

**A Study to Investigate if an
Understanding of Personality Type
Influences Parenting Style and Parental Self-Efficacy Levels
In Parents**

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ABSTRACT

The paper is a report of a study to determine whether knowledge of Personality Types influences Parenting Style and increases Self-Efficacy. Authoritarian and Permissive Parenting Styles and low levels of Parental Self-Efficacy can have detrimental effects for both parent and child. There is a need for an intervention focused on non-problematic children and fully functioning parents. A secondary aim was to explore the relationships between Parenting Styles, Parenting Self-Efficacy, and MBTI. The study employed a quantitative intervention longitudinal experimental design model. A total of 38 parents took part in the study over 12 weeks. Parents completed the PSDQ and TOPSE tools as pre and post measures of Parenting Styles and Parental Self-Efficacy over a 12 week period. The Experimental Condition also completed MBTI adult and child assessments and received a 'Personality and Parenting report' tailored to their children's Type. Parenting Self-Efficacy increased after 12 weeks overall, and for seven of the eight scales. Authoritarian scores were also significantly reduced. No relationships were found between MBTI and Parenting Styles or Parental Self-Efficacy. This approach can be used as an alternative method for increasing Parental Self-Efficacy and reducing Authoritarian parenting behaviours.

Chapter One

Introduction

1.1 Introduction

The purpose of this study is to determine whether knowledge of Personality Types influences Parenting Style and increases Self-Efficacy with parenting. Individual differences in personality can affect people's behaviour and lives in meaningful ways. Numerous studies relating to personality have been conducted in areas of pedagogy and organisational psychology but have been very few studies focusing on parenting. Awareness of personality and individual differences may be a mechanism that positively impacts Parental Self-Efficacy (PSE) and overall Parenting Style. While there is a consensus about the effects of parenting practices on child development, the area of Personality Type, Parenting Style and PSE remain unexplored. Differences in parenting approaches may be related to differences in personality. This study will determine if knowledge of Personality Type leads to increased PSE levels.

To create an awareness of personality differences between the parents and their children, Myers-Briggs Type Indicator (MBTI) was used. This chapter will review the literature relating to Myers-Briggs Type Indicator (MBTI), Parenting Styles and PSE Levels. It will provide an overview of the purpose of each instrument, its theoretical basis, its content and structure, and the appropriate applications as well its limitations. Overall it will highlight the lack of application of these instruments and determine if knowledge of Personality Types enables parents to adapt their Parenting Style to accommodate the personality of the child and increase overall PSE levels.

1.2 Myers-Briggs Type Indicator

This study used Myers-Briggs Type Indicator (MBTI) as a mechanism to create awareness of personality differences between parents and their children. MBTI is a highly popular personality inventory which has received widespread use over the last 30 years (Carlyn, 1977). MBTI is designed to quantify non-psychopathological Personality Types as postulated in Jung's psychodynamic Type theory (Myers & McCaulley, 1985). According to Jung, much of the seemingly random variation in behaviour is orderly and consistent and results from the core differences in the way people prefer to use their perception and judgment. Jung categorised people into four core functions of consciousness; two perceiving functions (Sensation or Intuition) and two judging functions (Thinking or Feeling). These functions are affected by the individual having one of two polar orientation of attitude (Extraversion or Introversion). The functions combined with the orientation of attitude results in eight psychological Types. The theory suggests specific dynamic relationships between the preferences (Briggs-Myers et al., 1998). Each Type has a distinct pattern of dominant and auxiliary processes and the attitudes in which these are applied. The characteristics of each Type result from the dynamic interplay of these processes and attitudes.

Myers and Briggs developed MBTI to identify the main preferences of people in relation to Jung's ideas on perception and judgment so that the effects of each preference could be established by research and put into practical use (Briggs-Myers et al., 1998). To construct a psychological instrument to implement the theory, Myers reframed Jung's concepts as separate indices scales and added a fourth index to identify a person's preferred extraverted function resulting in the sixteen Types rather than Jung's eight. The opposite pole of each dimension are conceptualised as distinct and opposite to each other (Coffield et al., 2004). The MBTI instrument contains four separate indices to assess an individual's

preference for one over the other. Table 1 (Briggs-Myers et al., 1998) provides an overview of each index. An individual's preference within each of the dimension determines their 'Type' which is denoted by an abbreviation of four letters. Table 2 (Briggs-Myers et al., 1998) shows the 16 combinations and a brief descriptor of each Type. Preferences are not absolutes and are regarded in the same way as handedness i.e. that people are born with preferred ways of to use their perception and judgment and therefore may find using their opposing preference more challenging. Preferences are not abilities, and there are no better or worse Types. People are the best judges of their own Type and therefore, MBTI is an indicator and not a test (Briggs-Myers et al., 1998).

Table 1

An Overview of the 4 Indices Used in MBTI to Assess an Individual's Preference

The Four Dichotomises of MBTI	
Extraversion & Introversion Dichotomy (Attitude or Orientation towards directing one's energy)	
Extraversion (E)	Introversion (I)
<ul style="list-style-type: none"> • Get energy from the outer environment of people and experiences • Focus energy and attention outwards in action 	<ul style="list-style-type: none"> • Get energy from the inner environment of reflections and thoughts • Focus energy and attention inwards in reflection
Sensing & Intuition Dichotomy (Mental Functions or Processes for Perception)	
Sensing (S)	Intuition (I)
<ul style="list-style-type: none"> • Prefer information coming from the senses • Focus on what is real • Value practical applications 	<ul style="list-style-type: none"> • Prefer information coming from association • Focus on what might be • Value imagination and insight
Thinking & Feeling Dichotomy (Mental Functions or Processes for Judgement)	
Thinking (T)	Feeling (F)
<ul style="list-style-type: none"> • Prefer to make decisions on the basis of logic and objectivity • Quick to see errors and give a critique • Step out of situations in order to analyse dispassionately 	<ul style="list-style-type: none"> • Prefer to make decisions on the basis of values and convictions • Quick to show appreciation • Step into situations to weigh human values and motives
Judging & Perceiving Dichotomy (Attitude or Orientation towards dealing with the outer world)	
Judging (J)	Perceiving (P)
<ul style="list-style-type: none"> • Prefer to live life in a planned and organised manner • Enjoy coming to closure and being decisive • Avoid stressful last-minute rushes 	<ul style="list-style-type: none"> • Prefer to live life in a spontaneous and adaptable manner • Enjoy keeping options open and being curious • Feel energised by last-minute pressures

Table 2

Brief Descriptors of the 16 MBTI types

<p><u>ISTJ</u> "Doing what Should be done" MOST RESPONSIBLE</p>	<p><u>ISFJ</u> "A high sense Of duty" MOST LOYAL</p>	<p><u>INFJ</u> "An inspiration To others" MOST CONTEMPLATIVE</p>	<p><u>INTJ</u> "Everything has Room for improvement" MOST INDEPENDENT</p>
<p><u>ISTP</u> "Ready to try Anything once" MOST PRAGMATIC</p>	<p><u>ISFP</u> "Sees much but Shares little" MOST ARTISTIC</p>	<p><u>INFP</u> "Performing noble service to aid society" MOST IDEALISTIC</p>	<p><u>INTP</u> "A love of problem solving" MOST CONCEPTUAL</p>
<p><u>ESTP</u> "The ultimate Realist" MOST SPONTANEOUS</p>	<p><u>ESFP</u> "You only go Around once In life" MOST GENEROUS</p>	<p><u>ENFP</u> "Giving life an Extra squeeze" MOST OPTIMISTIC</p>	<p><u>ENTP</u> "One exciting challenge after another" MOST INVENTIVE</p>
<p><u>ESTJ</u> "Life's Administrators" MOST HARD CHARGING</p>	<p><u>ESFJ</u> "Host and Hostesses of the world" MOST HARMONIZING</p>	<p><u>ENFJ</u> "Smooth talking Persuader" MOST PERSUASIVE</p>	<p><u>ENTJ</u> "Life natural Leaders" MOST COMMANDING</p>

The MBTI has many specific applications. It has frequently been applied in the areas of pedagogy (DiTiberio & Jensen, 2007), curriculum differentiation (Kise, 2006, 2007), cultural differences (Kise & Russell, 2010), career counselling (Dunning, 2010; Hartzler, 2004), team building (Hirsh et al., 2003), leadership development (Fitzgerald & Kirby, 1997), coaching (Hirsh & Kise, 2000), personal growth (Corlett & Millner, 1993) and understanding stress (Quenk, 2002). The MBTI has also been adapted for use with children and teenagers. The instrument shares the same theoretical approach as MBTI but has been adapted with shorter, simpler questions. It has primarily been used in areas of pedagogy e.g. to improve academic performance (McPeck et al., 2011). Little to no research exists on the use of MBTI and the parent-child relationship.

The MBTI has many limitations. It is an indicator of preferences only and gives no indication of knowledge, skills, abilities (Briggs-Myers et al., 1998) or intelligence. These factors, particularly intelligence, can have a significant influence on individual difference (Bayne, 2004). Other significant factors of individual difference that are omitted include anxiety and neuroticism. Characteristics such as chronic distress, nervousness and worrying are not reflected (Bayne, 2004). All of the classifications of Type are considered variants of normal Personality Types and MBTI cannot be used for those with personality disorders or in any diagnostic capacity (Segal & Coolidge, 2004). Despite these drawbacks, the instrument has proven easy for individuals to understand and participants report it is insightful and thought provoking. It is also highly flexible regarding administration options and has varied applications. Ample research has shown that the application of MBTI can bring benefits to individuals, groups, and organisations when effectively implemented and it has repeatedly proven useful as a mechanism for individuals to gain a greater understanding of each other (Kuipers et al., 2009), although research on applications within families is extremely limited. One of the primary advantages of the MBTI is the ability to organize the data about Personality Type into a manageable number of conceptually coherent variables.

Despite broad consensus about the effects of parenting practices on child development, the area of Personality Type, Parenting Style and PSE remains unexplored. Variation in parenting may be related to differences in personality. Linking between personality and Parenting Styles and PSE may be significant. This study sought to determine if knowledge of individual differences in personality influences Parenting Style and PSE levels through increasing understanding between the parent and the child. A secondary aim of the research was to examine the relationships between the four MBTI dimensions and Parenting Styles and the eight domains of PSE. Limited research exists that explores these

areas, yet assertions have been made suggesting significant relationships exist (Losoya et al., 1997; Furnham et al., 2003).

1.3 Parental Self-Efficacy

Parental self-efficacy (PSE) has been defined as *“a parent's beliefs in their ability to influence their child and the environment in ways that would foster the child's development and success”* (Ardelt & Eccles, 2001, p. 944). The model developed by Ardel and Eccles (2001) is based on the premise that as a parent's level of PSE increases, the greater the likelihood that parent will exhibit positive attitudes, outlooks, and beliefs. The research suggests that high levels of PSE are associated with a higher quality parent-child relationship, increased parental warmth and responsiveness as well as parental involvement and monitoring of adolescents (Kendall & Bloomfield, 2005). These behaviours may result in the child adopting these actions leading to a higher level of success and achievement. The likelihood of the child adopting these behaviours is reinforced by the theory of observational learning (Bandura, 1982) which emphasises modelling, suggesting that children observe and adopt the behaviours that their parent's model.

When a parent has a low level of PSE, there are detrimental effects for both parent and child (Coleman & Karraker, 1998). High levels of PSE have been linked to lower parenting stress levels and an increased standard of parenting quality (Raikes & Thompson, 2005). Parents with lower levels of confidence in their parenting have a greater likelihood of becoming overwhelmed when dealing with numerous stressors. As a result of this emotional overload, they may be more probable to adopt a passive coping method in their parenting role (Wells-Parker et al., 1990). This emotional overload can result in the parent internalising failure leading to increased anxiety levels, depression and an overall lack of satisfaction and

fulfilment as a parent (Bandura et al., 1982). As parents demonstrate this lack of motivation and interest, their children may adopt this behaviour, as per Bandura's theory of observational learning (Bandura, 1982).

PSE has been shown to have strong associations with both the behaviour of the child as well as positive parenting behaviour (Hill & Bush, 2001; Meunier & Roskam, 2009). Failure to address the emotional needs of the developing child has been associated with negative outcomes for the child from a social and emotional development perspective (Macdonald, 2001). Parenting is also a critical aspect in ensuring education is completed and in crime prevention (Stewart-Brown, 2008). Higher levels of PSE has been shown to mediate the effect of child behaviour on parenting behaviour, which indicates that problematic child behaviour affects parenting by negatively affecting their view of their competence at parenting (Jones & Prinz, 2005).

Research has also shown that PSE levels can be influenced by intervention programs such as is the aim of the current study. The purpose of these programmes is to help parents to understand the effects of their behaviour on their children and to feel in control and confident in their parenting ability (Bloomfield & Kendall, 2007). These programmes tend to focus on developing parenting skills, strengthening the parent-child relationship, techniques for managing challenging behaviours and education. No examples of interventions based on individual differences of personality could be found. The existing interventions used to increase PSE levels tend to be in the form of parenting classes or group sessions. Parents with low levels of PSE may not feel comfortable in this environment, and few interventions are available at an individual level (Kendall & Bloomfield, 2005). The majority of interventions dealing with PSE also are aimed at parents with mental illnesses, or children with behavioural

problems (Coleman & Karraker, 1997). Few programs appear to be available at an individual level for parents who may not have mental illnesses or children with difficulties. Finally, many of these programs are offered only after a problem has occurred and not as a pre-emptive measure.

Limited research exists between PSE levels and Parenting Style. Most research has focused on the self-efficacy levels a child develops as a result of a specific Parenting Style rather than the PSE levels. There is broad consensus that Parenting Styles affect children greatly (Hosogi et al., 2012), and the assumption appears to be as children of parents who exhibit an Authoritative style have better outcomes, in turn, their parents have higher self-efficacy levels. Limited research also exists between PSE levels and personality, specifically MBTI. One recent study provides some insights (Type Finder, 2015). The study looked at family roles and childcare responsibilities for 2,525 women and 924 men. The study found that Extroverted Types are more likely to express high levels of parental satisfaction than Introverted Types. These findings correlate with previous studies that show Extroverts are more likely to express positive emotions in general (Briggs-Myers et al., 1998). ESJ Types also gave higher ratings than any other Type in relation to their confidence in parenting levels. These findings are consistent with MBTI personality theory whose descriptions for these Types are portrayed as responsible, traditional and family-oriented (Keirsey, 1998). Types that appeared to have lower PSE levels included INTPs, INTJs, and ISTJs (Type Finder, 2015). These Types are typically described as rational, independent, and unconventional which are attributes that may make assuming a parental role more challenging (Briggs-Myers et al., 1998). The Types shown to be most confident in their parenting skills were ESTJ's, ENFJ's, ISTJ's and ISFP's. ESFJ's and INTP's were also the Types most content with their relationship with their child (Type Finder, 2015).

In conclusion, high PSE has been linked with positive outcomes for both the parent and child. Despite this, there is limited research on PSE levels and Personality or Parenting Styles. If an understanding of the individual differences in personality between Parent and Child can increase PSE levels, it is likely to lead to positive outcomes for the child and the parent. Research has also shown that PSE levels can be influenced by intervention programs such as is the aim of the current study. The majority of interventions dealing with self-efficacy, however, tend to focus on parents with mental illnesses or children with behavioural problems (Coleman & Karraker, 1997) and are not widely available. No interventions focus on personality and individual differences as a method to positively influence PSE.

1.4 Parenting Styles

Limited research exists between the relationship of PSE and Parenting Style. Parenting Style is a pattern of attitudes and behaviours that parents exhibit and express toward their children (Baumrind, 1967). Four distinct Parenting Styles were identified i.e. Authoritative, Authoritarian, Permissive, and Uninvolved styles (Maccoby & Martin, 1983). These styles are based on the two foundational elements of parental support (parental responsiveness) and control (parental demandingness). Parental support is linked to behaviours with affectionate, nurturing and companionable qualities and is associated with characteristics like warmth, responsiveness, and acceptance (Huver et al., 2009). Control relates to the parent's control over their children's behaviours and includes knowledge of their activities and monitoring attempts (Stattin & Kerr, 2000). Based on this premise, the four Parenting Styles emerge.

