

Assessing Parenting Styles through Online Forums: A Discourse Analysis Approach using the
Meaning of the Child Methodology.

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Abstract

This study investigated whether parenting styles can be reliably analyzed from written parenting discourse (such as that posted on online forums) using the Meaning of the Child (MotC) methodology. The research focused on two primary hypotheses: (1) sensitive parenting, as identified through the MotC manual analysis, is associated with lower levels of child difficulties, and (2) parents classified as sensitive using the MotC manual analysis would also be categorized as authoritative based on the Parenting Styles and Dimensions Questionnaire (PSDQ) self-report measure. Data were collected from two online parenting forums, Reddit and Mumsnet, with a total sample of 100 participants. The Strengths and Difficulties Questionnaire (SDQ) was used to measure child outcomes.

Results supported the first hypothesis, showing that children of parents identified as using sensitive parenting styles (as determined by the MotC manual analysis) exhibited significantly fewer difficulties ($F = 20.42, p < 0.05$). The second hypothesis was also validated, as the Chi-square test revealed a significant association between the MotC manual analysis and the PSDQ scores ($\chi^2 = 4.197, df = 1, p < 0.05$), indicating a high level of agreement between the two measures.

These findings supported the reliability of the MotC manual coding system in identifying sensitive parenting styles from written discourse and highlight the effectiveness of using online data for parenting research. The study also demonstrates the potential of using discourse analysis on online data to provide a scalable and nuanced

approach to understanding parenting behaviors. Future research should validate these findings against long-form MotC interviews to determine the validity and applicability of this method.

Author's Biographical Sketch

Neha is a product strategist and consultant with a background in design and technology. She has a Bachelor's degree in Business Administration and a Master's in Design. Neha has always had a deep interest in psychology and well-being and a belief that technology has the power to revolutionize the field of mental health.

This passion motivated her to pursue a graduate degree in psychology so that she could learn more about the field and led to the pursuit of a thesis that explores how online data can be harnessed to gain insights into parenting styles. Neha believes that online data remains underutilized in social science research and can be used to develop impactful interventions.

Currently, Neha is focused on integrating technological solutions with psychological insights to develop innovative tools that promote mental health and well-being on a large scale. With a unique blend of expertise in technology and psychology, Neha is dedicated to making a significant impact in the field.

Dedication

To my husband and parents, thank you for always being so supportive and for being such a strong support system in my life. Your unwavering support and encouragement have been invaluable.

To my daughter, you are my biggest inspiration. Your presence in my life has shown me the path I need to pursue. It is because of you that I am on this journey. Thank you for being my guiding light.

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Chapter I

Introduction

Parenting shapes the course of individual development to a great extent, playing a critical role in the emotional, cognitive, and social development of children (Pettit, Bates, & Dodge, 1997; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994), and is often studied through the lens of parenting styles. Parenting styles refer to the attitudes parents hold towards their children and how these attitudes shape parent-child communication. The emotional climate created by these attitudes plays a critical role in shaping the dynamics of the parent-child relationship (Darling & Steinberg, 1993).

Parental Sensitivity and Child Outcomes

All measures of parenting style assess parental sensitivity, which has consistently been linked to positive child outcomes. Parental sensitivity is defined as a dynamic process of accurately perceiving a child's behavior and making inferences about their mental state, making oneself emotionally available, and responding contingently and appropriately (Shin, Park, Ryu, & Seomun, 2008). Research indicates that higher levels of parental sensitivity are associated with a broad range of positive outcomes in children across cognitive, behavioral, and socio-emotional domains (Bernier, Carlson, & Whipple, 2009; Leerkes, Blankson, & O'Brien, 2009; Belsky, Fearon, & Bell, 2007; Paavola, Kemppinen, Kumpulainen, Moilanen, & Ebeling, 2006; Silvén, Niemi, & Voeten, 2001). Conversely, lower levels of parental sensitivity are associated with more negative cognitive, behavioral, and emotional outcomes in children (Edwards & Hans, 2016;

Braungart-Rieker, Hill-Soderlund, & Karrass, 2010; Conway & McDonough, 2006; Biringen, Skillern, Mone, & Pianta, 2003).

To measure the impact of parental sensitivity on emotional and cognitive development a study evaluated whether sensitive parenting at age 2 predicted socio-emotional and cognitive-linguistic development at age 3 (Belsky and Feron, 2002). A geographically diverse US sample of 1,088 mothers and their 24-month-old toddlers were observed during a 15-minute parent-child interaction during play, which was video-recorded. Mothers were rated on their sensitivity to distress, positive attitude, and intrusiveness. At 36 months, the children were assessed for language development, school readiness, behavior problems, and social competence during a home visit. Language development and school readiness were assessed through observation while behavior problems and social competence were assessed through parent questionnaires. A relationship was found between parental sensitivity and child outcomes. Children who had received insensitive caregiving at age two showed a developmental disadvantage in all areas. This longitudinal, large-scale study that used mostly observational measures to assess sensitivity and child outcomes consistently found that children exposed to sensitive caregiving show a significant advantage in multiple areas of development compared to their counterparts who received insensitive care.

Additionally, a longitudinal study evaluating the effects of maternal sensitivity and long childcare hours on adolescent behavioral outcomes found that prolonged childcare hours and low maternal sensitivity in early years predicted higher externalizing behaviors and impulsivity in adolescence (Burchinal, Vandell, & Belsky, 2014). 677 families recruited from 10 locations in the US were tracked for parental sensitivity during

different stages of childhood and adolescence by recording parent-child interactions on video. These assessments were repeated at 6, 24, 36, and 54 months, and at 6, 8, 10, and 15 years, while the dyads engaged in age-appropriate activities. Maternal sensitivity was evaluated using different measures suited to the different developmental stages. While extensive childcare hours were associated with externalizing behaviors and impulsivity at the age of 15, high parental sensitivity during middle childhood lessened this association. These findings highlight the crucial role of parental sensitivity in shaping child outcomes, not only in early childhood but also in later childhood and adolescence. However, the repeated assessments conducted at various stages of childhood and adolescence, coupled with the observational nature of the study, indicates that measuring parental sensitivity is a resource-intensive and time-consuming process. Given the critical role of parental sensitivity in child development, there is a need for the development of more efficient assessment measures.

Parental sensitivity has been shown to predict child outcomes, even in the presence of risk factors such as parental anxiety and depression. For instance, a study involving 125 mother-child dyads examined the effects of maternal anxiety on child behavioral outcomes and found that maternal sensitivity was associated with higher levels of child agency and lower levels of child negativity during social tasks, even after controlling for maternal anxiety (Kertz, Smith, Chapman, & Woodruff-Borden, 2008). Interactions were videotaped and mothers were coded for sensitivity by three independent raters. Results showed that sensitivity remained a significant predictor of child outcomes, even after accounting for the effects of anxiety. The results further highlight the importance of parental sensitivity in child development, as it not only predicts positive

child outcomes but also serves as a protective factor against other risks, potentially mitigating their negative impact on children's development.

Although parental sensitivity is widely recognized as a critical predictor of child outcomes, assessing sensitivity through detailed observation is an arduous and resource-intensive task. This challenge may explain the historic emphasis on maternal sensitivity in child development research, despite the growing recognition of the importance of paternal sensitivity. Recent research, however, has found a positive correlation between paternal sensitivity and children's cognitive outcomes, indicating its importance in promoting positive child outcomes (Rodrigues et al., 2021), and the associations are similar in strength to those found in meta-analyses between maternal sensitivity and child outcomes. Nonetheless, the challenge of assessing parental sensitivity remains, emphasizing the need for the development of more accessible and efficient methods for evaluating parental sensitivity in future research, which would enable the inclusion of both mothers and fathers in the assessment process.

Parenting Styles

Scholars have proposed three main styles of parenting across different theoretical frameworks (Grey & Farnfield, 2017a; Gottman et al., 1996; Darling & Steinberg, 1993; Baumrind, 1971). The first style involves a parent-dominated dynamic where the child is expected to conform to parental expectations. The second style involves a child-dominated dynamic where the parent is less involved and provides insufficient support. The third involves parents making reasonable requests, encouraging child independence, and providing appropriate levels of support, which constitutes sensitive parenting.

Diana Baumrind's parenting styles paradigm (1971; 2005) is one example of such a framework of parenting styles. Baumrind conducted extensive observational research in the 1960s, studying parents' interactions with their children in natural settings (Baumrind, 1967). Based on her findings, Baumrind created three distinct parenting styles: authoritarian, permissive, and authoritative (Baumrind, 1967; 1971). Authoritarian parenting involves rigid control over a child's behavior without warmth or responsiveness, while permissive parenting lacks structure and parental control despite being characterized by warmth and acceptance (Maccoby & Martin, 1983; Baumrind 1991). Authoritative parenting strikes a balance between control and independence, making child-centered decisions using reasoning while valuing open communication, showing high involvement, and granting appropriate autonomy; thus, it is characterized by high levels of parental sensitivity (Baumrind, 1991). Later researchers extended Baumrind's parenting styles to include neglectful parenting, which is characterized by a lack of involvement, responsiveness, monitoring, warmth, and support, resulting in the least parental involvement (Maccoby and Martin, 1983).

The Meaning of the Child (MotC; Grey & Farnfield, 2017a) is another prominent paradigm for understanding parent-child relationships, which is based on attachment theory (Bowlby, 1979) and specifically rooted in Crittenden's Dynamic Maturational Model of Attachment (Crittenden, 2006). The MotC was developed as an assessment and intervention tool and has been successfully utilized within therapeutic contexts, as well as to inform decisions related to child welfare (Grey & Farnfield, 2017b). The three main parenting patterns as defined by the MotC are controlling, unresponsive, and sensitive.

Parents using the controlling style closely monitor and limit the child's autonomy (Grey & Farnfield, 2017a), while those using the unresponsive style encourage competence and independence at the expense of emotional support and parental involvement (Grey & Farnfield, 2017a; Grey, 2014). The sensitive parenting style involves parents remaining flexible and responsive to the child's needs and promoting independence when appropriate (Grey & Farnfield, 2017a; Grey, 2014). This style promotes a co-constructed relationship in which the parent functions within the child's zone of proximal development (range of tasks that can be performed with support), monitoring their abilities and the environment to provide support when needed (Grey & Farnfield, 2017a; Crittenden 2016; Vygotsky, 1967).

Parenting Styles and Child Outcomes

Research consistently finds that parenting styles characterized by sensitive parenting are associated with positive child outcomes. Baumrind's authoritative parenting style, which emphasizes high parental sensitivity, has been linked to various positive outcomes such as prosocial behavior, academic performance, executive functioning in children, and fewer behavioral problems (Mensah & Kuranchie, 2013; Bernier et al., 2009; Aunola, Stattin, & Nurmi, 2000). Additionally, it promotes critical thinking and independent problem-solving skills among children (Hess & McDevitt, 1984).

A study evaluating the relationship between parenting styles and academic performance examined the association between parenting styles and adolescents' achievement strategies — including task-avoidance, failure-expectation, passivity, and self-enhancing attributions — while controlling for the effects of adolescents' self-esteem, depression, and concentration ability (Aunola et al., 2000). A sample of 354

adolescents and their parents were recruited from schools in Sweden. Parents filled out questionnaires assessing their parenting styles and adolescent achievement strategies. Adolescents filled out questionnaires assessing their self-esteem, depression, concentration, achievement strategies, and parenting styles used by their parents. The results indicated that parenting styles had an impact on adolescents' use of adaptive and maladaptive achievement strategies. Adolescents from authoritative families were more likely to use adaptive, task-oriented strategies, while those from neglectful families tended to use maladaptive, task-avoidant strategies. Additionally, parents from authoritative families exhibited higher levels of child disclosure, trust, and engagement compared to parents using other parenting styles, indicating greater parental sensitivity. These findings were consistent across both parent and adolescent reports, providing strong evidence for a positive correlation between authoritative parenting, which is characterized by high parental sensitivity and positive child outcomes.

In contrast, the other parenting styles in Baumrind's framework have been found to be associated with less positive outcomes for children (Mensah & Kuranchie, 2013; Baumrind et al., 2010; Williams et al., 2009; Hovee et al., 2008). Neglectful parenting, in particular, appears to have the most detrimental effects, with children from such families exhibiting behavior problems, low academic achievement, and poor self-regulation (Hovee et al., 2008; Aunola et al., 2000; Lamborn, Mounts, Steinberg, & Dornbusch, 1991).

