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
UP	80.11	62.24	97.43	54.38
UN	101.93	70.36	81.19	44.39
CU	110.39	31.79	105.18	35.06
BS	85.90	78.02	89.86	81.38
Indiff.	82.54	38.27	103.33	57.13

For the number of words used in the positive passage, separate variance estimate contrasts revealed that the UP group, as predicted, did not use more words than the BS group ( $t(9.1) = -0.18$ ,  $p = .864$ ). Given that the ordinal relationship of the means was exactly opposite predictions, it was not surprising that no contrast reached significance.

Separate variance estimates were used for the negative passage count data. Contrasts revealed no significant difference between the number of words used by the UN and BS types ( $t(8.7) = -0.25$ ,  $p = .805$ ), as predicted. After a negative prime, the BS and UN types were expected to be similar. Given that the ordinal relationship of means was again opposite predictions, no contrast was significant.

Figure 2.

Word Count Means for Positive and Negative Narrative Passages



Predictions concerning differences between the positive and negative word counts for each group were tested with separate variance within-subject tests. As predicted, the CU group

( $F(1,16)=0.51$ ,  $p = .487$ ), and BS group ( $F(1, 6) = 0.04$ ,  $p = .853$ ) did not demonstrate significant differences between the positive and negative passage word counts. Unfortunately, predicted differences for the UP group ( $F(1, 17) = 1.13$ ,  $p = .302$ ) and UN group ( $F(1, 8) = 0.96$ ,  $p = .356$ ) also failed to reach significance. Finally, the within subject effect for the Indifference group was not significant ( $F(1, 7) = 1.68$ ,  $p = .236$ ).

A univariate mixed model ANOVA revealed no significant between-subjects effect ( $F(4, 54) = 0.45$ ,  $p = .770$ ), within-subject effect ( $F(1, 54) = 0.18$ ,  $p = .675$ ), nor interaction ( $F(4, 54) = 1.05$ ,  $p = .392$ ) for the positive passage and negative passage word count data. The source table for this analysis appears in Appendix O and the data are graphed in Figure 2.

Due to poor inter-rater reliability, only the positive rating of the negative passage was used for analysis. The UP group passage ( $M = 1.81$ ,  $SD = 0.78$ ) had more positive content than the other groups ( $t(51) = 2.50$ ,  $p = .016$ ), and that there was no significant difference between the BS ( $M = 1.39$ ,  $SD = 0.68$ ) and UN ( $M = 1.29$ ,  $SD = 0.38$ ) positive ratings ( $t(51) = -0.29$ ,  $p = .770$ ), as predicted. The CU group ( $M = 1.35$ ,  $SD = 0.45$ ) did not differ significantly from the combination of the BS and UN groups ( $t(51) = -0.06$ ,  $p = .955$ ).

### **Trait Generation**

Section three on the PPQ and NPQ required participants to generate either positive adjectives or negative adjectives that described the child. Participants were allowed thirty spaces for recording the traits they generated. Responses ranged from 0 to 30

words for the negative traits ( $\underline{M} = 5.97$ ,  $\underline{SD} = 5.20$ ) and 4 to 32 for the positive traits ( $\underline{M} = 13.77$ ,  $\underline{SD} = 7.07$ ). Means and standard deviations for the trait generation data appear in Table 18.

Specific orthogonal contrasts to test the trait generation data, were developed. As predicted, UP and BS groups did not differ significantly, using a separate variance estimate, in the number of positive traits generated ( $\underline{t}(17.8) = 0.82$ ,  $\underline{p} = .426$ ). No other contrast was significant.

A univariate mixed model ANOVA of the positive and negative trait generation revealed no significant between-subjects (type) effect ( $\underline{F}(4,54) = 1.18$ ,  $\underline{p} = 0.332$ ) but a significant interaction ( $\underline{F}(4, 54) = 3.09$ ,  $\underline{p} = .023$ ) and trait effect ( $\underline{F}(1, 54) = 57.85$ ,  $\underline{p} < .001$ ) emerged. The data are graphed in Figure 3. The source table for the ANOVA analysis appears in Appendix N.

For the negative traits, a separate variance approach was used as well. As predicted, the UN and BS groups did not differ in the number of negative traits generated ( $\underline{t}(11.1) = 1.51$ ,  $\underline{p} = .158$ ) and the UP group did generate significantly less negative traits than the other groups ( $\underline{t}(25.0) = 3.98$ ,  $\underline{p} = .001$ ).

Within-subject analysis of the positive versus the negative trait generation at each level of type revealed significant differences for the Unitary Positive Group ( $\underline{F}(1, 17) = 31.80$ ,  $\underline{p} < .001$ ), Unitary Negative Group ( $\underline{F}(1, 8) = 7.50$ ,  $\underline{p} = .025$ ), Complex-Unresolved Group ( $\underline{F}(1, 16) = 17.35$ ,  $\underline{p} = .001$ ), and the Bivalent-Separated Group ( $\underline{F}(1, 6) = 9.35$ ,  $\underline{p} = .022$ ). In every group, the number of positive traits generated exceeded the number of negative traits generated.

Table 18

Positive and Negative Trait Generation Means and Standard Deviations

	Positive Traits		Negative Traits	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
UP	15.28	8.91	3.33	2.22
UN	13.33	7.23	10.22	7.87
CU	14.88	7.83	8.41	6.44
BS	12.86	5.55	5.86	3.18
Indiff.	11.00	2.45	4.00	1.69

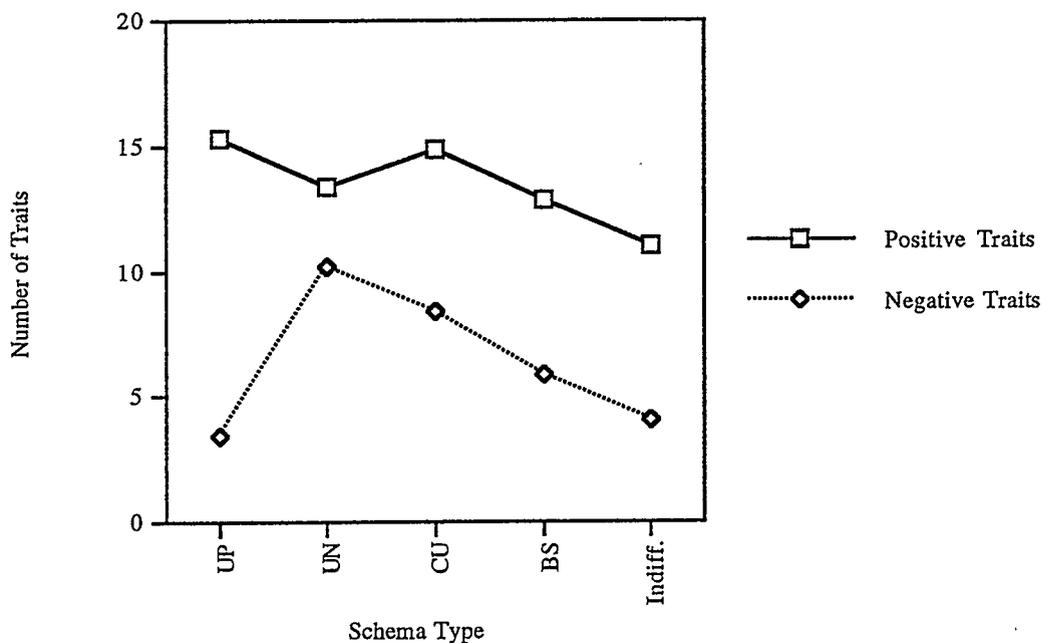
Note. Values represent the number of traits generated.

**Sentence Completion**

Each participant completed 4 sentence completion items on both the PPQ and the NPQ. Upon examination of responses, a decision was made to ignore the fourth sentence stem item because the item was a general attitude item, and did not refer specifically to the child, therefore, it was not considered meaningful for the present analysis. Independent raters assigned a positive and negative content score to each of the first three sentence completion items. The sentence stems themselves were intended to be neutral (e.g., "My child . . . ") so that any positive or negative content introduced to the sentence stem was conveyed solely by the participant. Due to poor inter-rater reliability, the positive and negative rating for Sentence Stem 3 of the PPQ were deleted from further analyses.

Figure 3.

Number of Positive and Negative Traits Generated by Type



The correlation between the positive content scores for the two remaining items of the PPQ was significant ( $r = 0.51$ ,  $p < .01$ ) and therefore the ratings were combined. The correlation between the negative content ratings on the PPQ was significant ( $r = 0.26$ ,  $p < .05$ ) and these ratings were also combined.

The BS and UP groups, as predicted, did not differ significantly on the positive content rating ( $t(53) = -0.79$ ,  $p = .434$ ). Other predictions were not supported.

For the negative ratings of the PPQ's sentence completions a separate variance approach was used. The UP and BS groups differed

marginally ( $t(21.5) = 1.67, p = .110$ ) suggesting that the UP group demonstrated a greater negative content than the BS group. There

Table 19

Means and Standard Deviations for Content Ratings on Sentence Completion Items from the Positively Primed Questionnaire

	Positive Content		Negative Content	
	Rating		Rating	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
UP	2.20	0.69	1.35	0.46
UN	1.96	0.53	1.50	0.70
CU	2.07	0.60	1.53	0.47
BS	2.40	0.43	1.14	0.15
Indiff.	2.27	0.52	1.48	0.41

Note. higher scores indicate more positive, or negative, content

was not a significant difference between the UN groups and the combination of the other groups ( $t(9.0) = -0.66, p = .528$ ). The CU group was rated as significantly more negative than the combination of the UP and BS groups ( $t(25.5) = -2.17, p = .040$ ). The means and standard deviations of the positive and negative content ratings for the PPQ, appear in Table 19.

Within-subject comparisons at each the level of each group were tested using separate variance estimates for each effect. The UP within-subject contrast of the positive and negative rating was

significant ( $F(1, 16) = 10.83, p = .005$ ). This indicated that the positive content was rated as greater than the negative content. The within-

Table 20

Means and Standard Deviations for Content Ratings on Sentence Completion Items from the Negatively Primed Questionnaire

	Positive Content Rating		Negative Content Rating					
	<u>M</u>	<u>SD</u>	Item #1		Item #2		Item #3	
			<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
UP	2.34	0.43	1.30	0.56	1.53	0.50	1.04	0.16
UN	1.78	0.39	1.37	0.70	2.33	0.64	1.56	0.75
CU	2.34	0.42	1.20	0.41	1.65	0.52	1.45	0.62
BS	2.47	0.40	1.00	0.00	1.33	0.42	1.29	0.36
Indiff.	2.22	0.31	1.33	0.47	1.57	0.60	1.33	0.59

Note. higher scores indicate more positive, or negative, content

subject contrast was not significant for the UN group ( $F(1, 8) = 1.47, p = .260$ ). The CU ( $F(1, 16) = 5.59, p = .031$ ), BS ( $F(1, 6) = 37.79, p = .001$ ), and Indifferent ( $F(1, 7) = 5.97, p = .044$ ) groups within-subject effects were all significant, indicating that the positive content was greater than the negative content.

For the NPQ, the positive content ratings were all significant ( $r = 0.26, 0.27, \& 0.33, p < .05$ ) and the ratings were combined to form one positive rating. However, the negative content ratings were not all

significant ( $r = 0.28$ ,  $p < .05$ ,  $r = 0.17$ , &  $-0.01$ ,  $p > .05$ ) and therefore these ratings could not be combined. Means and standard deviations for the NPQ sentence completion task appear in Table 20.

The BS group did have a significantly greater positive content rating than the UN group ( $t(54) = -3.37$ ,  $p = .001$ ) which was contrary to predictions. No other contrast was significant.

Predictions for the negative content rating of the NPQ sentence completions had to be completed on an item-by-item basis. For Sentence Stem #1, the BS and UN groups did not differ significantly ( $t(54) = 1.47$ ,  $p = .146$ ), as predicted. No other contrast was significant.

Results for comparisons of positive and negative ratings, within each type, using a separate variance reveal a significantly higher positive rating in the UP ( $F(1, 17) = 27.63$ ,  $p < .001$ ), CU ( $F(1, 16) = 11.12$ ,  $p < .001$ ), BS ( $F(1, 6) = 95.33$ ,  $p < .001$ ), and Indifferent ( $F(1, 7) = 15.60$ ,  $p = .006$ ) groups, but not for the UN group ( $F(1, 8) = 1.88$ ,  $p = .208$ ).

For Sentence Stem #2, the BS group was rated with significantly less negative content than the UN group ( $t(50) = 3.47$ ,  $p = .001$ ). Other contrasts were not significant.