Authoritative parents offer their children an environment of both high support and strict control. They are responsive, reciprocal, have clear standards and high expectations,

and are consistent, affectionate, flexible, and supportive. Authoritarian parents provide low support and strict control. They show little warmth, are emotionally distant and have high expectations with rigid standards. Permissive parents offer high support and low control. These parents can be indulgent, accepting, apply few rules and have low expectations of their children. Finally, Uninvolved parents provide little in the way of support or control. They may be uninterested, passive, uninvolved or even neglectful towards their children (Baumrind, 1971, 1991). The latter Parenting Style was not included in the present study.

Research has indicated that Parenting Styles are correlated with children's development (Collins et al., 2000), with the Authoritative style, in particular, leading to positive outcomes for the developing child. Huver et al. (2009) highlight how adolescents that are raised by Authoritative parents eat healthier, are less likely to drink alcohol, smoke, use recreational drugs and engage in delinquent behaviour as well as achieve greater academic competence. There is broad consensus among researchers that Parenting Styles have an effect on adolescent outcomes (Donnellan et al., 2005). If this is the case, then individual differences in personality may also be of direct relevance to adolescent development (Prinz et al., 2004). Numerous negative outcomes for the child have been shown to result from Authoritarian style parents in particular. Research has indicated that children of Authoritarian parents are more likely to exhibit aggressive behaviour (Underwood et al., 2009), social ineptitude (Lamborn et al., 1991) and have a greater likelihood of experiencing emotional problems such as anxiety, depression (Rothrauff et al., 2009), and lower self-esteem (Martinez & Garcia, 2008).

Belsky (1984) argues that there are three determinants of individual difference in parental function i.e. the child's individual characteristics, the sources of contextual stress

and support, and the parents personality. Of these determinants, he argues that personality is the most significant source of influence. Despite this, research that focuses on parental personality is rare. Belsky and Barends (2002) discuss how Extraversion correlated with an Authoritative Parenting Style that is characterised by high levels of support and control. Further studies have reported positive correlations between Extraversion and positive support (Losoya et al., 1997). The MBTI 'Judging and Perceiving' scale is aligned to that of 'Conscientiousness' in other models of personality (Furnham et al., 2003). Losoya et al., (1997) discovered 'Conscientiousness' was associated with higher levels of parental support and lower levels of control. The MBTI 'Thinking' and 'Feeling' scale has also been aligned to that of 'Agreeableness' in other studies (Fleener & Taylor, 1994). Losoya et al., (1997) also found Agreeableness to be associated with positive support and less controlling parenting. However, further studies have found that higher levels of parental Agreeableness are associated with manipulation (Prinz et al., 2004), a parenting practice that has shown to be unsuccessful for sustaining long-term positive behaviours (Strassberg et al., 1994).

While much research has focused on the effect of personality on working relationships, fewer studies focus on how personality might impact Parenting style (Caspi et al., 2005). Most of the studies that exist focus on the link between mother and child from an attachment perspective (Huver et al., 2009) or are focused on problematic child behaviour (Coleman & Karraker, 1997). However, it is important to focus on parental, and child personality as the potential for influence caused by individual differences is significant. Much of the research that does exist investigates the effect of parental psychopathology on the child. One of the aims of the present study is to examine the relationship between personality and Parenting Style with parents who are not experiencing mental health issues and children

who do not display significant problematic behaviours. One of the main reasons MBTI was selected for this study was that it purposely omits neuroticism as a factor.

1.5 Rationale for the Study

Significant evidence exists that indicates early emerging individual differences in personality influences how people experience and respond to many developmental tasks, from the developing social relationships to academic performance and mastery of work tasks (Caspi et al., 2005). Research has demonstrated that personality can predict divorce, professional success and mortality as well as, if not better than, socioeconomic status and cognitive ability (Roberts et al., 2007). However, with regards to parenting, relatively few studies have considered the personalities of parents as a potentially significant source of influence. Differences in parenting may be related to differences in personality.

PSE has been associated with the quality of the parent-child relationship and is linked to higher self-esteem, academic performance and social functioning in children (Donnellan et al., 2005). While research has shown PSE can be positively influenced by intervention programs, few are focused on 'non-problematic' children or fully-functioning parents. Some research exists exploring PSE and Parenting Styles, suggesting that it is a predictor of Authoritative and Authoritarian Parenting Styles, with high levels of PSE being associated with an Authoritative Parenting Style whereas lower levels predicted an Authoritarian Parenting Style (Celada, 2010). Another study reported that parents with Authoritative and Permissive Parenting Styles had higher levels of PSE (Ohan et al., 2000). There has been no research to date that utilises an understanding of Personality Type as a form of intervention and examines the effect on Personality Type and PSE levels.

1.6 Outline of the Study

The researcher will solicit 50 parents as volunteers through the use of parenting groups on Facebook. These will be randomly sorted into control and experiment groups. Both groups will complete assessments on Parenting Styles and PSE levels. The experiment group will also complete an MBTI assessment for themselves and their child with the support of the researcher, a trained administrator of MBTI. Each parent in the experiment group will receive a detailed report outlining their Personality Type, their child's Personality Type as well as specific recommendations for parenting to that 'Type'. After 12 weeks, both the Experimental and Control groups will retake the assessments on Parenting Styles and PSE levels.

The overall hypotheses of the proposed research are:

1. There will be a significant difference between the Parenting Style scores, before and after the intervention.
2. There will be a significant difference for the eight domains of Parental Self-Efficacy before and after the intervention
3. There will be a relationship between Parenting Styles and the four MBTI dimensions.
4. There will be a relationship between Parenting Styles and the eight domains of Parental Self-Efficacy.
5. Parents who differ on 3 or more for the letters from their child will have significantly lower levels of Parental Self-Efficacy.

The purpose of the research is to determine whether knowledge of Personality Types influences Parenting Style and PSE. This information may be of value to interested groups in the area of parenting and child care. Limited studies have focused on the combination of

these areas. The results may contribute to a greater understanding of factors that positively influence Parenting Style and PSE. Chapter two will present the methodological approach undertaken in this research study. Chapter three will present the results of the data collection and analysis. A discussion in which an interpretation of the findings obtained will be provided in Chapter 4. Chapter five will conclude with a brief summary of the complete research study along with a series of recommendations.

1.7 Conclusion

The primary aim of this chapter was to review the literature relating to MBTI, PSE and Parenting Styles. Despite broad consensus about the effects of parenting practices on child development (Baumrind, 1967), the area of Personality Type, Parenting Style and PSE remains unexplored. Variation in parenting may be related to differences in personality. Linking between personality and Parenting Styles and PSE may be significant.

Chapter Two

Method

2.1 Introduction

The aim of this chapter is to set out the methodological approach undertaken to investigate if an understanding of Personality Type influences Parenting Styles and PSE levels. This chapter will first present a description of the design used for this research. A review of the assessments and instruments used will then be provided. Next, an overview of the participants' selection process and subsequent demographic details will be presented. Finally, the procedure the research followed will be reviewed.

2.2 Design

While this study employs a primarily quantitative intervention longitudinal experimental design model, some qualitative methods were also used to capture the breadth of information required to evaluate whether knowledge of individual differences influences Parenting Style and increases PSE. Participants were randomly allocated to either the Experimental Condition or the Control Condition. Both groups completed online assessments relating to Parenting Style (Robinson et al., 1995) and PSE levels (Kendall & Bloomfield, 2005) as well as providing demographic data and information relating to children in the scope of the study. The overall independent variables are Parenting Style and PSE levels pre and post intervention. The dependent variable is Control Group or Experimental Group. Other variables captured include the parents MBTI Type (per dimension and overall Type), Child Type' (per dimension and overall Type), and the number of letters differing difference between Parent and Child Type. Only the Experimental Group completed the process of MBTI Type validation and received a tailored report. Both groups repeated the online assessments relating to Parenting Style and PSE levels with the Experimental Group also

answering open questions to provide their perspective on the usefulness of the information provided.

2.3 Materials

The experiment contained several aspects which were presented to each of the participants in the study over three phases. During Phase 1, the following demographic and behavioural measures were captured via an online survey for all participants: age range, the number of children to be included in the study, the number of children in the household, Parenting Style (Robinson et al., 1995) and PSE (Kendall & Bloomfield, 2005). During Phase 2, the experiment group completed an online MBTI adult assessment and an online MBTI child assessment for each child included in the study. Once adult and child Type had been validated, each adult received a ‘Personality and Parenting report’ tailored to their Type and their child or children’s Type. During Phase 3, all participants repeated the Parenting Style (Robinson et al., 1995) and PSE (Kendall & Bloomfield, 2005) assessments. The Experimental Group also were presented with a ‘Net Promoter Score’ (NPS) question as well as open questions to explore what, if anything, they found useful on the report.

The Parenting Styles and Dimension Questionnaire (PSDQ).

The PSDQ is designed to characterize the Parenting Styles of the parents of preschool and school-age children (Robinson et al., 1995). The study utilised a modified version of the original tool designed around Baumrind’s (1971, 1991) three main Parenting Styles (Authoritative, Authoritarian, and Permissive). The modified instrument contains 21 questions with items aligned to different dimensions creating separate scores for each of the Parenting Styles. Examples of the questions include “*I give praise when my child is good*” and “*I find it difficult to discipline my child*”. All items were measured on a five-point Likert

scale ranging from 'always' to 'never'. Reliability of the original PSDQ scales ranged from .91-.75 (Robinson et al., 1995). The modified questionnaire used in this study has been found to be a valid measure with reliability consistent with the original however significantly less research exists on the modified tool (Biletski et al., 2013).

Tool to Measure Parental Self-Efficacy (TOPSE).

The 'Tool to measure Parental Self-Efficacy' (TOPSE) was developed to measure PSE and has been applied in a large range of parenting interventions. The measure contains 48 self-efficacy statements related to eight domains of parenting; Emotion and Affection, Play and Enjoyment, Empathy and Understanding, Control, Discipline and Boundary Setting, Pressures of Parenting, Self-Acceptance, and Learning and Knowledge (Bloomfield & Kendall, 2007). There are six self-efficacy statements for each domain and parents indicate how much they agree with each statement by responding to a Likert scale from 1-5 where one equates to 'completely disagree' and five equates to 'completely agree.' The measure contains both positive and negatively worded items, and the responses are summed to create an overall score. A low score equates to lower levels of PSE. Six of the questions were reverse coded. Examples of the questions include "*I am able to listen to my child*" and "*As a parent, I feel I am in control*". The measure has reported acceptable levels of validity and reliability (Kendall & Bloomfield, 2005; Bloomfield & Kendall, 2007).

MBTI Instruments.

Both parent and child MBTI Type were determined through an online questionnaire in which the Experimental Group participants were presented with a series of observable behaviours related to each dimension and selected the one which matches closest with their own or their child's behaviour. Each participant validated their Type and their child's Type

by reviewing a brief synopsis of the whole Type provided by the researcher. In instances when the Type was not deemed an exact 'fit', the researcher, a trained administrator of the instrument, conducted follow-up calls and emails to validate their Type. The MBTI technical manual reports each of the four preference scales has internal consistency reliability of .90 or greater (Myers et al., 1995). Meta-analytical studies indicate that the reliabilities of the MBTI continuous scores are acceptable with scores of .84 and .86 for average internal consistency, and .76 for temporal stability (Harvey, 1996). As the theory stipulates that Type is inborn, it is expected that reliability levels would be high. However, several studies indicate that even when the test-retest interval is short, up to 50% of participants are reclassified (Howes & Carskadon, 1979). Researchers also argue that bimodality has not been demonstrated in any of the dimensions; while some argue the bi-polarity of all four scales is unsubstantiated (Coffield et al., 2004). Overall, the validity of the MBTI has proven to be relatively strong when applied in the appropriate situations and through trained administrators (Fleenor, 2001).

Personality and Parenting Report.

Each participant received a detailed report providing them with an overview of their MBTI Type and their child's MBTI Type. The researcher compiled this report by adapting information provided in the MBTI technical manual and other materials provided to certified administrators of the assessment (Myers et al., 1995). Sections included: About Personality Types, Overview of Parents Type, Overview of Child's Type, Shared and Differing Dimensions and Overview of what works for this child. As the test-retest interval for the whole Type has proven short on this instrument (Howes & Carskadon, 1979), parenting advice was aligned to each dimension rather than whole Type.

NPS and additional questions

Net Promoter Score (NPS) was used as a measure in Phase 3 with the Experimental Group to gauge overall satisfaction with the report. NPS is calculated based on responses to a single question, in this instance, “*How likely is it that you would recommend this report to a friend or colleague?*” (Reichheld, 2003). The scoring was based on a 0 to 10 scale where 0 equates to ‘very unlikely’ and 10 equates to ‘very likely’. It is calculated by subtracting the % of ‘Detractors’ (participants who provide a score in the range of 0 – 6) from the % of ‘Promoters’ (participants who provide a rating in the range of 9 – 10). NPS has been shown to be an acceptable measure of customer satisfaction (Reichheld, 2003).

Participants were also asked to rate the overall ‘accuracy’ and ‘usefulness’ of the report on a 10 point scale. Additional open questions presented to the experiment group included “*Overall how accurate did you find the report*”, and “*What, if any, of the information, in particular, did you put into practice?*” As part of all assessments and the report, participants were thanked for taking the time to participate in the study. It advised them of the aim of the research study, and that participation was completely voluntary and that they could opt out at any stage.

2. 4 Participants

Random samples of parents were solicited to participate in the study through parenting groups on Facebook. 84 individuals originally completed phase 1 of the study. 42 were randomly sorted into each group. Of these, only 38 participants completed the phase 3 questionnaires. 19 of these were members of the Experiment Group, and 19 were members of the Control Group. Participant data from parents who did not complete all phases were removed. Criteria for inclusion were parents who had children between the ages of 6 and 16

and whose children had not been diagnosed with a learning difficulty or significant mental health disorder. The breakdowns of gender in the different conditions are shown in Table 3.

Table 3

Participants by Gender

	Males	Females	Total
Experimental	2	17	19
Control	4	15	19
Total	6	32	38

The breakdowns of the age range in the different conditions are shown in Table 4.

Table 4

Participants by Age Range

	21 – 29	30 – 39	40 – 49	Total
Experimental	1	12	6	19
Control	1	11	7	19
Total	2	23	13	38

The numbers of children in each household, as well as the number to be included in the study for the experiment conditions, are shown in Table 5.

Table 5

Children in household

	1 Child	2 Children	3 Children	Total
Number of children in household	2	15	2	19
Number of children to be included in study	10	9	0	28

Note. The total number of children to be included is the product of the number of children to be included.

2. 5 Procedure

The researcher created a bit URL. 7 Facebook parenting groups shared this URL as well as information about the aim of the study. The URL was programmed so that any individual who clicked this link would be randomly directed to either the phase 1 questionnaire for the control group or the Experimental Group. The questionnaires were hosted on Internet survey website and took participants approximately 30 minutes to complete. Once participants in the Experimental Group had completed phase 1, they were invited to complete the MBTI assessments for them and the children in scope for the study. Once their Type was validated, the Experimental Group received a detailed personality report which provided an overview of their Type, their child or children's Type as well as Type-specific parenting recommendations. All Experiment Group participants received this report within one week of completing phase 1. All participants completed phase 3 sixteen weeks after they had completed phase 1.

2. 6 Ethical Considerations

A research proposal including ethical considerations was submitted and approved by Dublin Business School (DBS) in advance of the study. Approval was also sought from all Facebook parenting groups in advance of solicitation for participants. Participants were provided with information about the aim of the study and required to 'opt-in'. They were advised that participation was entirely voluntary and were given the option of having their results removed at all stages. In the unlikely event, participants felt negatively impacted by the issues covered by the research they were provided with details of mental help and parenting support groups. In addition, they were provided with direct contact information of the researcher and DBS supervisor if they had any additional questions or comments relating to the research.

Chapter Three

Results

3.1 Introduction

A series of descriptive and inferential statistical tests were performed on the data through SPSS to explore each hypothesis. Data was collected from 38 participants over a period of 16 weeks. 12 (24%) of the original 50 participants did not complete all phases of the study, and their data was removed accordingly. The majority of participants were Female (n=32) in the '30 – 39' (n=23) age range. In most cases (73%), all of the children in the household were included in the study (n=28). 19 participants in the Experiment Condition completed MBTI assessments on them and their children. The validated MBTI parent Types, as well as the frequency of each dimensions in the Experiment Conditions, are presented in Table 6 and Figure 1.