Research has shown that the MotC's sensitive parenting pattern is associated with more positive outcomes in children than the controlling and unresponsive patterns (Grey & Farnfield, 2017b). A study measuring the discriminant validity of the MotC

classification system found that it was effective in distinguishing between normative and 'at risk' samples. The families classified as 'at risk' in the study had been referred due to issues such as child custody, visitation rights, and allegations of neglect, indicating that these families were facing complex and challenging situations related to their children's well-being. It is well established in the literature that children who experience family court proceedings and other forms of adversity, such as neglect or abuse, are at a higher risk for negative developmental outcomes, including mental health problems, behavioral difficulties, and academic struggles (Greeson et al., 2011). The study involved 85 parents and their children, aged 0-3 years, including individuals from both 'at risk' and 'normative' populations. One-on-one interviews were conducted using the Parent Development Interview, transcribed, and coded using the MotC system of analysis. Parents scored higher on sensitivity in the normative sample and lower on sensitivity in the 'at risk' sample. This relationship held for fathers as well as mothers. While the existing research provides support for the positive association between the MotC-sensitive parenting style and positive child outcomes, there is a need for future studies to replicate these findings with larger and more diverse samples. Moreover, since the current process of conducting MotC assessments involves a time-consuming one-on-one interview, there is a need for the development of a less time-consuming methodology, which could support the wider application of the MotC framework in diverse contexts.

Self-report measures of parenting styles

In social science research, self-report measures are commonly used to gather data on participants' beliefs, behaviors, attitudes, and experiences. These measures rely on participant's self-reported responses to psychometrically valid self-report scales that lend

themselves to quantitative analysis. Researchers commonly use self-report scales to measure Baumrind's parenting styles (1971, 2005). These self-report measures involve parents indicating their level of agreement with items on a five-point Likert scale. The questionnaire includes statements related to their parenting attitudes and behaviors. One such measure is the Parenting Dimensions Inventory (Slater & Power, 1987), where parents respond to items such as, "I encourage my child to talk about his or her troubles" and "I think a child should be encouraged to do things better than other children." Another measure is the Primary Caregivers Practices Report (Azimi, Vaziri, & Kashani, 2011), which is a comprehensive questionnaire comprising 62 items. The questionnaire asks about the frequency of specific behaviors that parents or guardians engage in while interacting with their children. Examples of items in the Primary Caregivers Practices Report include "Do you encourage your child to talk about their troubles?" and "Do you resort to spanking your child when they are disobedient?"

A study using the Primary Caregivers Practices Report (PCPR) as a measure of parenting styles explored the relationship between parenting styles and aggressive behavior among high school students in Tehran, (Azimi et al., 2011). The study used cluster sampling to recruit 400 high school students, with equal representation of males and females (200 of each). The PCPR questionnaire to assess parenting styles was completed by 380 out of 400 parents of primary school students. Meanwhile, school teachers completed a survey to assess students' aggressive behavior, asking them to rate how often adolescents engage in these behaviors on a 5-point Likert-type scale. The results showed that the use of an authoritative parenting style had a negative correlation with adolescent aggression. A positive aspect of this study was the large sample size and

high completion rates, as evidenced by the fact that 380 out of 400 parents completed the parenting style self-report measure. The large sample size and high completion rates were likely due, in part, to the advantages of self-report measures of parenting, including their economy, ease of administration, suitability for large-scale studies and quantitative analysis, and confidentiality preservation (Robins, Fraley, & Krueger, 2009). Moreover, self-report measures of parenting tend to have high validity and reliability, making them a valuable tool for gathering data on parenting practices (Coolahan, McWayne, Fantuzzo, & Grim, 2001).

Although self-report measures have certain advantages, they also have potential limitations and biases, including restricted self-knowledge, biases in memory, and response biases such as socially desirable responding. Restricted self-knowledge refers to the idea that individuals may have trouble recalling or integrating information necessary to answer the question (Dunning et al., 2004). Research on self-assessment in various psychological domains finds that self-views have a weak correlation with actual behavior and performance. Memory biases involve difficulty accurately recalling past events or behaviors, which can lead to inaccuracies in participant responses (Conner & Barrett, 2012; Robinson & Clore, 2002). Socially desirable responding refers to the inclination of individuals to portray a positive image of themselves (van de Mortel, 2008). In a meta-analysis of 14,275 studies that employed self-report measures to evaluate individuals' inclination to depict themselves positively, socially desirable responding impacted the findings in nearly 50% of the studies, potentially affecting their validity (van de Mortel, 2008).

A study examined the influence of social approval bias (the desire to gain approval from others through one's responses) and social desirability bias on self-reported measures of physical activity and energy expenditure (Adams et al., 2005). Participants included 81 women from both the medical center and general community in Worcester, Massachusetts, who completed objective and self-report measures to assess physical activity and energy expenditure. Objective measures included doubly labeled water and ActiGraph accelerometers, while self-report measures consisted of two 7-day physical activity recalls and two social desirability/social approval scales. The findings revealed that self-reported measures tended to overestimate energy expenditure and light/moderate activity duration due to social desirability, and underestimate energy expenditure due to social approval. These findings suggest that self-reported measures of physical activity are susceptible to social biases, which may be present in any domain where there is pressure to conform or present oneself in a certain way, such as parenting.

Similarly, research spanning almost two decades suggests that social desirability bias has been consistently neglected in the construction, evaluation, and implementation of scales despite the use of validity correction factors in psychometric measures (King & Bruner, 2000). Moreover, socially desirable responding is more likely to occur when individuals are answering socially sensitive questions (Adams et al., 2005; Babcock et al., 2004; King & Bruner, 2000). This is particularly relevant in the case of parenting, where social desirability bias may affect parents' responses to inquiries concerning their parenting attitudes and methodologies. As a result, the presence of social desirability bias in self-report measures may lead to an overrepresentation of positive behaviors that individuals are more likely to report accurately, and an underrepresentation of negative

behaviors that may be seen as embarrassing or uncomfortable to report, such as the use of physical discipline.

Assessing parenting styles through discourse analysis

Discourse analysis is a research technique that falls within the broader field of language analysis, which examines language use and the construction of meaning through communication. This method can be applied to assess parenting styles by analyzing language use and communication patterns within parent-child interactions. In daily life, language use in all forms of communication, whether spoken or written, plays a fundamental role in human relationships (Wiggins, 2009). Discourse analysis encompasses a range of methodological approaches that explore how language is used in social interactions, including natural conversations, interviews, and written text. The essence of discourse lies in the speaker's or writer's choice of language from several possibilities when conveying an idea or event, which is dependent on their perspective (Budd & Raber, 1996). The term "discourse" emphasizes the focus on language usage rather than grammatical or linguistic elements (Wiggins, 2009), and serves a function as individuals adapt their language to fit the interpretive context in which they find themselves.

The Meaning of the Child's (MotC) methodological approach is based on the well-established methodology used to classify attachment strategies in the widely used Adult Attachment Interview for evaluating adult attachment, which has been employed in numerous research studies since its introduction in 1985 (George, Main, & Kaplan, 1985). Drawing on the Adult Attachment Interview, the MotC framework involves conducting interviews and analyzing transcripts to identify how individuals process

information and the degree of coherence in their discourse. The MotC looks at how parents interpret information about their child in order to highlight thought processes in parents' thinking (Grey & Farnfield, 2017a).

The MotC traditionally uses an interview procedure — the Parent Development Interview — that is approximately 1-1.5 hours long, which is first audio-recorded and then transcribed. The Parent Development Interview is a semi-structured interview that explores how parents perceive their child, themselves as parents, and the relationship between parent and child (Sleed, Slade, Fonagy, 2020). It includes questions such as, “What gives you the most joy in being a parent,” and “When your child is upset, what does he/she do?” The interview also includes questions about the parent's own childhood experiences and upbringing. The Parent Development Interview is structured to pose questions that require input from various memory systems (such as semantic, episodic, and imaged). The term memory systems is drawn from cognitive psychology and is used to describe the different pathways by which information is processed by the brain (Schacter & Tulving, 1994). For example, the interviewer probes the interviewee throughout the interview for examples to see if there are discrepancies between general semantic statements parents make and the episodes they describe.

Once the interview is transcribed, the parent's responses are analyzed to understand their relationship dynamics with their child, such as the degree of hostility, connectedness, and mutual enjoyment (Grey & Farnfield, 2017a). This is done by identifying discourse markers — linguistic features and patterns that signify speakers' feelings, beliefs, and attitudes — in the text and looking for recurring themes. For example, a marker of a sensitive parenting style is the use of humor to appreciate

unconventional or peculiar aspects of the relationship, as opposed to humor that depicts the parent as inept or belittles the child (Grey & Farnfield, 2017a).

Discourse analysis is a highly advantageous approach for evaluating parenting styles, as it allows researchers to gain a deeper understanding of parents' thought processes and detect subtle nuances that may be challenging to identify through other means. This approach investigates how parents truly feel and manage their emotions during interactions with their children, going beyond what parents assume they know about parenting. The MotC system of analysis further reveals how parents respond to their children when they feel threatened, which may not be readily apparent to the parent (Grey, 2022). By probing interviewees for specific episodes, this system uncovers discrepancies between a parent's beliefs and their actual actions.

In contrast to self-report measures, discourse analysis provides unique insights into a parent's mindset (Roisman et al., 2007). This approach enables researchers to understand a parent's thoughts and emotions towards their child, even when these cognitions are not fully realized, or if the parent would find it uncomfortable to report them directly. While self-report measures and discourse analysis capture some similar information, discourse analysis provides a distinct perspective on parents' experiences by examining the language used and revealing underlying thought processes and actual behavior that may not be apparent through self-report alone.

Despite these advantages, discourse analysis also has drawbacks. Firstly, most language coding systems tend to favor individuals who are better educated, possess higher literacy levels or have higher IQs. However, the MotC system was specifically developed for 'at risk' populations — families dealing with child custody issues,

allegations of neglect — and its population was mainly composed of people with lower socio-economic status and education levels. This means that it does not rely on or prioritize individuals with higher education or literacy levels, but rather provides a unique opportunity to capture and analyze the discourse of individuals from diverse backgrounds and challenging circumstances. Another disadvantage of discourse analysis is that it can be a time-consuming and intricate process, requiring skilled analysts to transcribe, code, and interpret the data accurately. For example, the MotC parenting style classification process can sometimes take several days to complete. The interview itself can be lengthy, sometimes taking up to three hours, and after that, it needs to be transcribed and coded, which can take several more days. Furthermore, interviewing and coding require different skill sets, meaning that the process often involves several researchers and analysts working on a single assessment. Lastly, the time-consuming nature of measuring parenting styles through traditional methods of discourse analysis has resulted in relatively limited quantitative research in this area.

While the MotC system has been primarily used in conjunction with the Parent Development Interview, the methodology refers to the coding system used to analyze the discourse and not to the interview protocol itself. As such, the MotC can arguably be used with any data collection method that elicits a parent's reflections about their child and the experience of parenting (Grey, 2022). Furthermore, discourse analysis is a versatile approach that can be applied to various forms of communication, such as written texts, online education platforms, interviews, and online discussions (Misir & Işık-Güler, 2022; Martins, 2022; Wiggins, 2009). Notably, researcher James Pennebaker has conducted extensive research on the use of language analysis on written text, particularly

in the areas of natural language processing and computational text analysis. By analyzing patterns in language use, Pennebaker's research has yielded detailed insights into individuals' thoughts, emotions, and underlying psychological and social processes. For example, a study including 767 individuals examined how values and behaviors can be extracted from open-ended text using a topic modeling technique called the Meaning Extraction Method (Boyd et al., 2015). The research involved an online survey that asked participants to describe in detail the values that guide their lives and the behaviors they engaged in within the past week. It also included a self-report values survey, in which participants rated 57 different value items based on their perceived importance. The data collected were analyzed using natural language processing techniques to identify prevalent values and behaviors and explore the links between the written and survey responses. The results showed that the values reflected in people's descriptions of their guiding principles showed relatively intuitive, predictive links to everyday behaviors. In contrast, the values stated in the self-report survey differed from the values derived from the text analysis and were less accurate in predicting everyday behaviors. This study demonstrates that individuals' personal written accounts are more predictive of real-life behavior, compared to responses provided in self-report questionnaires. Moreover, this example highlights the adaptability of language analysis, making it applicable to diverse written texts, including those that may be used to analyze parenting styles. The fact that the MotC system was designed as an adaptable system enhances the potential for researchers to gain insights into parenting styles using different forms of text.