Separate variance estimates of the positive versus negative ratings for each group on sentence stem 2 revealed significantly more positive than negative content in the UP ( $F(1, 16) = 16.09$ ,  $p = .001$ ), CU ( $F(1, 16) = 20.53$ ,  $p < .001$ ), and BS ( $F(1, 5) = 12.98$ ,  $p = .015$ ) groups. A marginally significant difference for the UN group ( $F(1, 7) = 4.80$ ,  $p = .065$ ) suggested that the negative content rating was greater than the positive content. The Indifferent group ( $F(1, 6) = 5.10$ ,  $p = .065$ )

demonstrated a marginally significant difference between positive and negative scores, favouring the positive content rating.

A separate variance approach was used for sentence stem 3. The BS group did not differ from the UN group ( $t(12.0) = 0.96$ ,  $p = .358$ ), as predicted. The UP did demonstrate significantly less negative content than the other groups ( $t(23.1) = 3.48$ ,  $p = .002$ ) but the CU group did not differ from the BS and UN groups ( $t(27.8) = -0.15$ ,  $p = .884$ ).

The results of positive and negative content rating comparisons within each type for sentence stem 3 revealed a significantly higher positive content rating for the UP ( $F(1, 17) = 125.29$ ,  $p < .001$ ), CU ( $F(1, 16) = 15.38$ ,  $p = .001$ ), BS ( $F(1, 6) = 18.70$ ,  $p = .005$ ), and CU ( $F(1, 7) = 10.02$ ,  $p < .016$ ) groups. Again, no significant difference between positive and negative ratings for the UN group ( $F(1, 8) = 0.56$ ,  $p = .474$ ) was noted.

### **Information Salience**

The information salience section required participants to select 2 pieces of information from 4 alternatives (2 positive and 2 negative). This task was completed on both the PPQ and the NPQ. Results for the PPQ are presented in Table 21, and results for the NPQ are presented in Table 22.

An examination of the patterns of selecting the items revealed that item #1 ("Your child cheated on a test at school") was selected by 75.4% of the participants on the PPQ. Item #2 ("Your child stole

something from a student at school") on the NPQ was selected by 76.8% of the participants.

Table 21

Selection of Positive or Negative Information on the Positively Primed Questionnaire

	Percentage of Type Selecting			Total
	Positive/ Positive	Positive/ Negative	Negative/ Negative	
UP	5.5	61.1	33.3	99.9
UN	22.2	66.7	11.1	100.0
CU	5.9	58.8	35.3	100.0
BS	28.6	71.4	0	100.0
Indiff.	12.5	12.5	75.0	100.0

Visual inspection of the results strongly suggested that predictions were not supported. Difficulties in data analyses precluded statistical tests of hypotheses beyond the examination of descriptive statistics.

**Ambivalence**

The measure of ambivalence, adapted from Thompson et al. (in press), yielded a measure of ambivalence based on overall attitude, affectual, and cognitive ratings of positive and negative evaluations

Table 22

Selection of Positive or Negative Information on the Negatively Primed Questionnaire

	Percentage of Type Selecting			Total
	Positive/ Positive	Positive/ Negative	Negative/ Negative	
UP	11.1	27.8	61.1	100.0
UN	11.1	88.9	0	100.0
CU	29.4	35.3	35.3	100.0
BS	0	100.0	0	100.0
Indiff.	12.5	87.5	0	100.0

taken independently (i.e., positive measure on the PPQ and a negative measure on the NPQ). All items were measured on 4-point scales, for example, item 2 on the NPQ was:

**2. Think about your feelings or emotions for your child.**

Considering only your feelings of dissatisfaction toward your child and ignoring your feelings of satisfaction, how dissatisfied do you feel about your child?

Not at all	Slightly	Quite	Extremely
Dissatisfied	Dissatisfied	Dissatisfied	Dissatisfied
(1)	(2)	(3)	(4)

Scores between the positive items correlated significantly ( $p < .01$ ), with correlation coefficients ranging from 0.41 to 0.60. Scores for the

negative items were also significantly correlated ( $p < .01$ ) with coefficients ranging from 0.52 to 0.74. Ambivalence scores were generated by determining a mean positive and a mean negative score for participants completing at least 2 of the three items. Then the equation  $(P + N)/2 - |P - N|$  (Thompson et al., in press; where P is the mean positive score and N is the mean negative score) was used to derive an ambivalence score with values from -0.5 (no ambivalence) to +4.0 (extreme ambivalence). Results for the ambivalence measure are shown in Table 23.

Table 23

Ambivalence by Type

	<u>M</u>	<u>SD</u>
Unitary Positive	0.29	0.70
Unitary Negative	1.16	0.66
Complex-Unresolved	1.09	0.83
Bivalent-Separated	-0.03	0.61
Indifferent	0.56	1.09

The hypothesis that the Bivalent-Separated, Unitary Negative, and Unitary Positive groups experienced the least amount of ambivalence while the Complex-Unresolved Groups experienced the most, was significant ( $t(27) = 2.61$ ,  $p = .015$ ), using a separate variance approach. However, the ordinal relationship of the means suggested that the UN group experienced as much ambivalence as the CU. A post-hoc

contrast demonstrated that the CU and UN groups did not differ significantly ( $t(19.8) = 0.21$ ,  $p = .819$ ), and the combination of CU and UN groups was significantly greater than the ambivalence of the UP and BS groups ( $t(26.2) = 4.71$ ,  $p < .001$ ).

## DISCUSSION

### Limitations

All investigations are only as good as their limitations allow. Numerous considerations impact upon not only upon the findings themselves, but implications of those findings. Thus, it was necessary to inform the reader of a number of issues.

**Sampling Bias.** Ethical considerations determined that the sample be self-selected. Considering that Berscheid (1983) has reported that most people believe they should only report positive affect within their close relationships, the hypothesized UN type would be an elusive participant to capture. Given the opportunity to become involved in research, it was more likely that a UP parent would respond rather than a UN. A UP type would be more willing to express their positive feelings, without fear of stigmatization, relative to a UN who would feel normative pressures to not disclose and therefore not wish to volunteer in such a study. Therefore, the range of parents willing to express the negative aspects of their feelings regarding the child was undoubtedly restricted.

Restriction of range would impact significantly upon the operationally defined types. This restriction of range would not be accounted for in the median split used to categorize the participants.

Therefore, the UN category would represent a more 'contaminated' category than would the UP category. The category of UN might be thought of as a mild to moderate version of UN; more closely approximated to a negatively biased CU. Such an interpretation was partially supported by ambivalence scores that showed a higher level of ambivalence in the UN group, as high as that of the CU group.

Restricted range in the degree of negative attitudes regarding the child also had implications for the BS type. If it was the case that fewer, truly negative parents were included in the sample, then the BS type represented a type whose positive schema was stronger than the negative schema purely on the basis of the operational definition of the types. Stronger positivity, than negativity, was a condition of the median split on which the types were based. Therefore, it was unsurprising to observe that the BS type often responded in a manner similar to the UP. Moreover, it was speculated that a BS schemata would experience differential activation of one schema over the other dependent on frequency of use. Thus, a greater use of the positive schema may be manifested in the BS types sampled in the present study. Consequently, this factor along with the problem in obtaining negatively responding parents in the sample, may have contributed to the measurement of BS parents who were primarily activated in a positive direction.

**Social Desirability.** The present research was intended to examine positive and negative dimensions of a parents' perception of their child. Normative pressures would likely encourage positive disclosures about the child while suppressing full disclosure of

negative aspects. This would have the effect of making positive responses more positive, and negative responses less negative. This works in favour of the UP group but inhibits responding on the UN group. In the case of BS, such pressures would make it more likely that participants would respond from the positively biased schematic representation more than the negative.

**Priming Manipulation.** The priming manipulation is very important in schema research (Baldwin, 1992) and the current study is no exception. Unfortunately, data that would have been useful in partially determining the effectiveness of the prime (i.e., content ratings of the narrative passages) was unavailable due to poor inter-rater reliability. This combined with other results (discussed below) that question the priming of participants makes it difficult to comment on the effectiveness of the priming manipulation.

**Small Sample Size.** Difficulties in obtaining participants for the research resulted in a small number of participants. This number was further attenuated by incomplete and/or missing data in various sections and on various items. The overall effect was to significantly reduce power in the study. Therefore, a less conservative approach was taken in examining the results in the hope that findings of interest for this exploratory study would be identified. Unfortunately, this made findings, that were significant, equivocal to some extent. As mentioned previously, the experiment-wise error rate indicated that approximately 5 tests would reach significance by chance alone. Such a consideration should be borne in mind while contemplating the results of the current investigation.

## Typology

Initially, a continuous measure of the degree to which participants endorsed items reflecting each of the 4 hypothesized types was intended. This measure was to be obtained from section I of the Preliminary Questionnaire (PQ). The analyses of the subscales generated for each participant revealed a fundamental difficulty for the theoretical formulation. Correlations between each of the continuous measures were inconsistent with the theoretical construction of the types. Unitary Positive (UP) and Unitary Negative (UN) types were constructed to reflect polar opposite schemata. However, correlations suggested that Bivalent-Separated (BS) and Complex-Unresolved (CU) types represented equal, or greater, opposite representations to that of UP. In fact, BS was strongly negatively correlated with UP and strongly positively correlated with UN suggesting little differentiation between a negative schema and BS schema.

It was possible that the typology section was not sensitive to the subtle differentiation of hypothesized types. Furthermore, the formulation of the BS schemata suggested that it was represented by either a positively biased schema, or a negatively biased schema, at any given time, thus making it difficult to accept a single-instance classification scheme which did not account for the current status of the BS schema.

Based on the above considerations, a more theoretically consistent approach was devised. This approach required less complex decisions to be made by the participants and took advantage of the

positive and negative prime of the Positively Primed Questionnaire (PPQ) and the Negatively Primed Questionnaire (NPQ), respectively. During the positive prime of the PPQ, participants rated a set of positive traits regarding the child. A negative set of traits was rated on the NPQ, during the negative prime. This procedure offered the advantage of separated primed measures of the positive and negative representation for the child. Furthermore, each measure, positive or negative, represented a homogeneous set of traits such that an individual who was schematic on that dimension, should have viewed them differently than an aschematic individual (Fiske & Taylor, 1991). The homogenous set would be viewed as a stable, consistent set of attributes by schematic types. For instance, UP would see all the positive traits as applicable to his/her schematic representation. Alternately, UN would also view the positive traits as a set of traits irrelevant for their representation. In a sense this is similar to stereotyped perception (Fiske & Taylor, 1991) wherein the schematic individual accepts and endorses information consistent with prior beliefs and discounts inconsistent, or opposing information, in an almost automatic fashion. Interestingly, BS types should represent schematic types that, while positively primed, would view the positive set as consistent with their representation, and, while negatively primed, view the negative set as consistent with their representation.

However, CU represented an aschematic type on the dimension of positive and negative. Such a type is data-driven, to the extent that information is not automatically processed in a stereotypical fashion (Fiske & Taylor, 1991). Thus, the positive and negative trait sets were

not viewed as homogeneous sets and each trait was evaluated for its own merits in describing the child. Positive and negative would be viewed as an integrated, yet not distinct, set of characteristics.

An operational definition, that incorporated the above considerations, was devised to determine each participant's predominant type. This procedure entailed the use of median splits for positive and negative trait data, to derive both a high and low negative and positive category. Next, standard deviation scores for each participants' positive and negative trait ratings were derived, and a median split was performed on each of the positive and negative standard deviation scores. Thus, CU types represented types with higher than median scores on the standard deviation of the positive *and* negative set. Therefore, all above median standard deviation scores on both the positive and negative trait scale were removed. A UP type was further defined as being above the median on the positive trait ratings and below the median on the negative trait ratings. A UN type was conversely defined as being above the median on the negative trait ratings and below on the positive trait ratings. Finally, a BS type was operationally defined as above the median on both the positive and negative trait ratings.

This operational definition resulted in the creation of a previously unconsidered type. Operationally, this type was defined in terms of having below median scores on both the positive and negative trait ratings. Such a type would not perceive the child as entirely negative or positive. This type was consistent with the conception of the "uninvolved parent" (Bukatko & Daehler, 1992; p.

581). This parenting style may be characterized by a lack of commitment and involvement with the child as well as a distinct emotional detachment. Other explanations of the type are possible. Further research and theoretical formulation need to better define what this fifth type represents.

