

**EXAMINING THE EFFECTS OF DEMOGRAPHIC CHARACTERISTICS ON  
DISPOSITIONS: A SECONDARY DATA ANALYSIS**

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## Abstract

Child Welfare Services (CWS) systems are designed to protect children and promote family well-being; however, research has consistently identified patterns of disproportionality and disparity in child welfare involvement across different races. This study examines the extent to which demographic and reporting factors influence substantiation outcomes in CWS referrals. Guided by systems theory, this research explores how individual, institutional, and structural factors interact to shape decision-making within the child welfare system. The findings highlight the complexity of decision-making within CWS and suggest that both case characteristics and systemic factors contribute to variation in outcomes. A secondary data analysis was conducted using referral data from Tulare County Child Welfare Services 2022 Disproportionately research. The sample included 818 referrals received for African Americans and Native Americans. Predictor variables included race, age at time of referral, mandated reporter, physical abuse school staff reporter, law enforcement reporter, previous referrals, number of siblings, and response time. The outcome variable was case disposition, with a focus on substantiated findings. Results indicated that the overall model was statistically significant, suggesting that the combination of variables meaningfully predicted substantiation outcomes. Physical abuse allegations significantly increased the likelihood of substantiation, while law enforcement referrals and delayed response times were associated with decreased odds of substantiation. Additionally, race was a significant predictor, with Black children having lower odds of substantiation compared to Native children. The results highlight the importance of examining potential disparities in child welfare processes and support the need for policy development, training, and practice reforms aimed at cultural responsiveness, and consistency in decision making.

## Chapter 1: Introduction

Child Welfare Services (CWS) systems are established with the primary mission of ensuring the safety, stability, and overall well-being of children (Tulare County Health & Human Services Agency, n.d.). These systems are designed to protect vulnerable children from abuse, neglect, and harm, while also supporting families in overcoming challenges that may place children at risk (Tulare County Health & Human Services Agency, n.d.). Despite these intentions, a growing body of research across the United States has documented persistent patterns of disproportionality and disparity within child welfare systems (Vargas, 2024). A longstanding concern within CWS is the overrepresentation of African American and Native American families at multiple stages of system involvement, including reporting, investigation, substantiation, and placement (Dettlaff & Boyd, 2020). These disparities in systemic and structural factors including implicit bias, differential surveillance of communities, and variations in reporting practices may contribute to unequal treatment and outcomes (Dettlaff & Boyd, 2020). For example, families in highly monitored environments or those with greater contact with mandated reporters may be more likely to be referred, regardless of actual risk levels. These patterns raise critical concerns about equity and fairness, highlighting the need to examine how decision-making processes within CWS, particularly during the referral and investigation stages, may contribute to or mitigate disparities (Vargas, 2024). Understanding these dynamics is essential for developing policies and practices that promote more equitable outcomes for all children and families.

### Problem

One of the most significant concerns within child welfare systems is the presence of disproportionality. Disproportionality refers to the overrepresentation or underrepresentation of specific groups most commonly identified by race, ethnicity, or socioeconomic status within the child welfare system relative to their proportion in the general population (Mumpower & McClelland, 2014). In 2022, Tulare County had a population of 477,544, with 26% identifying as White, 2.3% as Black, 2.8% as Native American, and 67% as Hispanic (United States Census Bureau, n.d.). Although African American children and Native American children comprise a small percentage of a county's overall child population, they are disproportionately overrepresented in CWS referrals and substantiated cases. Data collected by Tulare County CWS staff, in 2022, consisted of a total of 818 referrals for Native American and Black children. Despite Native American and Black residents making up a relatively small share of Tulare County's population, children from these groups are disproportionately represented in the county's Child Welfare Services (CWS) system compared to their Hispanic and White peers (United States Census Bureau, n.d.). Together, these data illustrate the persistence of disproportionality within Tulare County's child welfare system and emphasize the importance of examining the underlying factors contributing to these disparities.

Research suggests disproportionality may be prevalent due to mandated reporters having more access to certain community members who have low economic status (Cancian et al., 2013). Low-income families are more likely to come to the attention of Child Welfare Services (CWS), not necessarily due to higher rates of maltreatment, but because of increased exposure to systemic surveillance and structural disadvantage. These families often face limited access to

supportive services and resources compared to those with greater socioeconomic means, which can contribute to their overrepresentation within the child welfare system. Furthermore, Font et al. (2012), in his study did not discover different races were treated differently by Child Welfare Services, however, he did state the race of the assigned social worker may have been a factor in the results. This is important as it reflects that Child Welfare Services decisions are arbitrary. The disproportionality reflects deeper structural and institutional challenges or community problems (Vargas, 2024).