Use of online data in social science research

The use of online data sources has revolutionized social science research, providing researchers with new and innovative opportunities to study human behavior (Karpf, 2012). Online data sources include a variety of methods such as online surveys, social media, and internet forums, among others, and have several advantages compared to traditional methods of data collection. These include faster data collection as participants do not need to travel to the lab, cheaper and less resource-intensive studies, larger sample sizes that provide greater statistical power, and the ability to reach a wider and more heterogeneous audience (Birnbaum, 2004).

A study was conducted to determine whether online studies could provide reliable results that are comparable to those obtained from traditional laboratory settings, while also exploring the advantages of using online data collection methods (Birnbaum, 1999). The researchers tested whether modern decision-making theories could explain observed behavior using specific tests. The study compared an online sample of 1,224 participants from 44 countries to a lab sample of 124 undergraduate students. Both groups were given quizzes to assess their decision-making abilities, with online participants completing them remotely and lab participants completing them in-person. While the lab sample consisted mostly of participants under 22 years old, the online sample had a wider age range, with 77% of participants over the age of 22, 50% over 28, and 20% above the age of 40. The results showed that online data collection was an effective and reliable method of data collection, producing comparable results to the traditional laboratory studies. The study's large and diverse sample size, ease of online data collection, and relatively low cost highlight the advantages of using online methods for social science research, which

can help to reach a wider and more heterogeneous audience in a faster and more cost-effective manner. Additionally, the diversity of the online sample allowed the tests to capture differences in behavior that may not have been observed with a less diverse lab sample. Notably, the online sample demonstrated a higher tendency to choose gambles with higher expected value, despite having a similar choice percentage as the lab sample. These findings highlight the potential of online methods to reveal behavior that may not be observed with traditional research methods.

In addition to its advantages over traditional methods, online data sources, particularly online text data, offer a valuable tool for analyzing psychological variables in social science research (Karpf, 2012). These variables can include mental health data, attitudes, group membership, and ideological disposition. For example, a study utilized social media language to predict psychological stress level in 601 US participants who provided access to their Facebook and Twitter data (Guntuku, Buffone, Jaidka, Eichstaedt, & Ungar, 2019). The study employed various methods to convert social media language into numerical features, such as dictionaries and data-driven approaches. Results revealed that the stress levels identified through social media language were significantly correlated with participants' scores on a stress scale. The language of stress was characterized by expressions of perceived lack of control, negative-angry affect, and comorbid mental health conditions. The study found that certain linguistic features, such as first-person singular pronouns and filler words, as well as topics such as exhaustion and feeling hurt, were positively correlated with stress. This study underscores the value of analyzing online data as a novel approach to gaining insights into various aspects of

psychological well-being, including the correlations between specific linguistic features and psychological phenomena.

In addition to assessing psychological variables, online text data can be used to assess attitudes and opinions of individuals towards various topics. For example, one study used an online forum on home building to understand perspectives of construction workers on subjects of smoking, smoking restrictions on construction sites, and workplace second-hand smoke (Bondy & Bercovitz, 2011). The objective of the study was to identify factors that could act as obstacles or aids in establishing smoke-free worksites. The study included employers, employees, as well as freelance tradespeople, who worked in the field of residential construction. 1000 smoking-related messages were extracted and analyzed from public home-building discussion forums. The results revealed conflict between smoking and non-smoking workers, and insight into employer actions to implement smoking restrictions. This study was able to utilize existing online data to successfully analyze attitudes and opinions of construction workers and employers, providing useful insights that could inform conflict resolution strategies and other approaches for promoting smoke-free workplaces.

Lastly, online text data can yield similar — and possibly even more honest — data as compared with one-to-one interview transcripts. For example, a study compared the effectiveness of interviews and online forums in identifying barriers and facilitators to medication adherence after a stroke in order to understand stroke patient adherence to prevention medications post-stroke (Jamison et al., 2017). 42 participants were interviewed, and 84 participants engaged in an online forum. Both groups comprised a combination of stroke survivors and caregivers. The forum was moderated to facilitate

online communication between stroke survivors and caregivers, offering a platform for sharing information and emotional support related to any aspect of stroke. Data from the two sources was analyzed to produce themes using the Perceptions and Practicalities Approach framework. While both methods produced similar themes, the online forum yielded additional insights, such as criticisms of clinicians' prescribing practices and caregiver burden. This could be because online forums provide a more anonymous and less socially constrained environment for people to discuss sensitive topics, leading to more genuine and useful discursive data. Other research has also shown that online forums tend to produce more honest and natural communication compared to surveys and interviews (Holtz, Kronberger, & Wolfgang, 2012).

Despite the numerous advantages of online data sources for social science research, such as faster and cheaper data collection, larger sample sizes, and the ability to analyze psychological variables, research in the field of parenting styles has been slow to adopt these methods. Researchers in this area still mainly rely on traditional methods of data collection, such as in-person interviews and surveys. However, utilizing online text data could provide researchers with more diverse, naturalistic, and easier-to-collect data, enabling them to measure parenting styles more easily. Additionally, this approach could result in data that is more genuine and less affected by social restraint, and ultimately lead to more representative and accurate results.

The Current Study

Online text data has emerged as a powerful tool for assessing psychological variables as it can be more spontaneous than responses to an interview and can be easier to obtain. However, despite its potential, it remains underutilized in parenting style

research. This study aims to combine the strengths of discourse analysis with the speed and efficiency of online text data to investigate whether online parenting forum discourse can be reliably analyzed using the MotC methodology.

It was expected that parents classified as sensitive based on their online forum posts, as coded using the MotC system of analysis, 1) will report fewer child difficulties as compared with parents classified as controlling and unresponsive, 2) and will be more likely to be categorized as authoritative (using Baumrind's parenting style framework), as compared to authoritarian and permissive.

Chapter II

Method

The study was conducted using online forums. Two platforms were used for recruiting and analysis: Reddit and Mumsnet. Reddit is a comprehensive online platform that facilitates a wide range of user-created content and dialogues. Established in 2005, the site is organized into numerous "subreddits," each focusing on distinct themes or interests. Participants were recruited exclusively from the r/Parenting subreddit, an interactive online community where parents exchange advice, experiences, and support on all aspects of raising children. Mumsnet is a widely used online forum where primarily mothers engage in discussions on various aspects of parenting, family life, and other related topics.

Institutional Review Board (IRB) approval was secured from the Harvard Committee on the Use of Human Subjects (CUHS) prior to initiating contact with potential participants and conducting the research.

Participants

The sample predominantly comprised participants from the United States and the United Kingdom, with the former accounting for approximately 85% of the total cohort. Demographic details such as the gender of the parents were occasionally discernible from the posts when explicitly mentioned by the participants themselves; however, this information, along with specific locations, was not systematically collected. The only demographic information obtained was the participants' country of residence, which was

collected for the purpose of distributing country-specific Amazon gift cards. Given the online nature of the forum, it is presumed that the study attracted a geographically diverse group of parents from varied backgrounds within the United States and United Kingdom, enhancing the generalizability of the findings.

A total of 914 individuals were invited to participate in the study, of which 142 engaged. Among these, 42 participants either did not complete the questionnaire, failed both attention check questions, or wrote posts that did not meet the inclusion criteria. Consequently, the final study sample comprised 100 participants. Eligibility to participate required having a child aged between 2 and 17 years, amongst other criteria that are discussed in further detail later.

Measures

The instruments employed in this study to gather data are described in the following sections.

Strengths and Difficulties Questionnaire

Child outcomes were assessed using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001; 1999), which takes approximately 5 minutes to complete. The SDQ consists of 25 items, divided into five subscales of five items each. The subscales are emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior. The SDQ also includes a Total Difficulties Score, which is a sum of the scores from the first four scales, and ranges from 0 to 40. A higher score on the Total Difficulties Scale indicates more behavioral and emotional difficulties. Each item is rated on a three-point Likert scale, where 0 indicates that the item is “not true,” 1 indicates that the item is “somewhat true,” and 2 indicates that the item is

“certainly true.” The SDQ is a brief and easy-to-administer questionnaire filled out by parents that assesses both strengths and difficulties in children aged 2-17 years.

Respondents indicated their level of agreement with declarative statements about their child such as, “Has at least one good friend” and “Many worries or often seems worried.”

The survey is designed to capture the same construct across different age groups of children, with slight variations in the statements used. Specifically, the study utilized three versions of the survey, tailored to children aged 2-4, 4-10, and 11-17 years.

Numerous studies conducted worldwide have established the psychometric soundness of the instrument as a reliable and valid measure of child adjustment. In terms of reliability, high internal consistency has been found for the SDQ scales across parent, teacher, and youth versions, as well as high test-retest reliability and long-term stability for the SDQ scales across parent, teacher, and youth versions (Achenbach, et al., 2008). The SDQ problem items were modeled on the Rutter parent and teacher questionnaires, and the high correlations between the corresponding Rutter and SDQ scales suggest good content validity (Achenbach, et al., 2008). Additionally, the SDQ has been found to be a valid tool in identifying children with mental health problems and a greater need for services, as it has significant associations with referral for mental health and different combinations of difficulty and impact scores. Its consistent use across various cultures and settings attests to its robustness in accurately capturing child behavior and emotional functioning, providing a valuable tool for measuring child outcomes (Achenbach, et al., 2008; Goodman, Renfrew, & Mullick, 2000; Klasen, et al., 2000; Goodman, 1999).

Parenting Styles & Dimensions Questionnaire- Short Version (PSDQ)

The PSDQ-short version, a self-report questionnaire consisting of 32 items, was used to measure Baumrind's parenting styles (Robinson, Mandleco, Olsen, & Hart, 2001). The questionnaire assesses the three continuous dimensions of parenting styles — authoritative (15 items), authoritarian (12 items), and permissive (5 items), and is the shortened version of the original 62 item Parenting Styles and Dimensions Questionnaire (Robinson, Mandleco, Olsen, & Hart, 1995). Items are rated on a five-point Likert response scale, ranging from 1 (never) to 5 (always), and includes statements such as “I encourage my child to talk about his/her feelings.” The survey takes 5-10 minutes to complete. Previous research studies have consistently demonstrated the adequacy of the PSDQ instrument in terms of both its reliability and construct validity. Specifically, internal consistency estimates have been reported to be satisfactory (authoritative $\alpha = 0.86$; authoritarian $\alpha = 0.82$; permissive $\alpha = 0.64$), indicating that the instrument is internally reliable. Additionally, convergent validity has been established, with scores on the authoritative, authoritarian, and permissive dimensions of the PSDQ-short version being correlated with scores on corresponding dimensions of the Parental Authority Questionnaire and Parenting Styles Inventory, further validating the use of this instrument in measuring Baumrind's parenting styles (Oliveira, 2018; Yaffe, 2018).

Meaning of the Child Interview (MotC)

The MotC examines the dynamic of parent-child relationships and their systemic context through an analysis of parental discourse. It uses a modified version of the Parent-Development Interview (Sleed, Slade, & Fonagy, 2020; Aber, Slade, Berger, Bresgi, & Kaplan, 1985), which is a 1-1.5-hour long interview procedure that aims to

gather information on the parent's perception of their child, themselves as a parent, the relationship, and how they were parented. One-on-one interviews are audio-recorded, transcribed, and then coded using the MotC system of analysis. A MotC assessment yields insights into relational risk, patterns of caregiving, and parental ability to mentalize for their child. This analysis involves identifying parenting patterns, which are categorized as sensitive, controlling, or unresponsive, with the labels reflecting the child's perspective in the dynamic. Additionally, interviews are assigned a risk category based on the level of sensitivity exhibited, providing further information on the quality of the parent-child relationship.

For this study, the MotC methodology was adapted to analyze parental discourse from posts written by parents that were gathered through Reddit and Mumsnet. The adapted MotC assessment involved analyzing parental discourse in posts in order to identify parenting patterns as defined by the MotC system of analysis. Posts were categorized as sensitive, controlling, or unresponsive.