### **Interpersonal Dynamics**

This section represented a series of complex items that were designed to capture various aspects of the parent-child relationship and ways in which the parent responded to the child under certain circumstances. Unfortunately, it required rather fine discrimination on the part of the participant and may not have been a realistic estimation of the behaviours and responses it was intended to capture.

**Escalation of Conflict.** No significant differences were noted between the types on the estimation of the degree that conflict escalates after an argument begins. In a relative sense, UN types reported the greatest escalation of conflict, however, it was predicted that this would be a similar rate compared to the BS type. In the absence of a specific prime for the BS type, it was not certain which orientation, positive or negative, the BS type assumed. Normative pressures suggested a positive representation that resulted in the BS presenting with a positive bias - not unlike the UP. In the case of escalation of conflict, this may account for the similar rates of escalation of conflict reported by both the BS and UP groups.

**Perceived Commitment to the Child.** In order to counter normative pressures, the perceived commitment scale was adjusted to

reflect commitment on a scale ranging from below average to extremely committed (rather than extremely uncommitted to extremely committed). Unfortunately, this section still had severely restricted range indicating that parents were unwilling to report even 'average commitment'. The majority of parents reported 'more than average' to 'extreme' commitment. Such a restriction of range made significant findings unlikely.

Commitment is possibly a necessary condition of parenthood and therefore the lack of significant findings for this section revealed only that commitment did not differ among the hypothesized types. In fact, in order for the cognitive manipulations, hypothesized in the present study, to occur, high levels of commitment may be necessary in all groups. In light of this, it was interesting that partial support for the existence of the Indifferent type was obtained. The perceived commitment towards the child was marginally lower in the Indifferent group compared to the rest of the types. The Indifferent group may have represented a parental schemata of a less complex nature given that commitment was one of the motivational factors involved in the creation of the other types. Perhaps, without this level of commitment, the parent did not invest the cognitive effort to formulate a complex representation<sup>8</sup>.

**Hypothetical Scenarios.** The final three questions of this section required participants to make fine discriminations among possible parental responses to hypothetical situations involving their children. This was likely a difficult and demanding task.

It was discovered that in a hypothetical situation involving the child, the CU parent selected 'learning more information about the situation' (question 3b) significantly more than other alternatives. This was consistent with the CU's data-driven perception of the child where decisions were made on the basis of current information as opposed to the automatic decisions of schematic parent types. Similarly for question 5, a hypothetical situation regarding learning something positive about the child, the CU type chose the response that indicated he/she 'is always learning new things' about the child to a greater extent than other alternatives. This again demonstrated a data-driven view of the child. Interestingly, the CU type did not endorse these alternatives to a greater extent than the other types. It was possible that the CU response was attractive to the other types, as well. The CU alternative represented a more neutral, information-driven response that may have appeared to be a reasonable, and appropriate response. This was especially true in the case of a UN parent who may have been reluctant to respond with negativity and therefore chose, as an acceptable alternative, the non-valenced, neutral, CU response. An examination of the data revealed that the UN type did indeed endorse the CU item to the same extent, or more than, the CU type.

Specific predictions for responses of the UN type often were contradicted by the results. For instance, it was predicted that UN types would prefer to directly reprimand the child after learning something negative about the child's behaviour (e.g., picking on another child at school (question 3) or misbehaving during an outing

with the parent (question 4)). However, UN types endorsed punitive responses significantly less than alternative responses. In other words, disciplining the child after learning of negative behaviour was perceived as an unlikely response by UN parents.

It was possible that the assumption that a UN parent would react in a more disciplinary manner was simply incorrect. Evidence of a unitarily negative conception does not necessarily lead to a more disciplinary style of parenting. The UN parent may reduce interaction with a child he/she views as unmanageable. Alternately, the UN parent may be motivated to attempt numerous parental techniques, other than harsh discipline, to correct the child's behaviour. If a UN parent learns of something negative it should not be unexpected but instead is a consistent, predictable event given the UN schema. Thus, the UN parent may not react negatively towards the child but is prepared for such occurrences. Consequently, the UN parent does not endorse disciplinary alternatives in the hypothetical situations.

However, the above explanation does not account for question 5 which predicted that upon learning something positive about the child, the UN would make uncharitable attributions (e.g., 'there must be something weird going on'). The UN type endorsed this choice less than the other alternatives, choosing instead, the alternative that indicated 'I'm always learning new things about my child': a CU response. Invariably, the UN appeared to endorse the CU alternatives. Perhaps, this reflected an unwillingness for the UN to commit on his/her negative attitudes but an equal unwillingness to endorse positive (UP) alternatives. Instead, as previously indicated, the UN

found the 'lesser of the two evils' the endorsement of the neutral, data-driven CU alternative.

Evidence of UP making charitable attributions (Fiske & Taylor, 1991) in response to negative behaviour from the child was found in question 4 and question 5. The UP group significantly endorsed a response which attributed poor behaviour from the child, during an outing with the parent, as 'something must be bothering my child today'. The UP group endorsed this response to a greater extent by the UP group than the other types and endorsed this response significantly more than any other alternative. In question 5, the participant selected an alternative that made a charitable attribution regarding a positive behaviour performed by the child (i.e., cleaning up the house) by indicating that such behaviour was expected. Thus, evidence of the mechanisms of maintenance of the UP schema was demonstrated.

Responses that were intended to reflect BS responses were not endorsed by this group. Because the PQ was completed without the participants completing a priming task, there was no way to account for the BS schematic orientation at the time of completing the questionnaire. For instance, it was possible that BS could have been positively biased during the completion of the PQ and thus their responses would mirror UP responding. Questions 4 and 5 seemed to support a positively biased response pattern from BS. Both questions showed the BS endorsing the UP responses.

### Child Behaviour Checklist

As predicted, participants classified as UP rated a list of child behaviours as, overall, more pleasing than the other types. Because the list was intended to contain an equal number of positive and negative behaviours, the CU demonstrated a score which did not significantly differ from a neutral rating. This indicated that behaviours were less subject to positive or negative bias from the perspective of the CU participant. The UN type did not rate the behaviours as significantly more displeasing than the other groups. In fact, the UN group's ratings were on the positive side of neutral, indicating that more behaviour was seen as pleasing than was seen as displeasing. This was contrary to expectations. Again, such a finding may have been predictable given the equal numbers of pleasing and displeasing behaviours and normative pressures encouraging positive responding. In other words, the UN type may have exhibited lessened negative responding on the displeasing items, and endorsed more pleasing behaviour, the overall effect of which would be to make the averaged rating slightly weighted to the pleasing side. Once again, BS scores were similar to UP scores, thus supporting a positive orientation during the PQ.

Although the frequency data was based on a more objective determination (i.e., frequency of behaviour in last week versus pleasing/displeasing rating), it was unlikely that the data was free of schematic bias. Schema research has concluded that the content of the schema determines how information is stored and recalled (Fiske & Taylor, 1991). Without a specific priming component to the PQ, it was

unclear how to interpret BS responses. However, it was reasonable to assume that normative pressures made it more likely the BS type would be positively biased rather than negatively biased. With this consideration in mind, it was discovered that UP and BS participants reported a greater frequency of pleasing behaviours. However, the UN group did not report significantly less frequency of pleasing behaviour than the other groups. For frequency of negative behaviour, there were no significant differences among the groups. Thus, UP and BS demonstrated a positive bias while all groups reported similar amounts of negative behaviour.

While every group reported a significantly greater frequency of positive behaviour than negative behaviour, this effect was weakest for the CU group. This was likely a result of the more objective approach taken by this group who were predicted to evaluate behaviours, and their occurrence, in a qualitatively different fashion. The CU response, because of a greater use of bottom-up processing, would not automatically discount or endorse a behaviour. If children can be expected to perform both pleasing and displeasing behaviour in any given week, then it would be reasonable to predict that CU would more accurately report this and therefore not demonstrate a significant difference in the report of frequency of pleasing versus displeasing behaviour.

### Measure of Affect

Baldwin et al. (1990) suggested that an alternative explanation of ostensible priming effects is simply the activation of an affective

process. The present study accounted for affective factors to some extent. No differences between the groups were discovered on a measure of negative affect or fearfulness at any of the time intervals. However, differences were observed on positive affect. This difference showed that BS and UP types reported more positive affect than the other groups.

It was discovered that no difference in positive affect existed in the group after the completion of the PPQ. This may be partially accounted for by the CU group whose positive affect significantly increased from the beginning of the PPQ to the end. Perhaps, the aschematic type was more susceptible to the consideration of specific positive information over the course of the completion of the PPQ. Without reaching significance, the above interpretation was supported in the positive affect scores after the completion of the NPQ. The CU group was the only group whose positive affect decreased after completing the NPQ. Therefore, the CU did appear to be susceptible to mood related changes following a valenced priming task.

### Narrative Passage

The prediction that schema-consistent passages would result in the use of more words was not supported. Results suggested entirely opposite patterns of findings.

However, people may be more adept at the recall of specific information that is schema-inconsistent because such information cannot be assimilated easily into the conception (Srull et al., 1985; Stern et al., 1984). Therefore, schema-inconsistent passages may have

an advantage of greater substance because it requires more cognitive effort to assimilate such incidents into the schema. This may be especially true considering that the Narrative Prime required the participant to consider an incident in detail - details that a schema-consistent participant may not readily have. Details are less important when the information is schema-consistent because top-down, conceptually driven processes are more sensitive to attributes and generalizations than specific instances.

Therefore, schema-consistent passages (e.g., positive passage for a UP) should use less words because the incident was recreated to fit the set of attributes on which the schema was based. However, schema-inconsistent information (e.g., negative passage for UP) would be based on specific incidents that were stored more independently because of the inability to assimilate them easily into the predominant schema. A BS participant was schematic on the positive passage and the negative passage and therefore should have used less words on each passage.

Considered from this perspective, the CU type should recount passages using more words than the other types. This was based on the CU's theoretical formulation as a data-driven, bottom-up type that should access information on a more incident-by-incident basis, compared to schematic types that conceptualize the child in terms of a set of related, homogenous traits. Aschematic groups have conceptions based on incidents and behaviour (i.e., data-driven) and as such should have access to more material when relating a specific incident. In contrast, the schematic groups were, by definition, types who

conceptualized the child in terms of sets of traits and not individual incidents.

The above explanation appeared to be consistent with the data in Figure 2. The UP and UN types demonstrated opposite patterns of word usage for the positive and negative passages. For schema-consistent passages, these types used fewer words than for schema-inconsistent passages. The CU and BS both appeared to demonstrate more consistency. The CU type had a greater number of words for both passages while the BS, who was schematic for both passages, had, overall decreased numbers of words used for both passages.

Alternately, the results of the word counts for the narrative passages could reflect the use of greater justification, and consequently greater word use, for schema-inconsistent passages. In other words, the UP type uses more words in the description of the negative passages because of various qualifications (e.g., "My child is always great so don't get the wrong idea about what happened but one time . . . "). The BS would not have to qualify either passage because neither is schema-inconsistent and should use less words. However, this explanation cannot adequately account for the CU finding of elevated word counts on both positive and negative passages. Further research needs to determine the actual content of the passages.

Unfortunately, poor inter-rater reliability resulted in the loss of some information concerning positive and negative content in the Narrative Passage section. With passages of varying length and complexity, the task of assigning a single rating to describe the degree the parent described positive or negative aspects of the child may

have been too difficult for raters. One measure did achieve acceptable reliability. This measure, the rating of positive content in the negatively primed narrative passage, revealed that UP expressed more positive content than the other groups. Furthermore, the BS and UN groups did not differ in their ratings of positive content. This supported the prediction that UP remained positive regarding the child, even during a negatively primed task. However, the BS type was able to move from a positive schema to a negative schema in regard to the child. Therefore, positivity, that may have been observed during the positive prime, disappeared during the negative prime, such that BS more closely approximated a UN.

### **Trait Generation**

Results supported the prediction that the UP group would generate the least number of negative traits. The UP group simply had no negative material to support this task. The UP group also appeared to generate the most positive traits. However, the UN group also generated a large number of positive traits but distinguished itself with the greatest number of negative traits. The CU group generated a large number of both positive and negative traits, demonstrating an ability to see both sides of the child. The BS should have, if primed properly, generated equivalent numbers of positive traits compared to the UP group, and equivalent numbers of negative traits, compared to the UN group. The data did not support this. Surprisingly, the BS often presented with a positive bias on other items but generated the lowest number of positive traits on this task.

Consistent with other findings, the BS did resemble the UP again on the negative trait generation by generating a low number of negative words.

