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Predictors of Cooperative and Externalizing Behaviors in Siblings of Children with Disabilities

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ABSTRACT

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in Siblings of Children with Disabilities

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Objective: To examine whether caregiver burden, parenting style, and sibling relationships in families raising a child with a disability (CWD) predict cooperative and externalizing behaviors in typically-developing sibling (TDS).
Methods: This correlational study included 189 families raising both a CWD and a TDS. Mothers and fathers completed self-report questionnaires on caregiver burden, sibling relationships, parenting style, and TDS cooperative and externalizing behaviors.
Results: Authoritative parenting was positively associated with cooperative behaviors, whereas authoritarian parenting was positively associated with externalizing behaviors. Hierarchical regression revealed caregiver burden was a significant predictor of cooperative and externalizing behaviors; however, when parenting style was added as a predictor, it was also significant. However, when sibling relationships were added as a predictor, they were the only consistently significant predictor for both cooperative and externalizing TDS behaviors; caregiver burden was no longer significant and parenting style was only significant in predicting externalizing behaviors.
Conclusion: Positive sibling relationships may help negate the effects of caregiver burden and poor parenting practices on sibling outcomes. Therefore, interventions improving parenting and sibling relationships are critical in families raising a CWD.

Keywords: disabilities, caregiver burden, parenting style, sibling relationships

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Predictors of Cooperative and Externalizing Behaviors in Siblings of Children with Disabilities

Caring for a child with a disability (CWD) can be overwhelming and filled with many challenges. Up to 40% of children in the United States require additional health-related services due to a chronic condition or illness; most are cared for in the home, which can impact family relationships (Mandleco, 2011). The current body of literature documents significant caregiver burden for parents raising a CWD (Al-Krenawi, Graham, & Gharaibeh, 2011). However, in terms of how this affects typically-developing siblings (TDS), there is not a clear consensus. Some studies report negative adjustment of TDS (Sari, Baser, & Turan, 2006; Silver & Frohlinger-Graham, 2000). Whereas others report positive effects (Skotko & Levine, 2006; Waite-Jones & Madill, 2008), and some are ambiguous or found mixed outcomes (Fleary & Heffer, 2013; Cuskelly & Gunn, 2006). These conflicting results invite further investigation to determine key factors in TDS outcomes in families raising a CWD.

This study initially examines the relationship between caregiver burden, sibling relationships, and parenting style. Therefore, family systems theory is used to explore the factors predicting TDS outcomes. Family systems theory emphasizes family systems are interdependent, and a family member's behavior is related not only to oneself, but also to the behavior and interactions of other individuals and subsystems within the family. Thus, both interdependent family members and interdependent family subsystems may impact a person's adjustment (Holmes & Huston, 2010). Here, we ask which variable, if any, is most strongly associated with positive TDS adjustment, so care providers are

better able to understand the intricate relationship among variables helping families achieve positive outcomes in TDS.

Literature Review

Caregiver burden is the physical, emotional, financial, mental, and social stresses experienced as a result of caring for a family member with a chronic condition (Nguyen, 2009). Although parenthood is assumed to inherently contribute to changes in lifestyle, parenting a CWD is associated with increased levels of mental and physical burdens beyond those typically-expected (Manor-Binyamini, 2011). In fact, raising a CWD causes significant parental stress resulting in a decrease in well-being and health (Abbeduto, Seltzer, Shattuck, Krauss, Orsmond, & Murphy, 2004) such as depression (Hasting, Daley, Burs, & Beck, 2006), clinical levels of anxiety (Davis and Carter 2008), and marital conflict (Kersh, Hedvat, Hauser-Cram, & Warfield, 2006).