The MotC has been extensively utilized in therapeutic settings, as well as in child welfare decision-making and intervention. Empirical investigations have confirmed the construct validity of the MotC by demonstrating a positive correlation between parenting classifications on the MotC and the CARE-Index, which assesses similar constructs derived from parent-child interaction. Specifically, research has found that the MotC scores were significantly related to the sensitivity, control, and unresponsiveness subscales of the CARE-Index, indicating that the two measures assess related aspects of parenting (Grey & Farnfield, 2017b; Künster, Fegert, & Ziegenhain, 2010). Notably, the

MotC is one of only a few validated tools that have been successfully implemented with both fathers and mothers.

The Meaning of the Child (MotC) methodology employs discourse markers to analyze patterns of speech that reveal how parents process information about their child. These discourse markers examine the interplay between affect and cognition, providing insight into the parent's thought processes and emotional responses. The coding of these markers involves identifying specific speech patterns across different memory systems.

The concept of memory systems originates from cognitive psychology (Schacter and Tulving, 1994) and describes the various pathways through which the brain processes information. By analyzing these markers, researchers can gain a nuanced understanding of parental attitudes and behaviors. The methodology includes roughly 110 discourse markers, with this list continuously growing and being refined through ongoing research. Table 1 shows a sample of markers identified in discourse using the MotC methodology.

To ensure the reliability of the coding in this study, the author was tested and certified as a reliable coder for the MotC methodology.

Procedure

The study was conducted online using Qualtrics to host the survey. Different recruitment methods were employed on Reddit and Mumsnet to gather participants.

Reddit Recruitment:

On Reddit, parents who posted on the online forum and met the eligibility criteria were contacted to participate via direct messages on the forum. The r/Parenting subreddit

was used to collect data this way. The inclusion criteria for selecting previously written posts on Reddit was as follows: a post needed to be at least 120 words in length.

Table 1. Subset of Discourse Markers using in the MotC

Memory Systems	Sensitive	Controlling	Unresponsive
Semantic Memory	Nuanced, Balanced	Undermined Positive, Enmeshed	Idealizing, Borrowed
Procedural Memory	Open, Exploratory	Seeking Ally, Sarcasm	Flat Affect, Sad
Imaged Memory	Warm, Animated Affectionate Images	Intense, Exaggerated Fear	No Images, Imaginary Idealizing
Connotative Language	Moderate, Lively	Dismissive, Trite	Telegraphic, Rote
Episodic Memory	Rich and Personal, Child in Mind	Undermining, Triangulated	Absent, Scripted
Reflective Integration	Curious, Awareness of Problems	Refused, Magic Future	Oscillating, Unintegrated Fragments

The posts were analyzed for the presence of discourse markers which were used to code parenting styles using the MotC methodology. Additionally, to be included in the study, the posts had to pertain to topics such as parents' communication methods with their child, the parent-child relationship, or difficulties encountered in parenting.

The selection process for the study sample included identifying the most recent posts that met the length and content criteria. Conversely, posts solely seeking product recommendations or lacking discourse markers were excluded. Specifically, posts that did not contribute to meaningful discussions were not considered for participation. These criteria ensured that the sample consisted of individuals who have a genuine interest in discussing topics related to parenting, which was crucial for obtaining high-quality data for the study. The selection process focused on identifying the most recent posts that met the length and content criteria.

The response rate on Reddit was really low. A total of 793 posts were identified on r/Parenting as qualifying for the study. All 793 parents were contacted via direct messages on the r/Parenting subreddit. Of those, only 44 participated in the study. Out of the 44 who participated, only 30 were included in the study sample. The remaining 14 were disqualified either because they dropped out of the survey mid-way through or because they got both attention check questions wrong. Two attention check questions were included to ensure data integrity, where participants were explicitly instructed to select a specific answer (e.g., “Select ‘Not True’ for quality purposes”). This was done to ensure the integrity of the dataset. Participants who failed both attention checks were disqualified from the study.

Mumsnet Recruitment

Due to low participation from the Reddit recruitment method, a different strategy was employed on Mumsnet. An advertisement costing \$30 was posted, inviting parents to voluntarily express their interest in the study. A total of 165 individuals expressed interest and were sent a survey link. The survey was identical to that used on Reddit, except

Mumsnet participants were additionally asked to write a post meeting the study's inclusion criteria.

They were provided guidelines to write about a challenging behavior in their child, a communication problem, or any issue they were struggling with in parenting. Participants were instructed to write as naturally as they would if they were seeking advice on a forum like Mumsnet, using the first person. They were required to write a minimum of two paragraphs, with the survey configured to only allow submission once their post reached at least 120 words. Parents in this group knew that their posts weren't public, as opposed to the parents recruited from Reddit.

Informed Consent and Data Collection

All participants were informed about the study's risks and benefits and provided informed consent before participation. The online survey included questions about child outcomes and parenting styles, derived from the Strengths and Difficulties Questionnaire (SDQ) and the Parenting Styles and Dimensions Questionnaire (PSDQ) respectively.

Mumsnet participants also wrote a qualifying post as part of their submission.

Participation in this study was voluntary, and incentives were provided: \$15 Amazon gift cards for Reddit participants (increased from \$12 due to initial low participation) and \$12 Amazon gift cards for Mumsnet participants. Each participant who completed the survey and met the inclusion criteria received an Amazon gift card within 4-5 business days.

Participants first had to read and consent to participate before proceeding with the survey. On Reddit, parents were sent information about the research along with the link to participate via direct messages. On Mumsnet, parents who expressed interest were sent information about the research along with a link to provide consent and participate. The

difference was that on Mumsnet, links and study information were only sent to people who requested to participate. The messaging used to reach participants employed behavioral science principles to incentivize prospective participants and promote recruitment. With each change to the messaging, participation rates increased.

Coder Reliability

To ensure the reliability of coding parental discourse from posts using the MotC methodology, the author was tested and certified as a reliable coder. This certification ensured the robustness and validity of the analysis performed on the online parental discourse data.

Data Analyses

A series of statistical analyses were conducted using R and RStudio version 369 (RStudio Team, 2023). Initially, total difficulty scores and subscale scores were calculated for all research participants using the Strengths and Difficulties Questionnaire (SDQ). This was followed by the assessment of parenting styles utilizing the short version of the Parenting Styles and Dimensions Questionnaire (PSDQ) for all parents in the sample. Descriptive statistics were subsequently performed on these measures, as well as on data from posts coded using the MotC system of analysis. Analyses were conducted separately for each hypothesis under investigation. The MotC system includes three categories: sensitive, controlling, and unresponsive. However, due to feasibility constraints, the analysis was restricted to two. In the manual analysis, all three categories were initially categorized, but controlling and unresponsive were grouped into a single

non-sensitive category for hypothesis testing. Additionally, the distributions of SDQ and PSDQ scores were analyzed separately for data sourced from Mumsnet and Reddit.

To test the hypothesis that parents classified as sensitive (as determined by their MotC parenting pattern coding derived from online posts) would report lower levels of difficulties in their children compared to parents classified as either controlling or unresponsive, an analysis of variance (ANOVA) was employed comparing mean child difficulty scores between the sensitive and non-sensitive group (i.e., controlling and/or unresponsive) based on the results of manual coding.

To test the hypothesis that parents classified as sensitive (as determined by their MotC system scores derived from online posts) would be more likely to be categorized as authoritative (as derived from the PSDQ self-report measure), a Chi-square test of independence was used.

Chapter III

Results

Based on the sample of 100 participants, total difficulty scores ranged from 1 to 26, with a mean of 13.54 and a median of 13 (as shown in Table 2). The 25th and 75th percentiles were 8.75 and 19, respectively. The mean total difficulty score of 13.54 indicates that, on average, children experienced moderate levels of difficulties as assessed by the SDQ. The primary drivers of the total difficulty score were hyperactivity/inattention (mean = 4.2) and peer relationship problems (mean = 3.33), which were the highest subscale scores. Emotional symptoms (mean = 2.97) and conduct problems (mean = 3.04) were also significant contributors. The prosocial behavior subscale, which uses reverse scoring (where higher scores indicate better outcomes), had a mean of 6.14, suggesting that children in this sample generally exhibited positive social behaviors.

For the PSDQ measure, participants were categorized based on their relative scores within the sample. Individuals were assigned to the authoritative group if their scores were higher than the sample average for authoritative parenting. Similarly, participants were classified as authoritarian or permissive if their scores exceeded the sample averages for those categories. This categorization was achieved through centering and rescaling of the three parenting style variables (authoritative, authoritarian, permissive). All three variables were re-scaled to have a standard deviation of 1, achieved by dividing each score by the sample standard deviation for that score. The distribution of participants across the PSDQ parenting styles was as follows: 36 participants were classified as authoritarian, 40 as authoritative, and 24 as permissive.

Table 2. Descriptive Statistics for all measures in the study (N=100)

Measure	Variable	Min	Pct25	Median	Mean	Pct75	Max
Strengths and Difficulties Questionnaire	Emotion	0	1	2.5	2.97	4	8
	Conduct	0	1	3	3.04	5	9
	Hyper	0	2	4	4.2	6	10
	Peer	0	3	3	3.33	4	10
	Totdiff	1	8.75	13	13.54	19	25
	Prosoc	0	5	6	6.14	8	10
Parenting Styles and Dimensions Questionnaire	Connection	2	3.8	4	4.06	4.6	5
	Regulation	2.8	3.75	4.2	4.11	4.6	5
	Autonomy	2	3.2	3.8	3.726	4.2	5

Measure	Variable	Min	Pct25	Median	Mean	Pct75	Max
	Authoritative	2.267	3.65	3.933	3.965	4.4	4.8
	Physical	1	1.25	2	2.195	2.812	4.5
	Verbal	1	2	2.5	2.61	3.25	4.25
	Punitive	1	1.25	2.5	2.317	3	4.5
	Authoritarian	1.083	1.667	2.333	2.374	3.021	4.167
	Permissive	1	2	2.2	2.358	2.6	4
	Authoritative_z	-3.531731	-0.648085	-0.057459	0.009247	0.915337	1.749162
	Authoritarian_z	-1.59317	-0.86555	-0.03398	0.01695	0.82357	2.25282
	Permissive_z	-2.4277205	-0.6395977	-0.2819732	0.0005502	0.4332759	2.9366477

Measure	Variable	Min	Pct25	Median	Mean	Pct75	Max
	Psdq_sensitive	0	0	0	0.4	1	1
Meaning of the Child Manual Analysis	Manual_controlling	0	0	0	0.4	1	1
	Manual_unresponsive	0	0	0	0.43	1	1
	Manual_sensitive	0	0	0	0.17	0	1

The mean scores for the authoritative, authoritarian, and permissive parenting styles were 3.965, 2.374, and 2.358, respectively. These means suggest that, on average, the parents in this sample exhibited high levels of authoritative behavior, which is generally associated with positive child outcomes, and moderate levels of authoritarian and permissive behaviors.

Additionally, the manual analysis identified 40 participants as controlling, 17 as sensitive, and 43 as unresponsive. The mean score for the sensitive parenting style, as determined by the MotC system scores derived from manually coding online posts, was 0.17, indicating that 17% of parents were classified as sensitive. The mean scores for the controlling and unresponsive parenting styles, as determined by the MotC system, were 0.4 and 0.43, respectively, indicating that 40% of the parents were classified as controlling and 43% as unresponsive.

While many discourse markers were identified during the coding of the posts, certain markers appeared more frequently. Figure 1 below lists some of the commonly occurring discourse markers found in the posts of parents classified into all three categories: sensitive, controlling, and unresponsive.

Parenting style classifications derived from the MotC manual analysis were used to test the hypothesis of whether manual coding aligned with PSDQ scores, as examined by the Chi-square test of independence.

Classification	Commonly found discourse markers
Sensitive	Child specific understanding, Awareness of problems, Child in mind
Controlling	Evocative negative, Exaggerated affect, Child blaming
Unresponsive	Concrete and physical, Borrowed, No Mentalizing

Figure 1: Commonly Occurring Discourse Markers in Parental Posts

In this context, authoritative parenting in the PSDQ is comparable to sensitive parenting in the MotC system, both reflecting responsive and supportive parenting behaviors.