Table 6

Validated MBTI Parent Types

	Frequency
ENFJ	1
ENFP	1
ENTJ	1
ESFJ	5
ESTJ	2
ESTP	2
INFJ	3
INTP	1
ISFJ	1
ISTJ	2
Total	19

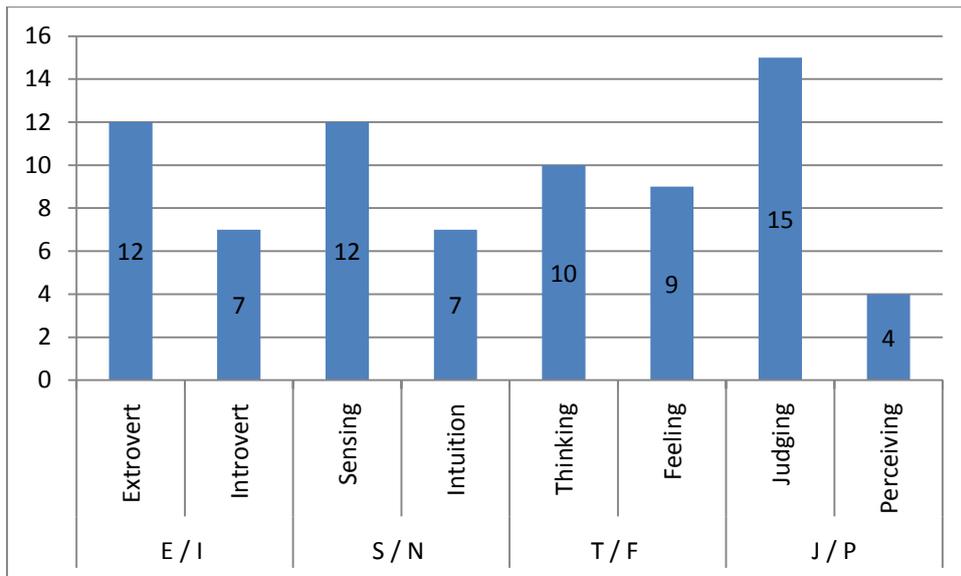


Figure 1. The frequency of each dimension in the experiment conditions for parents.

The validated MBTI child Types, as well as the frequency of each dimension in the Experiment Condition, are presented in Table 7 and Figure 2.

Table 7

Validated MBTI Child Types

ENFP	2
ENFJ	1
ENTJ	1
ENTP	4
ESFJ	2
ESFP	2
ESTP	4
INFP	3
INTP	2
ISFJ	2
ISFP	1
ISTP	4
Total	28

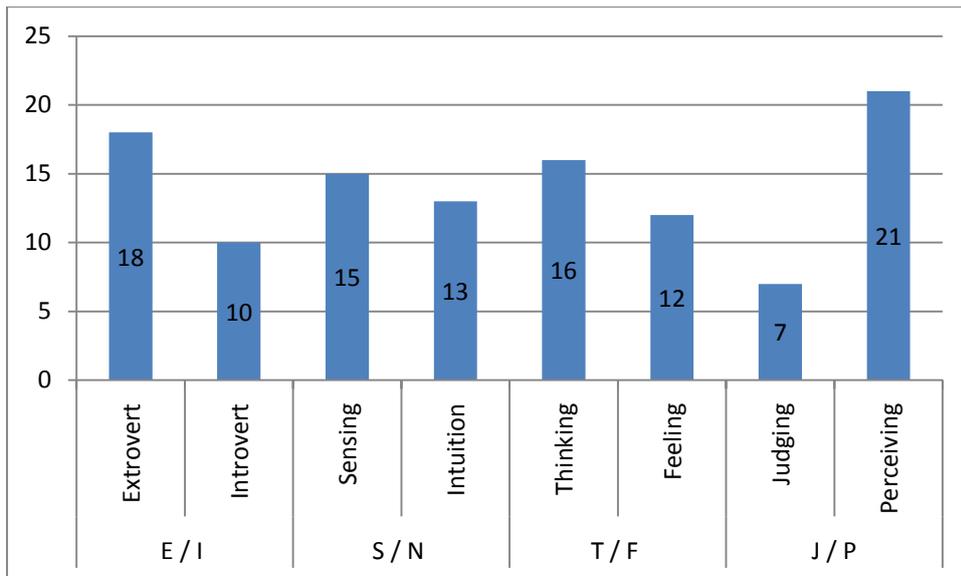


Figure 2. The frequency of each dimension in the Experiment Condition for children.

The Parenting Styles for all parents are shown in Table 8.

Table 8

Parenting Styles

Group	Authoritative	Authoritarian	Permissive
Experimental	17	0	2
Control	16	1	2

3.2 Pre and Post Parenting PSDQ Scores

In relation to the first hypothesis, that there will be a significant difference between the Parenting Style scores, before and after the intervention, a number of measures were assessed. For both the Experimental and Control Conditions, paired-samples t-tests were conducted to compare the scores for PSDQ before and after the intervention. Results are presented in Table 9.

Table 9

Parenting Style Phase 1 and Phase 3 Paired Sample t-Test Results

		Mean	Std. Deviation	t	Sig.
Experiment Group	Authoritative Average - Pre and Post	-.25731	.54314	-2.065	.054
	Authoritarian Average - Pre and Post	.46491	.39899	5.079	.000
	Permissive Average - Pre and Post- PS Permissive Average - Post	.26316	.53088	2.161	.044
	Authoritative Average - Pre and Post	.07602	.15736	2.106	.053
	Authoritarian Average - Pre and Post	-.01754	.13488	-.567	.578
	Permissive Average - Pre and Post- PS Permissive Average - Post	-.13158	.19704	-2.911	.009
Control Group					

The only significant results yielded here were in relation to Authoritarian scores. For the Experimental Group, a significant difference in the scores for before the intervention (M=2.36, SD=.48) and after the intervention (M=1.90, SD=0.41) in relation to Authoritarian scores on the PSDQ was found; $t(18)=5.08$, $p = .000$. The same test was conducted for the

Control Group, and no significant difference in the scores before ($M=2.10$, $SD=.49$) and after ($M=2.11$, $SD=0.48$) for Authoritarian' scores on the PSDQ was found; $t(18)=-5.67$, $p =0.58$. These results suggest that the intervention did have an effect on Authoritarian scores on the PSDQ. Specifically, our results indicate that knowledge of the individual differences in personality does influence Authoritarian PSDQ scores. To further examine this, an independent-samples t-test was conducted to compare the average difference of scores before and after the intervention for the Authoritarian scores on the PSDQ between the Control and Experiment Groups. There was a significant difference in the scores for the experiment group ($M=0.46$, $SD=4.0$) and the Control Group ($M=-0.18$, $SD=0.13$) in relation to Authoritarian scores on the PSDQ; $t(36)= 4.99$, $p =.000$. From these results, we can conclude that knowledge of individual differences in personality between parent and child does influence Authoritarian Parenting Style assessment scores. As no significant results were found before and after the intervention in relation to either Authoritative or Permissive Parenting Styles, we can conclude that the intervention does not have an effect on these Parenting Styles scales. In conclusion, in relation to the first hypothesis, our results indicate that knowledge of the child's Personality Types does influence Authoritarian' Parenting Styles and does not influence Authoritative or Permissive Parenting Style assessment scores.

3.3 Pre and Post TOPSE Scores

In relation to the second hypothesis, that there will be a significant difference for the eight domains of TOPSE before and after the intervention, paired-samples t-tests were conducted to compare the scores for each of the eight domains of PSE before and after the intervention, for both the Experimental and Control conditions. Results are presented in Table 10.

Table 10

PSE Phase 1 and Phase 3 Paired Sample t-Test Results

		Mean	Std. Deviation	T	Sig.
Experiment Group	Emotion & Affection Total - Pre and Post	-.84211	1.57280	-2.334	.031
	Play & Enjoyment Total - Pre and Post	-1.42105	1.34643	-4.600	.000
	Empathy & Understanding Total - Pre and Post	-1.68421	1.88717	-3.890	.001
	Control Total - Pre and Post	-2.21053	1.87317	-5.144	.000
	Discipline & Setting Boundaries Total - Pre and Post	-2.63158	2.29033	-5.008	.000
	Pressures of Parenting Total - Pre and Post	-1.10526	1.76052	-2.737	.014
	Self-Acceptance Total - Pre and Post	-1.21053	1.90260	-2.773	.013
	Learning & Knowledge Total - Pre and Post	-1.00000	1.73205	-2.517	.022
	Overall Total - Pre and Post	-12.10526	6.18147	-8.536	.000
Control Group	Emotion & Affection Total - Pre and Post	.57895	3.42078	.738	.470
	Play & Enjoyment Total - Pre and Post	.15789	3.04162	.226	.824
	Empathy & Understanding Total - Pre and Post	-.63158	3.68496	-.747	.465
	Control Total - Pre and Post	-.84211	5.49002	-.669	.512
	Discipline & Setting Boundaries Total - Pre and Post	-1.36842	4.23229	-1.409	.176
	Pressures Total - Pre and Post	.47368	5.35795	.385	.704
	Self-Acceptance Total - Pre and Post	1.10526	4.43339	1.087	.292
	Learning & Knowledge Total - Pre and Post	.15789	2.71341	.254	.803
	Overall Total - Pre and Post	-.36842	24.93149	-.064	.949

For the Experiment Group, paired-sample t-tests revealed significant results in all of the domains of parenting except 'Emotion and Affection.' For the Control group, the same test revealed no significant results in any of the eight domains of parenting.

In relation to the second domain, 'Play and Enjoyment', the paired-samples t-test conducted before and after the intervention on the experiment group found a significant difference in the scores for before ($M=25.79$, $SD=2.46$) and after ($M=27.21$, $SD=2.10$) the intervention; $t(18)=-4.60$, $p =.000$. This increase of 'Play and Enjoyment' was evidenced in the comments to the open questions. Participant 3 stated "*We got her loads of new creative stuff which she is really enjoying, and we are trying to encourage her with that*" and participant 14 added "*I also started watching different types of movies with her...They are really not my kind of thing, but it is worth it to see how much it sets her imagination wild.*" These results suggest that the intervention did have an effect on 'Play and Enjoyment' scores on the TOPSE instrument.

For the third domain 'Empathy and Understanding', the paired-samples t-test conducted before and after the intervention on the experiment group found a significant difference in the scores for before ($M=25.11$, $SD=2.73$) and after ($M=26.79$, $SD=2.42$) the intervention; $t(18)=-3.89$, $p =0.001$. This increase of 'Empathy and Understanding' was demonstrated in the comments to the open questions. Participant 1 volunteered that this has "*genuinely changed how I communicate with the girls. I found I was giving clearer instructions for both girls, setting things out in smaller pieces for M and allowing F time to cool town when angry rather than persisting and getting nowhere*". Participant 5 said "*I've also been showering him with hugs and kisses, and praise as much as possible*" and Participant 6 mentioned, "*With E I am encouraging her to express all of her feelings.*" These

results suggest that the intervention did have an effect on 'Empathy and Understanding' scores on the TOPSE measure of PSE.

For the fourth domain, 'Control', the paired-samples t-test found a significant difference in the scores for before (M=21.58, SD=3.93) and after (M=23.79, SD=3.58) the intervention; $t(18)=-5.14$, $p = .000$ for the experiment condition. Contextual evidence may also be found in comments shared e.g. Participant 2 said "*I did not realise how hard my OCD was on him. I try to give him more free time and build in buffer time when we are going out*". These results suggest that the intervention did have a positive effect on 'Control' scores on the TOPSE measure of PSE.

With regards to the fifth domain 'Discipline and Setting Boundaries', again a significant difference in the scores for before (M=20.32, SD=2.65) and after (M=22.95, SD=2.39) the intervention; $t(18)=-5.01$, $p = .000$ was found for the Experimental Group. Comments such as those shared by participant 2, "*Sometimes I thought D was moody. Now I give him time to think about things before we talk about it or let him cool done. It's hard for me to do but has really helped*", and participant 5 "*I have been trying to break things up and using incentives and rewards with him*" provide additional context to this finding. Again, these results suggest that the intervention had a positive effect on 'Discipline and Setting Boundaries' scores on the TOPSE measure of PSE.

For the sixth domain, 'Pressures of Parenting', a significant difference in the scores for before (M=23.16, SD=4.46) and after (M=24.26, SD=4.76) the intervention; $t(18)=-2.73$, $p = .014$ for the Experimental Group. A significant difference was also found for the seventh domain 'Self-Acceptance' before (M=24.68, SD=2.56) and after (M=25.89, SD=2.08) the

intervention; $t(18)=-2.77$, $p = .013$. These results suggest that the intervention did have an effect on 'Pressures of Parenting' and 'Self-Acceptance' scores on the TOPSE measure of PSE.

Similar results were also found for the experiment group, with regards to the final domain of parenting 'Learning and Knowledge.' Again, there was a significant difference in the scores for before ($M=24.89$, $SD=2.02$) and after ($M=25.89$, $SD=2.49$) the intervention; $t(18)=-2.52$, $p = .022$. This increase of 'Learning and Knowledge' was evidenced in the comments to the open questions. Participant 6 shared "*I always used to treat the girls the exact same. This has been so eye opening. I didn't realise the effects I was having on K. I'm trying to adapt to them both now*" and participant 16 added, "*I feel I know my children on a whole other level.*" This feedback suggests that the intervention did have an effect on 'Learning and Knowledge' scores on the TOPSE measure of PSE.

In relation to the overall scores, for the experiment group, a paired-samples t-test revealed a significant difference in the scores for before ($M=192.89$, $SD=16.60$) and after ($M=205.00$, $SD=13.54$) the intervention; $t(18)=-8.54$, $p = .000$. This test was also conducted for the control group. There was not a significant difference in the scores for before ($M=192.79$, $SD=16.82$) and after ($M=193.16$, $SD=14.21$) the intervention; $t(18)=.254$, $p = .803$. From these results, with regards to the second hypothesis, we can reject the null hypothesis and conclude that the intervention did have an effect on the PSE.

3.4 The relationship between PSDQ and MBTI

To explore the third hypothesis, that there will be a relationship between Parenting Styles and the four MBTI dimensions, a chi-square test was performed, and no relationships

were found between any of the pre or post Parenting Styles and the four MBTI dimensions, specifically:

- No relationship was found between 'Extrovert / Introvert' and Parenting Style, $X^2(1, N = 19) = .166, p = .61$.
- No relationship was found between 'Sensing / Intuition' and Parenting Style, $X^2(1, N = 19) = .166, p = .61$.
- No relationship was found between 'Thinking / Feeling' and Parenting Style, $X^2(1, N = 19) = 2.484, p = .21$.
- No relationship was found between 'Judging / Perceiving' and Parenting Style, $X^2(1, N = 19) = .596, p = .61$.

In this instance, we accept the null hypothesis, which there is no relationship between Parenting Styles and the four MBTI dimensions.

3.5 The relationship between PSDQ and PSE

To explore the relationship between Parenting Styles and the eight domains of PSE, a Pearson product-moment correlation coefficient was computed to examine the relationships between the three Parenting Styles and eight components of PSE. Some significant relationships were identified as presented in Table 11.

Table 11

Significant Relationships between Parenting Style and the eight Domains of PSE

Domain of Parenting	Authoritative	Authoritarian	Permissive
Emotion & Affection	A weak, positive correlation, $r = .362$, $n = 38$, $p = 0.026$	No significant relationship	No significant relationship
Play & Enjoyment	No significant relationship	No significant relationship	No significant relationship
Empathy & Understanding	No significant relationship	No significant relationship	No significant relationship
Control	No significant relationship	No significant relationship	A moderate, negative correlation, $r = -.553$, $n = 38$, $p = .000$.
Discipline & Setting Boundaries	No significant relationship	No significant relationship	A weak, negative correlation, $r = -.342$, $n = 38$, $p = .035$.
Pressures of Parenting	No significant relationship	No significant relationship	A moderate, negative correlation, $r = -.492$, $n = 38$, $p = .002$.
Self-Acceptance	A weak, positive correlation, $r = .379$, $n = 38$, $p = 0.019$.	A weak, negative correlation, $r = -.326$, $n = 38$, $p = 0.046$.	A moderate, negative correlation, $r = -.420$, $n = 38$, $p = .009$.
Learning & Knowledge	A moderate, positive correlation, $r = .480$, $n = 38$, $p = 0.002$	A moderate, negative correlation, $r = -.558$, $n = 38$, $p = .000$.	A weak, negative correlation, $r = -.352$, $n = 38$, $p = .030$.
Overall	A weak, positive correlation, $r = .372$, $n = 38$, $p = 0.021$	No significant relationship	A moderate, negative correlation, $r = -.560$, $n = 38$, $p = .000$.