Parenting style refers to the normative patterns of behavior and strategies parents use to socialize and control their children (Berkien, Louwerse, Verhulst, & Ende, 2012). Parenting styles can be categorized into Baumrind's (1971) four typologies of parenting: authoritative (high demandingness and high responsiveness), authoritarian (high demandingness and low responsiveness), permissive (low demandingness and high responsiveness), and uninvolved (low demandingness and low responsiveness). These parenting typologies are associated with different child outcomes. Authoritative parenting is associated with the most positive outcomes (Berkien et al., 2012; Simons & Conger, 2007), including higher levels of intrinsic motivation and academic performance (Rivers, Mullis, Fortner, Mullis, 2012). An authoritarian parenting style is associated with poor social skills, low self-esteem, and high levels of depression in children (Weiss,

& Schwarz, 1996). Permissive parenting is associated with an increased likelihood of problem behaviors in adolescents such as smoking and drinking (Piko & Balazs, 2012). Uninvolved parenting was the least effective style when delinquency, depression, and school commitment were measured (Simons & Conger, 2007).

Sibling relationships are an integral part of child development and typically the first, most intense, and longest peer relation a person will have (Mandleco, 2011). Siblings are a unique source of companionship, help, and emotional support. They act as key socializing agents in the life of a child and provide opportunities for sharing and learning (Abrams, 2009). TDS who have a positive relationship with a CWD, report a higher level of positive self-concept than those children not raised with a CWD (VanRiper, 2000). The literature also documents the protective effect of sibling affection on child adjustment during stressful life events regardless of mother–child relationship quality (Gass, Jenkins, & Dunn, 2007).

Sibling outcomes in families with a CWD are mixed. A meta-analysis by Sharpe and Rossiter (2002) found a significant overall negative effect on TDS whose sibling has a chronic illness. Williams (1997) examined more than 40 studies published between 1970 and 1995 covering the effects on TDS of children with pediatric chronic conditions. She found approximately 60% of studies reported manifestations of increased risk for negative outcomes, 30% reported no increased risk, and 10% reported both negative and positive effects. A later review found similar findings across studies with 61.1% reflecting TDS negative outcomes (Dauz, et al. 2010). Professionals also report concerns for missed social experiences, stigma, and constant worry for parent and siblings, as well as jealousy of uneven parenting for TDS (Packman et al., 2008).

In spite of the reported negative TDS outcomes, several positive outcomes exist suggesting TDS and CWD relationships may contribute to improved TDS outcomes. Examples of positive outcomes include TDS demonstrating more helping behaviors and greater-than-average self-respect (Kaminsky & Dewey, 2001). Some studies report TDS have more empathy, kindness, involvement (Nielson et al., 2012), warmth (Cuskelly & Gunn, 2003), and higher levels of cooperation and self-control (Mandleco, Olsen, Dyches, & Marshall, 2003) than children not being raised in a home with a CWD. Therefore, mixed reports on TDS outcomes in the presence of a CWD need further investigation.

Family systems theory posits that understanding the connection between caregiver burden, sibling relationships, and parenting style is critical in predicting TDS outcomes. However, current research captures only portions of the interplay between these variables. For example, Mazaheri et al. (2012) discovered increased levels of depression, feelings of isolation, anger, and worry in not only parents, but also siblings living with a CWD. In fact, 92% of the TDS indicated moderate-to-severe symptoms of PTSD. Indeed, living with a CWD may directly contribute to sibling stress, but research indicates parental stress can further negatively impact TDS as well. For example, parental stress or burden is correlated with poor cognitive, emotional, behavioral, and social development of TDS (Park, Chung, & Kim, 2011). Increased levels of caregiver burden negatively impacting child outcomes is further supported by Maas-van Schaaijk, Roeleveld-Versteegh, and van Baar (2012), who found that for adolescents with type 1 diabetes mellitus, parenting stress experienced by both parents was related to the child's emotional and physical functioning. However, Hastings and Taunt (2002) argue that

positive familial relationships help mitigate caregiver burden, therefore possibly improving TDS outcomes and decreasing caregiver burden. Although not inclusive of CWD, several studies examine links between sibling relationship qualities and individual child adjustment (Campione-Barr, Greer, Kruse, 2013). Additionally, Gass and colleagues (2007) report typically developing children with affectionate sibling relationships are less likely to demonstrate negative internalizing behavior after experiencing a stressful life event compared to children without such a relationship.