Comparisons of positive and negative trait generation within each group demonstrated a significantly greater generation of positive traits compared to negative traits in every group. However, this effect was greatest in the UP group in which the positive trait generation should have an advantage. The effect was less pronounced in the BS group and the UN groups. The BS group was predicted to have equal numbers of positive and negative traits because a positive schema supported the generation of positive traits, while a negative schema supported the generation of negative traits. The small significant difference between positive and negative trait generation for the UN group could be another example of UN responses being moderated by normative pressures.

There may be some question as to the effectiveness of the negative prime. If the BS type represented a type with a stronger positive schema than a negative schema, the prime to negative may have needed to be more powerful in order to activate the negative schema. Some of the results suggested that the BS type did not always differ from UP group on the NPQ. This would be the case if the negative priming mechanism was unsuccessful in priming the BS negatively. However, the priming mechanism was not predicted to have an effect on the UP or UN types. Without an opposite valenced schema to access, the priming task cannot change the orientation of the unitary types. Therefore, it was possible that the significant

positive to negative trait difference observed in the BS group was a reflection of the poor negative prime for that group.

Moreover, normative pressures towards not being unduly negative towards the child may have contributed to the inconsistent findings with the UN group. The UN had generated a large number of negative words, as expected, but also generated more positive words than was expected. This result may have been partially influenced by the normative pressure for the UN to present some positive material regarding the child.

Another consideration, not addressed in the present study, was the degree of positivity or negativity of each individual trait item. Perhaps, for example, the UN type generated a number of neutral, or ambiguous traits during the positively primed trait generation. Thus, even if UP and UN had generated equal numbers of words during the PPQ, the actual content of the items may have demonstrated a stronger positive bias in the UP words. Unfortunately, the present study did not address the specific content of the trait generation task.

In consideration of the Indifferent type, the trait generation task required the participant to reflect on the child and come up with as many words, as they are able, to describe the child. This was a task that would take a moderate amount of thought - cognitive effort that an Indifferent parent may not be motivated to attempt. In relative terms, the Indifferent type did report the fewest (positive traits), or second fewest (negative traits) words.

### Sentence Completion

The sentence completion section presented neutral sentence stems that allowed the participant to reveal their positive or negative orientation.

After the positive prime, the BS and UP groups, as predicted, did not differ in the degree of positive content. However, no other predictions were supported for the measure of positive content on the sentence completion task of the PPQ. Interestingly, a marginally significant difference was observed between the BS and UP groups on negative content ratings for the PPQ. The difference indicated that, during a positive prime, the BS group demonstrated less negativity than the UP group. Therefore, the positively primed BS, may represent an even purer positive schema than the UP schema. This was not unlikely, given that the UP schema must somehow account for inexcusable negative behaviour whereas the BS can remove negative material from the positive schema (placing it in the independent negative schema) leaving the positive schema untouched. Overall, the findings supported a positive priming of the BS type. The ratings also supported the inability of the UN type to be positively primed.

An examination of each group's positive and negative ratings revealed that only the UN group did not have a significantly higher degree of positive content than negative content in the sentence completion task following the positive prime. This supported the contention that a positive prime cannot influence the UN type which did not have positive content to be accessed.

For the NPQ, the overall pattern of results were inconsistent with predictions. The BS and UN groups were predicted to have equal amounts of negative content following a negative prime, while the UP remained unaffected by such a manipulation. In some cases, we see that the UP did demonstrate less negative content in the sentence completion than the other groups, but the BS did not consistently demonstrate higher negative content ratings. The BS group was also not consistent in demonstrating equality of negative content ratings with the UN. Again, this calls into question the priming of the BS' negative schema. This could have been the result of a poor priming task, the relatively weaker negative, than positive, schema of the BS, or, fundamental problems for the theoretical formulation of the BS type.

The positive content ratings on the NPQ did not support the prediction that the BS would not differ significantly from the UN group. In fact, the BS exhibited greater positive content than the UN group, again questioning the effect of the negative prime on the BS group. Or, it could be that the BS type had independent positive and negative representations of the child but operated within the positive schema to the exclusion of the negative schema. The negative schema may only be invoked whenever absolutely necessary, in order to protect the positive schema. All other situations were dealt with through the positive schema.

The results of positive versus negative comparisons for each group on the NPQ sentence completions demonstrated that UP groups did indeed maintain greater positive content after a negative prime.

The UP group consistently had higher positive content, on the completion of the neutral sentence stems, than negative content. Unfortunately, this was also the case with the BS and CU groups as well. In the case of the BS group, this result was contrary to predictions that suggested that upon being negatively primed they would reveal more negative content on the neutral sentence stems. Once again, the BS group appeared to be positively biased.

It was possible that the negative prime was not powerful enough to result in a complete schematic shift in the BS type. If normative pressures demanded that the BS type present positively, this would serve as a stronger prime than the recounting of a specific negative incident in the child's history.

In support of the UN type, the positive and negative content comparisons either revealed no significant differences or a marginally significant higher negative rating as compared to the positive rating. In other words, the UN type did not demonstrate higher positive, than negative, content ratings and did show higher negative ratings in one instance (Sentence Stem #2). This supported the hypothesis that the UN type perceived the child in negative terms. The sentence stem items were not biased towards one valence or the other, and as such, negative content rated in the completion of the item was a result of the participants' own response. Furthermore, the existence of higher negative content in at least one item of the UN responses demonstrated the negative bias in that group.

### Information Saliience

It was apparent that participants did not choose information to bolster their schematic orientation (e.g., UP choosing positive information). The overwhelming result of the section was for participants to select equal numbers of positive and negative information, perhaps in an effort to balance the information selection process. Although the UP was predicted to be unaffected by a negative prime, it was interesting that 61% of the UP respondents selected both pieces of negative information following the negative prime while zero percent of the UN respondents did so. Perhaps, the information, while not consonant with their schematic orientation, was nonetheless diagnostic for them in the sense that it necessitated a parental response ("My perfect child has done something wrong and I need to correct it").

It was also possible that this task was too difficult for respondents to answer accurately. The response required a complex analysis of the items in order to determine which, of 4 pieces of hypothetical information about the child's behaviour, the parent would want to know about. Analysis suggested that a negative item on both the PPQ and NPQ was selected by at least three quarters of the respondents. Thus, there may have been an inequality in the importance of the presented items. A larger proportion of male children reported on in the scaling study compared to the actual questionnaire study may have adversely affected the validity of the scaling. This inequality of male children, combined with the low number of participants in the scaling study, question the equality of

the information salience items selected. If the items were not of equivalent intrinsic interest, then there may have been a systematic bias in the selection of information. If this is the case, it is difficult to interpret the results.

### **Ambivalence**

As predicted, the aschematic type experienced the greatest ambivalence regarding the child. The simultaneous existence of positive and negative characteristics, and the need to continually integrate positive and negative characteristics, likely contributed to feelings of ambivalence (Grotstein, 1981).

In support of the differentiation of BS and CU types and the resolution of tension through the development of a positive *and* negative schema, the BS type had the lowest ambivalence of any group. This distinction was very important for the concept of BS schemata. If the existence of a positive schema and a negative schema were not independent than it was likely the parent would experience a great deal of ambivalence because he/she would be maintaining two, polar-opposite conceptions simultaneously. However, after operationally defining a group to have both a strong positive and strong negative conception, the BS group was found to have virtually no ambivalence whatsoever.

However, the interpretation of the BS group's lack of ambivalence was equivocal given other findings. There was reason, from other results, to suspect that; 1) the BS type represented a weakened version of BS, one with a stronger positive schema than

negative schema; and/or, 2) the negative prime for the BS was inadequate to fully prime the negative schema. Given these considerations, the lack of ambivalence may suggest difficulties in the study as much as real differences in the BS type compared to the other groups. Perhaps, the low ambivalence in the BS group merely reflected the UP perspective of the BS, a hypothesis supported in other areas of the study.

Interestingly, the ambivalence of the UN parent was as great as that of the CU parent. There were a number of possible explanations for this finding. Normative pressures encouraged the participant to report positively in regard to the child. While, the UP parent was assisted by such pressures, a UN parent would be highly conflicted by such a situation. The true reflection of the UN schema would be mostly negative, but the normative pressures suggested modifying the negative, or possibly buffering negative material with positive material. It was possible that such a process created feelings of ambivalence - "I feel that negative expresses my view, but I think I should report positive material".

### **Summary**

Overall, some support was garnered for the typology of interpersonal schemata hypothesized. The concept of a Unitary Positive parent who perceived of the child in all positive terms was supported consistently throughout the findings. There was also evidence suggesting a Unitary Negative parental schema existed, although the evidence was weaker in this regard. Given normative

pressures and the likelihood of sample bias problems for the types to respond positively this was not surprising.

Support for the concept of Complex-Unresolved was also encouraging. The pattern of findings consistently demonstrated that the CU type responded with moderation. Such a finding was consistent with predictions of Linville (1982), Showers (1992c) and Neuberg and Newsom (1993) but contradicted Holmes (1991). The present study suggested that the complex integration of positive and negative information that characterized the CU group likely served to buffer valenced reactions.

However, this conclusion must be considered in light of the non-equivalency of the domains of interest. Linville, Showers, and Neuberg and Newsom examined self-representation while Holmes' work dealt with intimate relationships and the current study examined parent-child relationships, thus the comparisons were not exact. Furthermore, Holmes (1991) argued that the high trust type integrated information more so than the uncertain type which may be better represented as a bivalent type whose positive and negative dimensions were more independent. If the uncertain type from Holmes formulation was more consistent with the BS type then predictions of extreme responding in the BS group were more comparable with the extremity Holmes predicted in his uncertain group.

The concept of Bivalent-Separated presented more difficulties. An elusive construct to capture through a questionnaire format, the study provided evidence that a BS process existed but was

equivocated by a presentation suggesting a relatively stronger positive schema than a negative schema. More work needs to define and test the constructs further.

Finally, a group derived in the current study, the Indifferent Schema, received some support as being less committed than the other types but was overall not adequately examined. Further efforts need to include the possibility of this fifth type.

It is important to note that the study presented does not provide adequate evidence for the existence of a schematic structure. Instead the evidence was suggestive of general evaluative approaches individuals might take within committed relationships. Such an evaluative framework could be constructed via schemata or possibly reflect other cognitive structures.

The UP and UN types were also not represented as extreme types in the current study. Instead, there appear as positively, or negatively, biased but not without some realization of opposite impressions of the child. This is a reasonable position. The maintenance of one extreme evaluation over the other would likely be very difficult. A UP parent would be confronted by incidents and events they are just not prepared for if they did not have some awareness and appreciation for negative aspects of the child. However, the evaluative schema suggested in the proposed typology predicted that the parent, while not delusional, was biased towards perceiving the child in one light or the other (i.e., positively or negatively). This does not predispose some oppositely valenced impressions from being incorporated in the schema, although such

material must be kept to a minimum lest the schema be forced to alter its structure to accommodate the information.

### **Methodological Problems and Future Considerations**

The large proportion of participants from academic settings restricted the generalizability of the results. Support garnered in the present study must take into consideration this restriction. Further research should employ a more representative sample in order to establish greater external validity. Furthermore, subsequent research must employ random selection for recruitment of participants. A major methodological confound was introduced into the present study through the self-selection of participants. Results with a random sampling would provide a more convincing test of the hypothesized typology.

The necessity of an operationally defined categorical classification was unfortunate in the present study for two reasons: 1) it resulted in less power than a continuous measure, or regression analyses approach would have permitted; and 2) it artificially created categories for participants. A median split procedure did not allow participants to be naturally selected into appropriate categories therefore the distribution of participants into the various schematic types cannot be considered an accurate classification. No observations regarding the distribution of types within the population were warranted on the basis of the current study and future work needs to develop a classification scheme that classifies participants more impartially.

The creation of a fifth type through operational definitions also merited future study. Some evidence supported the notion that this type represented an uninvolved, or Indifferent schema-type, but further refinement and validation of the construct is required.

The actual versus perceived behaviour of the child should be examined. The existence of each parental representation was likely driven by a combination of the child's actual behaviour and the parent's pre-conceptions of the child. However, this may vary among the types, for instance, a UN type might be more driven by actual delinquent behaviour on the part of the child than a UP type is driven by actual positive behaviour. Such considerations will also help delineate the differential impact of motivational and actual behavioural determinants of the schematic orientation. For instance, does the child's behaviour or the parent's own needs impact the representation of the child more?

