ADLERIAN PERSONALITY PRIORITIES OF SIBLINGS OF INDIVIDUALS WITH TOURETTE SYNDROME

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Deanna Sims, B.S., M.Ed.

Denton, Texas

August, 1998

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This study was designed to examine Adlerian personality priorities of siblings of individuals with Tourette Syndrome (TS). This study aimed to investigate whether a difference exists between TS siblings and siblings of those without disabilities on variables related to personality priorities.

Participants included 80 siblings of individuals with Tourette Syndrome and 72 siblings of individuals without a disability. Participants completed the Langenfeld Inventory of Personality Priorities, Modified (LIPP-M), a 75 item attitude survey measuring five variables associated with Adlerian personality priorities: achieve, please, outdo, avoid, and detach. It was hypothesized that TS siblings would score significantly higher than the control group on the superiority and pleasing personality priorities and significantly lower on the comfort and control personality priorities.

Both of the hypotheses were rejected. First, no significant difference was found between TS siblings and the

control group on the superiority and pleasing personality priorities. Second, no significant difference was found between TS siblings and the control group on the comfort personality priority, and TS siblings scored significantly higher than the control group on the control personality priority.

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I would like to thank the national Tourette Syndrome Association and all of the local and state chapters of TSA that helped me recruit participants.

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TABLE OF CONTENTS

LIST OF TABLES

Table Page

CHAPTER I

INTRODUCTION

Sibling relationships are an integral component in the emotional and psychological growth of a child. Through direct impact and indirect efforts, siblings' effects on other children in the family are of profound developmental significance (Dunn, 1987). Adler acknowledged the importance of sibling relationships relative to the concept of family constellation or perceived psychological position within the family (Lohman, Lohman, & Christensen, 1985). Additionally, Adler noted that handicaps or organ inferiorities were "position makers" (Mosak, 1989) in the family constellation and often influenced the development of siblings. From this perspective, siblings of handicapped children are more likely to choose certain roles within the family that in turn can affect their lifestyle development. Siblings of children with disabilities use the handicapped child as a reference point for developing their own lifestyle (Fairfield, 1983).

This study will examine the adjustment of siblings of children with Tourette Syndrome (TS). TS is a neurological disorder characterized by motor and vocal tics that occur daily. Shapiro, Shapiro, Young, & Feinberg (1988) liberally estimated that TS afflicts nearly one million Americans. Therefore the number of siblings indirectly affected is great. A review of the professional literature revealed no articles addressing the impact of Tourette Syndrome on siblings' adjustment. A very few books made minor reference to the impact of Tourette Syndrome on siblings. Without developed literature, it was necessary to extrapolate from knowledge about siblings of children with handicaps or mental and physical disabilities for the purpose of this literature review. Disabilities reviewed included, but were not limited to mental retardation, learning disabilities, autism, Down's syndrome, chronic disease, and physical handicaps.

Statement of the Problem

The research problem is that limited research has focused on adjustment of siblings of people with disabilities, much less siblings of individuals with Tourette Syndrome. More specifically, no known literature has described the adjustment of siblings of children with Tourette Syndrome using the Adlerian concept of personality priorities. Information gained from the current study will be useful to parents in understanding family dynamics surrounding a disability in the family. Second, counselors and teachers will benefit from knowledge and awareness of characteristic attitudes and behaviors of siblings of individuals with disabilities. Third and most importantly, siblings themselves will benefit by learning and understanding their own personality priorities and how characteristic behaviors and attitudes impact their daily lives.

Review of Literature

This literature review first contains three sections regarding experiences of siblings of people with disabilities or handicaps. The two terms "handicapped" and "disabled" are used interchangeably throughout the review. The limited research available reveals inconsistent findings concerning family relations, personality traits, roles of siblings, and adult siblings. Second is a brief description of Adlerian psychology and a detailed explanation of personality priorities. Third is a brief history of the discovery of Tourette Syndrome and a description of its symptoms.

Siblings

Limited research has focused on the impact children with disabilities have on their normal siblings

(Litzelfelner, 1995; Lobato, 1983; Lobato, Faust, & Spirito, 1988; Slade, 1988). More specifically, Bagenholm and Gillberg (1991) and McHale, Sloan, and Simeonsson (1986) noted minimal information exists about the experience of living with a disabled child from the sibling's perspective. Cerreto (1984) reported that "the brothers and sisters of handicapped and chronically ill children have been sorely neglected. Even those studies that address the impact of a handicapped child on the family make scant reference to the effects on normal sibs" (p. 112).

Harvey and Greenway (1984) noted the lack of research on siblings of children with disabilities might reflect the amount of attention they received by professionals in counseling settings. Few intervention programs considered the issues of siblings of children with disabilities (Litzelfelner, 1995; Lobato, 1985; Slade, 1988).

Of the research available concerning the effects children with disabilities have on their siblings, many of the findings were inconsistent and somewhat contradictory. Research originally focused on the ramifications on siblings of those with disabilities (Knott, Lewis, & Williams, 1995), but more recently has included positive outcomes for siblings of children with disabilities.

Some research findings suggested siblings of those with disabilities experienced more stress and thus were at greater risk for psychological problems. Bischoff and Tingstrom (1991) noted that siblings of children with disabilities were more likely to display a greater degree of psychological impairment, social maladjustment in school, social withdrawal, irritability, aggression, anxiety, depression, and behavior difficulties. Lobato (1983) and Bagenholm and Gillberg (1991) noted that siblings who reported harm by the disabled child described feelings of guilt, resentment, and feelings of being neglected by parents in favor of the child with a disability.

Harris (1984) noted that siblings described the child with a disability as a source of discomfort and embarrassment. Anger and jealousy were other emotions normal siblings reported experiencing. Moreover, 59% of siblings perceived the child with a disability to have negative effects on family relationships, whereas 18% reported positive effects and 9% believed no effect existed (Atkins, 1989).

Siblings of individuals with disabilities often had more responsibility than siblings from the normal population, but Lobato (1983) noted that this finding does not necessarily translate to the premise that siblings are more vulnerable to emotional and psychological disturbances. On the other hand, siblings of children with disabilities were viewed to be more compassionate and sensitive to prejudice, to have a greater understanding of people (Lobato, 1883; Lobato et al., 1988), to be more tolerant of individual differences (Bagenhom & Gillberg, 1991; Burton, 1994), and to have a greater appreciation for good health (Lobato, 1983; Lobato et al., 1988; Post-Kammer & Nickolai, 1988) than siblings of nondisabled children. They were also viewed by teachers as more socially competent, more positive with peers (Lobato, 1988), and more able to adapt and cope successfully in unique situations (Lobato, 1983).

Siblings of children with disabilities had strong family bonds (Post-Kammer & Nickolai, 1985) and were more considerate and kind to siblings, suggesting a high incidence of altruism (Dunn, 1988). Also describing siblings as altruistic, Atkins (1989) and Bagenholm and Gillberg (1991) characterized them as displaying high levels of warmth, empathy, and patience.

Siblings and Family

In families with a child with a disability, many issues are different than in other families. Some of these variables are related to gender, birth order, communication, parental attitude, parental relations, socioeconomic status, and severity of diagnosis.

Birth Order and Gender. Behavioral observations of firstborn siblings suggested they did more praising, teaching, and displaying leadership qualities when interacting with the disabled child compared to later born siblings (Burton & Parker, 1994). Older siblings more often acted as teachers, managers, and caregivers, whereas younger siblings balanced the family relationship by acting as students or followers (Lobato et al., 1988). Lobato (1983) reported that older siblings were rated more socially adaptive compared to younger siblings.

Consistent results have shown that the eldest female sibling may be the most affected by the child with the disability (Atkins, 1989; Cerreto, 1982; Harris, 1984; Lobato, 1983; Lobato et al., 1988; Slade, 1988). Traditionally in Western families, the firstborn female accepted a greater responsibility for taking care of younger siblings compared to firstborn males or later-born females (Burton & Parks, 1994; Lobato, 1983). Consequently, findings suggested the oldest sister was especially vulnerable to filling the role of meeting the exceptional needs typical of a child with a disability (Lobato, 1983; Slade, 1988).

Atkins (1991) and Lobato (1983) noted that older sisters were most negatively affected when a child with a disability was in the family. More specifically, Lobato et al. (1988) reported eldest sisters showed higher rates of behavioral problems and had difficulties with depression and anxiety. On the other hand, Slade (1988) reported that being the oldest sister of a child with a disability promoted a feeling of involvement that stemmed from increased responsibility. Oldest sisters generally had more accurate information about the disability (Slade, 1988).