Current research does not investigate the relationship between caregiver burden, parenting style, sibling relationship, and TDS outcomes together in one model. In addition, most research conducted with families raising a CWD uses mother reports, thereby excluding paternal perceptions. Our study is novel in both domains; all variables are modeled together and both parent reports are used. The model further includes authoritative and authoritarian parenting together in one analysis, allowing determination of which parenting style has the greatest effect on outcomes whether they be positive or negative. Modeling caregiver burden, parenting style, and sibling relationships together also allows us to determine which variables are stronger predictors of TDS outcomes, thus enabling providers and families to focus limited resources on variables with the greatest chance of improving family outcomes. Gathering data from fathers will provide information currently lacking regarding these variables.

Therefore, the purpose of this study was to answer the following questions in families raising a CWD and a TDS: (a) What is the relationship between caregiver burden and TDS outcomes? (b) What are the effects of caregiver burden on TDS outcomes if parenting style is factored in? (c) If sibling relationships are also included, which variable

is the best predictor of TDS outcomes?

Methods

Participants

Participants included 189 families, recruited through conferences and home-based early intervention programs. Forty-nine percent reported annual income levels between $50,000 and $75,000. Most families were Caucasian (94.4%) and two-parent (93%) with 98.8% of fathers and 99.4% of mothers having completed at least 12 years of education. Eighty-six percent of fathers worked full-time, 32.2% of mothers worked part-time; 14% worked full-time.

Disabilities included autism (33.3%; n=63), Down syndrome (22.8%; n=43), other disabilities (27%; n=51), and multiple disabilities (16.9%; n=32). Other disabilities included orthopedic impairment, intellectual disabilities, emotional or physical disabilities, and health impairment. Multiple disabilities included both physical and intellectual disabilities. Sixty-three percent of CWD were male, while 59.4% of the TDS were female. The average age of the CWD was 9.6 years of age (*SD* = 4.71); the average age of the TDS was 11.2 years (*SD* = 4.0) and 67.9% were older than the CWD. The age range for the CWD was 1 to 25,whereas the age range for TDS was 3 years to 25 years of age. Additional demographic characteristics are reported in Table 1.

Procedure

Each parent completed four questionnaires during a home visit: Caregiver Burden, Sibling Relationships, Parenting, and Typically-Developing Sibling Outcomes. A demographic questionnaire was usually filled out by the mother. The study and procedures were approved by the Brigham Young University Institutional Review Board.

Participation in the study was voluntary, families were compensated with a $20 gift card, and data were de-identified to ensure anonymity during analysis.

Measures

Caregiver burden. A modified version of the Caregiver Strain Index (Robinson, 1983) measured caregiver burden. Both parents rated 13 items on how much hassle (1= *No hassle*, 4= *Big hassle*) they felt related to caring for the CWD. Examples include "Feeling overwhelmed at all there is to do in caring for my children," and "Feelings of isolation – No one understands what I am going through in raising my children." Hassle of burden was chosen as the key determinant of caregiver burden in this study, which describes how much the burden affects their daily lives. Cronbach's alphas for caregiver burden scale are 0.88 for mothers and 0.86 for fathers.

Parenting style. Mothers and fathers independently completed the authoritarian and authoritative subscales of the Parenting Practice Report (Robinson, Mandleco, Olsen, & Hart, 1995). Example items include "I use physical punishment as a way of disciplining our child" (authoritarian) and "I emphasize the reasons for rules" (authoritative). Parents rated their own parenting behavior on a Likert scale (1=*Never)* (5=*Always*) for each item. Cronbach's alphas for authoritative parenting are 0.85 for mothers and 0.89 for fathers. Cronbach's alphas for authoritarian parenting are 0.81 for mothers and 0.87 for fathers.