In relation to the Parenting Style Authoritative, weak positive relationships were found with 'Emotion and Affection' and 'Self-Acceptance.' A moderate positive correlation was also found with 'Learning and Knowledge.' Overall a weak, positive relationship was found, $r = .372$, $n = 38$, $p = 0.021$. These results indicate that increases in PSE relate to an increase in Authoritative Parenting Style.

For the Parenting Style Authoritarian, a weak, negative correlation was found with 'Self-Acceptance,' $r = -.326$, $n = 38$, $p = 0.046$ and a moderate, negative correlation was

identified with 'Learning and Knowledge,' $r = -.558$, $n = 38$, $p = .000$. Increases in 'Self-Acceptance' and 'Learning and Knowledge' were correlated with decreases in the rating of the Authoritarian Parenting Style. No significant relationship was found between overall PSE and the Authoritarian Parenting Style.

Finally, for the Permissive Parenting Style, some moderate negative relationships were found with domains of PSE. These included 'control', $r = -.553$, $n = 38$, $p = .000$; 'Pressures of Parenting', $r = -.492$, $n = 38$, $p = .002$; and 'Self-Acceptance', $r = -.420$, $n = 38$, $p = .009$. A weak, negative correlation was also found relating to 'Learning and Knowledge,' $r = -.352$, $n = 38$, $p = .030$ and 'Discipline and Setting Boundaries,' $r = -.342$, $n = 38$, $p = .035$. Overall, a moderate, negative correlation between Permissive Parenting Style and PSE overall was found, $r = -.560$, $n = 38$, $p = .000$. These results indicate that increases in PSE relate to a decrease in Permissive Parenting Style and that a decrease in Permissive Parenting Style relates to increases in PSE. From these results, with regards to the fourth hypothesis, we can conclude that a relationship exists between PSE and Authoritarian and Permissive styles of parenting.

3.6 Differing Personality Types and PSE

With regards to the fifth hypothesis, that parents who differ on 3 or more for the letters from their child will have significantly lower levels of PSE, an independent-samples t-test was conducted with the Experiment Group to compare TOPSE results between parents who differ on 3 or more MBTI dimensions from their child and parents who do not differ on 3 or more MBTI dimensions from their child. This analysis revealed no significant difference in the scores for parents who differ on 3 or more MBTI dimensions from their child ($M=199.86$, $SD=15.20$) and parents who do not differ on 3 or more MBTI dimensions from

their child ($M=202.21$, $SD=8.92$) in relation to PSE; $t(16) = -.368$, $p = .717$. In this instance, we accept the null hypothesis, that differing on 3 or more MBTI dimensions from the child does not have an effect on PSE. Additional analysis to explore if a difference existed between the scores on the eight domains of parenting as per TOPSE and the four MBTI dimensions was conducted e.g. Did a significant difference exist between ‘Thinking’ and ‘Feeling’ Types for ‘emotional and affection’. No significant differences were found to exist between any of the eight domains and the MBTI dimensions.

3.7 Report Usefulness, Accuracy and NPS Rating

Participants in the Experimental Condition were asked three rating questions in Phase 3. These questions concerned the overall accuracy, usefulness and NPS scores. Each question was rated on a 10 point scale. For overall accuracy of the MBTI report, the average total accuracy was 96.32%. 68% of the participants rated the accuracy of the report as 100%. This was also portrayed in the comments participants provided as part of the final phase. Participant 3 said *“This was really quite true of both of us”*; Participant 5 added *“This was spot on for me and L”*; and participant 8 shared *“I would agree with all of the three personality Types”*. Not all participants felt the report was fully accurate for example, participant 4 said *“Not as sure for me to be honest but my husband said it really does so I’ll have to think on it.”*

For overall usefulness of the report, the average total was 95.79%. 63% of the participants rated the usefulness of the report as 100%. This was also portrayed in the comments participants provided as part of the final phase. Participant 9 said *“This was extremely useful. Initially I thought the results were a bit surprising, but after a careful read through I do agree with the analysis and recommendations”*; Participant 10 added *“Overall is*

was very interesting and useful, really opened my eyes on why with my daughter we seemed to be at different spectrums the older she is getting. I just found the whole report genuinely fascinating"; and participant 12 shared *"This was very useful, I understand F a lot more... it wasn't until I read the report that I noticed some of the behaviours"*.

Finally, NPS is calculated based on responses to the single question, *"How likely is it that you would recommend this report to a friend or colleague?"* It is calculated by subtracting the % of 'Detractors' (participants who provide a score in the range of 0 – 6) from the % of 'Promoters' (participants who provide a rating in the range of 9 – 10). In this study, 79% of participants were classified as 'Promoters', 21% were classified as 'Passive' and 0% was classified as 'Detractors'. This results in an overall NPS score of 79%.

3.8 Conclusion

In conclusion, this study yielded many significant results. These results indicate that knowledge of the individual differences in personality between parent and child does influence Authoritarian Parenting Styles and do not influence Authoritative or Permissive Parenting Style assessment scores. The results also show that increases in PSE relate to increases in Authoritative Parenting Style scores and decreases in Permissive Parenting Style scores. The results also indicate that knowledge that this knowledge can lead to a significant increase in overall PSE. From this study, we can also conclude that there is no relationship between Parenting Styles and the four MBTI dimensions and that differing on 3 or more MBTI dimensions from the child does not have an effect on PSE. The participants of the study also shared that they found the report to be accurate and useful. The impact of these results will be explored further in the discussion section.

Chapter Four

Discussion

4.1 Introduction

The purpose of this study was to determine whether knowledge of Personality Types and individual differences influences Parenting Style and PSE. Parents demonstrated a significant change in overall PSE after learning more about their personality and their child's personality through this process. These findings are consistent with similar studies aimed at increasing PSE (Bloomfield & Kendall, 2010). Before the intervention, parents reported a significantly higher score in Authoritarian Parenting Style scores than 12 weeks after. A relationship was also found to exist between an increase in PSE and an increase in Authoritative Parenting Style score and a decrease in Permissive Parenting Style score. The study also found that differing on three or four of the MBTI dimensions from the child did not have a negative effect on PSE. In contrast to similar studies, no relationship was found to exist between Parenting Styles and the four MBTI dimensions (Huver et al., 2009).

The aim of this chapter is to provide an interpretation of these results and to apply these findings to existing research. This chapter will discuss each finding in more detail with the purpose of broadening the perspective of these results as they relate to parenting and child outcomes.

4.2 Authoritarian Parenting Style

A significant difference was found in relation to the Parenting Style Authoritarian scores before and after the intervention. This difference was not found in the control group over the same period, indicating that information on parent and child's personality reduces the Authoritarian' behaviours displayed towards the child. As discussed, Authoritarian

parents are characterised as showing little warmth, are emotionally reserved with and have high expectations with unyielding standards (Huver et al., 2009). They are considered to offer less support and inflict greater control upon their children. This Parenting Style can lead to some significantly negative outcomes for the child such as developing aggressive behaviours (Underwood et al., 2009), anti-social behaviours (Lamborn et al., 1991) and depressive disorders (Rothrauff et al., 2009). One study of pre-school aged children showed that embarrassing a child for poor performance in learning can result in the child underperforming their peers on problem-solving tasks (Kamins & Dweck, 1999).

In understanding a child's personality, a parent can understand the impact of some of these kinds of behaviours, on their child. In relation to the MBTI dimension of 'Thinking/Feeling,' a parent can, perhaps, understand the impact of particular behaviours on their child. This understanding may be particularly relevant for 'Thinking' Type parents of 'Feeling' Type children. As part of the report, these parents were provided with alternative strategies such as token economies and effective use of positive reinforcement. Implementation of these techniques may lead to parents offering more support to their child, reducing the behaviours associated with the Authoritarian Parenting Style. Studies suggest that children, in particular, learn more efficiently from positive rather than negative feedback (Schmittmann et al., 2006).

In relation to the 'Judging/Perceiving' dimension, 79% of parents were sorted as 'Judging' Types whereas 75% of children were sorted into the opposing dimension of 'Perceiving' Types. This contrast in preference could potentially be related to the 'Control' aspect that underlies the Authoritarian Parenting Style. Judging Types are described as preferring to live life in a planned and organised manner whereas Perceiving Types are

described as preferring to live life in a more spontaneous and adaptable manner (Briggs-Myers et al., 1998). As part of the report, Judging Type parents were provided with suggestions to support their Perceiving Type child. These parents were advised how Perceiving Type children may have trouble finishing chores or homework as their natural inclination is to play first and work later (Briggs-Myers et al., 1998). Strategies such as building in buffer time into any event (such as shopping) to allow the child time to be curious and to provide deadlines for decisions were suggested. These strategies may lead parents to reduce the behaviours associated with the Authoritarian Parenting Style. It is also of interest that a significant difference was found in this study for the 'Control' and 'Discipline and Setting Boundaries' domains of PSE. Despite this, no relationship was found to exist between these domains and the Authoritarian Parenting Style. This type of intervention may serve as an additional tool for professionals working with parents to reduce Authoritarian parental behaviours leading to more positive outcomes for the child.

4.3 Increases in Parental Self-Efficacy

Parents in the Experimental Group demonstrated a significant difference in overall PSE after learning more about their personality and their child's personality through this process. This difference was not found in the control group over the same period, indicating that an understanding of the individual differences in personality between parent and child can increase PSE levels, and more specifically, seven of the eight domains of parenting assessed by the TOPSE measure.

The area of 'Play and Enjoyment' had significantly increased after parents were provided with information on their child's personality. The information given that related to the MBTI dimension of 'Sensing/Intuition' may be of relevance here. This dimension

concerns how we take in information and may be relevant for opposing Types (Briggs-Myers et al., 1998). As part of the report, parents were provided with techniques to try with different kinds of children. For example, parents of ‘Intuition’ Type children were advised to give the child space to dream and fantasize and to wait until later to ask about specifics and practicalities. In contrast, parents of ‘Sensing’ Type children were encouraged to engage in practical hands-on activities. Techniques like this were called out by participants in the open question that asked about what, if any, techniques they had applied. The information for parent’s of ‘Feeling’ Type children discussed positive reinforcement as critical. Knowledge of how to positively communicate during play may have contributed to the increase of scores for this domain. Research has shown that a negative relationship between parental pressure and enjoyment levels is reported by children (Anderson et al., 2003). Expressing disappointment towards a child’ for poor performance could contribute to lowered enjoyment and motivation levels for the child (Sánchez-Miguel et al., 2013).

The report each parent received included a positive description of their Type. Three participants specifically provided feedback in the open comments section that this had been very inspiring to them. One participant commented on how she only ever “*sees the bad*” and that the MBTI description had given her the confidence to join a new group. Another participant shared that it had inspired to her re-start her home craft business. Evidence of this can potentially be seen in the increases in scores of Self-Acceptance, Learning and Knowledge’, and Pressures of Parenting domains of parenting in this study.

These results are relevant given the numerous positive outcomes for both the parent and the child. Low levels of PSE has adverse effects for both parent and child (Coleman & Karraker, 1997) whereas higher levels are associated with positive outcomes for both (Raikes

& Thompson, 2005). Research has demonstrated that parents with high PSE report fewer instances of problematic child behaviour and make less use of physical methods of discipline (Day et al., 1994). Children are more likely to adopt these positive behaviours which are linked to higher levels of success and achievement (Bandura, 1982).

The overall increase in PSE through an understanding of the individual differences in personality between parent and child may be of interest to health and childcare practitioners working to increase PSE. Previous research has demonstrated that intervention programs can influence PSE levels however many of these interventions were in the form of parenting classes or other group work (Coleman & Karraker, 1997). The approach outlined in this study may provide an alternative method. The majority of interventions dealing with PSE have also focused on parents of children with mental illnesses, or significant behavioural problems (Coleman & Karraker, 1997) whereas this study eliminated these from the sample. As such limited research exists between PSE levels and individual differences in personality, this information may add to the literature available.

4.4 Parenting Styles and the Eight Domains of PSE.

Some significant relationships were found to exist between the three Parenting Styles and the eight domains of PSE. The Parenting Style Authoritative had positive relationships with many of the domains of PSE indicating that increases in PSE relate to an increase in Authoritative Parenting Style. These findings may validate the previous assumption that an Authoritative style is related to higher PSE levels (Hosogi et al., 2012). A negative relationship was also found on many of the domains of PSE and the Permissive Parenting Style.' These included 'control', 'Pressures of Parenting' 'Self-Acceptance', 'Learning and Knowledge' and 'Discipline and Setting Boundaries'. Decreases in PSE relate to increases in

Permissive Parenting Style whereas increases of PSE relate to decreases in Permissive style parenting. This study was limited in exploring this style as only four participants identified as having this Parenting Style. While a negative relationship was found between the Authoritarian Parenting Style and the 'Self-Acceptance,' and 'Learning and Knowledge' domains of PSE, no significant association was found overall. This study was limited in exploring the Authoritarian Parenting Style as only one participant identified as having this Parenting Style, and this individual was a member of the control group.

4.5 Additional findings

No relationships were shown to exist between the three Parenting Styles and the four MBTI dimensions in the current study. These results are in contrast to some of the existing research on this topic. Previous research proposes that extraversion correlated with an Authoritative Parenting Style (Belsky & Barends, 2002). This correlation was also suggested by studies that report positive correlations between 'Extraversion' and positive support (Losoya et al., 1997). No such relationship existed for the participants of the current study. It has also been suggested that the 'Judging/Perceiving' scale is aligned with an Authoritative style and that it is associated with higher levels of parental support and lower levels of control (Furnham et al., 2003). This relationship was not found to exist in the present study. Finally, the 'Thinking / Feeling' scale has also been related to the Authoritative' Parenting Style as it is associated with positive support and less controlling parenting (Fleenor & Taylor, 1994). The present study did not validate any of these results. No significant relationships were found to exist between any of the four MBTI dimensions and the three Parenting Styles. Many of these studies used much larger samples than the current study which may account for the disparity in results. While previous research indicated that personality can predict areas of an individual's life such as divorce, career success and mortality (Roberts et al.,

2007), this study found that difference in Parenting Style is not related to differences in Personality Types.

An analysis was also conducted to explore if a difference existed between the scores on the eight domains of PSE as per TOPSE and the four MBTI dimensions e.g. Did a significant difference exist between 'Thinking' and 'Feeling' Types for 'control' or 'Discipline and Setting Boundaries.' No significant differences were found to exist in the between any of the eight domains of PSE and the four MBTI dimensions.

Finally, this study explored if parents who differed on three or more for the letters from their child would have significantly lower levels of PSE than parents who shared two or more letters with their child. This analysis revealed no significant difference indicating that parents who differ considerably in Personality Type from their child do not have lower levels of PSE. 27% of the participants in the Experimental Condition had other children who were not included in the study. In two cases, the children were omitted due to diagnosed learning disabilities. In the remaining cases, the children were too young to be included. The participant's husbands or partners were also not included in the study. These unaccounted for variables makes it difficult to explore this question fully.

4.6 Conclusion

This chapter provided an interpretation of the results of the research study and an interpretation of the findings in relation to the research questions and previous research in the field. The primary aim of this study was to determine whether knowledge of the individual difference in Personality Type influences Parenting Style and PSE. This study found that it leads to a significant increase in overall PSE and a reduction in Authoritarian Parenting Style

scores. A secondary aim of the study was to explore the relationships between Parenting Styles, the eight domains of PSE and the four MBTI dimensions. A relationship was found between increases in PSE and an increase in Authoritative Parenting Style scores and a decrease in Permissive Parenting Style score. The study also found that differing on three or four of the MBTI dimensions from the child did not have a negative effect on PSE. In contrast to similar studies, no relationship was found to exist between Parenting Styles and the four MBTI dimensions (Huver et al., 2009). Overall the participants found the report to be accurate, useful and would 79% agreed they would recommend this approach to a friend.