Interestingly, Harris (1984) acknowledged the importance of the particular vulnerabilities for oldest female siblings, but also recognized younger brothers to be at-risk. Burton and Parks (1994) noted younger male siblings were more apt to act out regularly in school settings. Similarly, younger brothers were more likely to have higher rates of behavior difficulties and problems of aggression and delinquency (Lobato et al., 1988).

Harris (1984) postulated that the youngest boy born into the family is denied his role of being the youngest child because the child with the disability takes on the role of the baby. Lobato et al. (1988) noted increased tension and confusion of roles were anticipated among younger siblings simply because they were encouraged to accept roles that contradicted birth order. This phenomenon affected boys more significantly than younger female siblings because boys typically required more guidance during childhood (Harris, 1984).

Concerning reports specifically related to gender, Dunn (1988) noted that girls were more vulnerable to adjustment difficulties than boys, contrary to findings of Harris (1984). Burton and Parks (1994) noted siblings who were the same gender as the child with the disability more likely experienced stress. Siblings experienced more stress when the child with the disability was male because of societal expectations of masculine competence.

Contrary to the majority of findings relative to age, Cerreto (1984) acknowledged oldest siblings were least at-risk. Bicknell (1985) reported the most vulnerable sibling is the one closest in birth order (regardless whether they are older or younger) to the child with the disability. Atkins (1989) similarly reported that siblings who were close in age were most vulnerable, in addition to younger siblings. Although findings on gender and birth order were inconsistent, the majority of the reports suggested that eldest female siblings were most affected, youngest male siblings were also noted to be at-risk when a disability was in the family, and siblings close in age to the child with a disability were considered vulnerable as well.

Communication. Open communication about the child's handicap was pertinent to the sibling's comprehension of the disability and adjustment (Cerreto, 1985). In interviews of siblings of children with disabilities, Slade (1988) noted that the need for open and veracious communication about the child's disability was highly desired by siblings. Siblings wanted to know information about cause of disease, prognosis for the child, and management of the problems (Atkins, 1991; Slade, 1988). Siblings reported they preferred more communication about family problems related to the child's disability. "Greater openness on the part of parents in communicating within the family about a child's disability was associated with better psychological adjustment of the impaired child as well as the siblings" (Lobato, 1983, p. 356). Despite parents' good intentions to minimize pain, guilt, and burden for the sibling, lack of discussion about the impaired child was detrimental to open communication within the family (Slade, 1988). Preserving family secrets by absence of communication only served to isolate siblings from family and community which contributed to deficiencies of information many of them had experienced.

Harris (1984) noted the importance of providing factual information to siblings and allowing siblings to express concerns about issues surrounding the disability. Improving family communication was often a goal to help parents and siblings express feelings (Harris, 1984). In summary, findings were consistent for the notion that open communication was important for the adjustment of siblings and the maintenance of healthy family relationships.

Parental Attitudes. The literature noted the significant relationship between parental attitudes and sibling adjustment to and acceptance of the child with a disability (Bischoff & Tingstrom, 1991; Cerreto, 1984). Similarly, siblings' attitudes about their disabled sister or brother closely mimicked that of their parents. Slade (1988) more forcefully noted that parental attitude was the strongest single factor affecting how siblings reacted toward the impaired child. Lobato (1988) reported a significant positive relationship between adjustment of siblings and mothers' self-reports of mental and physical wellness, which is likely tied to attitude.

Unfortunately, little research was documented concerning positive feelings parents held about having a child with a disability. Reports concluded parents experienced decreases in self esteem, increases in marital difficulties, and feelings of loss, hopelessness, sorrow, shame, and guilt (Lobato, 1983). Indeed, siblings were likely affected due to the strong relationship between parent attitude and sibling adjustment.

Of those parents who displayed positive attitudes toward the disabled child, the normal siblings emulated the parents' behaviors. They were more likely to talk positively about the child with the disability and were more accepting during interactions with the child (Harris, 1984). In summary, parental attitude appeared to significantly correlate with adjustment of the sibling.

Parental Relations. The quality of the marital dyad had profound effects upon the development of all siblings (Dunn, 1988; Lobato et al., 1988). Because of added stressors in a family with a impaired child, some researchers speculated greater marital difficulties existed. Harris (1984) noted those at greater risk were couples experiencing marital discord prior to the diagnosis of the child because their problem solving strategies and communication techniques were already limited. Bagenholm and Gillberg (1991) reported parents of children who were disabled from birth were twice as likely to get divorced compared to the general population. These findings suggested indirect, if not direct impact on sibling adjustment.

According to Lobato et al. (1988), a common assumption was that chronic childhood disability led to higher divorce rates to those at risk but brought intact relationships closer together. However, actual findings were to the contrary, for divorce rates were relatively the same between couples with and without a disabled child, and marital quality deteriorated among those intact couples with a impaired child which contradicted the findings by Bagenholm and Gillberg (1991).

Concerning specifically the mother of the child with a disability, Dunn (1988) noted the quality of the mother’s support system was significantly related to sibling adjustment. Dyson (1996) reported some studies suggesting mothers of disabled boys were more anxious than mothers of normal achieving boys. A large amount of parenting stress was documented in mothers of children with disabilities compared to mothers with children in general education classes.

In summary, research findings regarding divorce were inconsistent. Additionally, mothers' support systems appeared to have a large impact on sibling adjustment. Finally, mothers of disabled children appeared to have more anxiety and parenting stress likely due to limited support systems or relationships.

Socioeconomic Status. Socioeconomic status (SES) has been a common variable studied in conjunction with disabled children and their siblings, dating back to the very first reports (Cerreto, 1985). Lobato et al. (1988) interestingly reported SES was a more accurate predictor of outcome of disabled children than the severity of the disability itself.

Theoretically, families with less financial stress would function in more appropriate ways, thus providing a more healthy environment for siblings. Families with higher SES had more financial resources to more effectively cope with the pressures of a impaired child (Burton & Parks, 1994), whereas families with lower amounts of resources had greater burdens when caring for the disabled child (Atkins, 1989). More specifically in low SES families, Atkins (1989) noted the burden lessened when family size increased, and the greatest risk was observed in families with two children, one disabled and one normal.

Middle class achievement-oriented parents more often viewed the disability as a tragedy because attainment of parental aspirations and goals for the child was denied (Burton & Parks, 1994). Families of low SES did not have such high aspirations and goals, so the disability of the child was not viewed so tragically. Lobato et al. (1988) similarly reported that high SES parents had elaborate expectations for their offspring, and their dreams were shattered by the disability, whereas low SES parents had more moderate expectations for their children. Furthermore, Lobato et al. (1988) suggested low SES parents were more concerned with finances and physical health and less concerned with achievement and potential. This suggests siblings in middle or high SES families likely felt pressured to make up for the impaired child.

Cerreto (1985) noted problems of middle class siblings were more often related to lack of emotional acceptance of the child while the adjustment of lower class siblings was more directly related to objective characteristics of the disabled child, particularly the extent of daily care required. Thus, it appeared upper and middle class siblings' greatest challenge was fear of stigma, whereas lower class siblings focused more on the burdens of caretaking (Cerreto, 1985). This suggests the burdens of caretaking for higher SES families were not as cumbersome because the family utilized resources to minimize stress. Consequently, this made the responsibilities for the higher SES sibling more manageable.

In summary, it appeared higher SES families had more resources to help care for the impaired child. Also, higher SES parents had greater expectations for their children and were more likely to view the disability of a child as a crisis compared to lower SES parents. Lower SES siblings were more concerned with objective characteristics, particularly the amount of caretaking time, whereas high and middle SES siblings were more concerned with stigma. The burden of having a disabled child was lessened with increased family size and heightened if only two children were in the family for low SES families.

Severity of Diagnosis. The severity of the child's disability was assumed to affect the sibling's adjustment (Cerreto, 1985). A common assumption was that the greater the severity of a child's disability, the more adverse the effects on the sibling. Generally, research findings suggested that the severity of a child's disability was significant only within the family environment when variables such as SES, birth order, and gender were considered (Cerreto, 1985; Lobato, 1983). Burton and Parks (1994) noted that the more severe the impairment of the child, the less likely that normal siblings were to overidentify with the disabled child.

Invisible disabilities, those with ambiguous symptoms such as a learning disability, appeared more stressful to families simply because pinpointing the problem was difficult. In other words, families struggled with establishing realistic expectations for the impaired child when the diagnosis was invisible, ambivalent, or not clearly defined (Burton & Parks, 1994). Because invisible disabilities placed greater stress on families, it was interpreted that the sibling was affected to a greater degree as well.