Sibling relationships. Mothers and fathers independently completed the 28-item Sibling Inventory of Behavior (Schafer & Edgerton 1981), which evaluated the relationship between the TDS and CWD. The instrument consists of four subscales: Empathy, Involvement, Avoidance, and Kindness. Parents responded on a Likert scale

(1=*Never*, 5=*Always*). Reverse coding was used for avoidance (i.e. a high score = a lack of avoidance). Examples include "Tries to avoid being seen with him/her" (Avoidance) and "Tries to comfort him/her when she is unhappy or upset" (Kindness). A total sibling relationship score (TSRS) was calculated based on a combination of the four subscales. The kindness score and TSRS were used in this study for two reasons; kindness in combination with TSRS served as the best indicators of a positive sibling relationship and reliabilities for both were high. Cronbach's alphas for kindness were 0.88 for both parents. Cronbach's alphas for the TSRS were 0.95 for both parents.

TDS cooperation and externalizing. The outcome variables were measured using the externalizing and cooperation subscales of the modified Social Skills Rating System (Gresham & Eliot, 1990). Parents rated questions or statements about the TDS using a Likert scale ranging from 1=*Never* to 7=*Always*. Example statements include, "Uses aggression to release pent-up feelings," and "Talks with a friend or teacher about the problem to help find a solution." This instrument specifically was developed to assess child functioning in two broad domains — social skills (cooperation) and problem behaviors (externalizing). Cronbach's alphas for mothers' responses were externalizing 0.81 and cooperation 0.79. Cronbach's alphas for fathers' responses are externalizing 0.77 and cooperation 0.84.

Analysis

SPSS 20 statistical software was used to analyze data. Descriptive statistics are presented (mean, standard deviation, range) for all variables in Table 2. We further performed multivariate analysis of variance (MANOVA) calculations to show the statistical significance of the mean differences between variables. Correlations, presented

in Table 3, depict the relationship between all study variables. Lastly, the results of a hierarchical regression analysis — with the first model containing only the effect of caregiver burden on sibling outcomes, the second model adding parenting style, and the third model adding sibling relationship — are presented in Table 4.

Results

Descriptive Statistics

Descriptive statistics (Table 2) show the mean for fathers' ratings of caregiver burden was lower (1.75) than mothers (2.09). On average, mothers exhibited higher levels of authoritative parenting practices (3.95) than fathers (3.65). This is reversed for authoritarian practices, with fathers reporting slightly higher levels (1.92) than mothers (1.84). Mean ratings by fathers and mothers were similar when reporting sibling relationship (fathers = 3.82, mothers = 3.8), externalizing behavior (fathers = .61, mothers = .6), and cooperation (fathers = 1.16, mothers = 1.12).

Analysis of Variance

MANOVAS were calculated to determine differences in sibling externalizing and cooperation as rated by each parent according to type of disability, gender of the CWD, and gender of the TDS. There were no significant differences in ratings of sibling externalizing or cooperation by disability type or CWD gender. However, mothers rated female siblings ($M = 1.31$) significantly more cooperative ($F = 2.89$; $p = 0.005$) than male siblings ($M = 1.13$).

Correlations

Bivariate correlations showed mothers' and fathers' ratings differed; for fathers, authoritative parenting style was positively associated with cooperation and negatively

associated with externalizing, whereas mothers' authoritative parenting was positively associated only with cooperation (Table 3). Even though mothers rated female TDS as having higher levels of cooperation, fathers rated older TDS as having higher levels of cooperation. Mothers' ratings of TDS externalizing behaviors were negatively related to age.

For both parents, caregiver burden and authoritarian parenting were negatively associated with cooperation and positively associated with externalizing behaviors. Family income was inversely related to sibling externalizing behaviors for both parents, and sibling relationships were positively correlated with cooperative behaviors and negatively correlated with externalizing behaviors.

Multiple Regressions

Hierarchical regression analyses (Table 4) allow us to disentangle the effects of caregiver burden, parenting style, and sibling relationships, thereby showing which variables are most predictive of TDS outcomes. Model 1 analyzes how caregiver burden relates to TDS cooperation and externalizing. Model 2 adds parenting style (both authoritarian and authoritative) as other predictors of TDS outcomes. Finally, Model 3 adds positive sibling relationships as an additional predictor. Because both maternal and paternal data were separately analyzed, this process was employed twice, as reported in the top (mothers' reports) and bottom (fathers' reports) panels of Table 4.