PSE has been associated with the quality of the parent-child relationship and is linked to higher self-esteem, academic performance and social functioning in children (Donnellan et al., 2005). The findings of this study are consistent with previous studies that have shown that PSE can be positively influenced by intervention programs. Unlike previous research, this study shows a method in which PSE can be increased outside of a class or group setting and with 'non-problematic' children of fully-functioning parents. The feedback provided on the accuracy and usefulness of the report, as well as their likelihood to recommend this to a friend, seem to indicate many parents would be open to this approach.

Chapter Five

Conclusion

5.1 Introduction

The purpose of this research was to determine whether knowledge of the individual difference in Personality Type influences Parenting Style and PSE. These areas are of critical importance for positive child outcomes. A secondary aim of the research was to examine the relationships between Parenting Styles, the eight domains of PSE and the four MBTI dimensions. Research exploring these areas has been limited yet assertions had been made suggesting significant relationships exist.

The preceding chapters examined the effects of PSE levels on the parent and the child and demonstrated how this could be influenced by various interventions, including an awareness of the individual differences that exist in personality. These chapters also explored Parenting Style as well as the MBTI indicator. While the study found a relationship between PSE and Authoritative and Permissive styles, no relationship was found to exist between the four MBTI dimensions and either Parenting Style and PSE levels. The research questions primarily explored through a quantitative longitudinal-experimental approach. Some qualitative methods were also used to provide context to the results. The results and an interpretation of the findings were then presented to demonstrate the relevance of the study in the context of previous studies.

5.2 Limitations

The current study has limitations that should be considered during future research of this type. The study was limited in the number of subjects that participated. In addition, significantly more women than men took part. The MBTI indicator was selected as it has

proven useful in numerous applications. However, only limited research exists on the use of MBTI to improve parent-child relationships. It has also proven easy for individuals to understand and was very flexible from a reporting perspective.

The method of validating the Type of every parent and child as well as producing a tailored report on each Personality Type and parenting recommendations was extremely time-consuming. Another limitation relates to researcher bias which is relevant to all studies. The nature of the quantitative experimental design will likely have limited the effects of bias.

5.3 Recommendations

It is essential that parenting interventions are rigorously assessed to validate the short and longer-term effectiveness and to explore methods that will deliver the best possible outcomes for both parents and children. Further similar studies should seek to have larger numbers and greater representation of both genders as well as greater representation of all Parenting Styles. It is also recommended that these studies examine the dynamics of all members of the family, both parents if applicable, and all siblings.

Despite its popularity, there remain issues with the reliability and validity of the MBTI, specifically with regards to whole preference clarity. For this reason, further research should be conducted using more reliable and valid tools such as the Sixteen Personality Factor Questionnaire (16PF). Most researchers agree there are more dimensions to personality than those assessed through MBTI. 16PF measures many of the same aspects of personality and has been shown to be more consistent than MBTI in relation to Test-Retest reliability (Rossier et al., 2004).

More efficient methods should be considered for future studies, especially if larger samples are being examined. MBTI has been administered frequently in group sessions and it would be interesting to explore if this mechanism produced similar results. Finally, it is recommended that future studies utilise a team of researchers rather than an individual to manage the large volume of tasks required in a study of this Type as well as to researcher bias.

5.4 Conclusion

Health practitioners working to increase PSE should be made aware of this method of increasing PSE through an understanding of the individual differences in personality between parent and child. Participants rated the report as accurate, useful and the majority would recommend this process to another parent. By creating an awareness of the individual differences that exist in personality between the parent and the child, as well as educating parents on techniques aligned to that style, professionals can support parents in reducing Authoritarian parental behaviours and in increasing PSE leading to more positive outcomes for both the child and the parent. This approach may serve as an alternative when other interventions are not available, when the parent may feel comfortable participating in a group session or when they fall out of the scope of the target audience of such sessions. This approach could also be used as a preventative method, before problematic child behaviours occur and can be administered in 1-2-1 setting.

References

- Anderson, J. C., Funk, J. B., Elliott, R., & Smith, P. H. (2003). Parental support and pressure and children's extracurricular activities: Relationships with amount of involvement and affective experience of participation. *Journal of Applied Developmental Psychology*, 24(2), 241-257.
- Ardelt, M., & Eccles, J. (2001). Effects of Mothers' Parental Efficacy Beliefs and Promotive Parenting Strategies on Inner-City Youth. *Journal of Family Issues*, 22(8), 944-972. <http://dx.doi.org/10.1177/019251301022008001>
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122.
- Bandura, A., Reese, L., & Adams, N. E. (1982). Microanalysis of action and fear arousal as a function of differential levels of perceived self-efficacy. *Journal of personality and social psychology*, 43(1), 5.
- Baumrind, D. (1991). Parenting Styles and Adolescent Development. *The Encyclopaedia of Adolescence*, 2, 746-58.
- Baumrind, D. (1971). Current Patterns of Parental Authority. *Developmental Psychology*, 4(1, Pt.2), 1-103. <http://dx.doi.org/10.1037/h0030372>
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic psychology monographs*, 75(1), 43-88.
- Bayne, R. (2004). *Psychological Types at Work*. London: Thomson Learning.
- Belsky, J. (1984). The determinants of parenting: a process model. *Child Development*, 55, 83-96.
- Belsky, J., & Barends, N. (2002). Personality and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting* (2nd ed.) (pp. 415-438) Mahwah, NJ: Erlbaum.
- Biletski, J., Macintosh, J., & McIsaac, K. (2013). *A description of parenting styles among a sample of Ontario parents*. Presentation, Public Health Ontario.
- Bloomfield, L., & Kendall, S. (2007). Testing a parenting programme evaluation tool as a pre-and post-course measure of parenting self-efficacy. *Journal of Advanced Nursing*, 60(5), 487-493.
- Bloomfield, L., & Kendall, S. (2010). Audit as evidence: the effectiveness of '123 magic' programmes. *Community Practitioner*.
- Briggs-Myers, I., McCaulley, M., Quenk, N., & Hammer, A. (1998). *A Guide to the Development and Use of the Myers-Briggs Type Indicator*. USA: Consulting Psychologists Press.

- Carlyn, M. (1977). An assessment of the Myers-Briggs type indicator. *Journal of Personality Assessment, 41*(5), 461-473.
- Caspi, A., Roberts, B.W., & Shiner, R. (2005). Personality development. *Annual Review of Psychology, 56*, 453-484.
- Celada, T. C. (2010). *Parenting styles as related to parental self-efficacy and years living in the United States among Latino immigrant mothers*. Alliant International University, Los Angeles.
- Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004). *Learning styles and pedagogy in post 16 learning: a systematic and critical review*. The Learning and Skills Research Centre.
- Coleman, P. K. & Karraker, K. H. (1997). Self-efficacy and parenting quality: findings and future applications. *Developmental Review, 18*, 47-85.
- Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: the case for nature and nurture. *American Psychologist, 55*(2), 218.
- Corlett, E., & Millner, N. (1993). *Navigating Midlife*. Palo Alto, Calif.: CPP Books.
- Day, D. M., Factor, D. C., & Szkiba-Day, P. J. (1994). Relations among discipline style, child behaviour problems, and perceived ineffectiveness as a caregiver among parents with conduct problem children. *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du comportement, 26*(4), 520.
- DiTiberio, J. K. & Jensen, G. H. (1995). *Writing and Personality, Finding Your Voice, Your Style, Your Way*. Palo Alto, CA: Davies-Black Pub.
- Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological science, 16*(4), 328-335.
- Dunning, D. (2010). *What's your type of career?* Boston, MA: Nicholas Brealey Pub.
- Fitzgerald, C., & Kirby, L. (1997). *Developing Leaders*. Palo Alto, Calif.: Davies-Black.
- Fleenor, J. W. (2001). Review of the Myers-Briggs Type Indicator, Form M. In B. S. Plake & J. C. Impara (Eds.), *The Fourteenth Mental Measurements Yearbook*. (pp. 816-818). Lincoln, NB: The University of Nebraska Press.
- Fleenor, J. W., & Taylor, S. (1994). Construct validity of three self-report measures of creativity. *Educational and Psychological Measurement, 54*(2), 464-470.
- Furnham, A., Moutafi, J., & Crump, J. (2003). The relationship between the revised Neo-Personality Inventory and the Myers-Briggs Type Indicator. *Social Behavior and Personality: An International Journal, 31*(6), 577-584.
<http://dx.doi.org/10.2224/sbp.2003.31.6.577>

- Hartzler, M. (2004). *Using Type Theory in Career Counseling*. Palmetto, FL: Type Makes a Difference, Inc.
- Harvey, R. J. (1996). Reliability and validity. In A. L. Hammer (Ed.), *MBTI Applications* (pp. 5-29). Palo Alto, CA: Consulting Psychologists Press.
- Hill, N. E., & Bush, K. R. (2001). Relationships between parenting environment and children's mental health among African American and European American mothers and children. *Journal of Marriage and Family*, 63(4), 954-966.
- Hirsh, E., Hirsh, K., & Hirsh, S. (2003). *Introduction to Type and Teams*. Palo Alto, Calif.: Consulting Psychologists Press.
- Hirsh, S., & Kise, J. (2000). *Introduction to Type and Coaching*. Palo Alto, Calif.: Consulting Psychologist's Press.
- Hosogi, M., Okada, A., Fujii, C., Noguchi, K., & Watanabe, K. (2012). Importance and usefulness of evaluating self-esteem in children. *BioPsychoSocial medicine*, 6(1), 1.
- Howes, R. J. & Carskadon, T. G. (1979). Test-Retest Reliabilities of the Myers-Briggs Type Indicator as a Function of Mood Changes. *Research in Psychological Type*, 2(1), 67-72.
- Huver, R. M., Otten, R., de Vries, H., & Engels, R. C. (2009). Personality and parenting style in parents of adolescents. *Journal of Adolescence*, 33(3), 395-402.
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical psychology review*, 25(3), 341-363.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: implications for contingent self-worth and coping. *Developmental psychology*, 35(3), 835.
- Keirse, D. (1998). *Please Understand Me II*. Del Mar, CA: Prometheus Nemesis Book Company.
- Kendall, S., & Bloomfield, L. (2005). Developing and validating a tool to measure parenting self-efficacy. *Journal of Advanced Nursing*, 51(2), 174-181.
<http://dx.doi.org/10.1111/j.1365-2648.2005.03479.x>
- Kise, J.A.G. (2006). *Differentiated Coaching: A Framework for Helping Teachers Change*. Thousand Oaks, CA: Corwin
- Kise, J.A.G. (2007). *Differentiation through Personality Types: A Framework for Instruction, Assessment, and Classroom Management*. Thousand Oaks, CA: Corwin
- Kise, J., & Russell, B. (2010). *Creating a coaching culture for professional learning communities*. Bloomington, IN: Solution Tree Press.
- Kuipers, B. S., Higgs, M. J., Tolkacheva, N. V., & de Witte, M. C. (2009). The influence of Myers-Briggs type indicator profiles on team development processes: An empirical

study in the manufacturing industry. *Small Group Research*.

- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child development*, 62(5), 1049-1065.
- Losoya, S. H., Callor, S., Rowe, D. C., & Goldsmith, H. H. (1997). Origins of familial similarity in parenting: a study of twins and adoptive siblings. *Developmental Psychology*, 33, 1012–1023.
- Martinez, I., & Garcia, J. F. (2008). Internalization of values and self-esteem among Brazilian teenagers from authoritative, indulgent, authoritarian, and neglectful homes. *Adolescence*, 43(169), 13.
- Meunier, J. C., & Roskam, I. (2009). Self-efficacy beliefs amongst parents of young children: Validation of a self-report measure. *Journal of Child and Family Studies*, 18(5), 495-511.
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. *Handbook of child psychology*.
- Macdonald, G. (2001). *Effective interventions for child abuse and neglect: An evidence-based approach to planning and evaluating interventions*. Chichester: John Wiley and Sons Ltd.
- McPeck, R. W., Urquhart, C., Breiner, J. F., Holland, D. F., & Cavalleri, D. (2011). The impact on student academic achievement performance and attitudes of psychological type and its introduction to the classroom. *Journal of Psychological Type*, 71(3), 54-71
- Myers, I., McCaulley, M., & Most, R. (1985). *Manual, a guide to the development and use of the Myers-Briggs type indicator*. Palo Alto, Ca.: Consulting Psychologists Press.
- Ohan, J., Leung, D., & Johnston, C. (2000). The Parenting Sense of Competence scale: Evidence of a stable factor structure and validity. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, 32(4), 251-261.
<http://dx.doi.org/10.1037/h0087122>
- Prinzle, P., Onghena, P., Hellinckx, W., Grietens, H., Ghesquiere, P., & Colpin, H. (2004). Parent and child personality characteristics as predictors of negative discipline and externalizing problem behaviour in children. *European Journal of Personality*, 18, 73–102.
- Quenk, N. (2002). *Was that really me?*. Palo Alto, Calif.: Davies-Black Pub.
- Raikes, H. A., & Thompson, R. A. (2005). Efficacy and social support as predictors of parenting stress among families in poverty. *Infant mental health journal*, 26(3), 177-190.
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard business review*, 81(12),

46-55.

- Roberts, B., Kuncel, N., Shiner, R., Caspi, A., & Goldberg, L. (2007). The Power of Personality: The Comparative Validity of Personality Traits, Socioeconomic Status, and Cognitive Ability for Predicting Important Life Outcomes. *Perspect On Psych Science*, 2(4), 313-345. <http://dx.doi.org/10.1111/j.1745-6916.2007.00047.x>
- Robinson, C., Mandleco, B., Olsen, S., & Hart, C. (1995). Authoritative, Authoritarian, and Permissive Parenting Practices: Development of a New Measure. *Psychological Reports*, 77(3), 819-830. <http://dx.doi.org/10.2466/pr0.1995.77.3.819>
- Rossier, J., de Stadelhofen, F. M., & Berthoud, S. (2004). The hierarchical structures of the NEO-PI-R and the 16 PF 5. *European Journal of Psychological Assessment*, 20, 27-38.
- Rothrauff, T. C., Cooney, T. M., & An, J. S. (2009). Remembered parenting styles and adjustment in middle and late adulthood. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 64B (1): 137-146.
- Sánchez-Miguel, P. A., Leo, F. M., Sánchez-Oliva, D., Amado, D., & García-Calvo, T. (2013). The importance of parents' behavior in their children's enjoyment and amotivation in sports. *Journal of human kinetics*, 36(1), 169-177.
- Schmittmann, V. D., Visser, I., & Raijmakers, M. E. (2006). Multiple learning modes in the development of performance on a rule-based category-learning task. *Neuropsychologia*, 44(11), 2079-2091.
- Segal, D. L., & Coolidge, F. L. (2004). Objective assessment of personality and psychopathology: An overview. *Comprehensive handbook of psychological assessment: Personality assessment*, 3-13.
- Stewart-Brown, S. (2008). Improving parenting: the why and the how. *Archives of Disease in Childhood*, 93, 102-104.
- Stattin, H., & Kerr, M. (2000). Parental Monitoring: A Reinterpretation. *Child Development*, 71(4), 1072-1085. <http://dx.doi.org/10.1111/1467-8624.00210>
- Strassberg, K. A., Dodge, G. S., Pettit, & Bates, J. E. (1994). Spanking in the home and children's subsequent aggression toward kindergarten peers. *Development and Psychopathology*, 6, 445-461.
- Type Finder,. (2015). *How Personality Type Affects Parenting Styles: A Research Report*. San Francisco, CA: Truity. Retrieved from <http://www.truity.com/sites/default/files/PersonalityTypeParenting-Report.pdf>
- Underwood, M. K., Beron, K. J., & Rosen, L. H. (2009). Continuity and change in social and physical aggression from middle childhood through early adolescence. *Aggressive Behavior*, 35(5), 357-375.
- Wells-Parker, E., Miller, D. I., & Topping, J. S. (1990). Development of control-of-outcome scales and self-efficacy scales for women in four life roles. *Journal of Personality Assessment*, 54(3-4), 564-575.