On a different note, Lobato (1983) suggested no significant relationship existed between particular types of disability and sibling psychological adjustment. Specifically, levels of anxiety, guilt, and depression were not significantly different among siblings of children with a variety of disabilitites. Thus, it appeared regardless of the type of disability of a child, the siblings were affected to a similar degree. One could surmise that factors other than diagnosis impacted how siblings adjusted to the child with the disability (Lobato, 1983).

Concerning timing, reports suggested sibling adjustment was related to amount of time since diagnosis (Lobato et al., 1988). Theoretically, the earlier the diagnosis, the more time to prepare and make adjustments. Bagenholm and Gillberg (1991) suggested early diagnosis lowered stress levels in families and had protective effects on siblings and the marital relationship. Conversely, other studies suggested that parents of children with disabilities from birth (an early diagnosis) had double the divorce rate.

In summary, severity of diagnosis was not found to be solely responsible for sibling adjustment. Studies involving only visible disabilities found that specific type of disability did not have differential effects on sibling adjustment. Invisible disabilities, due to their ambiguous nature did appear to impact siblings’ adjustment. Finally, it was unclear how timing of diagnosis affected sibling adjustment.

Clinical Symptoms

Researchers have focused on particular psychological symptoms of siblings of children with disabilities. The author presents findings about deviance, depression, anxiety, and self-esteem. Although self-esteem is not a clinical symptom, it was included because of its relationship to depression.

Deviance. Breslau and Prabucki (1987) reported siblings rated significantly higher on three subscales measuring impulsive and aggressive behaviors: conflict with parents, fighting, and delinquency. Lobato (1983) noted that siblings of impaired children were rated by teachers and mothers to be twice as likely to evidence deviance compared to a control group. Similarly, siblings were four times as likely to display school related adjustment difficulties compared to a control group.

In summary, siblings were more likely to have conflict with parents and show fighting and delinquent behaviors. Siblings were more likely to display deviant behaviors and show school adjustment problems.

Depression and Anxiety. Rates of depression and major depressive symptomatology of siblings were only slightly elevated compared to control groups (19.7% versus 17.5%)

(Breslau & Prabucki, 1987). However, when comparing siblings to controls using the Diagnostic Interview Schedule for Children Depressive Symptom Scale, depressive symptoms were higher in all categories: total depression, affective, cognitive, vegetative, and suicidal. All categories were statistically significant except for the vegetative scale.

Concerning anxiety disorders, siblings displayed no evidence of increased risk for separation anxiety, overanxious disorder, excess anxiety symptoms, or oppositional defiant disorder (Breslau & Prabucki, 1987). In summary, depressive symptoms of siblings were found only when using a specific instrument. Anxiety symptoms were no more likely to be displayed by siblings than control subjects.

Self-esteem. Siblings often developed roles to cope with the stress of having a disabled child in the family. Though the roles had positive and negative characteristics, the underlying element was low self-esteem (Atkins, 1991). Siblings reported feeling neglected and unimportant, which could be precipitants to low self-esteem. Dyson (1996) suggested because siblings spent much time interacting and influencing one another, the normal sibling might develop low self-esteem by identifying with the disabled child (Dyson, 1996).

On the other hand, Bischoff and Tingstrom (1991) reported siblings did not display lower levels of social competence than siblings of children without disabilities. The perceived self-competence of siblings was not compromised by having an impaired child in the family (Bischoff & Tingstrom, 1991). These findings suggested that siblings were able to interact with friends and partake in activities just as well as siblings of children without disabilities.

Similarly, Burton and Parks (1994) noted no significant differences existed between sibling and control groups concerning self-esteem or self-concept. However, girls tended to score higher on self-concept scales than boys. Higher self-esteem of siblings was correlated with lower levels of guilt and less preoccupation of the future for the disabled child. Also, the more visible the disability, the higher self-esteem seemed to be (Burton & Parks, 1994).

In summary, reports of self-esteem among siblings of children with disabilities were inconsistent. Some researchers reported lower self-esteem related to neglect or feelings of unimportance while other studies reported no changes in self-esteem among sibling and control groups. Findings suggesting more visible disabilities, lower guilt levels, and less preoccupation about the disabled child were related to higher levels of self-esteem for siblings.

Roles and Characteristics

Siblings of individuals with disabilities established rigid, overdetermined roles to cope with the stress of having a disabled brother or sister and to maintain a sense of self control. Atkins (1991) and Dyson (1996) noted two roles that siblings of the disabled frequently adopted: super achiever and mediator.

Following the descriptions of the super achiever and mediator, the author additionally presents information concerning siblings in relation to rigid boundaries when interacting with others, over-responsible behaviors, grief over loss of a normal relationship with the disabled child, and guilty feelings for being the normal sibling.

Super Achiever. The super achiever and mediator roles had the common denominator of an exaggerated sense of responsibility. The author describes the variable of responsibility in more detail in a subsequent section. The sibling's heightened sense of responsibility extended to different aspects of life with the sibling feeling responsible not only to help care for the disabled child and maintain parental approval, but also to achieve in many areas such as academics, talents, or work. Frequently the normal sibling worked passionately at everything he or she endeavored and received many accolades for the efforts (Atkins, 1991). At other times, the sibling focused all of his or her energy on one area in order to become an expert or to obtain "super status;" yet this limited concentration often detracted from achievement in other important areas such as school performance or social development (Atkins, 1991). Attempts of achievement by siblings were generally efforts to minimize the stress of having a disabled child in the family.

Mediator. According to this author's conceptualization, the mediator role entailed placating and sustaining relationship harmony or maintaining family equilibrium. The sibling felt responsible to be the communication medium between the parents and the disabled child and to protect both parties from stress (Bank & Khan, 1982). The sibling utilized a variety of behaviors to maintain the homeostasis of the family. Mediator siblings used comic relief to minimize stressors related to the disabled child, or siblings isolated themselves in order to create fewer demands on the family so all attention could be on the disabled child (Bank & Khan, 1982). The siblings also rebelled and broke family rules in an attempt to divert the stress within the family. All attempts at mediation by the sibling were primarily an effort to minimize stress and maintain balance of the family with a disabled child.

Rigid Boundaries. Siblings of impaired children were often so focused on achieving or mediating in order to maintain family balance that they forgot to relax and apply adaptive behaviors outside the family environment (Atkins, 1991). In other words, because siblings' behaviors were purposive and frequently used within the family, siblings sometimes erroneously and rigidly applied these behaviors out of context in other environments. Spontaneity and flexibility of behaviors in interpersonal relationships were challenging for siblings.

Because the normal sibling was not disabled, he or she was expected by others to do and be more. Thus the sibling paid a price for being normal, and this pressure contributed to the development of rigid boundaries (Bank & Khan, 1982).

Responsibility. Much of the literature reported siblings of the disabled experienced an overwhelming amount of pressure and added responsibility. Lobato (1983) noted disabled children required greater vigilance and attention from parents than normal children. Consequently, siblings were more likely to be neglected and burdened by excessive childcare or other household responsibilities. In a study of personal accounts of childhood experiences, siblings reported they thought they had greater in-house responsibilities compared with their friends (Lobato, 1983).

Similarly, Litzelfelner (1995) summarized "non-disabled children may be called on more often to help in household tasks and given more responsibilities for caregiving activities than non-disabled children" (p. 265). Of psychological importance was the notion that not only did siblings have more physical household and care taking responsibilities, but they also felt emotionally responsible to make up for the disabled child's deficits.

> Siblings of handicapped children often report feelings that their parents' expectations of them exceeded what was appropriate for their age or self-perceived capabilities. Similarly, they report feelings of having to excel in order to make up to their parents for the limitations of the handicapped child. Certainly these sibling reports of caretaking responsibilities shared with their parents suggest at least parental

> acceptance, if not recruitment, of their normal children as child-rearing partners (Lobato, 1983, p. 356).

Grief. In addition to pressure and added responsibility, the sibling grieved the absence of having a normal relationship with a healthy brother or sister. Harris (1984) noted the handicap of the child "limits the development of an intimate relationship between the siblings and precludes a sister's participation in the reinforcing interactions that are possible between normal siblings" (p. 233). In other words, in sibling and disabled child relationships, the balance, reciprocity, and complimentarity were skewed; thus the sibling had minimal opportunity to benefit from mutual interactions (Atkins, 1989).