Predictors for cooperative behaviors are presented on the left panel of Table 4. For both mothers and fathers, burden was negatively related to TDS cooperative behaviors; mothers also rated female siblings higher on cooperation (Model 1: Cooperative Behaviors) than male siblings. When parenting style was added (Model 2),

caregiver burden was no longer significant. For both parents, authoritative parenting became the significant predictor; authoritarian parenting, however, was not significant. When positive sibling relationships were added (Model 3), it was the only significant predictor of TDS outcomes; burden and parenting style became insignificant for both parents.

Predictors of TDS externalizing behaviors are presented in the right panel of Table 4. For both parents, caregiver burden was a significant predictor of TDS externalizing behaviors (Model 1: Externalizing Behaviors). Mothers' also reported more externalizing behaviors in male TDS. In Model 2, both parenting styles were added. Caregiver burden again became insignificant and authoritarian parenting was significant for both parents. Income also became significant for mothers, whereas sibling age was significant for fathers, with younger children displaying more externalizing behaviors. In Model 3, caregiver burden, parenting style, and sibling relationships were all included as predictors of externalizing behaviors. Income, authoritarian parenting, and sibling relationship were significant for mothers; however, caregiver burden was no longer significant. For fathers, authoritarian parenting and sibling relationships were the only significant predictors.

Discussion

Family systems theory is useful in examining families raising a CWD because individuals are best understood in the context of the whole. Caregiver burden, parenting style, and sibling relationships are interrelated; yet some have a greater impact on TDS outcomes than others. Past research explored caregiver burden (Wade et al., 2010), parenting style (Rivers et al., 2012), and sibling relationships (Burke, 2010) separately.

However, none fully integrated these variables into one model, which is what family system theory suggests will be most beneficial in understanding families raising a CWD. Additionally, minimal research on these variables considers both maternal and paternal reporting. This study provides such an analysis, identifying which parenting style was more influential in predicting TDS outcomes for each parent, whether sibling relationships contribute to child outcomes, and under which conditions the effect of caregiver burden is weakened.

First, our findings support previous studies, indicating that higher levels of caregiver burden are associated with negative TDS outcomes. For example, Abbeduto et al. (2004) report caring for a CWD brings greater levels of caregiver burden and stress on parents, which can negatively impact a TDS (Maas-van Schaajjk et al., 2013). Our findings confirm that greater caregiver burden is correlated with less cooperative and more externalizing behaviors. This may occur because as parents spend more time caring for the CWD, they have less time available to address TDS needs and wants resulting in poorer child outcomes. However, it is also possible that stressors which increase caregiver burden (such as changes in health status or the CWD's socially unacceptable behaviors) similarly contribute to TDS negative behaviors. Either explanation highlights the importance of understanding family dynamics.

Second, this study sought to answer what happens to the association between caregiver burden and TDS outcomes if parenting style is also considered. Our results reinforce previous findings with TDS supporting a relationship between parenting and child outcomes (Simons & Conger, 2007). However, we expand those findings to families raising CWD and identify differences based on parent gender and parenting

style. Authoritative parenting by either parent significantly predicted TDS cooperation, even in the presence of caregiver burden, which became an insignificant predictor. However, both caregiver burden and authoritarian parenting were significant predictors of externalizing behaviors. Caregiver burden might be related to parenting style; but our model shows if parents can maintain authoritative parenting practices in spite of high caregiver burden, the levels of cooperative TDS behaviors will be high. A possible explanation is that parenting style directly affects TDS outcomes, while caregiver burden only indirectly affects TDS outcomes. Outcomes TDS learn, such as love and caring within the family, are modeled by an authoritative parent. As this occurs, TDS partner with the parent in daily family tasks and hence exhibit more cooperative behaviors and might decrease the level of burden felt by parents. However, since authoritarian parenting provides the TDS with an inferior model of parenting behavior, it results in more externalizing behaviors.

Lastly, this study discovered that positive sibling relationships are significant predictors of both TDS cooperative and externalizing behaviors, even when taking into consideration parenting style and caregiver burden. In families raising a CWD, once positive sibling relationships were included in the model, caregiver burden became insignificant and sibling relationships were the only variable consistently significant for both parents and both TDS outcomes. This makes sense in a family systems theory, which suggests these variables are interactive, not simply additive.