Hypothesis 1

To test the hypothesis that sensitive parenting, as identified through manual MotC coding of online parenting posts, is associated with lower levels of child difficulties, an ANOVA was used. The results of the ANOVA revealed a significant difference in mean child difficulty scores between the sensitive and non-sensitive groups ($F = 20.42, p < 0.05$). Specifically, children of parents classified as sensitive, according to manual coding, reported significantly lower levels of difficulties compared to children of parents classified as non-sensitive. As shown in Figure 2, the total difficulty score for the sensitive group was 6.89 points lower than for the non-sensitive group, indicating that children of sensitive parents experienced fewer difficulties on average. These findings support the hypothesis that sensitive parenting, as identified through manual MotC coding of online parenting posts, is associated with lower levels of child difficulties. This result highlights the importance of sensitive parenting in promoting better outcomes for children.

Hypothesis 2

To test the hypothesis that parents classified as sensitive (as determined by their MotC system scores derived from online posts) would be more likely to be categorized as authoritative, a Chi-square test of independence was used. The null hypothesis for this

test is that the distribution of manual coding (MotC) is independent of the distribution of PSDQ score type.

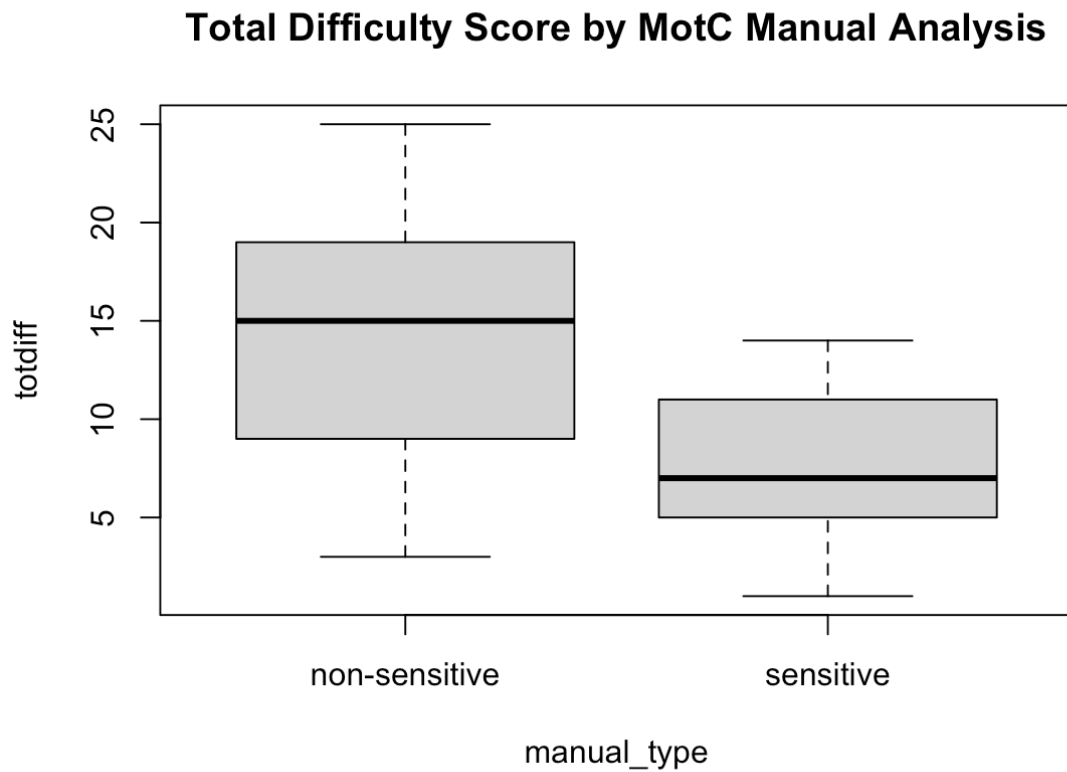


Figure 2: Total Difficulty Score by MotC Manual Analysis

The results of the Chi-square test revealed a significant association between the sensitive parenting style as defined by MotC and authoritative parenting as per the PSDQ ($\chi^2 = 4.197$, $df = 1$, $p < 0.05$). This allows us to reject the null hypothesis of

independence, indicating a significant correlation between the MotC manual coding and the PSDQ self-report scores.

As shown in Figure 3, the analysis revealed that 54 participants were consistently classified as non-sensitive by both the MotC coding and the PSDQ scores, indicating a high level of agreement between the two methods for this group.

	MotC non-sensitive	MotC sensitive
PSDQ non-sensitive	54	6
PSDQ sensitive	29	11

Figure 3: Consistency between MotC and PSDQ classification

Additionally, 29 participants were classified as sensitive by the PSDQ scores but non-sensitive by the MotC coding, suggesting some discrepancies between self-reported measures and manual coding in identifying sensitivity. This discrepancy may be due to self-reporting bias, where participants are more likely to report behaviors that they perceive as favorable, which aligns with the sensitive categorization. Conversely, 6 participants were identified as sensitive by the MotC coding but non-sensitive by the PSDQ scores, reflecting a few cases where manual coding detected sensitivity that the PSDQ did not. Finally, 11 participants were classified as sensitive by both the MotC coding and the PSDQ scores, showing strong concordance between the two methods for this subgroup.

Exploratory Analyses

An exploratory analysis was conducted to examine differences in total difficulty scores between participants from Mumsnet and Reddit. The sample split between the two sources was 70 participants from Mumsnet and 30 participants from Reddit. As shown in Figure 4, the mean total difficulty score for participants from Reddit was slightly lower than that for participants from Mumsnet by approximately 1.6762 points. However, the t-test analysis showed that this difference was not statistically significant ($t = -1.3$, $p = 0.19$). This indicates that there were no significant differences in total difficulty scores between the samples from Mumsnet and Reddit.

Further analysis examined the relationship between being categorized as sensitive (based on PSDQ scores) and total difficulty scores. As shown in Figure 5, the results indicated that participants classified as sensitive had significantly lower total difficulty scores by approximately 3.65 points compared to non-sensitive participants ($t = -2.966$, $p < 0.05$). This suggests that children of parents who are categorized as sensitive, according to the PSDQ, experience fewer difficulties. This demonstrates that parenting styles derived from both the PSDQ and manual analysis using the MotC methodology had a similar relationship to total difficulty scores, with sensitivity corresponding to lower difficulty scores for both measures.

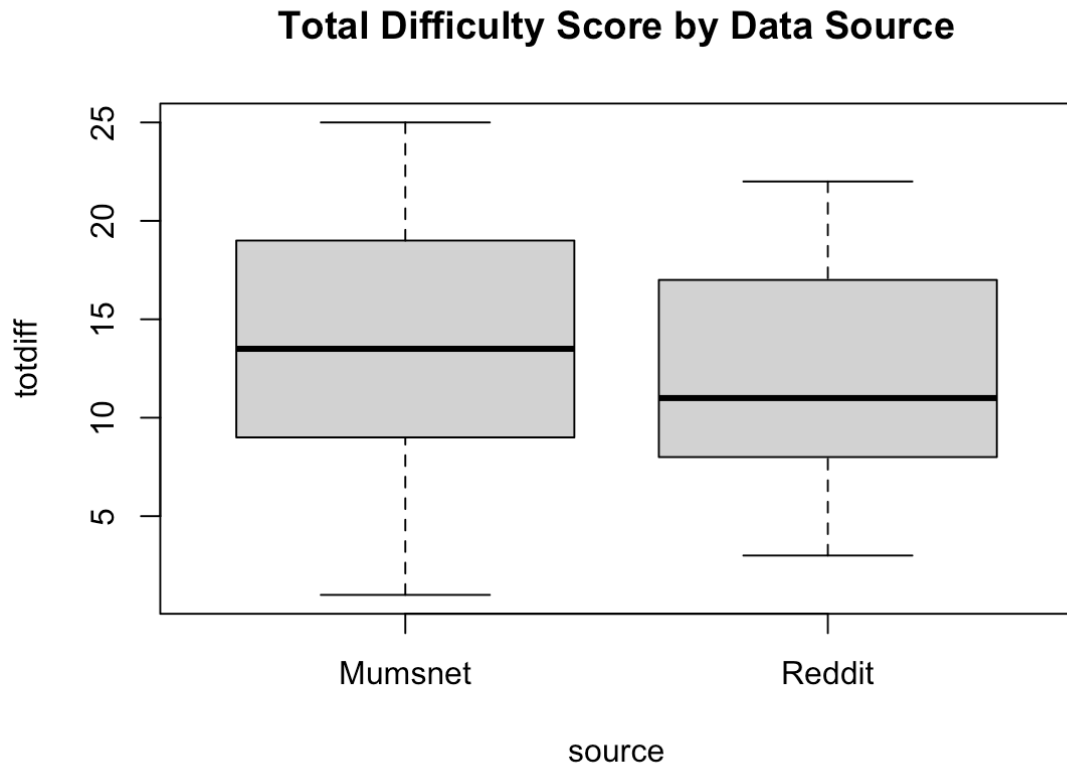


Figure 4: Total Difficulty Score by Data Source

An additional exploratory analysis was conducted to examine differences in total difficulty scores based on the results of manual analysis using MotC coding (sensitive vs. non-sensitive) and the data source (Mumsnet vs. Reddit). The regression analysis revealed that the manual type classification (sensitive vs. non-sensitive) remained a significant predictor of total difficulty scores ($t = -4.294$, $p < 0.05$), while the data source did not have a significant impact ($t = -0.057$, $p = 0.954$). The model explained approximately 15.54% of the variance in total difficulty scores (Adjusted R-squared = 0.1554).

In addition, the regression analysis was repeated to include an interaction term between the MotC manual coding and the data source. The interaction term was nonsignificant ($p=0.497$). This suggests that the difference in total difficulty scores between sensitive and non-sensitive classifications are not influenced by the data source (Mumsnet vs. Reddit).

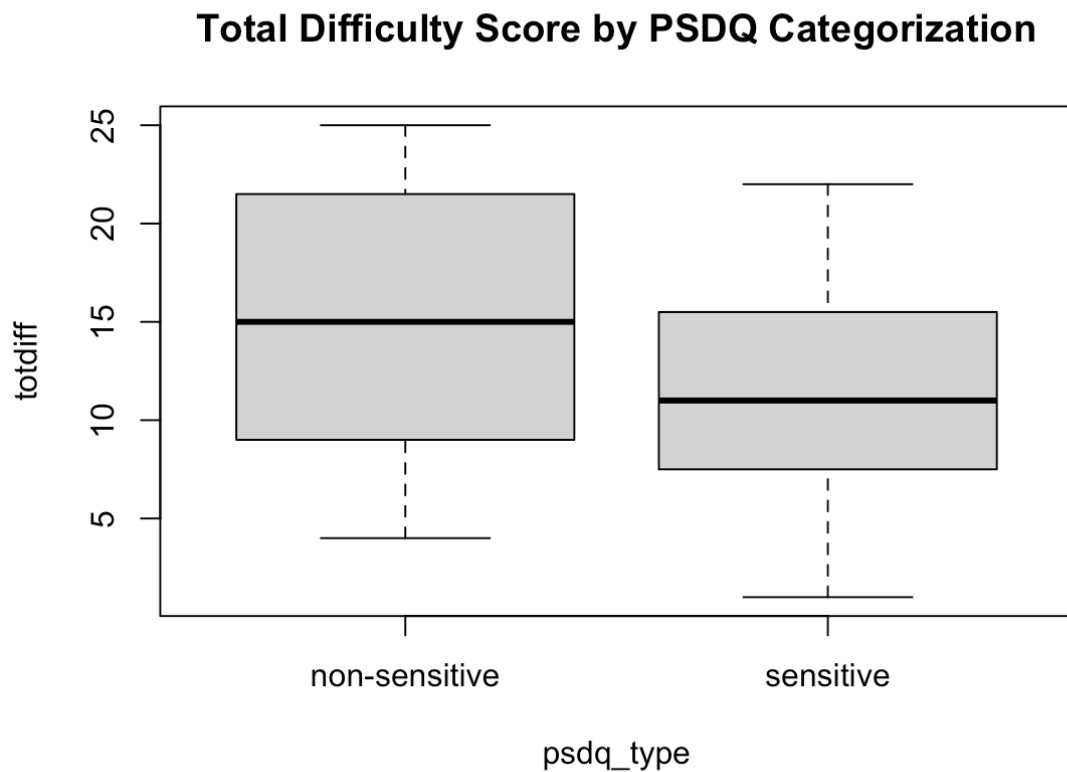


Figure 5: Total Difficulty Score by PSDQ Self-report Categorization

When considering both the data source and sensitivity classification for the PSDQ measure, a regression analysis revealed that the sensitivity classification on the PSDQ

remained a significant predictor of total difficulty scores ($t = -2.692, p < 0.05$), while the data source was not related ($t = -0.366, p = 0.71514$). This suggests that for the PSDQ measure, the sensitivity classification had a meaningful effect on total difficulty scores, whereas the source of the data (Mumsnet vs. Reddit) did not significantly influence the scores.