Guilt. Siblings who believed they were harmed by having a disabled brother or sister reported feeling guilty (Lobato, 1983). Siblings felt guilty for resenting the disabled child and the amount of attention he or she received from the parents. Despite added pressures of responsibility and the feeling of having been neglected by parents, siblings also felt guilty for their own good health and thought that their resentment toward the disabled child was unjustified.

Bank and Khan (1982) noted because the disabled child was unable to or less apt to achieve, siblings felt guilty for their numerous accomplishments. Siblings noticed that the more achievements they attained, the more the disabled child deteriorated. This suggests that despite family messages encouraging responsibility and achievement, the sibling still felt guilty for his or her accomplishments because of perceived unbalance in the family and changes in the disabled child's behavior or condition.

Career Choice. A common assumption was that siblings of disabled persons more often chose careers in the helping profession. Lobato et al. (1988) noted female siblings (who generally had a large share of caretaking responsibilities) were more likely to pursue jobs in the helping professions. Similarly, Cerreto (1985) noted female siblings were more apt to choose helping careers such as teaching, social work, and nursing. To the contrary, Burton and Parks (1994) reported no significant differences in career aspirations of siblings of disabled individuals and control groups.

In summary, reports appeared inconclusive regarding the assumption that siblings were more likely to choose careers in the helping profession. Two reviews cited support for the assumption despite results from another suggesting no difference in career choice between siblings of disabled persons and control groups.

Continued Care. Siblings became increasingly troubled with the tacit assumption of continually taking care of the disabled person after the parents were unable or had died (Bicknell, 1985). The sibling had likely generously contributed caretaking duties and experienced excessive responsibilities as a child and hence felt burdened to continue this throughout adult life.

Fear of Contagion. The sibling also experienced fear of passing the disability to his or her offspring (Bicknell, 1985). Fear of not having a healthy baby was a worry for siblings, particularly if the disability was genetic. Atkins (1989) noted siblings experienced fears of contagion concerning the future and the reactions of others. Furthermore, Atkins (1991) noted siblings were continuously concerned with how the impaired person would affect their own children, how the future partner of the sibling would be impacted by the disability, and if they together would procreate a disabled child. In summary, one assumption was that siblings worried about contagion of the disability and that they would rather not experience the disability twice with two family members.

Tourette Syndrome

Symptoms of Tourette Syndrome (TS) were first organized and published in 1825 when several physicians around the world were describing what they considered bizarre and inexplicable features in patients such as barking, involuntary cursing, facial grimaces, repetitive speech patterns, and jerking movements in the torso and limbs. In 1810 a physician named Bouteille described clinical symptoms of movement disorders, which medical historians believe could have been linked to TS (Shapiro et al., 1988). Prior to Bouteille's work on movement disorders, several isolated references dating back to 1489 appeared in medical literature describing individuals with characteristics that were similar to modern day symptoms of TS (Shapiro et al., 1988).

The first famous historical case of TS was a patient of Itard's in 1825 who displayed obscene verbalizations and convulsive, spasmodic movements in the arms and hands (Shapiro et al., 1988). Her symptoms changed to spasms of the face and neck and additional vocal tics emerged. Several physicians were called upon to consult with the patient and one described her symptoms:

> Non-dolorous tics consist of brief and momentary muscular contractions, more or less limited as a general rule, involving preferably the face, but affecting also the neck, trunk and limbs. Their exhibition is a matter of everyday experience. In one case it may be a blinking of the eyelids, a spasmodic twitch of the cheek, nose and lip; in another it is a toss of the head; in the third, it is a shrug of the shoulder, a convulsive movement of the diaphragm or abdominal muscles. In time, the term embodies an infinite variety of bizarre actions that defy analysis. These tics are not infrequently associated with a highly characteristic scream, cry, or bark, a sort of laryngeal or diaphragmatic chorea, which may itself constitute the condition, or there may be a more complicated symptom of a curious impulse to repeat the same word or the same exclamation. Sometimes the patient is driven to utter aloud what he would conceal (Shapiro et al., 1988, p. 3-4).

Several persons' contributions to the developments, distinctions, and refinements of theories of symptoms of TS are noteworthy. Of psychological importance, Trosseau in 1873 first used behavior modification therapy in an attempt to control tics. He utilized a metronome to exercise the parts of the body with tics or spasms, but soon discovered the tics would reappear in another body part (Shapiro et al., 1988).

Second, Friedrich in 1881 described the symptoms of the illness as a sub-part of the choreas, a class of illnesses characterized by motor incoordination and named after the Greek term meaning dance (Shapiro et al., 1988). Third, Beard described what he called "a most incredible nervous phenomenon" when he discovered tics would surface after a patient was startled and he additionally described the echo phenomena or imitative patterns of movements in patients (Shapiro et al., 1988, p. 4).

Probably the most significant contribution was that of Gilles de la Tourette who proposed a new diagnostic category for TS, apart from the choreas and included echolalia and coprolalia in the description. He described the illness as "a nervous affliction characterized by generalized motor incoordination and noises, accompanied by echolalia and coprolalia" (Shapiro et al., 1988, p. 5). For his brilliant characterization of the symptoms of TS, he was given the honor of having the syndrome named after him.

Symptoms. TS is described as a neurological, chronic tic disorder beginning in childhood consisting of both involuntary motor and vocal tics (Butler, 1984). Tics are "involuntary, rapid, sudden movements or vocalizations that occur repeatedly in the same way" (Tourette Syndrome Association, 1994, p. 2). Tics are classified in two categories, motor and vocal, with two levels each: simple and complex. Examples of simple motor tics are blinking eyes, sticking out tongue, and hitting, whereas complex motor tics might include smelling things, grooming behaviors, or self-injurious behaviors (Haerle, 1992). Examples of simple vocal tics are throat-clearing, sniffing, or spitting, whereas complex vocal tics may include animal sounds or repeating words or phrases (Haerle, 1992).

Several terms that are characteristic of TS are important to mention. Coprolalia is the usage of expletives or socially inappropriate language; palilalia is the repeating of one's sounds or words; echolalia is the repeating of the most recent sound, word, or phrase of someone else; copropraxia is the display of obscene or socially inappropriate gestures (Haerle, 1992).

Symptoms of TS typically manifest in childhood between ages five and ten (Butler, 1984). Shapiro et al. (1988)

reported the mean age of symptom onset was 6.7 years with 90% of the clinical population developing tics by age ten. Recent research findings have extended the range of symptom onset to 2 to 16 years (Tourette Syndrome Association, 1994).

TS affects about five in 1000 people, totaling approximately one million in the United States alone. Initial tics are generally motor tics and fluctuate in severity and type, thus making diagnosis challenging. Tics are exacerbated during times of fatigue, television watching, periods of psychological stress and relaxation, and at the beginning of school terms (Butler, 1984).

TS has gained interest from the psychiatric community because of the observation that TS patients occasionally have voluntary control over involuntary symptoms, thus encouraging some contribution of psychological etiology (Butler, 1984). The American Psychiatric Association's _Diagnostic and Statistical Manual of Mental Disorders_ (4th edition) has delineated the following criteria for TS:

> a) Both multiple motor and one or more vocal tics have been present at some time during the illness, although not necessarily concurrently...; b) the tics occur many times a day (usually in bouts) nearly every day or

> intermittently throughout a period of more than one year, and during this period there was never a tic-free period of more than 3 consecutive months; c) the disturbance causes marked distress or significant impairment in social, occupational, or other important areas of functioning; d) the onset is before age 18 years; e) the disturbance is not due to the direct physiological effects of a substance (e.g., stimulants) or a general medical condition (e.g., Huntington's disease or postviral encephalitis) (p. 103).

Purpose of the Study

No known research describes in detail how Tourette Syndrome affects siblings. The purpose of the study is to identify, relative to adjustment, the most prevalent Adlerian personality priority or priorities for siblings of individuals with Tourette Syndrome and compare them to personality priorities of siblings of individuals without disabilities. Second, the study aims to provide useful information for counselors to better serve clients and their families. Understanding a sibling's personality priority will serve as a useful conceptualization tool for counselors.

Adlerian Psychology

Alfred Adler (1870-1937) founded Adlerian Psychology, otherwise known as Individual Psychology. Adler firmly believed people find wholeness and security through social interest (Way, 1950). Social interest can be defined as "the feeling of being a part of a larger whole, the feeling of being socially embedded, the willingness to contribute in the communal life for the common weal..." (Mosak, 1989, p. 66). In other words, Adler believed humans to be primarily social creatures, only able to understand their behavior within a social or group context (Adlerian Psychology Association of British Columbia, 1997). Adlerian theory is a holistic, phenomenological, and teleological perspective in which people are perceived as responsible, purposeful, active, and creative in choosing behaviors.