Similarly, evidence concerning direct behavioural correlates of the interpersonal schematic representation should also be collected. How parents differ in their parental duties as a function of their schematic representations is an important consideration. Furthermore, the impact of one parental representation versus another on the functioning of the child represents another area of possible study. If the parent perceived the child in unitary negative terms, the notion of a self-fulfilling prophecy would suggest the child was more likely to end up acting negatively. Investigation of this phenomena would require objective measures of the child's behaviour in multiple situations. Future work in this area needs to examine the suggestion

found in the concept of psychodynamic splitting that the BS type may represent a type prone to affective extreme and chaotic interpersonal relationships must be considered. This would require subsequent work to include measures of dyadic and familial functioning in subsequent work.

Once support for the typology is forthcoming, it will be necessary to examine the context in which the typology is applicable. In other words, how robust are the types? Such evidence will need to address reliability, consistency, and stability of the types. An interesting corollary of this line of questioning concerns how parental schemata might differ among family members: Can a parent hold one schematic representation for one child, and a different schematic representation for another?

In future study, it would be useful to compare the typologies described to other related measures. For instance, the Personal Need for Structure Scale described in Neuberg and Newsom (1993) measures an individual's inability to accept ambiguity. This measure should be positively correlated with the UP, UN and BS types but negatively correlated with the CU type.

Another consideration for the proposed typology involves special populations. Would parents of young offenders be more likely to use UN or BS schematic representations? What about parents of special needs children: Can the mother of a severely handicapped child perceive of the child in all positive terms because the negative aspects of the child's disability are separated in her BS view?

Inter-rater reliability of the positive and negative content measures suggested a potential weakness for related findings. Although some results reached significance, the results for the positive and negative content measures were equivocal to a certain extent. Future work must consider a modification of this procedure, perhaps by creating anchors for the rater such that ratings are more objectively derived. Positive and negative content ratings might also be reduced to objective counts of valenced terms used in the passage (e.g., word counts of the number of positive and negative words).

Considering the narrative passages, information relevant to the actual content of the passages could be used to illuminate maintenance strategies for the types. For instance, a UP type may qualify a negative passage to a greater extent than a UN (e.g., "Although my child is normally wonderful, . . ."). Such results would provide more evidence for active maintenance strategies utilized by the proposed types.

Unfortunately, missing data affected all sections and subscales in the current study. An attempt was made to equate those participants completing all three questionnaires versus those who had not, but this did not account for systematic differences in participants who completed specific items versus those that did not. Without an examination of each item and subscale that contained missing data, results may be potentially confounded by such systematic differences.

Finally, the BS type requires investigation into the nature of the priming mechanism. There are two possibilities for the threshold activation of the opposite valenced schema. First, the mechanism

could be quantitative, in that, once a certain number of opposite-valenced events occur, the parent would switch to that schema in order to assimilate the information. Alternately, the mechanism might be more qualitatively controlled so that the kind, or importance, of the event determines whether it will activate a dormant schema.

Evidence in support of the priming mechanism for BS types would likely require the use of an experimental paradigm to approximate natural conditions.

Much work remains to be done with the interpersonal typology proposed in the present study. However, given the dearth of direct evidence concerning parental representations of their children, the present line of investigation is crucial.

## ENDNOTES

1. It should be noted that contention exists surrounding the schema construct (e.g., Wilcox & Williams, 1990).
2. A Ganzfeld is a Gestalt term indicating a perceptual field that is like "a shapeless fog that goes on forever" (Coren & Ward, 1989; p. 307).
3. Showers & Ruben (1990) also suggest that a pessimistic style of coping can be associated with negative outcomes (e.g., impaired performance, poor health outcomes, poor coping, and depression).
4. Baldwin (1992; see note, p. 471) argues that schematic versus aschematic is a relative matter as the concept of schema is best thought of along a continuum. Therefore, although the present study discusses issues regarding schemata in a discrete sense, it is not intended to discount the value of approaching the issues in a more continuous sense.
5. It was necessary to select school-aged children for the referent in study because items in the questionnaires refer to hypothetical and actual behaviours that occur in school settings.
- 6 This finding was also confirmed in a discriminant function analysis (DFA) of the demographic variables which identified the Marital Status

item as the best item for discriminating those participants who had completed all three questionnaires versus those participants who had not. However, the overall classification rate of the DFA was only slightly better (86.8%) than simply classifying all participants in the complete group (83.1%).

7. The calculation of experiment-wise error rate was based on all tests of statistical significance, planned and unplanned (approximately 88).

8. Complex representation in this case referring to the creation of one of UP, UN, BS, or CU, and not only to the Complex-Unresolved type.

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**APPENDIX A**  
**General Information for Participants**

**General Information for Participants**  
***How Parents Think About Their Children***  
***Questionnaire Study***

Thank you for expressing interest in this project. Your participation is vital to the success of this project.

This study examines the different ways in which parents may understand their children. The study utilizes a new model for viewing how parents think about their children. The basic premise of the theory is that parents may differ in how they organize positive and negative information. Children do good things *and* bad things. As a parent there is a need to understand these different qualities in your child. The organization of these positive and negative traits is the focus of the present investigation.

The study consists of one questionnaire broken into three smaller questionnaires. It should take approximately 20 to 30 minutes to complete each of the three parts. You will find *Part One* of the questionnaire included with this information package. After returning *Part One*, *Part Two* will be sent to you shortly, and likewise with *Part Three*. It is hoped that breaking down the questionnaire into three short parts will make participation easier. It is also important that each part be completed at one sitting. If you decide you do not wish to participate, please return all of the information in the envelope provided.

Each questionnaire asks you to consider how you feel, and what you think, about your child. Simply reflect on your relationship with your child and answer each question appropriately.

In the event you feel you are unduly distressed by your participation in the study you are invited to contact the Faculty and Staff Assistance Program at 220-5893. This department offers counseling services and will be able to assist you. They have been notified about the possibility of participants contacting them. Distress can be considered the reaction, specific to the questionnaire, which causes you unusual anger, sadness, or anxiety which you believe you would not have otherwise felt.

If you have questions or concerns about the study, which you would like to discuss with someone other than the primary investigators, please contact the Associate Dean (Research) for the Faculty of Social Sciences, Dr. James S. Frideres, at 220-5889.

Thank you for your interest and participation in the study.

Sincerely,

---

Mr. B. Kelln, B.A. (Hons)  
(Principal Investigator)

---

Dr. J. H. Ellard  
(Graduate Supervisor)

**APPENDIX B**  
**General Instructions for Completing the Questionnaires**

## **General Instructions for Completing the Questionnaires**

Thank you for agreeing to participate in this study.

Please consider the following points in completing the questionnaire:

- *answer honestly; do not worry about saying the 'right', or most appropriate, things*
- *do not be afraid to say things you think are flattering or unflattering about your child if you believe these things are an honest reflection of your opinions*
- *take your time to put each item into the context of your relationship with your child*
- *if you have more than one child, please focus on one child only*
- *the study consists of one questionnaire broken into 3 short parts*
- *complete each part in one sitting*
- *when you have finished Part One, return it, and you will be sent Part Two*
- *upon the completion of Part Two, return it, and you will be sent Part Three*
- *if there are questions you do not understand please contact the investigator or attempt to complete them as well as you can*

Thank you very much for your time and cooperation. Your care in completing this questionnaire is very much appreciated and will be of enormous assistance to the current study.

**APPENDIX C**  
**Consent Form**

## "How Parents Think about their Children"

Brad Kelln  
Dr. John Ellard

### Consent for Participation in the Study

The investigation and my part in the investigation have been fully explained to me and I understand the explanation. I have read the *General Information for Participants* and understand the purpose of the investigation.

I understand :

- I will be required to complete three (3) short questionnaires concerning my child
- that I am free not to answer specific items or questions
- that any data or answers to questions will remain confidential with regard to my identity
- that I am free to withdraw my consent and terminate my participation at any time without penalty
- that I may request a summary of the results of this study (this summary will be available in August, 1995 from the Clinical Psychology Main Office, ED. B. 292)
- that mandatory reporting laws in the Province of Alberta require that any disclosure of abuse against children must be reported to the proper authorities. However, I realize that it is *not* the purpose of this investigation to identify cases of child abuse.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Investigator's Signature

**APPENDIX D**  
**Preliminary Questionnaire**

## How Parents Think About Their Children

### Section I:

#### Descriptions of Your Feelings Towards Your Child

The following are statements that some parents use when describing how they feel about their children. Please read each statement carefully and decide how closely the statement reflects how you feel, or what you think, about your child. No answer is better or worse than any other so please answer honestly. Please answer by choosing a number from the scale of 1 (Very False) to 7 (Very True) and placing it on the space following the item.

- |   | Very<br>True | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Very<br>False |
|---|--------------|---|---|---|---|---|---|---|---------------|
| 1. My understanding of my child is a <i>mix</i> of his/her good and bad qualities.  |              |   |   |   |   |   |   |   | _____         |
| 2. My child and I get along great.  |              |   |   |   |   |   |   |   | _____         |
| 3. Overall, I am just bursting with pride over my child.  |              |   |   |   |   |   |   |   | _____         |
| 4. Just seeing my child makes me feel angry or upset.   |              |   |   |   |   |   |   |   | _____         |
| 5. My child and I argue when we are together.   |              |   |   |   |   |   |   |   | _____         |
| 6. My feelings for my child can change drastically so that one day I can't think anything but good things about him/her and then the next day I can't think of anything but bad things. |              |   |   |   |   |   |   |   | _____         |
| 7. Sometimes I am really happy with who my child is, other times I couldn't be more dissatisfied with my child.   |              |   |   |   |   |   |   |   | _____         |
| 8. I rarely see my child do something that makes me proud.  |              |   |   |   |   |   |   |   | _____         |
| 9. My understanding of who my child is seems to change almost every day.  |              |   |   |   |   |   |   |   | _____         |
| 10. It seems that everything my child does annoys me.   |              |   |   |   |   |   |   |   | _____         |

Very True      7      6      5      4      3      2      1      Very False

---

11. I have two different impressions of my child - on the one hand he/she is great and I couldn't ask for more; on the other hand my child really disappoints me. \_\_\_\_\_
12. My child is the worst. \_\_\_\_\_
13. When I learn that my son/daughter has done something wrong, I usually find out that it was not his/her fault. \_\_\_\_\_
14. Sometimes I love my child more than anything in the world, sometimes I don't know why I put up with my son/daughter. \_\_\_\_\_
15. I never think anything bad about my child. \_\_\_\_\_
16. My idea of who my child is is not really clear. \_\_\_\_\_
17. I never think anything good about my child. \_\_\_\_\_
18. My relationship with my child is either really great or really bad. \_\_\_\_\_
19. I think there is room for my opinion of my child to change. \_\_\_\_\_
20. I am still trying to figure out what kind of child my son/daughter is. \_\_\_\_\_
21. I feel lucky to have my child. \_\_\_\_\_
22. I think my child is the greatest. \_\_\_\_\_
23. I can't say my child is extremely good or extremely bad. \_\_\_\_\_
24. It seems like I have two different kids, one child who is really great and one child who lives to make my life miserable. \_\_\_\_\_

**Section II:****Rounding Out the Picture**

1.

Generally speaking, when conflict arises between you and your child how quickly do you find that conflict escalates? That is, how quickly does anger flare up and emotions start to run really high? Please answer by circling a number on the following scale.

1	2	3	4	5	6	7
Escalates Very Quickly						Escalates Very Slowly, If At All

2.

Commitment can be viewed as pledging oneself to raising and helping the child in every way possible. Parents differ on their perceived commitment to their child. With regard to the child about whom you are answering this questionnaire; how committed do you believe yourself to be? (circle a number on the following scale)

Extremely			Moderately			Below Average
7	6	5	4	3	2	1
	More than Average			Average		

For the following questions please read the hypothetical situation carefully. Once you have read the situation, please try to imagine how you would feel if those events had actually taken place. Once you believe you have a good idea of how you would react in such a situation, read through the alternatives and decide how closely each reaction matches how you would respond in that situation. Please answer by circling a number on the scale following each alternative.

3.

You go to school for parent teacher interviews. The teacher explains that there are some problems with your child. It seems that your child has been constantly picking on other children in the class and has frequently gotten into 'shoving matches'. Your immediate reaction is:

a) there must be some explanation for his/her behavior (e.g., the other kids are causing trouble)

7	6	5	4	3	2	1
That's how I would react						Not how I would react

b) I want to know more about what exactly is going on (e.g., where is this occurring, who is involved, how many times has it happened, etc.)

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

c) I better set my child straight

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

d) my reaction would depend on how my child had been acting recently and how I had been feeling about him/her

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

4.