Appendix A

Phase 1 Questionnaires

Section one: Demographic Data

Please provide an answer to each question

Gender	Male Female Prefer not to answer
Age	17 or younger 18-21 years old 21-29 years old 20-39 years old 40-49 years old 50-59 years old 60 years or older Prefer not to answer
Ethnicity	White Hispanic or Latino Black or African American Native American or American Indian Asian / Pacific Islander Other Prefer not to answer
Number of children in household	

Section two: Parenting Styles

Using the scale below, please enter in the boxes how often you engage in different parenting practices. The scale ranges from 0 (Never) to 5 (Always).

You may use any number between 0 and 5. Please answer all statements.

1. I am responsive to my child's feelings and needs	<input type="text"/>
2. I give comfort and understanding when my child is upset	<input type="text"/>
3. I give praise when my child is good	<input type="text"/>
4. I give my child reasons why rules should be followed	<input type="text"/>
5. I help my child understand the impact of his/her behaviour	<input type="text"/>
6. I explain the consequences of bad behaviour to my child before he/she misbehaves	<input type="text"/>
7. I take into account my child's desires before asking him/her to do something	<input type="text"/>
8. I encourage my child to freely express him/herself when disagreeing with his/her parents	<input type="text"/>
9. I show respect for my child's opinions by encouraging him/her to express them	<input type="text"/>
10. I use physical consequences as a way of disciplining my child	<input type="text"/>
11. I yell or shout when my child misbehaves	<input type="text"/>
12. I scold and criticize to make my child improve	<input type="text"/>
13. I give consequences by taking away privileges with little or no explanation	<input type="text"/>

14. I use threats as consequences with little or no justification	<input type="checkbox"/>
15. I give consequences by putting my child off somewhere with little or no explanation	<input type="checkbox"/>
16. I give into my child when he/she causes a commotion about something	<input type="checkbox"/>
17. I threaten my child with consequences more often than actually giving them	<input type="checkbox"/>
18. I state consequences to my child and do not actually do them	<input type="checkbox"/>
19. I am confident about my parenting abilities	<input type="checkbox"/>
20. I find it difficult to discipline my child	<input type="checkbox"/>
21. I am unsure of how to solve my child's misbehaviour	<input type="checkbox"/>

Section three: Parental Self Efficacy Measure

Using the scale below, please enter in the boxes how much you agree with each statement. The scale ranges from 0 (completely disagree) to 10 (completely agree). You may use any number between 0 and 10. Please answer all statements

1. I am able to show affection towards my child	<input type="text"/>
2. I can recognise when my child is happy or sad.	<input type="text"/>
3. I am confident my child can come to me if they're unhappy.	<input type="text"/>
4. When my child is sad I understand why.	<input type="text"/>
5. I have a good relationship with my child.	<input type="text"/>
6. I find it hard to cuddle my child.	<input type="text"/>
7. I am able to have fun with my child.	<input type="text"/>
8. I am able to enjoy each stage of my child's development.	<input type="text"/>
9. I am able to have nice days with my child.	<input type="text"/>
10. I can plan activities that my child will enjoy.	<input type="text"/>
11. Playing with my child comes easily to me.	<input type="text"/>
12. I am able to help my child reach their full potential.	<input type="text"/>
13. I am able to explain things patiently to my child.	<input type="text"/>

14. I can get my child to listen to me.	<input type="checkbox"/>
15. I am able to comfort my child.	<input type="checkbox"/>
16. I am able to listen to my child.	<input type="checkbox"/>
17. I am able to put myself in my child's shoes.	<input type="checkbox"/>
18. I understand my child's needs.	<input type="checkbox"/>
19. As a parent I feel I am in control.	<input type="checkbox"/>
20. My child will respond to the boundaries I put in place.	<input type="checkbox"/>
21. I can get my child to behave well without a battle.	<input type="checkbox"/>
22. I can remain calm when facing difficulties.	<input type="checkbox"/>
23. I can't stop my child behaving badly.	<input type="checkbox"/>
24. I am able to stay calm when my child is behaving badly.	<input type="checkbox"/>
25. Setting limits and boundaries is easy for me.	<input type="checkbox"/>
26. I am able to stick to the rules I set for my child.	<input type="checkbox"/>
27. I am able to reason with my child.	<input type="checkbox"/>
28. I can find ways to avoid conflict.	<input type="checkbox"/>

29. I am consistent in the way I use discipline.	<input type="checkbox"/>
30. I am able to discipline my child without feeling guilty.	<input type="checkbox"/>
31. It is difficult to cope with other people's expectations of me as a parent.	<input type="checkbox"/>
32. I am not able to assert myself when other people tell me what to do with my child.	<input type="checkbox"/>
33. Listening to other people's advice makes it hard for me to decide what to do.	<input type="checkbox"/>
34. I can say 'no' to other people if I don't agree with them.	<input type="checkbox"/>
35. I can ignore pressure from other people to do things their way.	<input type="checkbox"/>
36. I do not feel a need to compare myself to other parents.	<input type="checkbox"/>
37. I know I am a good enough parent.	<input type="checkbox"/>
38. I manage the pressures of parenting as well as other parents do.	<input type="checkbox"/>
39. I am not doing that well as a parent.	<input type="checkbox"/>
40. As a parent I can take most things in my stride.	<input type="checkbox"/>
41. I can be strong for my child.	<input type="checkbox"/>
42. My child feels safe around me.	<input type="checkbox"/>

43. I am able to recognise developmental changes in my child.	<input type="checkbox"/>
44. I can share ideas with other parents.	<input type="checkbox"/>
45. I am able to learn and use new ways of dealing with my child.	<input type="checkbox"/>
46. I am able to make the changes needed to improve my child's behaviour.	<input type="checkbox"/>
47. I can overcome most problems with a bit of advice.	<input type="checkbox"/>
48. Knowing that other people have similar difficulties with their children makes it easier for me.	<input type="checkbox"/>

Appendix B

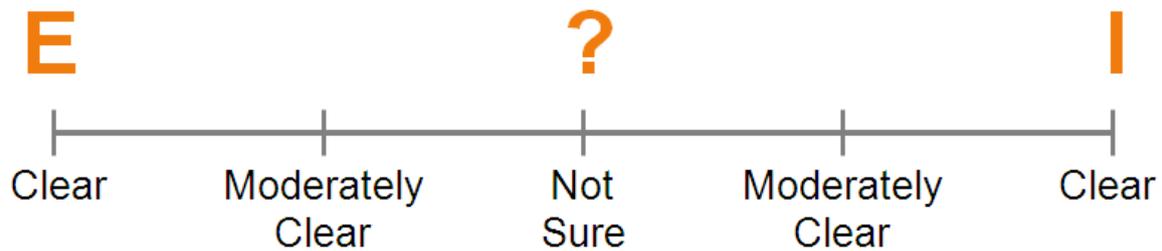
Phase 2 MBTI Type Adult Assessment Sample Questions

Extraversion & Introversion

Where you prefer to get and focus your 'energy' or attention

Do-think-do	vs	Think-do-think
Action	vs	Reflection
Talk things through	vs	Think things through
Expressive	vs	Contained
Interaction	vs	Concentration
Breadth of interest	vs	Depth of Interest

What is your preference?

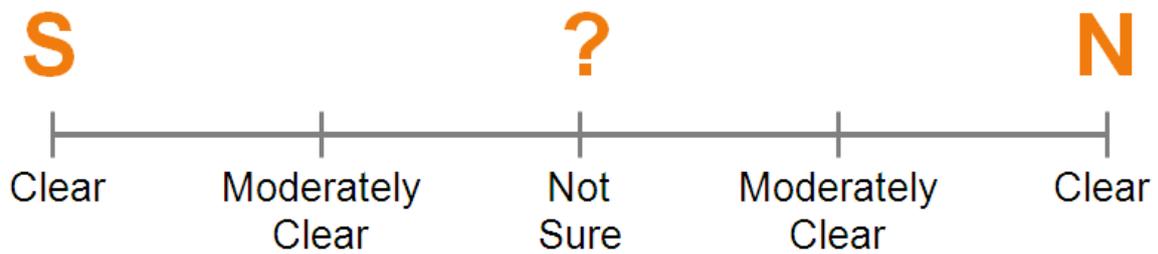


Sensing & iNtuition

What kind of information you prefer to gather and trust

Facts	vs	Ideas
Specifics	vs	Big picture
Realistic	vs	Imaginative
Here and now	vs	Anticipating the future
Practical	vs	Theoretical
Observant	vs	Conceptual

What is your preference?

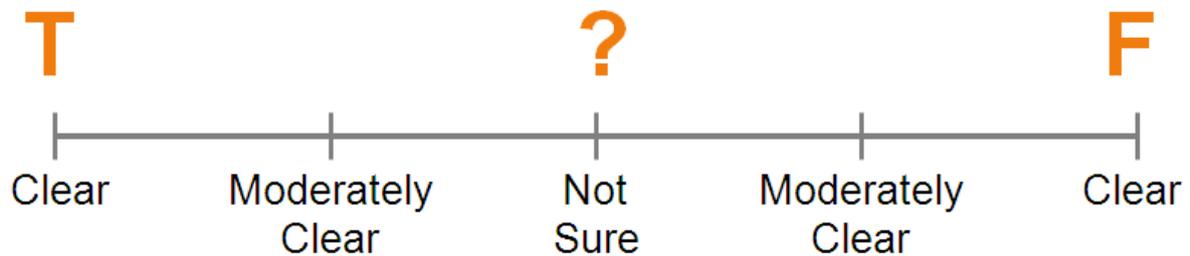


Thinking & Feeling

What process you prefer to use in coming to decisions

Guided by cause & effect reasoning	vs	Guided by personal values
Logical analysis	vs	Understand others POV
Seek objective truth	vs	Seek Harmony
Impersonal criteria	vs	Personal circumstances
Critique	vs	Praise
Focus on task	vs	Focus on relationship

What is your preference?

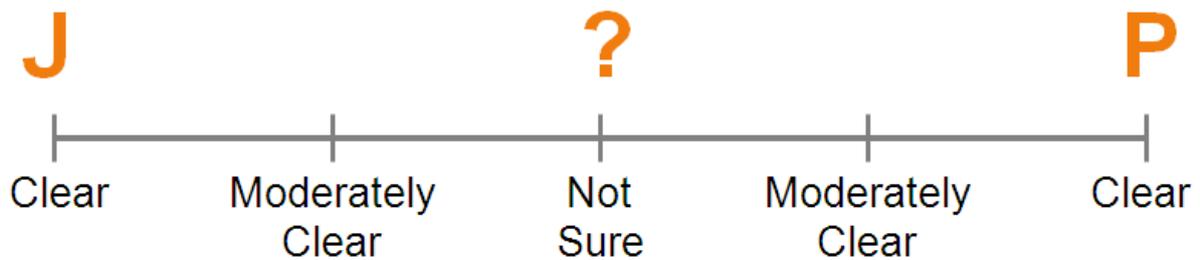


Judging & Perceiving

How you prefer to deal with the world around you, your
'lifestyle'

Planned	vs	Emergent
Organised	vs	
Flexible		
Controlled	vs	Unconstrained
Structured	vs	Go with the flow
Scheduled	vs	Spontaneous

What is your preference?



Appendix C

Phase 2 MBTI Type Child Assessment Sample Questions

Extraversion & Introversion

How is your child's energy naturally directed?

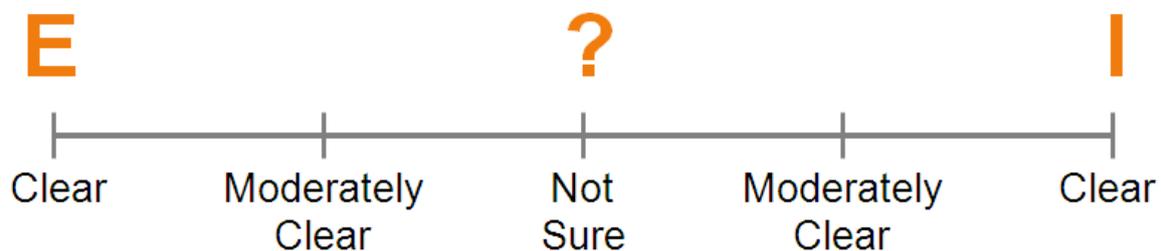
Children Who Prefer Extraversion

- Think out loud
- Show energy and enthusiasm for activities
- May easily be distracted by events and actions
- Are attracted to action and activity
- May act before they think
- May say things before thinking them through
- Like variety and action
- Interrupt and finish other's sentences when excited and want to share their ideas
- Think out loud while talking to others

Children Who Prefer Introversion

- Keep thoughts to self
- Watch first, then try task or activity
- Can ignore distractions
- Like to spend time alone to get re-energized
- Like to observe or think about things before trying them
- Pause before answering new questions
- Enjoy individual or small group activities
- Start conversations from their point of view
- Think ahead and then respond to others

What is your child's preference?



Sensing & iNtuition

What kind of information does your child naturally notice and remember?

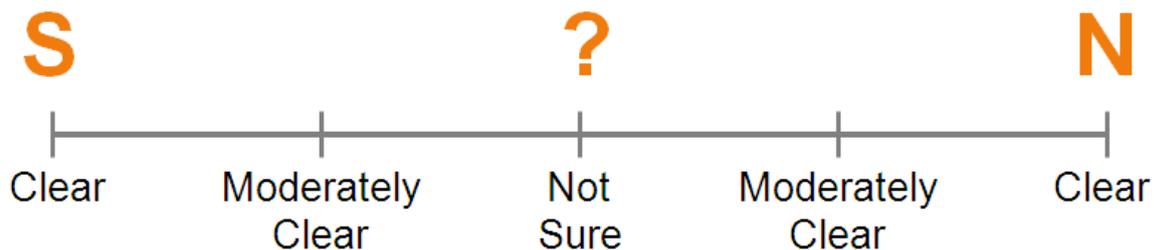
Children Who Prefer Sensing

- Are realistic and practical
- Like to use eyes, ears, and other senses to find out what's happening
- Direct attention to the "here and now"
- Prefer step-by-step learning
- Work at a steady pace
- Are patient with details but impatient when details get complicated
- Dislike new problems unless there are standard ways to solve them
- Trust their past experience
- Focus on the present

Children Who Prefer Intuition

- Are imaginative and enjoy stories and metaphors
- Like to use imagination to come up with new ways to do things, new possibilities
- Like to imagine what could be
- May appear to be sporadic and random in their learning
- Work in bursts of energy with slower, less productive periods in between
- Are impatient with details but don't mind complicated situations
- Like solving new problems, and dislike doing the same thing over
- Trust their vision and fantasies
- Focus on the future

What is your child's preference?



Thinking & Feeling

How does your child make decisions?

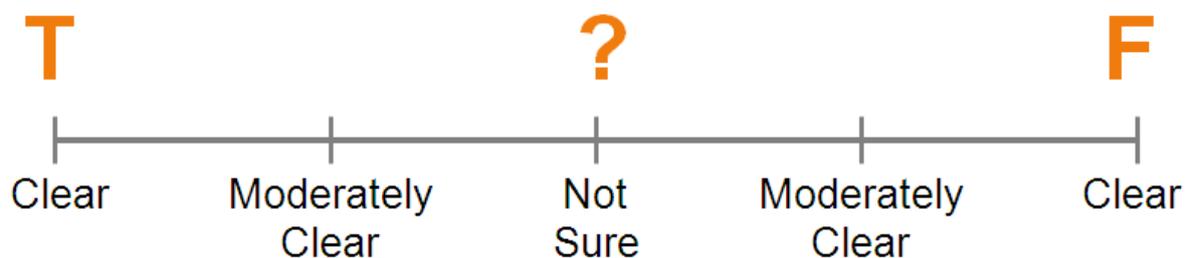
Children Who Prefer Thinking

- Express themselves directly, with honesty and clarity
- Are more truthful than tactful, if forced to choose
- Are most convinced by logic
- Want fairness and justice
- Want to be praised for their independence and achievements
- Are able to determine if they have done something well
- May argue or debate for fun
- May neglect and hurt other's feelings without knowing it
- Expect others to be responsible for themselves
- Spontaneously find flaws in ideas, things, or people

Children Who Prefer Feeling

- Express themselves with warmth, diplomacy, and tact
- Are more tactful than truthful, if forced to choose
- Are most convinced by their personal values
- Want harmony and affection
- Want to be praised for their personal contributions and cooperative spirit
- Need feedback and rely on others to tell them how they have done something well
- Avoid arguments, conflict, and confrontation
- Are aware of other people's feelings
- Work at developing and motivating others
- Spontaneously appreciate the good in people

What is your child's preference?