Personality Priorities

Part of developing social interest is establishing patterns of behaving (generally unconscious) to interact with others and function within society. Particular ways or patterns of behaving are described as personality priorities, which were first postulated by Nina Kefir, an Israeli psychologist, in the early seventies (Brown, 1976).

Personality priorities are also described as defense mechanisms or unconscious behaviors and strategies that are an attempt to maintain a balance between safety and movement (Bitter, 1993). Individuals use personality priorities to eliminate feelings of insignificance (Britzman & Henkin, 1992) and in reactions against inferiority (Bitter, 1993). People use personality priorities to move toward maximizing positive experiences and minimizing negative experiences. Another way to describe personality priorities is that they are a fundamental and dominant set of convictions (Britzman & Main, 1990) that an individual employs to achieve significance and belonging.

Brown (1976) described four goals associated with each priority: superiority, control (of self and others), pleasing others, and comfort. Similarly, Langenfeld and Main (1983) described personality priorities as the dominant method of interacting incorporating the following five characteristics: achieving, controlling, pleasing, avoiding, and detaching.

Superiority. The superiority personality profile is primarily characterized by achieving. Achievers are responsible, competent, organized, tenacious, and attempt to strive to be foremost in any situation. Moreover, these individuals are internally motivated to develop self-responsibility, generally have a proactive orientation to life, and maintain a strong internal locus of control (Britzman & Main, 1990). Theoretically, the superiority personality priority matches the concept of achieving, which the Langenfeld Inventory of Personality Priorities (LIPP) measures.

Achievers put forth much effort and self-sacrifice (Britzman & Main, 1990) and enjoy being powerful and "one up" (Bitter, 1993). People displaying the superiority personality priority strive to be morally superior and attempt to avoid anonymity (Kefir, 1981), relaxation, meaninglessness, and immediate gratification (Holden, 1991). Achievers also avoid making mistakes and are quick to blame others for wrongs in order to maintain a sense of self-worth (Bitter, 1993).

Individuals who display the superiority personality priority influence others through martyrdom, accomplishment, and leadership (Kefir, 1981), but often feel pressured and critical of self and others (Bitter, 1993). Finally, individuals displaying the superiority personality priority may experience excess fatigue and be immersed in many projects that cannot realistically be completed alone.

Control. The controlling personality priority is primarily characterized by ruling. From the perspective of Langenfeld and Main (1983), control can be broken down into two parts: control of self and control of others. The outdoing scale on the LIPP measures control of others and the detaching scale on the LIPP measures self controlling attitudes.

The controlling individual acts as if he or she is a computer, filtering in and out information (Bitter, 1993), while simultaneously minimizing expression of feelings. This individual favors controlled feelings and utilizes manipulative forms of emotion (Langenfeld & Main, 1983). Because these individuals are generally limited in emotional expression, this often leads to isolation, resentment, loss of relationship (Holden, 1991), and pessimistic attitude toward interpersonal relationships (Langenfeld & Main, 1983). Similarly, Bitter (1993) noted that controllers pay a price for social distance and are often disconnected from others.

Controllers are rational and abstract and their lives are guided by principle and management. They are generally characterized as being dependable, punctual, directive, and self-initiating. On the other hand, they fear coming out in the open and seek to control stress by navigating people to avoid embarrassment and humiliation (Bitter, 1993). In other words, controllers are socially sensitive and clearly desire a guarantee against being ridiculed (Kefir, 1981).

Controllers are less likely to use appreciation, praise, and approval (for to do so would be to give up control) and more likely to be bossy, blaming, and critical (Holden, 1991). Holden also noted that people with this personality priority are never completely pleased, for to be so would be to give up control which is perceived as a threat. Finally, controllers seek to out-do others, be in charge (Holden, 1991), and are greatly concerned about proprieties (Kefir, 1981).

Pleasing. The pleasing personality priority is primarily characterized by placating. Theoretically, the pleasing scale on the LIPP measures the concept of the pleasing personality priority. Pleasers are overly sensitive to others' needs, will self-sacrifice to satisfy others' wants before their own, and seek to agree and be truly deferential toward others (Bitter, 1993). Pleasers are best motivated in safe, supportive environments that ensure positive outcomes (Britzman & Henkin, 1992), but simultaneously lose internal motivation needed to obtain a high level of wellness for themselves (Britzman & Main, 1990). Stated in another way, pleasers lose their own identity to fulfill the wants and needs of others and often allow themselves to be taken advantage of (Holden, 1991).

Pleasers are generally characterized as pleasant and cooperative. Pleasers have much endurance and perseverance and placate to manage fear of rejection (Bitter, 1993), to avoid conflict and disapproval from others (Holden, 1991), and to minimize being disliked or feeling unimportant (Kefir, 1981). However, the desire to please others supersedes the fear of rejection for people displaying the pleasing personality priority (Langenfeld & Main, 1983). Realistically, there are too many people to please and because pleasers say yes to nearly any request, they are pulled in many directions which fragments their energy (Bitter, 1993).

Pleasers are successful in maintaining peaceful, friendly, noncompetitive, and harmonious relationships, but are often nervous and ineffective at assessing their own behavior (Bitter, 1993). Finally, they view personal commitment (which fosters wellness) as selfish (Britzman & Main, 1990) and feel a sense of worthlessness and helplessness without others.

Comfort. The comfort personality priority is characterized by avoiding. Theoretically, the LIPP scale of avoiding measures the comfort personality priority. Bitter (1993) noted that comfort seekers attempt to utilize distracting behaviors to avoid pain and prolong involvement in stressless situations. Langenfeld & Main (1983) noted that comfort seekers are easily hurt and avoid closeness with others in relationships.

Although comfort seekers' behaviors lead to stagnation and reduction in growth and developmental opportunities, they continue to make attempts to maneuver out of uncomfortable situations (Britzman & Henkin, 1992). In other words, comfort seekers remain in comfortable situations even at the cost of boredom, incompleteness of tasks, or stunted growth opportunities. Britzman and Henkin (1992) similarly noted that comfort seekers generally suffer from lack of satisfaction due to minimal risk taking and spontaneity.

Bitter (1993) noted individuals displaying the comfort personality priority seldom take an active stance for something they believe for fear a disagreement will ensue. Holden (1991) noted the comfort seeker continuously avoids novelty, conflict, competition, or anything that remotely suggests stress even at the cost of being perceived as lackadaisical, purposeless, or unproductive.

Kefir (1981) described comfort seekers as reactors who utilize delay and who are experts in unfinished business, unresolved problems, and indecisiveness. Finally, despite procrastination and lower levels of productivity, comfort seekers are often described as content, predictable, easygoing, and charming.

Relative Stability of Personality Priorities. An unpublished and undocumented source suggested superiority and pleasing personality priorities have higher levels of social interest than the comfort and control personality priorities. Dewey and Pew, in an unpublished paper with an unknown date, suggested those with superiority personality priority have longer range goals. Britzman & Main (1990) reported that the achieving personality priority, comparable to the superiority personality priority, is strongly correlated to high levels of wellness.

The avoiding personality priority was reported to contradict many wellness activities, and the outdoing personality priority was not associated with wellness because it is generally characterized by lower levels of internal locus of control (Britzman & Main, 1990). Contrary to previous comment suggesting that the pleasing personality priority may be linked to higher social interest levels, Britzman & Main (1990) reported the pleasing priority was not correlated to wellness because of a strong tendency to put others' needs before one's own. It is of interest to the author to determine if siblings of individuals with TS choose what some consider to be healthier personality priorities.

CHAPTER II

METHODS AND PROCEDURES

Definition of Terms

1. Tourette Syndrome- a neurological disorder characterized by one or more vocal and motor tics that occur daily; the onset is prior to age 18, causes significant impairment or distress in important areas of functioning, and cannot be attributed to medical conditions or substance abuse (American Psychiatric Association, 1994).

The next ten definitions relate to Adlerian counseling theory.

2. Superiority priority- individuals primarily characterized as achievers; they are responsible, competent, organized, and strive to be successful.
3. Achieving- a scale on the LIPP characterized by responsibility, competence and successful attitudes that most closely resembles the superiority priority.
4. Control priority- individuals primarily characterized by ruling; they are rational, abstract, dependable, and directive; they minimize emotion and are often isolated from others.