An additional analysis was conducted to examine differences in SDQ subscale scores between sensitive and non-sensitive groups as coded by the MotC analysis. As shown in Table 3, the analysis revealed that children of non-sensitive parents had higher scores across all difficulties subscales—emotional symptoms, conduct problems, hyperactivity, and peer problems—indicating more difficulties compared to children of sensitive parents. Additionally, the prosocial behavior score was higher for the sensitive group (7.71) compared to the non-sensitive group (5.82) — as shown in Figure 6. These results highlight that sensitive parenting is associated with fewer reported difficulties and better prosocial behavior in children.

Table 3. SDQ subscale scores for MotC analysis

	Emotion	Conduct	Hyper	Peer	Totdiff	Prosoc
Non-sensitive	3.20481 9	3.31325 3	4.518 072	3.6746 99	14.7108 43	5.81927 7
Sensitive	1.82352 9	1.70588 2	2.647 059	1.6470 59	7.82352 9	7.70588 2

SDQ subscale scores between sensitive and non-sensitive groups as coded by the MotC analysis

Lastly, an analysis was conducted to examine differences in SDQ subscale scores between sensitive and non-sensitive groups as measured by the PSDQ. As shown in Table 4, the analysis revealed that children of non-sensitive parents had higher scores across all difficulties subscales—emotional symptoms, conduct problems, hyperactivity, and peer problems—indicating more difficulties compared to children of sensitive parents. Specifically, the total difficulty score for the non-sensitive group was 15.00, while it was 11.35 for the sensitive group.

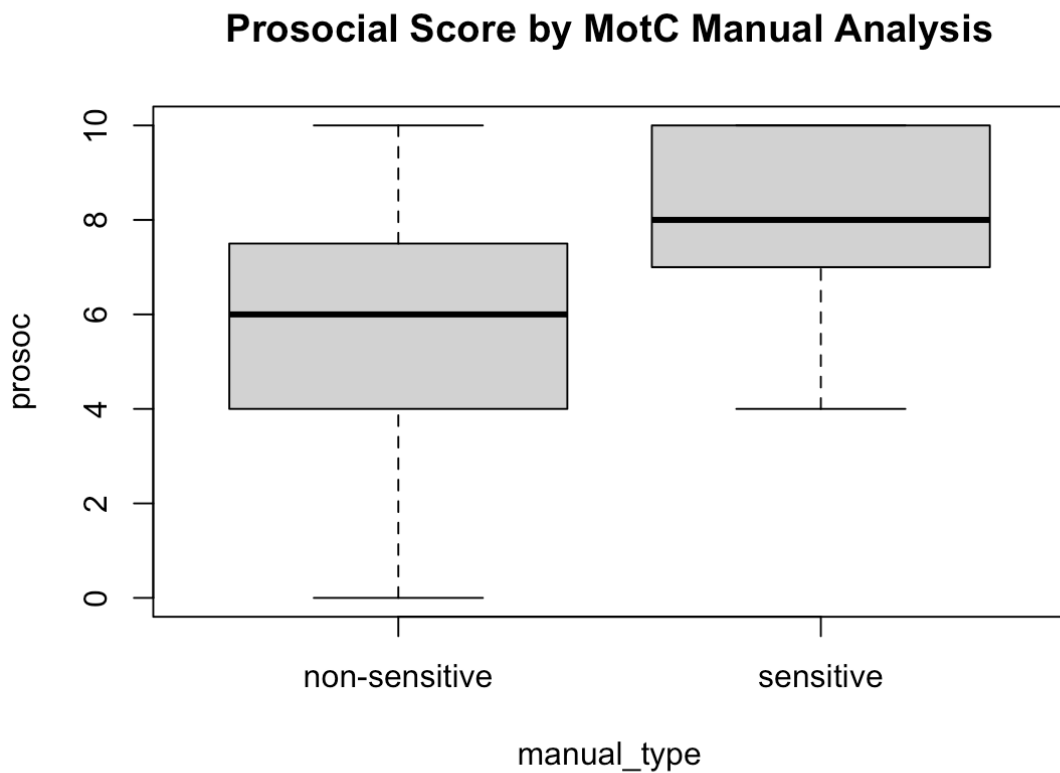


Figure 6: Prosocial Score by MotC Manual Analysis

Table 4. SDQ subscale scores for PSDQ categorization

	Emotion	Conduct	Hyper	Peer	Totdiff	Prosoc
Non-sensitive	3.400	3.50	4.350	3.75	15.00	5.966667
Sensitive	2.325	2.35	3.975	2.70	11.35	6.400000

Additionally, the prosocial behavior score was higher for the sensitive group (6.40) compared to the non-sensitive group (5.97) — as shown in Figure 7. These results further support the finding that sensitive parenting measured through the self-report and discourse analysis approaches tended to be associated with fewer reported difficulties and better prosocial behavior in children.

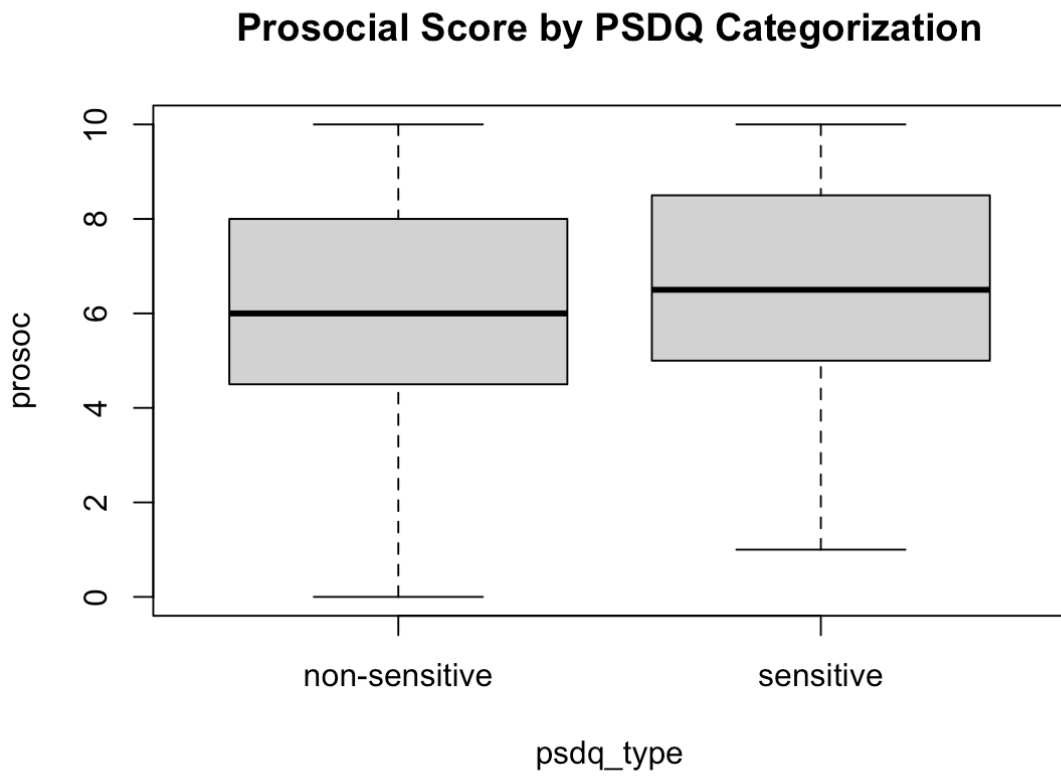


Figure 7: Prosocial Score by PSDQ Self-report Categorization

Chapter IV

Discussion

The study results validated the hypothesis that sensitive parenting, as determined by the Meaning of the Child (MotC) coding system, is associated with lower levels of child difficulties. The ANOVA showed a significant difference in child difficulty scores between the sensitive and non-sensitive groups, indicating that children of parents identified as sensitive exhibited significantly fewer difficulties than those of non-sensitive parents. These findings align with existing research on the positive impact of sensitive parenting on child development. Parental sensitivity, defined as a dynamic process of perceiving a child's behavior, making inferences about their mental states, and responding contingently and appropriately (Shin, Park, Ryu, & Seomun, 2008), has been consistently linked to a broad range of positive child outcomes. Studies have shown that higher levels of parental sensitivity are associated with better cognitive, behavioral, and socio-emotional outcomes in children (Bernier, Carlson, & Whipple, 2009; Leerkes, Blankson, & O'Brien, 2009; Belsky, Fearon, & Bell, 2007; Paavola, Kempainen, Kumpulainen, Moilanen, & Ebeling, 2006; Silvén, Niemi, & Voeten, 2001). Consistent with these findings, this study found that sensitive parenting was associated with better prosocial behavior and fewer difficulties in children. Specifically, children of non-sensitive parents had higher scores across all difficulty subscales—emotional symptoms, conduct problems, hyperactivity, and peer problems—indicating more difficulties compared to children of sensitive parents.

Additionally, the prosocial behavior score was higher for the sensitive group (7.71) compared to the non-sensitive group (5.82). These results highlight that sensitive parenting is associated with fewer reported difficulties and better prosocial behavior in children. The higher prosocial scores for children of sensitive parents support the importance of parental sensitivity in promoting positive child outcomes across various domains. Moreover, this result demonstrates the success of the MotC manual coding system in accurately inferring sensitive parenting styles from online discourse, supporting the study's primary aim to combine discourse analysis with online text data for reliable assessment of parenting styles.

The study results also validated the second hypothesis that parents classified as sensitive, according to their MotC classification derived from online posts, would be more likely to be categorized as authoritative, according to the PSDQ self-report measure. The Chi-square test of independence revealed a significant association between the MotC manual analysis and PSDQ measure. This significant association indicates a high level of agreement between both methods when it comes to evaluating parenting styles. Both measures — MotC and PSDQ — aim to capture the essence of sensitive parenting, albeit through different methodologies—self-report vs. discourse analysis. The alignment between these two measures supports the notion that sensitive parenting can be reliably identified through both self-report and discourse analysis. By demonstrating that the MotC methodology can accurately classify sensitive parenting in a manner consistent with established self-report measures, this study highlights the reliability of using online discourse as a meaningful source for assessing parenting styles. However, it is important to note that there were some discrepancies, with more parents being classified as sensitive

by the PSDQ self-report than by the manual discourse analysis done by the author. It may be possible that the author was biased in some sort of judgment on coding, and future studies can resolve this limitation by having multiple coders or a panel of experts review for quality control. This approach, although costly, would help ensure the robustness and accuracy of the coding process, addressing potential discrepancies observed in the current study.

Research indicates that discourse analysis can be effectively applied to various types of data, including natural conversations, interviews, and written text (Misir & Işık-Güler, 2022; Martins, 2022; Wiggins, 2009). The MotC system was designed to be flexible enough to be used beyond the traditional interview format (Grey, 2022). This study extends the application of MotC discourse analysis to text data from online forums, demonstrating that the MotC system can be adapted to analyze online discourse. Using discourse analysis on online data can provide a more nuanced and scalable approach to understanding parenting behaviors, potentially enabling more efficient and extensive data collection in child development and parenting research. This method also has practical applications for parenting interventions.

The findings of this study highlight the numerous advantages of using online forums for data collection. Online forums enable researchers to reach a broader and more diverse sample, which enhances the generalizability of the results. Additionally, this method is cost-effective and efficient, allowing for the rapid gathering of large amounts of data with minimal resources (Karpf, 2012; Birnbaum, 2004). Compared to traditional methods, online data collection reduces the impact of social desirability bias and alleviates the time-consuming nature of data collection and analysis (Conner & Barrett,

2012; van de Mortel, 2008). The success of applying MotC discourse analysis to online forum data in this study highlights the potential for this method to be a robust tool for future parenting research and interventions.