Judging & Perceiving

How does your child prefer the world around him / her to be organised?

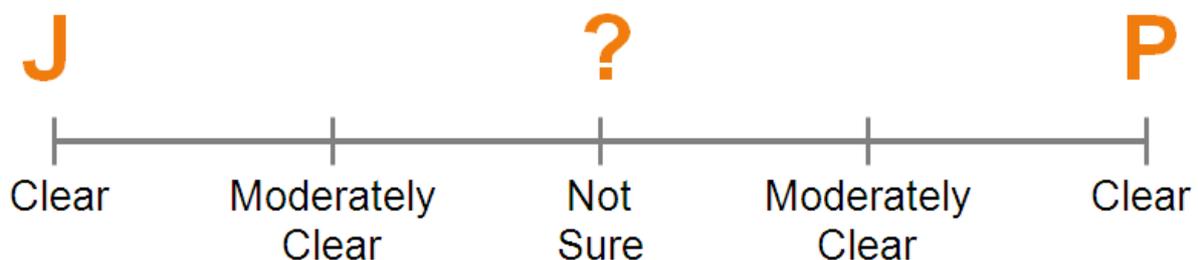
Children Who Prefer Judging

- Like to know what's going to happen
- Know how things "ought to be"
- Find rules comforting and often remind others to obey them
- Usually work before play – finish their chores or homework before playtime
- Have enthusiasm for finishing projects – set and definite goals and work to accomplish them
- Like to make and stick with a plan
- Are very decisive and have strong opinions but sometimes appear in-flexible and rigid
- Keep a well-ordered room
- Want to be in charge - may appear bossy

Children Who Prefer Perceiving

- Enjoy spontaneity
- Show a lot of curiosity
- Finding rules limiting and often forget or disregard them
- Turn work into to play – weave play into their chores or homework time
- Have enthusiasm for starting projects – many new ideas but may not follow through
- Like to adapt and respond to changes
- Have trouble making decisions and may not follow through with commitments
- Do not object to having things out of place
- Are easy going and let others call the shots

What is your child's preference?



Appendix D

Phase 3 Additional Questions

1. On a scale of 1 – 10, where 1 is not useful and 10 is very useful, how useful did you find the **report**?
2. On a scale of 1 – 10, where 1 is very inaccurate and 10 is very accurate, how accurate did you find the report?
3. On a scale of 1 – 10, where 1 is very inaccurate and 10 is very accurate, how likely is it that you would recommend this report to a friend?
4. What, if any, of the information, did you put into practice?
5. What other comments or thoughts would you like to share?

Appendix E

Sample 'Personality & Parenting Report

MOTHERS TYPE- ESFJ

The Caregivers

These types are people persons - they love people. They are warmly interested in others. They gather specific, detailed information about others, and turn this information into supportive judgments. They want to like people, and have a special skill at bringing out the best in others. They are extremely good at reading others, and understanding their point of view. The ESFJ's strong desire to be liked and for everything to be pleasant makes them highly supportive of others. People like to be around ESFJs, because the ESFJ has a special gift of invariably making people feel good about themselves.

The ESFJ takes their responsibilities very seriously, and is very dependable. They value security and stability, and have a strong focus on the details of life. They see before others do what needs to be done, and do whatever it takes to make sure that it gets done. They enjoy these types of tasks, and are extremely good at them.

ESFJs are warm and energetic. They need approval from others to feel good about themselves. They are hurt by indifference and don't understand unkindness. They are very giving people, who get a lot of their personal satisfaction from the happiness of others. They want to be appreciated for who they are, and what they give. They're very sensitive to others, and freely give practical care. ESFJs are such caring individuals, that they sometimes have a hard time seeing or accepting a difficult truth about someone they care about.

With Extraverted Feeling dominating their personality, ESFJs are focused on reading other people. They have a strong need to be liked, and to be in control. They are extremely good at reading others, and often change their own manner to be more pleasing to whoever they're with at the moment.

The ESFJ's value system is defined externally. They usually have very well-formed ideas about the way things should be, and are not shy about expressing these opinions. However, they weigh their values and morals against the world around them, rather than against an internal value

system. They may have a strong moral code, but it is defined by the community that they live in, rather than by any strongly felt internal values.

ESFJs who have had the benefit of being raised and surrounded by a strong value system that is ethical and centred around genuine goodness will most likely be the kindest, most generous souls who will gladly give you the shirt off of their back without a second thought. For these individuals, the selfless quality of their personality type is genuine and pure. ESFJs that have not had the advantage of developing their own values by weighing them against a good external value system may develop very questionable values. In such cases, the ESFJ most often genuinely believes in the integrity of their skewed value system. They have no internal understanding of values to set them straight. In weighing their values against our society, they find plenty of support for whatever moral transgression they wish to justify. This type of ESFJ is a dangerous person indeed. Extraverted Feeling drives them to control and manipulate, and their lack of Intuition prevents them from seeing the big picture. They're usually quite popular and good with people, and good at manipulating them. Unlike their ENFJ cousin, they don't have Intuition to help them understand the real consequences of their actions. They are driven to manipulate other to achieve their own ends, yet they believe that they are following a solid moral code of conduct.

All ESFJs have a natural tendency to want to control their environment. Their dominant function demands structure and organization, and seeks closure. ESFJs are most comfortable with structured environments. They're not likely to enjoy having to do things which involve abstract, theoretical concepts, or impersonal analysis. They do enjoy creating order and structure, and are very good at tasks which require these kinds of skills. ESFJs should be careful about controlling people in their lives who do not wish to be controlled.

ESFJs respect and believe in the laws and rules of authority, and believe that others should do so as well. They're traditional, and prefer to do things in the established way, rather than venturing into uncharted territory. Their need for security drives their ready acceptance and adherence to the policies of the established system. This tendency may cause them to sometimes blindly accept rules without questioning or understanding them.

An ESFJ who has developed in a less than ideal way may be prone to being quite insecure, and focus all of their attention on pleasing others. He or she might also be very controlling, or overly sensitive, imagining bad intentions when there weren't any.

ESFJs incorporate many of the traits that are associated with women in our society. However, male ESFJs will usually not appear feminine at all. On the contrary, ESFJs are typically quite conscious about gender roles and will be most comfortable playing a role that suits their gender in our society. Male ESFJs will be quite masculine (albeit sensitive when you get to know them), and female ESFJs will be very feminine.

ESFJs at their best are warm, sympathetic, helpful, cooperative, tactful, down-to-earth, practical, thorough, consistent, organized, enthusiastic, and energetic. They enjoy tradition and security, and will seek stable lives that are rich in contact with friends and family.

Parenting

As parents, ESFJs are extremely committed to their roles and duties, and contain and freely express a great deal of love and affection for their children. They expect their children to honour, respect and obey their parents, and do not tolerate well any deviance from this rule of behaviour. Their Feeling preference makes it difficult for them to punish or discipline their children. If they have not worked on overcoming this issue, they may tend to punish their children in less obvious ways, such as using guilt manipulation. This is a potential pitfall for the ESFJ to overcome. It is generally more effective and healthier to directly issue punishment when called for.

The ESFJ is very service-oriented and concerned with the comfort and happiness of those around them. Consequently, their children are likely to have their practical needs taken care of very efficiently and responsibly. Their ESFJ parents will create structured environments for the children, where their boundaries will be well-defined and known.

The ESFJ's tendency to be controlling, combined with their emphasis on tradition and security, makes it likely that they will be at least somewhat strict and controlling of their children. However, they will also be their children's strongest, loudest advocate. Children of ESFJ parents are likely to rebel from their authority at some point, which will cause a stressful time for both parent and child. In this case, the ESFJ natural tendency is to make their children feel guilty about their behaviour. Depending on the extent of the guilt manipulation, this may cause serious damage to the relationship.

Most ESFJs are remembered fondly by their children for their genuine love and affection, and for the well-defined structure and guidelines they created for their children.

CHILD TYPE

ISTJ - Being a kid is serious business

"He's so responsible; sometimes I wonder who's the parent and who's the child."

The most important thing to remember about children of this type is that they know and trust those things they have personally experienced. They pride themselves on their accuracy and memory for detail and their ability to make logical and objective decisions. Above all, they are realistic, down-to-earth children who want to be parented with consistency, clarity, and fairness. Lasting self-esteem for children of this type develops as a result of being allowed to explore the world from their private and stable vantage point and gather lots of factual data before making logical decisions. They know you love them when you trust and respect them for what they know to be true.

Some Characteristics of the ISTJ Child - Behaviours to Look For

- Even at very young ages (3-4) ISTJ kids can be very serious
- The ISTJ child may connect with only one parent for a long time
- Young ISTJs may not smile with strangers
- The ISTJ child can be very aware of their bodies need for sleep and food
- The ISTJ child will probably thrive with a schedule, and be upset when off schedule
- The ISTJ child will feel secure in a home environment and very insecure when not in it
- It can take some time for the ISTJ child to get used to new surroundings...so frequent moves can unsettle the ISTJ child
- All kids cry, but you may see the ISTJ child crying less than other types
- As they grow they will take their time getting involved with "social" activities....they don't like being rushed/pushed into social events
- Don't be surprised if your child is quiet and enjoys being alone and/or gets

The School Aged ISTP

Age 5 to 10

The highly organized structure of the traditional school experience is well matched to the natural preferences of children of this type. They like the order and rules of school as well as the predictable routine. They enjoy working alone or with a partner, if that person is their intellectual equal, and since they are often concerned about grades, they tend to be fairly competitive academically. Like all children, they do best with teachers who mirror their style. They find inconsistent, overly mean, or highly emotional teachers off-putting and prefer teachers who are organized, efficient, and clear in their expectations. While they have great powers of concentration, they can become distracted and unnerved if the classroom is too chaotic. School-aged children of this type demonstrate clearly traditional tendencies, and most have a strong need to belong. Like children of many other types, young children of this type get that need satisfied in their families and perhaps with one or two close friends. As they move up in grade school, their need for belonging is met more through their peers, but often not as much as it is for children of other types. Instead, they like to maintain a close relationship with their parents and a small circle of friends for many years. For them, it is very important to have a clear sense of which group they belong to and the politics of group dynamics can be very confusing and upsetting to them. Shifts in what or who is acceptable as a playmate present a special challenge for children of this type who may have previously enjoyed close friendships with children of the opposite sex. They have to somehow reconcile their need for gender identification with their need for social belonging.

In some cases, the child will comply with the expectations of his or her same-sex friends. It confirms much of what they have seen around them, and that feels comfortable. Other children of this type, particularly girls, may be resistant to these social traps. They often decide not to deal with them at all and spend more time alone. Growing girls of this type can have such high standards for themselves and their friends that they may be either unwilling or unable to compromise their behaviour to fit in with the other girls. They'd rather avoid the pressure and they aren't forced to act in ways that are unnatural or misleading.

Children of this type love to demonstrate their knowledge and competence to other children but really enjoy impressing adults they know well. A favourite activity of many growing children of this type is to be given a specific problem to solve or to be asked to research something for their

parents. They take pride in their hard work and derive great satisfaction from doing thorough research and coming to a factually based, logical conclusion.

The Joys and Challenges of raising this school aged child

Because children of this type are so literal and precise in their thinking and language, they usually expect the same level of precision from everyone else and are usually eager to point out any errors in fact. Motivated by an appreciation for the importance of honesty and accuracy, they often consider it their duty to correct their friends' and family's mistakes. Naturally, their friends and siblings don't always find this behaviour quite as helpful as it is intended. Children of this type may be surprised and hurt when other children get mad at them or call them "know it all" because they genuinely believe they are helping. Without the benefit of years of life experience, many young children of this type lack tact. They rarely intend to be rude or indelicate, but because they say exactly what they think and answer questions honestly, it happens periodically. It is helpful for parents who feel embarrassed or hurt by their child's bluntness to remember the intent behind their statement, for them honesty is a virtue, at whatever the cost. For them, there is very little grey area—things are either black or white. They would never consider lying to a friend, and to the young child of this type hedging the truth is the same as lying. Honesty is, in effect, an expression of friendship and affection. While it doesn't always feel that way when you're on the receiving end, understanding this key fact about children of this type helps you appreciate them. It also means that you can, with very rare exceptions, always take them at their word. And a compliment from them is high praise indeed. Being direct and literal, children of this type tend to be confused by ambiguity and frustrated by contradictions. They are driven crazy when their parents exaggerate or offer vague answers. Typically, they will press their parents for definitive answers to all their questions. Because they have such one-track minds, it can be extremely frustrating for parents when the answers their child seeks are either not clear or unavailable.

Children of this type have cautious natures are evident throughout their elementary school years. They are happiest when things remain the same and may have real trouble adjusting to big changes. They may have to be actively persuaded to try a new activity, join a new team, or volunteer for a new assignment. If you offer them a new opportunity, their first reaction is

often to turn it down. With new or untested approaches, they'd rather wait and see how it all turns out. Not adventurous by nature, they are more content to stick with the things they know. They live the old adage "The devil you know is better than the devil you don't." Parents of children of this type need to broach new areas with caution and allow their child to gather plenty of information about the experience through observation before being expected to participate.

Shared Personality Traits

The mother and child share two of the four components of personality type.

(1) What type of information you prefer to take in and trust

The mother and child take in information in the same way. They take in information directly through their five senses; paying attention to details and building conclusions based on the sequential organisation of this information.

The following statements generally apply to both:

- I remember events as snapshots of what actually happened.
- I solve problems by working through facts until I understand the problem.
- I am pragmatic and look to the "bottom line."
- I start with facts and then form a big picture.
- I trust experience first and trust words and symbols less.
- Sometimes I pay so much attention to facts, either present or past, that I miss new possibilities.

Parenting Tips for this Trait:

The child needs detailed, specific instructions or needs to know how long a task will take. Break a task into components and give shorter sets of directions. Use a timer to get real-life information to share with him. Learn patience.

How you like to organize the world around you

Both prefer a planned or orderly way of life, like to have things settled and organized, feel more comfortable when decisions are made, and like to bring life under control as much as possible.

The following statements generally apply to both:

- I like to have things decided.
- I appear to be task oriented.
- I like to make lists of things to do.
- I like to get my work done before playing.
- I plan work to avoid rushing just before a deadline.
- Sometimes I focus so much on the goal that I miss new information.

Parenting Tips for this Trait:

The child will prefer to plan ahead. He will find comfort in knowing what to expect and will be able to relax when life is predictable. He will feel relieved once a decision is made.

The child may not always like it when plans change. Even nice surprises take getting used to. Transitions can be difficult. Give as much advance notice as possible. Also, give him some “space” when you make a change in a plan. He may need time to adjust and put the new plan into place.

Structure and a dependable routing may be important to him. If the schedule is thrown off, he may get annoyed. He will have developed a good sense of time. He may express this through being concerned about how much time is available for an activity. He probably will like to be “on time” for events, and other obligations. He may become irritated or anxious if he thinks you are going to be late. Often, being “on time” is arriving early and having time to get settled and ready to participate in the activity. In addition, it is important to be “on time” picking him up from school etc... If you know you will be late, let him know ahead of time.

Following the rules is probably important to him. He may find comfort and security in knowing and following the rules. When playing a game he will want to be told its limits and expectations. He will try to follow the rules once he understands them. He may become worried or upset if other people break the rules, even correcting others who don't follow the rules. If someone wants to change the way the game is played, he may even stop playing. He may act rigid because he needs and trusts rules to help him know he is doing things right and to make him feel safe.

Differing Personality Traits

The mother and child differ on 2 of the 4 components of personality type

(1) Where you get your energy from

The mother and child get their energy from different places. The mother and child gets her energy from active involvement in events and having a lot of different activities.