5. Outdoing- a scale on the LIPP characterized by control of others that represents a combination of attitudes mirroring the superiority and controlling personality priorities.
6. Detaching- a scale on the LIPP characterized by self controlling attitudes and most closely resembles the controlling priority.
7. Pleasing priority- individuals primarily characterized by placating; they are pleasant and cooperative and typically say "yes" to any request even at the expense of self.
8. Pleasing- a scale on the LIPP that measures pleasing attitudes that most closely resembles the pleasing priority.
9. Comfort priority- individuals primarily characterized by avoiding; they are easygoing, predictable, and avoid conflict, competition, and stressful situations.
10. Avoiding- a scale on the LIPP that measures avoiding type attitudes that most closely resembles the comfort priority.
11. Langenfeld Inventory of Personality Priorities- a 75 item instrument utilized to measure an individual's personality priority constructs based on Adlerian counseling theory.

Research Questions

The research questions for this study are as follows: 1) Will siblings of individuals with TS differ from siblings of nondisabled (ND) individuals on measurements of all personality priorities?; 2) Will siblings of individuals with TS more often display traits from the superiority and pleasing personality priorities compared to siblings of nondisabled individuals?; 3) Will siblings of individuals with TS display fewer traits from the comfort and controlling personality priorities compared to siblings of nondisabled individuals?

Hypotheses

Hypothesis 1. Siblings of individuals with TS will differ significantly from siblings of nondisabled individuals on the superiority and pleasing personality priority scores.

Hypothesis 2. Siblings of individuals with TS will differ significantly from siblings of nondisabled individuals on the comfort and control personality priority scores.

Subjects

Two groups of subjects will be included in the study. Subjects will be asked to participate on a voluntary basis only. The first group will consist of siblings of individuals diagnosed with TS. These subjects will be recruited from the Tourette Syndrome Association or from local physicians. The second group will consist of siblings of individuals without any known or diagnosed mental or physical illness or disability. These subjects will be recruited from local regional school districts or through a snowball effect. Subjects will be matched for age and gender to minimize confounding variables.

All subjects are required to be at least 11 years of age for cognitive maturity purposes. The age range of subjects is proposed to be 11 through adulthood. The age range is broad because according to Adlerian theory, personality development occurs at an early age, specifically the first six years (Mosak, 1989). Kefir (1981) also noted that personality priorities originate at an early age. Therefore, it is safe to presume that personality styles are well established by late childhood. Upon investigation by this author, no sources contest that personality priorities generally remain consistent throughout adulthood, thus the reasoning for a broad age range for this study.

Letters of informed consent will be submitted to minor subjects' parents or guardians for permission to participate in the study. Subjects will not be excluded because of gender or ethnic background. An application for human subjects approval was submitted to and accepted by the University of North Texas Institutional Review Board for the Protection of Human Subjects in Research.

The researcher will include 30 subjects for each group. Due to attrition factors, the author will aim for 50 subjects and include no less than 30. If it is determined that the population of siblings of individuals with TS is difficult to obtain, the researcher will expand the geographical base.

Instruments

Subjects will complete the Langenfeld Inventory of Personality Priorities (LIPP). The inventory is designed to identify an individual's primary personality priority according to the principles of Adlerian counseling theory. This inventory measures the following five factors associated with Adlerian personality priorities: pleasing, achieving, outdoing, detaching, and avoiding. "Among the instruments measuring priorities, the ones that have been researched, and deomnstrated [sic] greatest psychometric strength, have been the Langenfeld Inventory of Personality Priorities..." (Pietrzak & Main, 1997).

The response format of the 75 item questionnaire is based on a 6 point Likert scale, and it must be scored by hand. Langenfeld and Main (1983) reported the test-retest reliability coefficient of the questionnaire to be .94. Additionally, each item was tested for validity and a criterion of .30 was chosen as an appropriate value to identify significant factor loading (Langenfeld & Main, 1983). Items with criterion values of less than .30 were excluded from the inventory.

The instrument was initially completed by 92 college students for a pilot study and later administered to 801 college students to determine question revision and exclusion. Since then, the LIPP has been administered to couples to determine relationship style (Britzman & Main, 1990). The LIPP has been cited in several journal articles and dissertations, as well.

DeLaet and Wise (1986) reported two limitations for the LIPP regarding its use with an adolescent population: 1) the length of the questionnaire, and 2) the reading level of the questionnaire. Upon further investigation by this author, it was determined that the current and revised LIPP form has 75 questions, and Delaet and Wise (1986) were basing their criticism on an older, longer version of the instrument that had 100 items. Second, when the reading level of the instrument's language was checked on Microsoft's readability computer program, the Flesch-Kincaide reading level was sixth grade, the Coleman-Liau reading level was 7th grade, and the Bormuth reading level was eighth grade. These reading statistics indicate an appropriate reading level for adolescents. Furthermore, the Flesch reading ease statistic was 70.1 on a scale from 0 to 100. Higher numbers indicate material that is easier to read. Averages for most reading material is 60. Additionally, the average number of letters per word in the instrument was four and the average number of words per sentence was eleven. These averages are not considered highly difficult for the adolescent population.

Design

The study will be an ex-post facto design where the relationship between sibling type (TS siblings and ND siblings) and personality priority characteristics (achieving, comfort, pleasing, detaching, and control) will be studied.

The independent variable is sibling type with two levels: TS siblings and ND siblings. The dependent variable is a measure of five personality priorities: achieving, comfort, pleasing, detaching, and control, according to the LIPP.

Data Collection and Analysis

Questionnaires and informed consent letters with instructions about distribution will be sent by mail to members of chapters of Tourette Syndrome Association across the United States. See Appendices A and B. Participants will complete the questionnaire and return it by mail in the pre-paid postage envelopes provided by the researcher.

Data will be collected during the spring 1998 semester. The t-test will be utilized to evaluate and compare the measures of personality priorities between the two groups.

Limitations

The first limitation is that a non-probability convenience sample will be used as opposed to random sampling that is generally considered ideal. Second, ex-post facto designs lend themselves to the error of chance when attempting to match subjects for comparability between groups. Third, ex-post facto studies have little control over independent variables, and it is difficult to account for all extraneous variables affecting both groups. Fourth, findings will be based on relationships or correlation only, and cause and effect cannot be inferred. Fifth, birth order was not included as a demographic matching variable. Opportunities for further research include studying birth order in relation to understanding siblings of individuals with disabilities.

Assumptions

First, the researcher assumes for the ex-post facto design that variables of both groups are similar except for different sibling status. Second, it is assumed for the averaging of standardized scores that the shape of the distribution of raw scores and standardized scores is identical and that the mean has a value of 0 and the standard deviation and variance have a value of 1 (Hinkle, Wiersma, & Jurs, 1988). Third, it is assumed for the t-test that both samples are independent or unrelated and the homogeneity of variance is the same for both groups.

CHAPTER III

RESULTS AND DISCUSSION

The results of the data analysis and a discussion of the research findings are presented in this chapter. Eighty TS siblings and 72 ND siblings completed the questionnaire. The mean age of participants was 23.1 years and the range was 11 to 55 years. The gender breakdown for females and males was 71.1% and 28.9%, respectively.

Analysis of Data

The t-test statistic was used for data analysis and $p<.01$ was the significance level used for hypothesis acceptance. Assumptions for the appropriateness of utilizing the t-test, specifically normal distribution and homogeneity of variance, were checked. Homogeneity of variance was within normal limits for all variables. All variables assumed normal distributions except the Detach variable. The author implemented a data transformation, specifically a logarithmic transformation, to manipulate the data to conform to a normal distribution. The results were not altered after the manipulation, thus the significance was not an artifact of the data distribution, but an actual difference between the means of the groups.

Hypothesis 1 stated that TS siblings would score significantly higher than ND siblings on the superiority and pleasing personality priorities. The Achieve variable scores on the LIPP, most closely resembling the superiority personality priority, are presented in Table 1.

The results in Table 1 indicate there was no significant difference between the means of the two groups on the Achieve variable. The Please variable scores on the LIPP, most closely resembling the pleasing personality priority, are presented in Table 2.

Table 1

t-test for the Achieve Variable

	TS Siblings	ND Siblings
Mean	66.94	67.74
Standard Deviation	10.89	9.80
Standard Error Mean	1.22	1.15

Table 2

t-test for the Please Variable

	TS Siblings	ND Siblings
Mean	61.60	61.25
Standard Deviation	11.18	9.78
Standard Error Mean	1.25	1.15

The results in Table 2 indicate there was no significant difference between the means of the two groups on the Please variable. Based on the results presented in Tables 1 and 2, hypothesis 1 was rejected.