Limitations and future directions

One limitation of this study is the reliance on self-reported data to assess parenting styles and child outcomes, and compare it to parenting styles derived through the Meaning of the Child (MotC) posts. Self-reported data may introduce potential biases such as social desirability or recall bias, which can limit the accuracy of the data. Participants' actual behaviors, attitudes, or emotions may not be fully reflected through self-report methods, potentially impacting the validity of the study's findings.

Another potential limitation is the reliance on online public forums as a data source, which might limit the generalizability of the study findings. Individuals who post in online forums may not be representative of the broader population, potentially including only those who are more tech-savvy and more open to sharing personal information online. This restricts the diversity of the sample. The recruitment strategy and inclusion criteria, which only included certain types of content posts, may introduce selection bias. This approach may exclude individuals who are less active in online forums and those seeking product recommendations, thereby limiting the sample size and potentially biasing the data towards parents who are more engaged and invested in parenting. Additionally, individuals who opted in to write posts (such as those recruited from Mumsnet) might introduce further selection bias, as they may be more motivated or have specific characteristics that differ from those who did not opt in.

Furthermore, while this study explored the relationship between sensitive and non-sensitive parenting in its statistical analysis, it may not have adequately captured the distinctions among different non-sensitive styles. As a coder, it was challenging at times to distinguish between unresponsive and controlling MotC styles due to insufficient data from a single post. Longer posts may be necessary to accurately assess the different types of non-sensitive parenting styles from online discourse. In future studies, it would be useful to evaluate whether the controlling and unresponsive parenting styles can be accurately coded with posts that might be as little as 120 words in length. It would also be beneficial to validate the results of online MotC posts against 1:1 long-form MotC interviews to determine if the same classifications are achieved.

Overall, despite these limitations, this study contributes to the understanding of parenting styles and child outcomes by demonstrating the potential of using online discourse for research purposes. Future research should build on these findings to further explore and validate the use of online data in studying parenting behaviors.

Conclusions

This study confirmed that sensitive parenting, as identified through the Meaning of the Child (MotC) coding system, is linked to lower levels of child difficulties. The results demonstrated that children of sensitive parents exhibited fewer behavioral and emotional difficulties and higher prosocial behavior scores, affirming the positive impact of parental sensitivity on child outcomes. These findings validate the first hypothesis and establish the reliability of using the MotC system in accurately identifying sensitive parenting styles from online discourse.

Additionally, the significant association between MotC coding and PSDQ self-report measures emphasizes the effectiveness of using online forum data to assess parenting styles. This supports the idea that sensitive parenting can be reliably recognized through both self-report and discourse analysis.

In summary, this study extends the application of the MotC system to online discourse, contributing to the literature by demonstrating its efficacy in identifying sensitive parenting. The findings have practical implications for developing interventions aimed at fostering parental sensitivity to improve child outcomes. It also highlights the use of online forums for data collection as offering notable advantages, such as reaching a broader and more diverse sample. This scalable and efficient approach can enhance research in child development and parenting.

References

- Achenbach, T. M., Becker, A., Döpfner, M., Heiervang, E., Roessner, V., Steinhausen, H., & Rothenberger, A. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: research findings, applications, and future directions. *Journal of Child Psychology and Psychiatry*, *49*(3), 251–275. <https://doi.org/10.1111/j.1469-7610.2007.01867.x>
- Adams, S. A., Matthews, C. E., Ebbeling, C. B., Moore, C. G., Cunningham, J., Fulton, J., & Hébert, J. R. (2005). The Effect of Social Desirability and Social Approval on Self-Reports of Physical Activity. *American Journal of Epidemiology*, *161*(4), 389–398. <https://doi.org/10.1093/aje/kwi054>
- Ainsworth, M. D. S. (1979). Infant-mother attachment. *American Psychologist*. <https://doi.org/10.1037/0003-066x.34.10.932>
- Aunola, K., Stattin, H., & Nurmi, J. (2000). Parenting styles and adolescents' achievement strategies. *Journal of Adolescence*, *23*(2), 205–222. <https://doi.org/10.1006/jado.2000.0308>
- Azimi, A., Vaziri, S., & Kashani, L. (2011). Relationship between Maternal Parenting Style and Child's Aggressive Behavior. *Procedia - Social and Behavioral Sciences*, *Volume 69*, Pages 1276-1281.
- Babcock, J. C., Costa, D. C., Green, C., & Eckhardt, C. I. (2004). What Situations Induce Intimate Partner Violence? A Reliability and Validity Study of the Proximal Antecedents to Violent Episodes (PAVE) Scale. *Journal of Family Psychology*, *18*(3), 433–442. <https://doi.org/10.1037/0893-3200.18.3.433>
- Barnett, M. A., Gustafsson, H. C., Deng, M., Mills-Koonce, W. R., & Cox, M. J. (2012). Bidirectional Associations Among Sensitive Parenting, Language Development, and Social Competence. *Infant and Child Development*, *21*(4), 374–393. <https://doi.org/10.1002/icd.1750>
- Bartholomew, K., & Horowitz, L. N. (1990). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226–244. <https://doi.org/10.1037/0022-3514.61.2.226>
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, *75*(1), 43–88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, *4*(1, Pt.2), 1–103. <https://doi.org/10.1037/h0030372>

- Baumrind, D. (1991). The Influence of Parenting Style on Adolescent Competence and Substance Use. *Journal of Early Adolescence*, 11(1), 56–95. <https://doi.org/10.1177/0272431691111004>
- Baumrind, D. (2005). Patterns of parental authority and adolescent autonomy. *New Directions for Child and Adolescent Development*, 2005(108), 61–69. <https://doi.org/10.1002/cd.128>
- Belsky, J., & Fearon, P. (2002). Early attachment security, subsequent maternal sensitivity, and later child development: Does continuity in development depend upon continuity of caregiving? *Attachment & Human Development*, 4(3), 361–387. <https://doi.org/10.1080/14616730210167267>
- Belsky, J., Fearon, P., & Bell, B. (2007). Parenting, attention and externalizing problems: testing mediation longitudinally, repeatedly and reciprocally. *Journal of Child Psychology and Psychiatry*, 48(12), 1233–1242. <https://doi.org/10.1111/j.1469-7610.2007.01807.x>
- Bernier, A., Carlson, S. M., & Whipple, N. (2009). From External Regulation to Self-Regulation: Early Parenting Precursors of Young Children’s Executive Functioning. *Child Development*, 81(1), 326–339. <https://doi.org/10.1111/j.1467-8624.2009.01397.x>
- Biringen, Z., Skillern, S., Mone, J., & Pianta, R. (2003). Emotional availability is predictive of the emotional aspects of children’s school readiness. *Journal of Early Childhood and Infant Psychology*, 1, 81–97.
- Birnbaum, M. H. (1999). Testing Critical Properties of Decision Making on the Internet. *Psychological Science*, 10(5), 399–407. <https://doi.org/10.1111/1467-9280.00176>
- Birnbaum, M. H. (2004). Human Research and Data Collection via the Internet. *Annual Review of Psychology*, 55(1), 803–832. <https://doi.org/10.1146/annurev.psych.55.090902.141601>
- Bondy, S. J., & Bercovitz, K. (2011). Non-smoking worksites in the residential construction sector: using an online forum to study perspectives and practices. *Tobacco Control*, 20(3), 189–195. <https://doi.org/10.1136/tc.2010.038398>
- Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, 2(4), 637–638. <https://doi.org/10.1017/s0140525x00064955>
- Boyd, R. L., Wilson, S. E., Pennebaker, J. W., Kosinski, M., Stillwell, D., & Mihalcea, R. (2015). Values in Words: Using Language to Evaluate and Understand Personal Values. *National Conference on Artificial Intelligence*, 9(1), 31–40. <https://doi.org/10.1609/icwsm.v9i1.14589>
- Braungart-Rieker, J. M., Hill-Soderlund, A. L., & Karrass, J. (2010). Fear and anger reactivity trajectories from 4 to 16 months: The roles of temperament, regulation,

- and maternal sensitivity. *Developmental Psychology*, 46(4), 791–804.
<https://doi.org/10.1037/a0019673>
- Budd, J. M., & Raber, D. J. (1996). Discourse analysis: Method and application in the study of information. *Information Processing and Management*, 32(2), 217–226.
[https://doi.org/10.1016/s0306-4573\(96\)85007-2](https://doi.org/10.1016/s0306-4573(96)85007-2)
- Burchinal, M., Vandell, D. L., & Belsky, J. (2014). Is the prediction of adolescent outcomes from early child care moderated by later maternal sensitivity? Results from the nichd study of early child care and youth development. *Developmental Psychology*, 50(2), 542–553. <https://doi.org/10.1037/a0033709>
- Conner, T. S., & Barrett, L. F. (2012). Trends in Ambulatory Self-Report. *Psychosomatic Medicine*, 74(4), 327–337. <https://doi.org/10.1097/psy.0b013e3182546f18>
- Conway, A., & McDonough, S. C. (2006). Emotional Resilience in Early Childhood: Developmental Antecedents and Relations to Behavior Problems. *Annals of the New York Academy of Sciences*, 1094(1), 272–277.
<https://doi.org/10.1196/annals.1376.033>
- Coolahan, K., McWayne, C. M., Fantuzzo, J. W., & Grim, S. (2001). Validation of a multidimensional assessment of parenting styles for low-income African-American families with preschool children. *Early Childhood Research Quarterly*, 17(3), 356–373. [https://doi.org/10.1016/s0885-2006\(02\)00169-2](https://doi.org/10.1016/s0885-2006(02)00169-2)
- Crittenden, P. (2016). *Raising Parents: Attachment, Representation, and Treatment* (2nd ed.). Routledge.
- Crittenden, P. M. (1987). Relationships at risk. *Clinical Implications of Attachment*.
- Crittenden, P. M. (2006). A Dynamic-Maturational Model of Attachment. *Australian and New Zealand Journal of Family Therapy*, 27(2), 105–115.
<https://doi.org/10.1002/j.1467-8438.2006.tb00704.x>
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113(3), 487–496. <https://doi.org/10.1037/0033-2909.113.3.487>
- Dunning, D., Heath, C., & Suls, J. (2004). Flawed Self-Assessment. *Psychological Science in the Public Interest*, 5(3), 69–106. <https://doi.org/10.1111/j.1529-1006.2004.00018.x>
- Edwards, R., & Hans, S. L. (2016). Prenatal Depressive Symptoms and Toddler Behavior Problems: The Role of Maternal Sensitivity and Child Sex. *Child Psychiatry & Human Development*, 47(5), 696–707. <https://doi.org/10.1007/s10578-015-0603-6>
- Fraser, B. (1990). An approach to discourse markers. *Journal of Pragmatics*, 14(3), 383–398. [https://doi.org/10.1016/0378-2166\(90\)90096-v](https://doi.org/10.1016/0378-2166(90)90096-v)

- George, C., Main, M., & Kaplan, N. (1985). Adult Attachment Interview. *Department of Psychology, University of California at Berkeley*. <https://doi.org/10.1037/t02879-000>
- Goodman, R. (1999). The Extended Version of the Strengths and Difficulties Questionnaire as a Guide to Child Psychiatric Caseness and Consequent Burden. *Journal of Child Psychology and Psychiatry*. <https://doi.org/10.1111/1469-7610.00494>
- Goodman, R. (2001). Psychometric Properties of the Strengths and Difficulties Questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(11), 1337–1345. <https://doi.org/10.1097/00004583-200111000-00015>
- Goodman, R., Renfrew, D., & Mullick, M. S. I. (2000). Predicting type of psychiatric disorder from Strengths and Difficulties Questionnaire (SDQ) scores in child mental health clinics in London and Dhaka. *European Child & Adolescent Psychiatry*, 9(2), 129–134. <https://doi.org/10.1007/s007870050008>
- Gottman, J. M., Katz, L. E., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10(3), 243–268. <https://doi.org/10.1037/0893-3200.10.3.243>
- Greeson, J. K., Briggs, E. C., Kisiel, C., Layne, C. M., Ake, G. S., Ko, S., Gerrity, E. T., Steinberg, A. M., Howard, M., Pynoos, R. S., & Fairbank, J. K. (2011). Complex trauma and mental health in children and adolescents placed in foster care: findings from the National Child Traumatic Stress Network. *Child Welfare*, 90(6), 91–108.
- Grey, B. (2014). The Meaning of the Child to the Parent: The Development and Validation of a New Method of Classifying Parenting Interviews for the Nature of the Parent-Child Relationship. *PhD Thesis, London: University of Roehampton*.
- Grey, B. (2020). The Meaning Of the Child Interview: Assessing the Nature of the Parent-Child Relationship from Semi-Structured Interviews with Parents. *Cambridge Center for Attachment*.
- Grey, B., & Farnfield, S. (2017a). The Meaning of the Child Interview: A new procedure for assessing and understanding parent–child relationships of ‘at-risk’ families. *Clinical Child Psychology and Psychiatry*, 22(2), 204–218. <https://doi.org/10.1177/1359104516633495>
- Grey, B., & Farnfield, S. (2017b). The Meaning of the Child Interview (MotC) – the initial validation of a new procedure for assessing and understanding the parent-child relationships of “at risk” families. *Journal of Children’s Services*, 12(1), 16–31. <https://doi.org/10.1108/jcs-03-2016-0006>