On the other hand, the child gets his energy from dealing with the ideas, pictures, memories, and reactions that are inside his head, in his inner world.

The following statements generally apply to the child:

- I am seen as "reflective" or "reserved."
- I feel comfortable being alone and like things I can do on my own.
- I prefer to know just a few people well.
- I sometimes spend too much time reflecting and don't move into action quickly enough.
- I sometimes forget to check with the outside world to see if my ideas really fit the experience.

Parenting Tips for this Trait:

When you ask him questions, give him time to answer. He is more likely to mull things over and may not speak until he has decided exactly what he wants to say. Respect his pace, and don't finish his sentences.

He is less likely to enjoy being quizzed about his day. Asking a lot of questions may make him withdraw more because he'll need to reflect on each one. The best way to get him to tell you about his day is to simply talk about your own day. Tell him what you saw or did but pause frequently in between. During those pauses you'll find he may start opening up and talking about his day too.

He may prefer smaller more intimate gatherings. You may sometimes find yourself at a loss when planning his birthday party. You may ask him who you want to invite and he'll name 2 children. Some parents can, mistakenly, assume their child would be happier if more children were included. Not so!

Give him space when he's angry. While some children will tell you right away-loudly and clearly--when he is mad or upset, He is more likely to clam

up and leave the room. Children of this type often need to resolve their angry feelings inside themselves before they are able to talk about them with others. In this case, we shouldn't try to get them to talk to you at that moment. A better idea is to say, "It looks like you're angry and when you're ready to talk about it I'll be here."

Arrive early at parties or at a new setting. This will give him the time he needs to get acclimated before he feels ready to interact.

Make eye contact when you tell him to do something. He will have a rich inner life and a constant stream of thoughts running in their heads, or he may get so focused on something that interests them, that he tunes out the rest of the world.

(1) How you make decisions

The mother and child use a fundamentally different way to make decisions. This preference guides how choices are made. They use objective information to decide, weighing pros and cons to make a decision that makes the most sense. The child will tend to question rules and demand that rules be both fair and logical.

The following statements generally apply to the child:

- I enjoy technical and scientific fields where logic is important.
- I notice inconsistencies.
- I look for logical explanations or solutions to most everything.
- I make decisions with my head and want to be fair.
- I believe telling the truth is more important than being tactful.
- Sometimes I miss or don't value the "people" part of a situation.
- I can be seen as too task-oriented, uncaring, or indifferent.

Parenting Tips for this Trait:

Children with a thinking preference do value praise but they want praise about their competence and achievements. Praise must be specific. Statements such as, "You are super!" will have little meaning to him unless you can explain why. In fact, if you offer general praise to a thinking child, that child may ask, "Why?" Instead, say to a thinking child, "That was a heavy load. Thanks for helping," which allows the thinking child to internalize the praise and conclude that he is a "good helper."

He will likely tend to say what he thinks. He is direct. What is socially acceptable is not the issue, the truthfulness of the statement is. It's important to remember that he is not trying to be hurtful. Expressions from a thinking child are not personal. It is the objective truth, as they see it. Avoid responding immediately to him direct and sometimes critical comments. Ask him, "Do you really mean that?" Then, give them him time to consider how his words affect others.

He will need to believe the rules and procedures are fair. Creating an environment where rules are fairly and consistently enforced will allow him to flourish. Children like him may experience stress when a situation doesn't make sense to him or has unfair rules.

Children like this find it nearly impossible to learn from someone they don't respect. It can be worth monitoring her opinion of his teacher at school and encourage a productive relationship.

Recapping What Works with this Child

- Give him plenty of time to adjust to new things and keep routines in place as much as possible.
- Respect the fact he is very particular about certain textures, smells, and tastes.
- Offer lots of beautiful things to look at.
- Be clear and explicit in your directions and requests: say what you mean and mean what you say
- After asking questions, give him time to think through the answers first: when making an agreement, don't assume silence means there's a problem or that he is in agreement.
- Don't push him into social situations they resist, he will participate when he is ready
- Offer games and activities with clear parameters and guidelines.
- Give him access to encyclopaedias, books of facts and records.
- Respect his need for quiet, uninterrupted time to think.
- Ask him to research things for you and then listen to his advice: ask his opinions, and then wait quietly for him to share them with you.
- Don't rush him from one activity to another; respect his slower transition pace.
- Be clear, explicit, consistent, and logical in all discipline and directions; respect his need for structure: be on time!
- Reward him with increasing amounts of personal control and responsibility.
- Preview new experiences in advance and tell him what to expect

Appendix F

Supplemental Tables – SPSS Output

Table 12

Paired Difference for Parenting Styles Before and After for the Experimental Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PS Authoritative Average - Pre - PS Authoritative Average - Post	-.25731	.54314	.12460	-.51909	.00447	-2.065	18	.054
Pair 2	PS Authoritarian Average - Pre - PS Authoritarian Average - Post	.46491	.39899	.09153	.27260	.65722	5.079	18	.000
Pair 3	PS Permissive Average - Pre - PS Permissive Average - Post	.26316	.53088	.12179	.00728	.51904	2.161	18	.044

a. Group = Experimental

Table 13

Paired Difference for Parenting Styles Before and After for the Control Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PS Authoritative Average - Pre - PS Authoritative Average - Post	.07602	.15736	.03610	.00018	.15187	2.106	18	.053
Pair 2	PS Authoritarian Average - Pre - PS Authoritarian Average - Post	-.01754	.13488	.03094	-.08256	.04747	-.567	18	.578
Pair 3	PS Permissive Average - Pre - PS Permissive Average - Post	-.13158	.19704	.04520	-.22655	-.03661	-2.911	18	.009

a. Group = Control

Table 14

Independent T-Test for difference for Parenting Styles Before and After for the Control Group

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
PSAuthoritativeAverageDiff	Equal variances assumed	3.665	.064	-2.569	36	.014	-.33333	.12973	-.59643	-.07023	
	Equal variances not assumed			-2.569	21.001	.018	-.33333	.12973	-.60312	-.06355	
PSAuthoritarianAverageDiff	Equal variances assumed	7.927	.008	4.993	36	.000	.48246	.09662	.28649	.67842	
	Equal variances not assumed			4.993	22.061	.000	.48246	.09662	.28210	.68281	
PSPermissiveAverageDiff	Equal variances assumed	.933	.340	2.014	36	.052	.33333	.16553	-.00239	.66905	
	Equal variances not assumed			2.014	34.673	.052	.33333	.16553	-.00283	.66950	

Table 15

Paired Difference for 8 Domains of PSE Before and After for the Experimental Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PSE - Emotion Total - Pre - PSE - Emotion Total - Post	-.84211	1.57280	.36082	-1.60017	-.08404	-2.334	18	.031
Pair 2	PSE - Play Total - Pre - PSE - Play Total - Post	-1.42105	1.34643	.30889	-2.07001	-.77210	-4.600	18	.000
Pair 3	PSE - Empathy Total - Pre - PSE - Empathy Total - Post	-1.68421	1.88717	.43295	-2.59380	-.77462	-3.890	18	.001
Pair 4	PSE - Control Total - Pre - PSE - Control Total - Post	-2.21053	1.87317	.42974	-3.11337	-1.30769	-5.144	18	.000
Pair 5	PSE - Discipline Total - Pre - PSE - Discipline Total - Post	-2.63158	2.29033	.52544	-3.73548	-1.52767	-5.008	18	.000
Pair 6	PSE - Pressure Total - Pre - PSE - Postsure Total - Post	-1.10526	1.76052	.40389	-1.95380	-.25672	-2.737	18	.014
Pair 7	PSE - Self Total - Pre - PSE - Self Total - Post	-1.21053	1.90260	.43649	-2.12755	-.29350	-2.773	18	.013
Pair 8	PSE - Learning Total - Pre - PSE - Learning Total - Post	-1.00000	1.73205	.39736	-1.83482	-.16518	-2.517	18	.022
Pair 9	PSE - Overall Score - Pre - PSE - Overall Score - Post	-12.10526	6.18147	1.41813	-15.08463	-9.12589	-8.536	18	.000

a. Group = Experimental

Table 16

Paired Difference for 8 Domains of PSE Before and After for the Control Group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PSE- Emotion Total - Pre - PSE- Emotion Total - Post	.57895	3.42078	.78478	-1.06982	2.22771	.738	18	.470
Pair 2	PSE - Play Total - Pre - PSE - Play Total - Post	.15789	3.04162	.69780	-1.30812	1.62391	.226	18	.824
Pair 3	PSE - Empathy Total - Pre - PSE - Empathy Total - Post	-.63158	3.68496	.84539	-2.40767	1.14452	-.747	18	.465
Pair 4	PSE - Control Total - Pre - PSE - Control Total - Post	-.84211	5.49002	1.25950	-3.48821	1.80400	-.669	18	.512
Pair 5	PSE - Discipline Total - Pre - PSE - Discipline Total - Post	-1.36842	4.23229	.97095	-3.40832	.67148	-1.409	18	.176
Pair 6	PSE - Pressure Total - Pre - PSE - Postssure Total - Post	.47368	5.35795	1.22920	-2.10876	3.05613	.385	18	.704
Pair 7	PSE - Self Total - Pre - PSE - Self Total - Post	1.10526	4.43339	1.01709	-1.03156	3.24209	1.087	18	.292
Pair 8	PSE - Learning Total - Pre - PSE - Learning Total - Post	.15789	2.71341	.62250	-1.14993	1.46571	.254	18	.803
Pair 9	PSE - Overall Score - Pre - PSE - Overall Score - Post	-.36842	24.93149	5.71967	-12.38501	11.64817	-.064	18	.949

a. Group = Control

Table 17

Independent T-Test for difference for 8 Domains of PSE Before and After for the Experimental Group

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
PSEEmotionTotalDiff	Equal variances assumed	3.359	.075	1.645	36	.109	1.42105	.86376	-.33073	3.17283	
	Equal variances not assumed			1.645	25.285	.112	1.42105	.86376	-.35687	3.19898	
PSEPlayTotalDiff	Equal variances assumed	4.418	.043	2.069	36	.046	1.57895	.76311	.03129	3.12660	
	Equal variances not assumed			2.069	24.794	.049	1.57895	.76311	.00663	3.15126	
PSEEmpathyTotalDiff	Equal variances assumed	3.892	.056	1.108	36	.275	1.05263	.94980	-.87366	2.97892	
	Equal variances not assumed			1.108	26.834	.278	1.05263	.94980	-.89676	3.00203	
PSEControlTotalDiff	Equal variances assumed	14.912	.000	1.028	36	.311	1.36842	1.33079	-1.33055	4.06739	
	Equal variances not assumed			1.028	22.135	.315	1.36842	1.33079	-1.39050	4.12734	
PSEDisciplineTotalDiff	Equal variances assumed	6.881	.013	1.144	36	.260	1.26316	1.10401	-.97588	3.50219	
	Equal variances not assumed			1.144	27.710	.262	1.26316	1.10401	-.99937	3.52569	
PSEPressureTotalDiff	Equal variances assumed	16.627	.000	1.220	36	.230	1.57895	1.29385	-1.04511	4.20300	
	Equal variances not assumed			1.220	21.842	.235	1.57895	1.29385	-1.10546	4.26336	
PSESelfTotalDiff	Equal variances assumed	8.554	.006	2.092	36	.044	2.31579	1.10679	.07111	4.56047	
	Equal variances not assumed			2.092	24.413	.047	2.31579	1.10679	.03352	4.59806	
PSELearnTotalDiff	Equal variances assumed	4.836	.034	1.568	36	.126	1.15789	.73851	-.33988	2.65566	
	Equal variances not assumed			1.568	30.580	.127	1.15789	.73851	-.34915	2.66494	
PSEOverallTotalDiff	Equal variances assumed	12.925	.001	1.992	36	.054	11.73684	5.89286	-.21443	23.68811	
	Equal variances not assumed			1.992	20.205	.060	11.73684	5.89286	-.54746	24.02115	

Table 18

Relationships between Parenting Styles and PSE

		Correlations											
		PS Authoritative Average - Pre	PS Authoritarian Average - Pre	PS Permissive Average - Pre	PSE - Emotion Average - Pre	PSE - Play Average - Pre	PSE - Empathy Average - Pre	PSE - Control Average - Pre	PSE - Discipline Average - Pre	PSE - Pressure Average - Pre	PSE - Self Average - Pre	PSE - Learning Average - Pre	PSE - Overall Average - Pre
PS Authoritative Average - Pre	Pearson Correlation Sig. (2-tailed) N	1 38	-.525** .001 38	-.412** .010 38	.362* .026 38	.189 .256 38	.206 .215 38	.287 .081 38	.182 .273 38	.183 .272 38	.379* .019 38	.490** .002 38	.372* .021 38
PS Authoritarian Average - Pre	Pearson Correlation Sig. (2-tailed) N	-.525** .001 38	1 38	.404** .012 38	-.079 .638 38	-.026 .875 38	-.012 .944 38	-.258 .118 38	-.141 .399 38	-.200 .229 38	-.326* .046 38	-.558** .000 38	-.271 .099 38
PS Permissive Average - Pre	Pearson Correlation Sig. (2-tailed) N	-.412** .010 38	.404** .012 38	1 38	-.315 .054 38	-.298 .069 38	-.302 .553** 38	-.553** .065 38	-.342* .035 38	-.492** .002 38	-.420** .009 38	-.352* .030 38	-.560** .000 38
PSE - Emotion Average - Pre	Pearson Correlation Sig. (2-tailed) N	.362* .026 38	-.079 .638 38	-.315 .054 38	1 38	.659** .000 38	.284 .084 38	.321* .049 38	-.114 .494 38	.105 .530 38	.360 .026 38	.217 .190 38	.445** .005 38
PSE - Play Average - Pre	Pearson Correlation Sig. (2-tailed) N	.189 .256 38	-.026 .875 38	-.298 .069 38	.659** .000 38	1 38	.508** .001 38	.426** .008 38	-.049 .771 38	.425** .008 38	.482** .002 38	.084 .614 38	.611** .000 38
PSE - Empathy Average - Pre	Pearson Correlation Sig. (2-tailed) N	.206 .215 38	-.012 .944 38	-.302 .065 38	.284 .084 38	.508** .001 38	1 38	.507** .001 38	.442** .006 38	.650** .000 38	.522** .001 38	.324* .047 38	.761** .000 38
PSE - Control Average - Pre	Pearson Correlation Sig. (2-tailed) N	.287 .081 38	-.258 .118 38	-.553** .000 38	.321* .049 38	.426** .008 38	.507** .001 38	1 38	.536** .001 38	.622** .000 38	.763** .000 38	.378* .019 38	.840** .000 38
PSE - Discipline Average - Pre	Pearson Correlation Sig. (2-tailed) N	.182 .273 38	-.141 .399 38	-.342* .035 38	-.114 .494 38	-.049 .771 38	.442** .006 38	.536** .001 38	1 38	.487** .002 38	.515** .001 38	.328* .044 38	.585** .000 38
PSE - Pressure Average - Pre	Pearson Correlation Sig. (2-tailed) N	.183 .272 38	-.200 .229 38	-.492** .002 38	.105 .530 38	.425** .008 38	.650** .000 38	.622** .000 38	.487** .002 38	1 38	.696** .000 38	.479** .002 38	.843** .000 38
PSE - Self Average - Pre	Pearson Correlation Sig. (2-tailed) N	.379* .019 38	-.326* .046 38	-.420** .009 38	.360* .026 38	.482** .002 38	.522** .001 38	.763** .000 38	.515** .001 38	.696** .000 38	1 38	.647** .000 38	.886** .000 38
PSE - Learning Average - Pre	Pearson Correlation Sig. (2-tailed) N	.490** .002 38	-.558** .000 38	-.352* .030 38	.217 .190 38	.084 .614 38	.324* .047 38	.378* .019 38	.328* .044 38	.479** .002 38	.647** .000 38	1 38	.586** .000 38
PSE - Overall Average - Pre	Pearson Correlation Sig. (2-tailed) N	.372* .021 38	-.271 .099 38	-.560** .000 38	.445** .005 38	.611** .000 38	.761** .000 38	.840** .000 38	.585** .000 38	.843** .000 38	.886** .000 38	.586** .000 38	1 38

** . Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).