Hypothesis 2 stated that TS siblings would score significantly lower than ND siblings on the comfort and control personality priorities. The Avoid variable scores on the LIPP, most closely resembling the comfort personality priority, are presented in Table 3.

The results in Table 3 indicate there was no significant difference between the means of the two groups on the Avoid variable. The Detach variable scores on the LIPP, most closely resembling the control personality priority, are presented in Table 4.

Table 3

<u>t-test for the Avoid Variable</u>

	TS Siblings	ND Siblings
Mean	58.39	58.78
Standard Deviation	8.98	8.87
Standard Error Mean	1.00	1.05

The results in Table 4 indicate that there was a significant difference between the means of the two groups on the Detach variable, although the opposite trend occurred than what was hypothesized. Based on the results indicated in Tables 3 and 4, hypothesis 2 was rejected.

The Outdo variable scores on the LIPP, most closely resembling a combination of the control personality priority and the superiority personality priority, are presented in Table 5. Because the Outdo variable is associated with both superiority and control personality priorities, results in Table 5 do not support either Hypotheses 1 or 2.

Table 4

<u>t-test for the Detach Variable</u>

	TS Siblings	ND Siblings
Mean	44.86*	40.26
Standard Deviation	10.38	10.71
Standard Error Mean	1.16	1.26

*p<.01

Table 5

<u>t-test for the Outdo Variable</u>

	TS Siblings	ND Siblings
Mean	65.75	66.13
Standard Deviation	10.11	8.75
Standard Error Mean	1.13	1.03

Discussion

This study was conducted to investigate the personality priorities of siblings of individuals with Tourette Syndrome. To date, no studies have investigated this population relative to personality. The present study more specifically evaluated five variables tested by the LIPP related to the concept of personality priorities: achieve (superiority priority), outdo (combination of superiority and control priorities), please (pleasing priority), avoid (comfort priority), and detach (control priority).

As a result of the data analysis using $p<.01$ as the significance level, both hypotheses were rejected. Although the statistical analysis did not support the hypotheses, several findings are worthy of mentioning.

Summary and Discussion of Non-hypothesized Findings

According to the LIPP, the highest score of the five variables tested indicates an individual's primary personality priority. While not hypothesized, of considerable importance is the finding that 47.5% of TS siblings scored highest on the Achieve variable, compared to 39.58% of the ND group. Thus, nearly half of TS siblings demonstrated superiority as their primary personality priority. Although the total mean group scores were not statistically different from the control group, the high percentage of TS siblings showing preference for this personality priority is interesting. From an Adlerian perspective, this is of importance because the superiority personality priority is most closely associated with the highest level of social interest (Dewey & Pew, date unknown) and wellness (Britzman & Main, 1990). Perhaps TS siblings develop attitudes and choose behaviors consistent with healthy lifestyles. The higher percentage of TS siblings choosing this priority compared to the control group may be related to choosing achieving behaviors to compensate for the disability in the family.

Regarding the Outdo variable, 28.13% of TS siblings scored highest on this variable compared to 40.28% of ND siblings. Although more ND siblings demonstrated preference for this measure, the percentage was still relatively high for TS siblings. Because the Outdo variable correlates with both the superiority and control personality priorities, some healthy characteristics of the superiority priority must be evident in the attitudes and behaviors of TS siblings. Perhaps TS siblings attempted to achieve and "outdo" to compensate for the stress in their families. Because the Outdo and Achieve variables both have achieving characteristics, it is important to distinguish between the two. Achievers attempt to be successful and take the needs of others into consideration, whereas outdoers simply seek to outdo without much regard for others' needs. Fewer TS siblings choose Outdo to be their primary personality priority compared to the control group. Perhaps TS siblings have learned empathic and nurturing responses from their experiences of living with a brother or sister with a disability and thus are more likely to choose achieving behaviors rather than outdoing behaviors.

Concerning the Please variable, 13.75% of TS siblings scored highest on this variable compared to 11.11% of ND siblings. The pleasing personality priority is considered to have high social interest, second to the superiority personality priority (Dewey & Pew, date unknown). Although this finding is not suggestive of high levels of pleasing personality traits in TS siblings or ND siblings, when percentages were combined, it appeared that 89.38% of TS siblings and 90.97% of ND siblings scored highest on the achieving (superiority), outdoing (combination of superiority and control), and pleasing (pleasing) variables. Although no different from ND siblings, this suggests that the vast majority of TS siblings chose primary personality priorities that are indicative of wellness and social interest. In other words, TS siblings overall appeared to develop healthy lifestyles relative to the concept of personality priorities. Achieving, pleasing, and outdoing variables are ones associated with the personality priorities that are characteristic of moving toward a perceived plus (Britzman & Main, 1990). The other variables, detach and avoid, are described as only moving away from a perceived minus (Britzman & Main, 1990). Therefore, if nearly 90% of TS siblings chose the priorities most often associated with moving toward a positive, then they appeared to be adopting healthy behaviors and coping styles.

According to Dewey and Pew (date unknown), comfort and control personality priorities are characteristic of lower levels of social interest. Both TS and ND siblings were less likely to prefer these priorities for their primary personality styles. This suggests that both groups are likely to choose healthy attitudes and behaviors. Specifically for the Avoid variable (comfort personality priority), 8.13% of TS siblings versus 6.94% displayed this priority as the primary style. For the Detach variable (control personality priority), 2.5% of TS siblings compared to 2.08% of ND siblings displayed this priority as the primary personality style. Although the statistical analysis reported a significant difference between group mean scores on the Detach variable, it is important to note that only 2 out of 80 TS siblings scored highest on this variable, indicating a low percentage of TS siblings displaying the control personality priority as the primary priority. The significant difference between group means may suggest that the small proportion of TS sibs that did score highest on the Detach variable chose ways of detaching to cope with the stressors of living with someone with a disability. See Table 6 for a breakdown of percentages of primary personality priorities reported for both groups.

Table 6

Percentages of Primary Personality Priorities

	TS Siblings	ND Siblings
Achieve	47.50%	39.58%
Outdo	28.13%	40.28%
Please	13.75%	11.11%
Avoid	8.13%	6.94%
Detach	2.50%	2.08%

In summary, the most profound discovery applicable to counselors, teachers, and parents is the finding that nearly 90% of TS siblings adopted healthy lifestyles as evidenced by scoring highest on the primary personality priorities linked to high levels of social interest and wellness. Perhaps TS siblings, despite the stressors they experience, grow and adapt in ways that are healthy in an attempt to compensate for the stress they encounter. Nonetheless, whatever the reason, this information can be useful to parents, counselors, and teachers in helping them understand how TS siblings react and adjust to having a brother or sister with a disability. Except for the Detach variable, perhaps the similarities of the group means are accounted for because ND siblings inevitably experience stressors in the family, although they may be different stressors than TS siblings encounter. Furthermore, the lack of significant differences between group means may be related to the fact that the LIPP is designed to measure an individual's primary personality priority and not intended to compare group scores. Implications for further research might entail investigating the differences of personality priorities between TS patients and their siblings within the same family. The author suspects the differences would be quite remarkable compared to the present study. The variable of birth order would also be an interesting component to include in a future study to evaluate its impact on personality priorities.

APPENDIX A

Informed Consent

Informed Consent

Dear Participant and/or Parent:

I am conducting a research project designed to study siblings of individuals with Tourette Syndrome and siblings of individuals without disabilities. The study will consist of a questionnaire. The amount of time involved for the participant is anticipated to be 20 minutes. The purpose of the study will be to identify common personality traits among siblings of those with Tourette Syndrome and siblings of individuals without disabilities. The information gained will be useful to parents and counselors when dealing with issues of siblings of individuals with disabilities.

Siblings will be invited to participate in the study on a voluntary basis and may discontinue participation at any time. Questionnaires will be sent by mail and can be completed in the participant's home for comfort and privacy. The participant will be instructed to seal the return envelope himself/herself after completing the questionnaire. To preserve confidentiality, the participant's name will not appear in any form on the questionnaire and he/she will be identified only by a number.

Anticipated benefits of the study are as follows: 1) feeling special for simply being a sibling of a person with a disability; 2) feeling important about participating in a research project that aims to learn more about Tourette Syndrome; 3) siblings of individuals without disabilities will benefit by having the opportunity to think about relationships in their families in new and different ways. Other general anticipated benefits will be available at the conclusion of the study: 1) enhanced awareness for parents of siblings about the types of characteristics that siblings may display and differences between families with disabled and nondisabled individuals; 2) education for counselors regarding the special needs of siblings of disabled individuals; 3) enhanced insight for siblings about how their own personality traits work for and against them.