There are several possible explanations as to why sibling relationships are more predictive of TDS outcomes than caregiver burden or parenting style. Sibling relationships are integral for a child's development (Mandleco, 2011). A good

relationship and empathy for CWD facilitate TDS involvement in caring for the CWD (Benderix & Sivberg, 2007; Sharpe & Rossiter, 2002). If the TDS teams up with parents rather than competing with the CWD for attention, working with parents to care for the CWD may assist the TDS in understanding differences in caregiver time and resource allocation. This partnership also allows both the CWD and the TDS to receive parental involvement in spite of high caregiver burden and less available time for each child—which may be made possible because the CWD and TDS initially have a positive relationship.

However, even in the presence of positive sibling relationships, authoritarian parenting style remains a significant predictor of externalizing behavior. An authoritarian parenting style does not promote resource sharing, which may lead to greater attention-seeking behavior. Hence, it is not surprising that authoritarian parenting from either parent is significantly correlated with externalizing behaviors even in the presence of a positive sibling relationship.

In summary, the final model most fully incorporates concepts from family systems theory. To help guide families raising both a CWD and a TDS, providers should understand the interplay between predictors. Caregiver burden, parenting style, and sibling relationships each matter individually, but when considered together, most or all of the effect is directed through the sibling relationship. Thus, families would benefit if counseling and early intervention strategies were redirected toward a truly more "family-centered" approach that includes the TDS and encourages positive TDS behaviors.

Future Research and Limitations

There are limitations to this study. The design is cross-sectional, not longitudinal,

and while we identify correlations, our findings do not establish causation. A convenience sample was employed, with participants gathered from educational and early intervention programs. Therefore, our sample reflects families currently receiving support and intervention rather than families not receiving help. Parents proactive in their child's treatment were also more likely to be represented. In addition, participants were similar demographically, including ethnicity (mostly Caucasian), socioeconomic status (SES, primarily upper middle class), from the same geographic area, and two-parent families. Future research should include more ethnically and SES diverse families as well as longitudinal data. Evaluating the effect of caregiver burden on parenting style and intervention strategies focusing on involving siblings might also be informative.

Conclusion and Implications

Our results suggest sibling relationships are related to TDS outcomes, even in the presence of caregiver burden and parenting style. However, in isolation, these latter two factors are significantly associated with sibling outcomes; yet intervention programs that help create positive sibling relationships may be as impactful as those that focus on decreasing a parent's burden or helping improve parenting practices. Therefore, in-home and intervention services based on helping CWD should not only include parents, but also assist TDS better interact with and understand the CWD. In addition, improving sibling relationships may negate or decrease the effect of parental burden or undesirable parenting styles in such families. This knowledge can assist practitioners as they guide families. Consequently, programs and interventions for these families should focus on facilitating positive sibling relationships that will act as protective factors for TDS in families raising a CWD.

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Table 1
Participant Characteristics

Variable	M	SD	Range
Number of children in family	4.01	2.21	1-13
Mothers age	40.78	7.72	26-66
Fathers age	42.81	8.18	29-67
Mothers education	15.13	2.04	11-25
Fathers education	15.61	2.38	5-25
Mothers hours work per week	13.40	16.31	0-80
Fathers hours work per week	45.11	12.02	0-80

Table 2
Descriptive Statistics for Study Variables

	Mothers' Ratings			*Fathers' Ratings*		
	M	SD	Range	M	SD	Range
Caregiver burden	2.09	.59	1.00-3.55	1.75	.49	1.00-3.08
Authoritative	3.95	.39	3.05-4.95	3.68	.49	2.19-4.81
Authoritarian	1.84	.37	1.18-3.25	1.92	.44	1.00-3.53
Sibling Relationships	3.80	.58	1.51-4.97	3.82	.57	1.37-4.97
Externalizing	0.60	.42	0.00-2.00	.61	.41	.00-2.00
Cooperation	1.23	.38	0.25-2.00	1.16	.42	.13-2.00