You run across an old friend in a mall. Your child is with you and has been acting up a little. While you try, briefly, to talk to your friend, your child starts to complain and become a real nuisance. You gently try to get your son/daughter to settle down, but to no avail. Your child continues to act up to a point where you can't talk to your friend anymore. Your friend says, "Well, you've got quite a handful there so I had better let you go." You:

a) say good-bye to your friend realizing that you are really frustrated with your child, wondering why he/she turned into such a brat.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

b) say good-bye to your friend because something must be bothering your child today.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

c) decide that sometimes going to the mall with your child is a bad idea.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

d) tell your friend to wait and then severely reprimand your child.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

5.

You arrive home one day to find that your child has cleaned up the kitchen. There had been dishes and cooking utensils left everywhere from a dinner party you had the night before. You knew that your child wasn't told to clean up the kitchen and you had expected to do it when you got home. You think:

a) I'm always learning new things about my child.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

b) I better find out why he/she cleaned up the kitchen, I hope there isn't anything weird going on.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

c) your reaction would depend on whether your child had been acting like a good or a bad kid recently.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

d) that's just like my child, what a great kid.

7	6	5	4	3	2	1
That's how I would react				Not how I would react		

**Section III:****Child Behaviour List**

This section requires you to report, *as accurately as you can*, how often your child engaged in the following behaviours during the last week. Please indicate how often the behaviour occurred as well as the degree to which the behaviour is pleasing or displeasing to you. Place a number in the column beside the behaviour by using the following scales.

Frequency of Behaviour:

- (1) N/A
- (2) Never
- (3) Rarely
- (4) Sometimes
- (5) Frequently

Degree behaviour is pleasing or displeasing to yourself:

- (1) Extremely Displeasing
- (2) Moderately Displeasing
- (3) Minimally Displeasing
- (4) Neither Pleasing, nor Displeasing
- (5) Minimally Pleasing
- (6) Moderately Pleasing
- (7) Extremely Pleasing

	<i>Frequency</i>	<i>Pleasing/ Displeasing</i>
1. Argued with parent		
2. Asked for help on things that should be done alone		
3. Did laundry by him/herself or with parent		
4. When shopping, was well-behaved		
5. Refused to get up when asked		
6. Made bed		
7. Volunteered or asked to help pick up dirty clothes		
8. Told parent what he/she did during the day		
9. Sulked when things went wrong, refused to talk to anyone		
10. Volunteered or asked to help feed pets		
11. Cooked meal(s) together		
12. Participated together in organized activity (e.g., church, YMCA)		
13. Asked parent a question to which the parent was able to respond satisfactorily		
14. Showed excitement when working parent(s) came home		
15. Called parent a "nasty" name		
16. Expressed jealousy when parent paid attention to other children		
17. Whined		

	<i>Frequency</i>	<i>Pleasing/ Displeasing</i>
18. Played outside with parent		
19. Gave parent a hug or kiss		
20. Asked parent to teach them something new		
21. Told parent spontaneously that he/she loved them		
22. Ate meals with parent		
23. Took an excessive amount of time to dress		
24. Volunteered, or asked to help throw out garbage, do a chore		
25. Interrupted parent who was talking on the phone		
26. Showed parent something new they had learned or done that day		
27. Cried		
28. Failed to do a chore		
29. Refused to go to bed when asked		
30. Took walk with parent		
31. Talked back to parent		
32. Complained that no one loves him/her		
33. Rejected parent's attempts at hugging them		
34. Volunteered or asked to help set table		
35. Told parent they do not "like" or "love" them		
36. Destroyed things belonging to others		
37. Demanded attention of parent		
38. Commanded parent to do something		

Frequency of Behaviour:

- (1) N/A
- (2) Never
- (3) Rarely
- (4) Sometimes
- (5) Frequently

Degree behaviour is pleasing or displeasing to yourself:

- (1) **Extremely Displeasing**
- (2) **Moderately Displeasing**
- (3) **Minimally Displeasing**
- (4) **Neither Pleasing, nor Displeasing**
- (5) **Minimally Pleasing**
- (6) **Moderately Pleasing**
- (7) **Extremely Pleasing**

### Section IV: Demographics

1 Today's Date :       /      /        
( year / month/ day )

2. Please Circle One of the Following:

I am the child's:

- (1) Biological Mother      (2) Biological Father  
 (3) Adoptive Mother      (4) Adoptive Father  
 (5) Step-Mother      (6) Step-Father  
 (7) Other - please specify \_\_\_\_\_

a) If you are a step-parent or adoptive parent, please indicate the number of years you have known the child:  
 \_\_\_\_\_

5. Is your first language English?      YES      NO

6. Are you: (circle one)

- (1) Married      (2) Divorced      (3) Widowed  
 (4) Separated      (5) Common-Law      (6) Never Married

7.

a) Is there an adult guardian, other than yourself, living in the home with the child? (circle one)

YES      NO

b) If yes, that guardian is the:

- (1) Biological Mother      (2) Biological Father  
 (3) Adoptive Mother      (4) Adoptive Father  
 (5) Step-Mother      (6) Step-Father  
 (7) Other - please specify \_\_\_\_\_

Please answer the following questions with regard to the child you were considering while answering this questionnaire.

8. The child is (circle one) :

- (1) Male      (2) Female

10. The child's date of birth: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
( year / month/ day )

12. Are there any other children in the family? YES NO

If yes please indicate the following:

a) Number of natural siblings: \_\_\_\_\_

b) Number of adoptive siblings: \_\_\_\_\_

c) Number of step-siblings: \_\_\_\_\_

d) In terms of order of the siblings (oldest to youngest), where does this child fall? (circle one)

(1) Oldest (5) 5th oldest

(2) 2nd oldest (6) 6th oldest

(3) 3rd oldest (7) other

(4) 4th oldest

13. What is the average amount of direct contact (e.g., talking, playing) you have with this child over the course of a week? (circle one)

(1) less than 1 hour (5) 16-20 hours

(2) 1-5 hours (6) 20-30 hours

(3) 6-10 hours (7) more than 30 hours

(4) 11-15 hours

14. Does your child have any special medical conditions that require on-going attention?

YES NO

If yes, please specify: \_\_\_\_\_

---

Thank you for your participation.  
Please enclose the completed questionnaire in the  
envelope provided and return to:

**BRAD KELLN c/o**  
**PROGRAMME IN CLINICAL PSYCHOLOGY**  
**ED. B. 292**  
**UNIVERSITY OF CALGARY**

**APPENDIX E**  
**Positively Primed Questionnaire**

## How Parents Think About Their Children

### Section I:

#### Mood Check-list

This scale consists of a number of words that describe different feelings and emotions. Using the scale of 1 - 5 to record your answers, indicate the extent *you* feel this way right now, that is, at the present moment.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely
_____	secure	_____	_____	hostile
_____	good	_____	_____	nervous
_____	upset	_____	_____	tense
_____	sad	_____	_____	scared
_____	afraid	_____	_____	glad
_____	pleased	_____	_____	enthusiastic
_____	irritable	_____	_____	friendly
_____	loving	_____	_____	jittery
_____	proud	_____	_____	happy

Please record the time and date that you finished Section I:

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
           day                    month                    year

Time: \_\_\_\_\_ AM / PM



**Section III:****Trait Generation**

Take a few moments to consider things about your child that make you happy. Now, describe, in *single words*, the good things that come into your mind when you think about your child. Please do not attempt to censor the words that you think of, just write down all the *single words* that come to you when thinking positively about your child.

- |           |           |           |
|-----------|-----------|-----------|
| 1. _____  | 11. _____ | 21. _____ |
| 2. _____  | 12. _____ | 22. _____ |
| 3. _____  | 13. _____ | 23. _____ |
| 4. _____  | 14. _____ | 24. _____ |
| 5. _____  | 15. _____ | 25. _____ |
| 6. _____  | 16. _____ | 26. _____ |
| 7. _____  | 17. _____ | 27. _____ |
| 8. _____  | 18. _____ | 28. _____ |
| 9. _____  | 19. _____ | 29. _____ |
| 10. _____ | 20. _____ | 30. _____ |

**Section IV:****Sentence Completion**

The following task requires you to read each of the sentence beginnings below. It is your job to complete the sentence in whatever way you see fit. This particular task requires you to work quickly and respond with the first answer that comes to your mind. You need not limit your answers to single words.

(e.g., These instructions... are easy to follow )

1. It seems that my son/daughter...

---

2. My child always...

---

3. It surprises me when my child...

---

4. Kids...

---



**Section VI:****Information Saliency**

Parents are not always aware of everything their children do. There are sometimes things that a parent does not know - both good and bad. Pretend that all of the things on the following list are true of your child. However, you can only learn about two (2) of the following things. Which would you would most want to know? Please read all the items carefully before you decide.

**Assuming your child has done all of the following, circle the two (2) you would most want to know about:**

1. Your child cheated on a test at school.
2. Your child was named "Most Valuable Player" on his/her athletic team.
3. Your son/daughter is one of the least popular kids in school.
4. Your child received the highest mark in the class on an exam.

**Section VII:****Attitudes, Feelings, and Thoughts****1. Think about your attitude toward or evaluation of your child.**

Considering only the favourable qualities of your child and ignoring the unfavourable characteristics, how favourable is your evaluation of your child.

Not at all Favourable (1)	Slightly Favourable (2)	Quite Favourable (3)	Extremely Favourable (4)
---------------------------------	-------------------------------	----------------------------	--------------------------------

**2. Think about your feelings or emotions for your child.**

Considering only your feelings of satisfaction toward your child and ignoring your feelings of dissatisfaction, how satisfied do you feel about your child?

Not at all Satisfied (1)	Slightly Satisfied (2)	Quite Satisfied (3)	Extremely Satisfied (4)
--------------------------------	------------------------------	---------------------------	-------------------------------

**3. Think about your thoughts or beliefs for your child.**

Considering only the good qualities of your child and ignoring the bad characteristics, how good do you believe your child to be?

Not at all Good (1)	Slightly Good (2)	Quite Good (3)	Extremely Good (4)
---------------------------	-------------------------	----------------------	--------------------------

**Section VIII:****Mood Check-list**

This scale consists of a number of words that describe different feelings and emotions. Using the scale of 1 - 5 to record your answers, indicate the extent *you* feel this way right now, that is, at the present moment. Please do not compare these responses to the Mood Check-List you completed on page 1.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely
_____	glad		_____	irritable
_____	friendly		_____	good
_____	upset		_____	scared
_____	happy		_____	loving
_____	sad		_____	nervous
_____	pleased		_____	secure
_____	hostile		_____	jittery
_____	enthusiastic		_____	tense
_____	proud		_____	afraid

Please record the time and date that you finished Section VIII:

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
          day           month           year

Time: \_\_\_\_\_ AM / PM

---

Thank you for your participation.  
Please enclose the completed questionnaire in the  
envelope provided and return to:

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**PROGRAMME IN CLINICAL PSYCHOLOGY**  
**ED. B. 292**  
**UNIVERSITY OF CALGARY**

**APPENDIX F**  
**Negatively Primed Questionnaire**

## How Parents Think About Their Children

### Section I:

#### Mood Check-list

This scale consists of a number of words that describe different feelings and emotions. Using the scale of 1 - 5 to record your answers, indicate the extent *you* feel this way right now, that is, at the present moment.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely
_____	glad		_____	irritable
_____	friendly		_____	good
_____	upset		_____	scared
_____	happy		_____	loving
_____	sad		_____	nervous
_____	pleased		_____	secure
_____	hostile		_____	jittery
_____	enthusiastic		_____	tense
_____	proud		_____	afraid

Please record the time and date that you finished Section I:

Date:        \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
                   day                    month                    year

Time:        \_\_\_\_\_ AM / PM



**Section III:****Trait Generation**

Take a few moments to consider things about your child that make you unhappy. Now, describe, in *single words*, the bad things that come into your mind when you think about your child. Please do not attempt to censor the words that you think of, just write down all the *single words* that come to you when thinking negatively about your child.

- |           |           |           |
|-----------|-----------|-----------|
| 1. _____  | 11. _____ | 21. _____ |
| 2. _____  | 12. _____ | 22. _____ |
| 3. _____  | 13. _____ | 23. _____ |
| 4. _____  | 14. _____ | 24. _____ |
| 5. _____  | 15. _____ | 25. _____ |
| 6. _____  | 16. _____ | 26. _____ |
| 7. _____  | 17. _____ | 27. _____ |
| 8. _____  | 18. _____ | 28. _____ |
| 9. _____  | 19. _____ | 29. _____ |
| 10. _____ | 20. _____ | 30. _____ |

**Section IV:****Sentence Completion**

The following task requires you to read each of the sentence beginnings below. It is your job to complete the sentence in whatever way you see fit. This particular task requires you to work quickly and respond with the first answer that comes to your mind. You need not limit your answers to single words.