- Guntuku, S. C., Buffone, A., Jaidka, K., Eichstaedt, J. C., & Ungar, L. H. (2018). Understanding and Measuring Psychological Stress Using Social Media. *arXiv (Cornell University)*, 13, 214–225. <https://doi.org/10.1609/icwsm.v13i01.3223>
- Hess, R. F., & McDevitt, T. M. (1984). Some Cognitive Consequences of Maternal Intervention Techniques: A Longitudinal Study. *Child Development*, 55(6), 2017. <https://doi.org/10.2307/1129776>
- Hoeve, M., Blokland, A., Dubas, J. S., Loeber, R., Gerris, J., & Van Der Laan, P. H. (2008). Trajectories of Delinquency and Parenting Styles. *Journal of Abnormal Child Psychology*, 36(2), 223–235. <https://doi.org/10.1007/s10802-007-9172-x>
- Holtz, P., Kronberger, N., & Wagner, W. (2012). Analyzing Internet Forums. *Journal of Media Psychology*, 24(2), 55–66. <https://doi.org/10.1027/1864-1105/a000062>
- Howes, C., & Hong, S. (2008). Early emotional availability: Predictive of pre-kindergarten relationships among Mexican heritage children? *Journal of Early Childhood and Infant Psychology*, 4, 4–26.
- Jamison, J., Sutton, S., Mant, J., & De Simoni, A. (2018). Online stroke forum as source of data for qualitative research: insights from a comparison with patients' interviews. *BMJ Open*, 8(3), e020133. <https://doi.org/10.1136/bmjopen-2017-020133>
- Karpp, D. (2012). SOCIAL SCIENCE RESEARCH METHODS IN INTERNET TIME. *Information, Communication & Society*, 15(5), 639–661. <https://doi.org/10.1080/1369118x.2012.665468>
- Kertz, S. J., Smith, C. J., Chapman, L. K., & Woodruff-Borden, J. (2008). Maternal Sensitivity and Anxiety: Impacts on Child Outcome. *Child & Family Behavior Therapy*, 30(2), 153–171. <https://doi.org/10.1080/07317100802060336>
- King, M. F., & Bruner, G. C. (2000). Social desirability bias: A neglected aspect of validity testing. *Psychology & Marketing*, 17(2), 79–103.
- Klasen, H., Woerner, W., Wolke, D., Meyer, R. A., Overmeyer, S., Kaschnitz, W., Rothenberger, A., & Goodman, R. (2000). Comparing the German Versions of the Strengths and Difficulties Questionnaire (SDQ-Deu) and the Child Behavior Checklist. *European Child & Adolescent Psychiatry*, 9(4), 271–276. <https://doi.org/10.1007/s007870070030>
- Künster, A. K., Fegert, J. M., & Ziegenhain, U. (2010). Assessing parent—child interaction in the preschool years: A pilot study on the psychometric properties of the toddler CARE-Index. *Clinical Child Psychology and Psychiatry*. <https://doi.org/10.1177/1359104510367585>

- Kuppens, S., & Ceulemans, E. (2018). Parenting Styles: A Closer Look at a Well-Known Concept. *Journal of Child and Family Studies*, 28(1), 168–181. <https://doi.org/10.1007/s10826-018-1242-x>
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of Competence and Adjustment among Adolescents from Authoritative, Authoritarian, Indulgent, and Neglectful Families. *Child Development*, 62(5), 1049. <https://doi.org/10.2307/1131151>
- Leckelt, M., Wetzel, E., Gerlach, T. M., Ackerman, R. A., Miller, J. D., Chopik, W. J., Penke, L., Geukes, K., Kűfner, A. C. P., Hutteman, R., Richter, D., Renner, K., Allroggen, M., Brecheen, C., Campbell, W. K., Grossmann, I., & Back, M. D. (2017). Validation of the Narcissistic Admiration and Rivalry Questionnaire Short Scale (NARQ-S) in convenience and representative samples. *Psychological Assessment*, 30(1), 86–96. <https://doi.org/10.1037/pas0000433>
- Leerkes, E. M., Blankson, A. N., & O’Brien, M. J. (2009). Differential Effects of Maternal Sensitivity to Infant Distress and Nondistress on Social-Emotional Functioning. *Child Development*, 80(3), 762–775. <https://doi.org/10.1111/j.1467-8624.2009.01296.x>
- Lefever, S., Dal, M., & Matthíasdóttir, Á. (2007). Online data collection in academic research: advantages and limitations. *British Journal of Educational Technology*, 38(4), 574–582. <https://doi.org/10.1111/j.1467-8535.2006.00638.x>
- Martins, J. N. (2022). Homophobia in Brazilian football: A critical discourse analysis of fans’ comments in online football forums. *International Review for the Sociology of Sport*, 58(2), 392–410. <https://doi.org/10.1177/10126902221107323>
- McPherson, S., Andrews, L., Taggart, D., Cox, P., Pratt, R. E., Smith, V., & Thandi, J. (2018). Evaluating integrative services in edge-of-care work. *Journal of Social Welfare and Family Law*, 40(3), 299–320. <https://doi.org/10.1080/09649069.2018.1493651>
- Mensah, M., & Kuranchie, A. (2013). Influence of Parenting Styles on the Social Development of Children. *Academic Journal of Interdisciplinary Studies*. <https://doi.org/10.5901/ajis.2013.v2n3p123>
- MısıR, H., & Işık-Gűler, H. (2022). “Be a better version of you!”: A corpus-driven critical discourse analysis of MOOC platforms’ marketing communication. *Linguistics and Education*, 69, 101021. <https://doi.org/10.1016/j.linged.2022.101021>
- Oliveira, T. L., De Souza Costa, D., Albuquerque, M. R., Malloy-Diniz, L. F., De Miranda, D. M., & De Paula, J. J. (2018). Cross-cultural adaptation, validity, and reliability of the Parenting Styles and Dimensions Questionnaire – Short Version (PSDQ) for use in Brazil. *Revista Brasileira De Psiquiatria*, 40(4), 410–419. <https://doi.org/10.1590/1516-4446-2017-2314>

- Paavola, L., Kemppinen, K., Kumpulainen, K., Moilanen, I., & Ebeling, H. (2006). Maternal sensitivity, infant co-operation and early linguistic development: Some predictive relations. *European Journal of Developmental Psychology*, 3(1), 13–30. <https://doi.org/10.1080/17405620500317789>
- Pettit, G. S., Bates, J. E., & Dodge, K. A. (1997). Supportive Parenting, Ecological Context, and Children's Adjustment: A Seven-Year Longitudinal Study. *Child Development*, 68(5), 908. <https://doi.org/10.2307/1132041>
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology & Psychotherapy*, 18(3), 250–255. <https://doi.org/10.1002/cpp.702>
- Robins, R. W., Fraley, R. C., & Krueger, R. F. (2009). *Handbook of Research Methods in Personality Psychology*. Guilford Publications.
- Robinson, M. E., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128(6), 934–960. <https://doi.org/10.1037/0033-2909.128.6.934>
- Rodrigues, M., Sokolovic, N., Madigan, S., Luo, Y., Silva, V., Misra, S., & Jenkins, J. (2021). Paternal Sensitivity and Children's Cognitive and Socioemotional Outcomes: A Meta-Analytic Review. *Child Development*, 92(2), 554–577. <https://doi.org/10.1111/cdev.13545>
- Roisman, G. I., Holland, A. S., Fortuna, K., Fraley, R. C., Clausell, E., & Clarke, A. M. (2007). The Adult Attachment Interview and self-reports of attachment style: An empirical rapprochement. *Journal of Personality and Social Psychology*, 92(4), 678–697. <https://doi.org/10.1037/0022-3514.92.4.678>
- Schacter, D. L., & Tulving, E. (1994). Memory Systems 1994. In *MIT Press eBooks*. MIT Press. <http://ci.nii.ac.jp/ncid/BA23584946>
- Shin, H. D., Park, Y., Ryu, H., & Seomun, G. (2008). Maternal sensitivity: a concept analysis. *Journal of Advanced Nursing*, 64(3), 304–314. <https://doi.org/10.1111/j.1365-2648.2008.04814.x>
- Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). From neurons to neighborhoods: The science of early childhood development. National Academies Press.
- Silvén, M., Niemi, P., & Voeten, M. (2001). Do maternal interaction and early language predict phonological awareness in 3- to 4-year-olds? *Cognitive Development*, 17(1), 1133–1155. [https://doi.org/10.1016/s0885-2014\(02\)00093-x](https://doi.org/10.1016/s0885-2014(02)00093-x)
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269–281. <https://doi.org/10.1080/14616730500245906>

- Slater, M. A., & Power, T. G. (1987). Multidimensional assessment of parenting in single parent families. In J. Vincent (Ed.). *Advances in Family, Intervention Assessment, and Theory (Vol. 4, Pp. 197–228)*. Greenwich, CT: JAI.
- Sleed, M., Slade, A., & Fonagy, P. (2020). Reflective Functioning on the Parent Development Interview: validity and reliability in relation to socio-demographic factors. *Attachment & Human Development, 22*(3), 310–331. <https://doi.org/10.1080/14616734.2018.1555603>
- Smith, V., Pratt, R., Thomas, C., & Taggart, D. (n.d.). Norfolk Parent-Infant Mental Health Project (PIMAP): Working towards integration in attachment, mental health and social care. In Leach P, Ed. *Transforming Infant Wellbeing: Research, Policy and Practice for the First 1001 Critical Days*. London and New York: Routledge.
- Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-Time Changes in Adjustment and Competence among Adolescents from Authoritative, Authoritarian, Indulgent, and Neglectful Families. *Child Development, 65*(3), 754–770. <https://doi.org/10.1111/j.1467-8624.1994.tb00781.x>
- Van De Mortel, T. F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing, 25*(4), 40–48. http://epubs.scu.edu.au/cgi/viewcontent.cgi?article=1001&context=hahs_pubs
- Vygotsky, L. S. (1967). Play and Its Role in the Mental Development of the Child. *Soviet Psychology, 5*(3), 6–18. <https://doi.org/10.2753/rpo1061-040505036>
- Wiggins, S. (2011). Discourse analysis. In Harry T. Reis & Susan Sprecher (Eds.), *Encyclopedia of Human Relationships*. Pp. 427-430. Thousand Oaks, CA: Sage.
- Williams, L. R., Degnan, K. A., Pérez-Edgar, K., Henderson, H. A., Rubin, K. H., Pine, D. S., Steinberg, L., & Fox, N. A. (2009). Impact of Behavioral Inhibition and Parenting Style on Internalizing and Externalizing Problems from Early Childhood through Adolescence. *Journal of Abnormal Child Psychology, 37*(8), 1063–1075. <https://doi.org/10.1007/s10802-009-9331-3>
- Yaffe, Y. (2018). Convergent validity and reliability of the Hebrew version of the Parenting Styles and Dimensions Questionnaire (PSDQ) in Hebrew-speaking Israeli-Arab families. *Interpersona: An International Journal on Personal Relationships, 12*(2), 133–144. <https://doi.org/10.5964/ijpr.v12i2.303>