Because the study simply involves completing a questionnaire, no potential risks have been noted by the researcher.

At the conclusion of the study, a one page summary of results will be available to participants and parents who are interested. Should you have any further questions, please call me first at (972) 394-4681. If you should have any complaints, you may contact my dissertation chair, Dr. Bob Berg at (940) 565-2910. Thank you in advance for your cooperation and support.

Sincerely,

Deanna Sims

Deanna Sims, M. Ed., LPC

I have read and understand or have had any questions answered about the above information concerning this study. I do grant permission for my child to participate in this study.

Parent signature______________________________Date_______________
(if participant is under age 18)
Participant signature____________________________Date_______________

Please send me a one page summary of results: YES NO
If yes, please give address:____
_____________________________________Phone(____)_____________

THIS PROJECT HAS BEEN REVIEWED BY UNIVERSITY OF NORTH TEXAS COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (PHONE: 940-565-3940).

Appendix B

Langenfeld Inventory of Personality Priorities

LIPP-M

Instructions: the following questions are designed to measure your personal opinions or attitudes. Although there is not a time limit, do not spend too much time on each item as your first response is often best. After reading each item, CIRCLE the category which best represents your attitude for the question. The six categories are as follows:

SA	Strongly agree
A	Agree
MA	Mildly Agree
MD	Mildly Disagree
D	Disagree
SD	Strongly Disagree

It is important that you answer all the items on the questionnaire.

Age:______ Gender: M F Birth order:_____________ (ex. first of two children, or third of three, etc.)

1. I have a hard time putting down a project or task until I know that I have done the best job possible.. SA A MA MD D SD
2. Very few people know me well.. SA A MA MD D SD
3. It makes me extremely uncomfortable to see some one in pain............ SA A MA MD D SD
4. I prefer to be indoors in extreme weather.. SA A MA MD D SD
5. It is important that I be the best, or at least one of the best, at what I do.. SA A MA MD D SD
6. I mind my own business and would like others to do the same............. SA A MA MD D SD
7. I try to live the slogan "What is worth doing is worth doing well.".. SA A MA MD D SD
8. I would prefer being in charge of others than having someone in charge of me.. SA A MA MD D SD
9. I rarely get emotionally involved with others, but prefer to keep to myself.. SA A MA MD D SD
10. If I think that I have offended someone I will not be comfortable until I have made the situation right.. SA A MA MD D SD
11. I enjoy attempting difficult tasks that others may not have been able to accomplish.. SA A MA MD D SD
12. Others sometimes take advantage of my willingness to please............. SA A MA MD D SD
13. I have a tendency to become bossy if I'm not careful........................ SA A MA MD D SD
14. It is important that I have a say in decisions which affect me.............. SA A MA MD D SD

15. I enjoy competition...SA A MA MD D SD

16. I tend to hold in negative feelings rather than to express them.............SA A MA MD D SD

17. Once I make my mind to do something, I get it done..........................SA A MA MD D SD

18. I am frequently asked to take a leadership role in some worthwhile activity..SA A MA MD D SD

19. I seldom display my feelings or emotions..SA A MA MD D SD

20. I would be willing to endure prolonged discomfort or pain in order to gain approval of others...SA A MA MD D SD

21. I feel uncomfortable around people who get emotional.........................SA A MA MD D SD

22. I tend to either withdraw from an argument or give in rather than put up with the hassle..SA A MA MD D SD

23. I have a hard time saying "no" when someone asks me for a favor...SA A MA MD D SD

24. I set very high standards for myself..SA A MA MD D SD

25. I am not very sentimental..SA A MA MD D SD

26. I am very sensitive to criticism...SA A MA MD D SD

27. I don't mind correcting someone when I feel it is justified..................SA A MA MD D SD

28. I like to analyze people—to try to figure them out............................SA A MA MD D SD

29. I cry easily...SA A MA MD D SD

30. I dislike competition and do my best to avoid it................................SA A MA MD D SD

31. I do well in high pressure situations..SA A MA MD D SD

32. I enjoy getting involved in worthwhile causes and frequently do so at my expense...SA A MA MD D SD

33. It is important that I have a good understanding of what others expect of me...SA A MA MD D SD

34. I am very sentimental...SA A MA MD D SD

35. Although I go out of my way to avoid pain and stress, I am frequently getting hurt...SA A MA MD D SD

36. People, particularly strangers, feel uncomfortable around me................SA A MA MD D SD

37. I can't stand conflict and will do all that I can to keep the peace..SA A MA MD D SD

38. I am very careful to respect the rights of others even though they may not respect my rights...SA A MA MD D SD

39. I would like to be recognized for accomplishing something of great significance...SA A MA MD D SD

40. I carry a great deal of responsibility on my shoulders.........................SA A MA MD D SD

41. I tend to be rather critical, although I don't always show it.................. SA A MA MD D SD

42. I rarely let others know what I'm thinking or how I'm feeling..............SA A MA MD D SD

43. My feelings are easily hurt...SA A MA MD D SD

44. I have a difficult time expressing my anger or disappointment.............SA A MA MD D SD

45. Others rarely seek my advice...SA A MA MD D SD

46. I do not like to be the center of attention in social situations................SA A MA MD D SD

47. I work hard and seldom have periods of low productivity.................... SA A MA MD D SD

48. I usually notice whether or not fellow workers are accomplishing as much as I...SA A MA MD D SD

49. I am a self starter who rarely needs a push in order to get something accomplished.. SA A MA MD D SD

50. I enjoy impressing others with my skill or accomplishments................SA A MA MD D SD

51. I have a low tolerance for physical pain... SA A MA MD D SD

52. I don't like surprises...SA A MA MD D SD

53. I try very hard to avoid stressful situations......................................SA A MA MD D SD

54. I often place others needs above my own.. SA A MA MD D SD

55. I seldom go out of my way to make others happy.............................SA A MA MD D SD

56. It doesn't bother me to see someone in pain.....................................SA A MA MD D SD

57. I am a hard worker who likes to keep busy...................................... SA A MA MD D SD

58. I feel deeply hurt when others are thoughtless or inconsiderate toward me.......... SA A MA MD D SD

59. I bend over backwards to keep from offending others..........SA A MA MD D SD

60. I am willing to work long and hard as long as I am rewarded for my efforts.......... SA A MA MD D SD

61. Others often seek my advice..........SA A MA MD D SD

62. Although I may not like it, I feel annoyed when I lose at something, such as sports, cards, etc.......... SA A MA MD D SD

63. I have high moral standards and a strong sense of right and wrong..........SA A MA MD D SD

64. I'm usually well organized.......... SA A MA MD D SD

65. Even though I realize that I cannot please everyone, I continue to try.......... SA A MA MD D SD

66. I frequently display feelings or emotions..........SA A MA MD D SD

67. I am very sensitive to the feelings of others..........SA A MA MD D SD

68. I am very good at what I do.......... SA A MA MD D SD

69. I avoid joining or belonging to groups.......... SA A MA MD D SD

70. I don't mind taking medicine if it helps relieve my pain..........SA A MA MD D SD

71. People tell me that I am too agreeable..........SA A MA MD D SD

72. I enjoy trying to out-do my friends, such as having the last word in a friendly argument.......... SA A MA MD D SD

73. I try very hard to make others happy.......... SA A MA MD D SD

74. Some people consider me to be a workaholic..........SA A MA MD D SD

75. I dislike being involved in group activities which involve a lot of social interaction or contact with other people..........SA A MA MD D SD

Thank you for completing the questionnaire. Please mail the questionnaire and informed consent to the researcher in the addressed, stamped envelope provided.

LIPP-M Scoring Key

Achieve	**Outdo**	**Please**	**Avoid**	**Detach**
1.____	5.____	10.____	3.____	2.____
7.____	8.____	12.____	4.____	6.____
17.____	11.____	16.____	22.____	9.____
18.____	13.____	20.____	26.____	19.____
24.____	14.____	23.____	29.____	21.____
32.____	15.____	33.____	30.____	25.____
40.____	27.____	37.____	31.____	36.____
47.____	28.____	38.____	34.____	42.____
49.____	39.____	44.____	35.____	45.____
57.____	41.____	54.____	43.____	46.____
61.____	48.____	59.____	51.____	52.____
63.____	50.____	65.____	53.____	55.____
64.____	60.____	67.____	58.____	56.____
68.____	62.____	71.____	66.____	69.____
74.____	72.____	73.____	70.____	75.____

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