(e.g., These instructions... are easy to follow )

1. I can imagine my child...

---

2. My child never...

---

3. When I think about my child...

---

4. Other parents...

---



**Section VI:****Information Salience**

Parents are not always aware of everything their children do. There are sometimes things that a parent does not know - both good and bad. Pretend that all of the things on the following list are true of your child. However, you can only learn about two (2) of the following things. Which would you would most want to know? Please read all the items carefully before you decide.

**Assuming your child has done all of the following, circle the two (2) you would most want to know about:**

1. Your child received an award at school.
2. Your child stole something from a student at school.
- 3 Your son/daughter defended another student who was being picked on by older children.
4. Your child was caught defacing school property.

**Section VII:****Attitudes, Feelings, and Thoughts****1. Think about your attitude toward or evaluation of your child.**

Considering only the unfavourable qualities of your child and ignoring the favourable characteristics, how unfavourable is your evaluation of your child.

Not at all Unfavourable (1)	Slightly Unfavourable (2)	Quite Unfavourable (3)	Extremely Unfavourable (4)
-----------------------------------	---------------------------------	------------------------------	----------------------------------

**2. Think about your feelings or emotions for your child.**

Considering only your feelings of dissatisfaction toward your child and ignoring your feelings of satisfaction, how dissatisfied do you feel about your child?

Not at all Dissatisfied (1)	Slightly Dissatisfied (2)	Quite Dissatisfied (3)	Extremely Dissatisfied (4)
-----------------------------------	---------------------------------	------------------------------	----------------------------------

**3. Think about your thoughts or beliefs for your child.**

Considering only the bad qualities of your child and ignoring the good characteristics, how bad do you believe your child to be?

Not at all Bad (1)	Slightly Bad (2)	Quite Bad (3)	Extremely Bad (4)
--------------------------	------------------------	---------------------	-------------------------

**Section VIII:****Mood Check-list**

This scale consists of a number of words that describe different feelings and emotions. Using the scale of 1 - 5 to record your answers, indicate the extent *you* feel this way right now, that is, at the present moment. Please do not compare these responses to the Mood Check-List you completed on page 1.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely
_____	secure	_____	_____	hostile
_____	good	_____	_____	nervous
_____	upset	_____	_____	tense
_____	sad	_____	_____	scared
_____	afraid	_____	_____	glad
_____	pleased	_____	_____	enthusiastic
_____	irritable	_____	_____	friendly
_____	loving	_____	_____	jittery
_____	proud	_____	_____	happy

Please record the time and date that you finished Section VIII:

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
           day           month           year

Time: \_\_\_\_\_ AM / PM

---

Thank you for your participation.  
 Please enclose the completed questionnaire in the  
 envelope provided and return to:

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**ED. B. 292**  
**UNIVERSITY OF CALGARY**

**APPENDIX G**  
**Narrative Descriptions of Types**

**Unitary Positive:**

I think my child is the greatest. I always feel lucky to have him/her. I know that other people might think I am a little vain when it comes to kids because I often think my son/daughter is better than most other kids I see. I guess my child has problems but they never seem as troublesome as other people's kids. I might be unrealistic about what my child can do but I'm not sure. I think my child is great and can do anything he/she wants. I rarely get angry with my child and I find I don't end up having to use discipline very much either. When I find that my son/daughter has done something wrong, I can normally find that it wasn't his/her fault. Overall, I guess I am just bursting with pride over my child. It certainly makes me proud to have a son/daughter like that.

**Unitary Negative:**

I know this is going to sound horrible. I guess I love my child but every now and again I guess I question whether or not I got a bad break. I see other kids and I think that they probably don't cause their parents as much trouble as my son/daughter causes me. It seems like my child is out to get me sometimes. I might be a little too sensitive, or unreasonable, but it seems that everything my child does annoys me. I'm not saying I'm abusive or that I hate my child, it's just that I don't feel a strong positive bond with my son/daughter. It seems like we do nothing but fight. I feel like I'm always mad at him/her. It's gotten to the point where just seeing my son/daughter makes me feel all fired up. It's not always so bad. Sometimes, but pretty rarely, we seem to click, and we have the best relationship any parent has ever had. At those times, I can't believe I ever wished I had a different kid. When we click I feel like I am with a new son/daughter but one I knew was there all along. But something always seems to happen and we are back to where we started and the whole 'new kid' thing seems like a dream.

**Complex-Unresolved:**

I feel I have an understanding of both my child's good side and bad side. I believe that my child has some areas of strength but also some areas that need improvement. I love my child very much but I don't think I am unreasonable when it comes to my expectations for him/her. I think I have a pretty good idea of my child but there are always new things you can learn. He/she probably changes everyday and so every once in awhile I see my child in a new light and have to

adjust my opinion of him. It's not that I ever start to doubt that I love him/her but just that I think, "Hey, I didn't know he/she liked that", or "I didn't think he/she would ever do that" and it sort of changes my idea of the kind of person my child is.

**Bivalent-Separated:**

My relationship with my child is sort of an on-again off-again sort of thing. Well, I don't even know if that is right. It isn't so much that the relationship turns 'off', but it is more like my son/daughter, or I, gets onto the wrong track and we just don't connect for a time. I think the world of my son/daughter and I wouldn't trade him/her for anything. At those times I think he/she can do anything and I feel pity for the other parents who are having trouble with their kids. Then something happens. Maybe my son/daughter gets in trouble or we just start fighting a lot or whatever and then I lose some of my enthusiasm for my child. It isn't like I don't love my child anymore but it is more like I understand what the other parents are going through. At these other times I think my child is just trying to make me crazy. It seems like he/she won't do anything right and everything he/she does is done to annoy me. Sometimes it makes me feel like the other parents have a better deal. I often ask myself, "Where did the great kid go that I had last week!" I don't know if it is me or my son/daughter but things can sure change from week to week. Sometimes I see an angel who can do no wrong, next I see a little demon who lives to do wrong. Oh well, I guess it makes parenting that much more interesting.

**APPENDIX H**  
**Scaling Study Questionnaire for Information Saliency Section**

## Hypothetical Information That Parents Might Learn about their Child

Please read the following list of items carefully. We would like you to take a moment to consider how you would feel if you learned that the following pieces of information were true about your child. Please rate each item for how important it would be for you to learn that particular piece of information; and how positive or negative you believe it to be. If you have more than one child, please consider only one of your children while completing this questionnaire.

*Use the following scale when rating the following items:*

**Importance:**

- (1) Do not care to know
- (2) Mildly Interested
- (3) Moderately Interested
- (4) Extremely Interested

**Positive or Negative:**

- (1) Extremely Negative
- (2) Quite Negative
- (3) Slightly Negative
- (4) Neither Positive, nor Negative
- (5) Slightly Positive
- (6) Quite Positive
- (7) Extremely Positive

<i>Item Your Child...</i>	<i>Importance</i>	<i>Positive or Negative</i>
1. ...is one of the least popular kids in school.		
2. ...was sent to the school office for misbehaving in class.		
3. ...threw a rock through someone's window in another neighborhood.		
4. ...defended another student who was being picked on by older children.		
5. ...received an award at school.		
6. ...has been talking back to the teacher.		
7. ...skipped school.		
8. ...has volunteered to help with a project to raise money for the local "food bank".		
9. ...got the highest mark on an exam at school.		
10. ...was in a fight with another student at school.		
11. ...cheated on a test at school.		

<i>Item Your Child...</i>	<i>Importance</i>	<i>Positive or Negative</i>
12. The teacher is impressed that your child always has his/her homework completed.		
13. ... is one of the most popular kids in school		
14. ... as named "Most Valuable Player" on his/her athletic team.		
15. ...shared a prized possession with another student.		
16. ...has been using "foul language" outside the home.		
17. ...stole something from a student at school.		
18. ...lost his/her brand new jacket.		
19. ...was caught defacing school property.		
20. ...cleaned his/her room without being asked.		

### Demographic Information:

1. My child's age : \_\_\_\_\_
2. My child is (circle one):
 

(1) MALE	(2) FEMALE
----------	------------
3. I am the child's (circle one) :
 

(1) BIOLOGICAL FATHER	(2) BIOLOGICAL MOTHER
(3) STEP-FATHER	(4) STEP-MOTHER
(5) ADOPTED FATHER	(6) ADOPTED MOTHER
(7) OTHER explain : _____	
4. Do you have any comments or suggestions regarding the above items.

---



---



---



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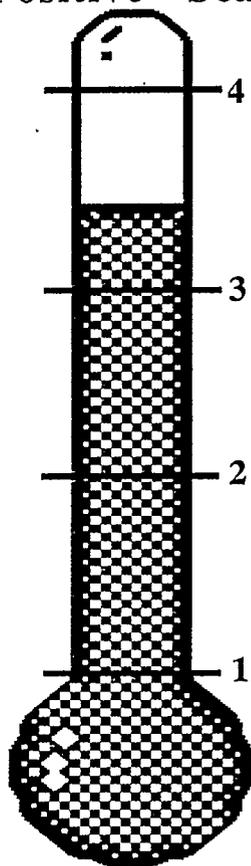
**APPENDIX I**  
**Rating Scale for Positive/Negative Content Ratings:**  
**Narrative Passage (Positive and Negative)**  
**Sentence Completion**

# Rating Scale for Global Ratings

## General Instructions:

- intended to code the data into numerical form
- raters should attempt to take the perspective of the parent writing the passage and determine that parent's overall view of the child; i.e., consider only the overall tone of the passage
- ignore positive information when rating negative; ignore negative information when rating positive
- use only whole numbers

## Positive Scale



0

*extreme positive (negative) tone;  
overemphasis on the positive (negative)  
aspects of the child*

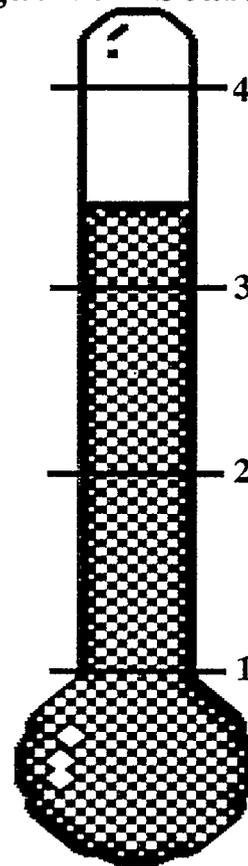
*moderate positive (negative) tone;  
consistent positive (negative) tone  
that isn't over done*

*minimal positive (negative) content;  
just enough that it isn't completely  
neutral*

*neutral, no positive (negative)  
connotation in the passage*

*subject unable to  
complete the task*

## Negative Scale



0

**APPENDIX J**  
**Intraclass Correlation Coefficients Raters**

Intraclass Correlation Coefficients for Information Provided by Raters  
(Inter-Rater Reliability Estimates)

Raters	1 <sup>a</sup> & 2 <sup>b</sup>	1 <sup>a</sup> & 3 <sup>c</sup>	2 <sup>b</sup> & 3 <sup>c</sup>	Average
Positive Passage				
Passage Count	0.9607	0.9955	0.9583	0.9715
Passage + rating	0.2257	0.3360	0.2580	0.2732
Passage - rating	0.2888	0.5950	0.4706	0.4515
Sentence Completion (S-C)				
S-C 1 + rating	0.6177	0.6397	0.6432	0.6335
S-C 1 - rating	0.6876	0.7212	0.5876	0.6655
S-C 2 + rating	0.6350	0.4785	0.5982	0.5706
S-C 2 - rating	0.6375	0.6585	0.4097	0.5686
S-C 3 + rating	0.2709	0.0848	0.0786	0.1448
S-C 3 - rating	0.2855	0.1932	0.0418	0.1735
Negative Questionnaire				
Passage Count	0.9783	0.9710	0.9921	0.9805
Passage + rating	0.4999	0.5674	0.5107	0.5260
Passage - rating	0.1748	0.3936	0.2931	0.2872
Sentence Completion (S-C)				
S-C 1 + rating	0.4939	0.5418	0.4694	0.5017
S-C 1 - rating	0.6221	0.7448	0.4199	0.5956
S-C 2 + rating	0.5464	0.4893	0.6833	0.5730
S-C 2 - rating	0.6235	0.5076	0.4906	0.5406
S-C 3 + rating	0.5701	0.5683	0.5232	0.5539
S-C 3 - rating	0.6600	0.7562	0.5763	0.6642

a: rater - I. N.

b: rater - J. H.

c: rater - M. K.