Table 3
Pearson Correlations

	Mothers' Ratings		*Fathers' Ratings*	
	Cooperation	Externalizing	Cooperation	Externalizing
CWD Gender	-.08	-.16	.08	-.06
CWD Age	.00	-.12	.15	-.10
Sibling Gender	.24**	-.12	.16	-.00
Sibling Age	.04	-.21*	.19*	-.23
Sibling Older	.05	-.12	-.00	-.08
Family Income	.12	-.23**	.11	-.22*
Caregiver Burden	-.19*	.20*	-.23*	.33**
Authoritarian Parenting	-.19*	.35**	-.28**	.45**
Authoritative Parenting	.20*	-.07	.43**	-.33**
Sibling Relationships	.30**	-.28**	.40**	-.43**

* $p < 0.05$ (2-tailed) ** $p < 0.01$ (2-tailed)

Table 4
Caregiver Burden, Parenting Style, Sibling Relationships, and TDS Behaviors

	Cooperative Behaviors									Externalizing Behaviors								
Variable	Model 1			Model 2			Model 3			Model 1			Model 2			Model 3		
Mother	B	b	R^2	B	b	R^2	B	b	R^2	B	b	R^2	B	b	R^2	B	b	R2
Constant	1.30		.12 [c]	.70		.16 [c]	.24		.20 [c]	1.11		.18 [a]	-.17		.29 [a]	.35		.33 [b]
Income	.03	.10		.03	.10		.04	.11		-.09	-.26 [b]		-.08	-.22 [b]		-.08	-.23 [b]	
Sibling Older	.02	.03		-.01	-.01		.04	.05		-.07	-.08		-.09	-.11		-.14	-.17	
CWD Age	-.00	-.05		-.01	-.09		.00	.03		.00	.03		-.00	-.02		-.01	-.15	
CWD Sex	-.08	-.10		-.09	-.12		-.11	-.13		-.14	-.17 [c]		-.14	-.16		-.12	-.14	
Sibling Age	.00	.02		.00	.04		-.00	-.03		-.01	-.11		.01	.06		.01	.13	
Sibling Sex	.16	.20 [c]		.15	.19 [c]		.11	.14		-.09	-.11		-.05	-.07		-.01	-.01	
Burden	-.15	-.22 [c]		-.11	-.17		-.08	-.12		.13	.18 [c]		.09	.12		.05	.07	
Authoritarian				-.09	-.08		-.08	-.07					.45	.39 [a]		.43	.37 [a]	
Authoritative				.19	.19 [c]		.13	.13					.08	.07		.14	.14	
Sibling Relationships							.15	.22 [c]								-.17	-.24 [b]	
Father																		
Constant	1.21		.12	-.10		.25 [a]	-.72		.30 [b]	.68		.19 [b]	.61		.29 [b]	1.22		.34 [b]
Income	.02	.05		.01	.02		.02	.06		-.07	-.18		-.05	-.13		-.07	-.18	
Sibling Older	-.09	-.09		-.11	-.13		-.06	-.06		.11	.12		.16	.17		.10	.11	
CWD Age	-.01	-.06		-.01	-.12		.00	.01		.02	.20		.03	.28		.02	.15	
CWD Sex	.09	.10		.03	.03		.05	.06		-.02	-.03		.03	.04		.01	.01	
Sibling Age	.02	.18		.03	.27		.01	.14		-.03	-.33		-.04	-.36 [c]		-.02	-.23	
Sibling Sex	.11	.12		.09	.10		.08	.09		.02	.03		.05	.06		.06	.07	
Burden	-.19	-.21 [c]		-.06	-.07		.01	.01		.25	.29 [b]		.13	.15		.07	.08	
Authoritarian				-.04	-.04		-.05	-.05					.27	.27 [b]		.28	.27 [c]	
Authoritative				.33	.38 [a]		.21	.24					-.12	-.14		-.01	-.01	
Sibling Relationships							.23	.30 [c]								-.22	-.30 [b]	

[a] $p < .001$, [b] $p < .01$, [c] $p < .05$