**APPENDIX K**  
**Source Table for Interpersonal Dynamics:**  
**Escalation of Conflict**  
**Perceived Commitment**

## Source Table for Interpersonal Dynamics Items

## Question 1: Escalation of Conflict

Source	SS	df	MS	F
Within	147.53	54	2.73	
Type	12.63	4	3.16	1.16

## Question 2: Perceived Commitment to the Child

Source	SS	df	MS	F
Within	36.25	54	0.6713	
Type	3.89	4	0.9717	1.45

**APPENDIX L**  
**Source Table for Frequency of Positive and Negative**  
**Behaviour**  
**Univariate Mixed-Model ANOVA**  
**and Follow-Up Tests**

## Source Table for Frequency Data

**Univariate Mixed Model**

## Between Effect (Type)

	SS	df	MS	F
Within Cells	14.13	54	0.26	
Type	0.73	4	0.18	0.70

## Within-Subject Effect (Frequency)

Within Cells	7.28	54	0.13	
Frequency	14.81	1	14.81	109.76***
Type by Freq	3.03	4	0.76	5.62**

## Follow-Up Tests

**Between-Subjects**

## Positive Frequency (Separate Variance Estimates)

Within Group	12.4393	54	0.2304	
Between Groups	2.0715	4	0.5179	2.2481

## Negative Frequency (Separate Variance Estimates)

Within Group	8.9717	54	0.1661	
Between Group	1.6907	4	0.4227	2.5440*

**Within-Subjects (Separate Variance Estimates)**

## Unitary Positive

	SS	df	MS	F
Within Cells	2.11	17	0.12	
Frequency	11.00	1	11.00	88.66***

## Unitary Negative

Within Cells	1.11	8	0.14	
Frequency	1.60	1	1.60	11.50**

## Complex-Unresolved

Within Cells	2.75	16	0.17	
Frequency	0.88	1	0.88	5.13*

Bivalent-Separated				
Within Cells	0.55	6	0.09	
Frequency	3.51	1	3.51	38.09**
Indifferent				
Within Cells	0.76	7	0.11	
Frequency	2.53	1	2.53	23.34**

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

**APPENDIX M**  
**Mood Scale Source Tables:**  
**Positive Affect**  
**Negative Affect**  
**Fearfulness**

## Split-Plot MANOVA

**Positive Affect***Between Effect (Type)*

	SS	df	MS	F
Within Cells	82.87	54	1.53	
Type	20.64	4	5.16	3.36*

*Within-Subject Effect (Positive Affect)*

	Value	Hypoth df	Error df	Approx. F
Pillais				
-Bartlett	0.0836	3	52	1.58
<i>Interaction (Positive Affect x type)</i>				
Pillais				
-Bartlett	0.1649	12	162	0.79

**Negative Affect***Between Effect (Type)*

	SS	df	MS	F
Within Cells	53.17	54	0.98	
Type	6.02	4	1.51	1.53

*Within-Subject Effect (Negative Affect)*

	Value	Hypoth df	Error df	Approx. F
Pillais				
-Bartlett	0.0646	3	52	1.20
<i>Interaction (Negative Affect x type)</i>				
Pillais				
-Bartlett	0.1600	12	162	0.76

**Fearfulness***Between Effect (Type)*

	SS	df	MS	F
Within Cells	29.67	53	0.56	
Type	1.10	4	0.27	0.49

*Within-Subject Effect (Fearfulness)*

	Value	Hypoth df	Error df	Approx. F
Pillais				
-Bartlett	0.0148	3	51	0.25

*Interaction (Fearfulness)*

Pillais

-Bartlett	0.0852	12	159	0.39
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\*  $p < .05$

**APPENDIX N**  
**Source Table for Trait Generation Data**

## Trait Generation

**Univariate Mixed Model Design**

Source	SS	df	MS	F
Between Subjects Effect (Type)				
Within Cells	3106.73	54	57.53	
Type	270.61	4	67.65	1.18
Within Subjects Effects				
Within Cells	1194.03	54	22.11	
Trait	1279.13	1	1279.13	57.85***
Type by Trait	273.30	4	68.33	3.09*

\*  $p < .05$ \*\*\*  $p < .001$

**APPENDIX O**  
**Source Table for Positive and Negative Passages Word Counts**

**Source Table for Passage Count Data***Between Subjects Effect*

Source	SS	df	MS	F
Within Cells	236750.06	54	4384.26	
Type	7943.91	4	1985.98	0.45

*Within Subject Effects*

Within Cells	79944.06	54	1480.45	
Count	262.78	1	262.78	0.18
Type By Count	6199.50	4	1549.87	1.05

**APPENDIX P**  
**A Pirori Contrast Sets**

**Escalation of Conflict**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	0	1	0	-1	0
2	3	-1	-1	-1	0
3	0	-1	2	-1	0

1:  $t(54) = -1.45, p = .153$ 2:  $t(54) = -1.32, p = .192$ 3:  $t(54) = 0.10, p = .922$ **Perceived Commitment**

## Contrast Weights

Contrast #	UP	Non-Orthogonal			BS	Indifferent
		UN	CU			
1	-1	-1	-1	-1	4	
2	1	1	-3	1	0	
3	1	-3	1	1	0	

1:  $t(54) = 1.89, p = .064$ 2:  $t(54) = 1.22, p = .227$ 3:  $t(54) = 0.54, p = .590$ **Hypothetical Situations: Item 3a**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	3	-1	-1	-1	0
	3 a	3 b	3 c	3 d	
2 (w/s)	3	-1	-1	-1	

## Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(52) = -0.19, p = .852$ 2:  $F(1, 16) = 0.35, p = .563$

**Hypothetical Situations: Item 3b**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	-1	3	-1	0
	3 a	3 b	3 c	3 d	
2 (w/s)	-1	-1	3	-1	

## Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(54) = 0.32, p = .749$

2:  $F(1, 15) = 87.74, p < .001$

**Hypothetical Situations: Item 3c**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	3	-1	-1	0
	3 a	3 b	3 c	3 d	
2 (w/s)	-1	3	-1	-1	

## Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(16.9) = 0.14, p = .892$

2:  $F(1, 8) = 9.14, p = .016$

**Hypothetical Situations: Item 3d**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	-1	-1	3	0
	3 a	3 b	3 c	3 d	
2 (w/s)	-1	-1	-1	3	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(54) = -1.05, p = 0.300$

2:  $F(1, 6) = 4.32, p = 0.083$

**Hypothetical Situations: Item 4a**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	-1	-1	3	0
	4 a	4 b	4 c	4 d	
2 (w/s)	-1	-1	-1	3	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(51) = 0.51, p = .613$

2:  $F(1, 6) = 1.09, p = .337$

**Hypothetical Situations: Item 4b**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	3	-1	-1	-1	0
	4 a	4 b	4 c	4 d	
2 (w/s)	3	-1	-1	-1	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(52) = 2.80, p = .007$

2:  $F(1, 16) = 19.43, p < .001$

**Hypothetical Situations: Item 4c**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	-1	3	-1	0
	4 a	4 b	4 c	4 d	
2 (w/s)	-1	-1	3	-1	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(52) = 0.25, p = .807$

2:  $F(1, 14) = 2.45, p = .140$

**Hypothetical Situations: Item 4d**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	3	-1	-1	0
	4 a	4 b	4c	4 d	
2 (w/s)	-1	3	-1	-1	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(14.1) = 1.14, p = .272$

2:  $F(1, 8) = 11.70, p = .009$

**Hypothetical Situations: Item 5a**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	-1	3	-1	0
	5 a	5 b	5c	5 d	
2 (w/s)	-1	-1	3	-1	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(53) = -0.74, p = .461$

2:  $F(1, 16) = 10.12, p = .006$

**Hypothetical Situations: Item 5b**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	3	-1	-1	0
	5 a	5 b	5 c	5 d	
2 (w/s)	-1	3	-1	-1	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(53) = 0.11, p = .915$

2:  $F(1, 8) = 12.77, p = .007$

**Hypothetical Situations: Item 5c**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	-1	-1	-1	3	0
	5 a	5 b	5 c	5 d	
2 (w/s)	-1	-1	-1	3	

Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(53) = -0.08, p = .934$

2:  $F(1,7) = 6.84, p = .035$

**Hypothetical Situations: Item 5d**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1 (b/s)	3	-1	-1	-1	0
	5 a	5 b	5 c	5 d	
2 (w/s)	3	-1	-1	-1	

## Notes:

b/s indicates a between-subjects contrast

w/s indicates a within-subjects contrast

1:  $t(54) = 0.02, p = .986$

2:  $F(1, 16) = 15.85, p = .001$

**Child Behaviour Checklist: Pleasing/Displeasing Scale**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	3	-1	-1	-1	0
2	0	-1	1	0	0
3	0	-1	-1	2	0

1:  $t(20.3) = 2.71, p = .013$

2:  $t(17.9) = -0.51, p = .618$

3:  $t(5.9) = 1.57, p = .169$

**Child Behaviour Checklist: Frequency of Pleasing Behaviour**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	1	-1	-1	1	0
2	1	0	0	-1	0
3	1	1	1	-3	0

1:  $t(54) = 1.83, p = .073$

2:  $t(54) = 0.62, p = .538$

3:  $t(54) = 0.06, p = .953$

**Child Behaviour Checklist: Frequency of Displeasing Behaviour**

Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	-1	3	-1	-1	0

1:  $t(54) = 1.33, p = .189$

**Narrative Passage Word Count (Positive Prime)**

Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	1	0	0	-1	0
2	1	-1	-1	1	0
3	0	-1	1	0	0

1:  $t(9.1) = -0.18, p = .864$

2:  $t(17.2) = -1.13, p = .276$

3:  $t(9.8) = 0.34, p = .739$

**Narrative Passage Word Count (Negative Prime)**

Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	0	1	0	-1	0
2	-1	1	-1	1	0
3	-1	0	1	0	0

1:  $t(8.7) = -0.25, p = .805$

2:  $t(12.5) = -0.84, p = .415$

3:  $t(29.2) = 0.50, p = .618$

**Trait Generation: Positive**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	1	0	0	-1	0
2	1	-1	-1	1	0
3	1	-3	1	1	0

1:  $t(17.8) = 0.82, p = .426$

2:  $t(35.3) = -0.02, p = .985$

3:  $t(12.1) = 0.38, p = .714$

**Trait Generation: Negative**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	0	1	0	-1	0
2	-1	1	-1	1	0
3	-3	1	1	1	0

1:  $t(11.1) = 1.51, p = .158$

2:  $t(18.4) = 1.30, p = .208$

3:  $t(25.0) = 3.98, p = .001$

**Sentence Stem Completion: Positive Prime (Positive Content Rating)**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	1	0	0	-1	0
2	1	-3	1	1	0
3	1	0	-2	1	0

1:  $t(53) = -0.79, p = .434$

2:  $t(53) = 1.18, p = .244$

3:  $t(53) = 1.19, p = .240$

**Sentence Stem Completion: Positive Prime (Negative Content Rating)**

Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	1	0	0	-1	0
2	-1	3	-1	-1	0
3	-1	0	-2	-1	0

1:  $t(21.5) = 1.67, p = .110$

2:  $t(9.0) = -0.66, p = .528$

3:  $t(25.5) = -2.17, p = .040$

**Sentence Stem Completion: Negative Prime (Positive Rating)**

Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	0	1	0	-1	0
2	3	-1	-1	-1	0
3	0	-1	2	-1	0

1:  $t(54) = -3.37, p = .001$

2:  $t(54) = -1.17, p = .246$

3:  $t(54) = -1.52, p = .136$

**Sentence Stem Completion: Negative Prime (Negative Rating)**  
Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	0	1	0	-1	0
2	-3	1	1	1	0
3	0	1	-2	1	0

## Item #1

1:  $t(54) = 1.47, p = .146$ 2:  $t(54) = -0.72, p = .476$ 3:  $t(54) = -0.06, p = .950$ 

## Item #2

1:  $t(50) = 3.47, p = .001$ 2:  $t(50) = 1.45, p = .154$ 3:  $t(50) = 0.96, p = .341$ 

## Item #3

1:  $t(12.0) = 0.96, p = .358$ 2:  $t(23.1) = 3.48, p = .002$ 3:  $t(27.8) = -0.15, p = .884$ **Ambivalence**

## Contrast Weights

Contrast #	UP	UN	CU	BS	Indifferent
1	-1	-1	3	-1	0
2	0	1	-1	0	0
3	-1	1	1	-1	0

1:  $t(26.9) = 2.61, p = .015$ 2:  $t(19.8) = 0.23, p = .819$ 3:  $t(26.2) = 4.71, p < .001$