Tulare County Child Welfare Services has implemented training focusing on cultural humility in an attempt to better serve all cultures effectively while attempting to understand traditions and child rearing practices look differently in different cultures. In addition, the agency promotes strength-based approaches and solution-focused strategies guided by Safety Organized Practice (SOP) framework. Safety Organized Practice (SOP) is a collaborative approach deeply rooted in principles of collaboration, cultural sensitivity, trauma awareness, and evidence-based methodologies. (University of California, Davis, n.d.). However, despite these developments, disproportionality is persistent in Black and Native families within child welfare services.

Due to the disproportionate issues remaining stagnant in Child Welfare Services, this project seeks to understand if any demographic information collected at the time of the referral will predict whether a case is substantiated or not substantiated. Understanding this relationship is critical because the referral stage serves as the gateway into the child welfare system, and decisions made at this point can have long-lasting consequences for children and families. If certain demographic characteristics, such as race or socioeconomic indicators, are found to influence substantiation outcomes, this may suggest that factors beyond the actual risk of maltreatment are shaping decision-making processes.

### Purpose of Proposed Study

This research project seeks to examine whether specific factors collected during the referral process influence the outcomes of the CWS referrals, including race, age at time of referral, if the reporter is a mandated reporter, if the allegations is physical abuse, if the reporter is school staff, if reporter is law enforcement, number of previous referrals, number of siblings, and response time. By analyzing 2022 referral data for African Americans and Native Americans and identifying any patterns of disproportionality, this research aims to determine whether particular variables predict differences in investigation outcomes.

This is important because substantiation decisions directly impact whether families receive services, experience increased surveillance, or face potential child removal. Identifying patterns in how referrals are processed can help determine whether systemic biases or structural inequalities are contributing to disproportionate outcomes. Additionally, examining these predictors can provide insight into whether current assessment practices are applied consistently across different populations.

By understanding which factors influence substantiation versus not substantiated, child welfare agencies can better evaluate their policies, training, and screening tools to ensure that decisions are based on objective risk rather than subjective interpretation. Ultimately, this research has the potential to inform more equitable practices, reduce unnecessary system involvement for certain populations, and improve outcomes for children and families by promoting fairness, transparency, and accountability within the child welfare system.

## Significance

Understanding the factors that contribute to disproportionality in Child Welfare Services referrals is essential for promoting fairness, accountability, and effectiveness in child welfare practice (Harris & Hackett, 2008). The findings from this proposed study may inform policy recommendations, training initiatives, and practice reforms designed to reduce inequities and ensure all families receive equitable treatment from the initial referral stage through the closure of a Child Welfare Services (CWS) case.

## Summary

Chapter One outlined the significant problem of disproportionality affecting African American and Black families within the Child Welfare System. Despite Tulare County's efforts to reduce disparities by implementing training and shifting focus to strength-based approaches the problem still remains. The chapter outlined the purpose of the study, which is aimed to analyze if demographic characteristics collected during the referral process are more likely to predict a referral result in being substantiated versus not substantiated. Understanding what factors are more likely to lead to a disposition of substantiated will help us understand if specific information is leading to disproportionality in African Americans and American Indians. The following literature will provide further insight to factors that influence the Child Welfare Services and factors contributing to disproportionality.

## CHAPTER II: LITERATURE REVIEW

### Child Abuse Reports

It is critical to understand factors influencing child abuse referral outcomes, as these decisions determine which families enter and remain involved in the child welfare system. . Recent statewide data reinforce the significance of examining disproportionality within the child welfare system. In 2023, Child Welfare Services received a national estimate of 4,399,000 total referrals. Approximately 7.8 million children were the subjects of maltreatment allegations in total (U.S. Department of Health & Human Services et al., 2025). Across the United States, 28.7 out of every 1,000 children are the subjects of screened-in reports of maltreatment. Data from 46 reporting states indicate that 47.5% of referrals are accepted for investigation (screened in), whereas 52.5% are not (screened out) (U.S. Department of Health & Human Services et al., 2025).

Furthermore, in 2023, an estimated 546,159 children were identified as victims of abuse or neglect nationwide, representing a rate of 7.4 victims per 1,000 children (U.S. Department of Health & Human Services et al., 2025). While these figures illustrate the substantial scope of child maltreatment, they also underscore that only a fraction of reported cases ultimately result in substantiated findings. This gap between referrals, investigations, and substantiations highlights the complexity of child welfare decision-making and raises important questions about how cases are evaluated and prioritized.

These statistics emphasize that the referral and screening stages are critical points where discretion, professional judgment, and systemic factors intersect. Because nearly half of all referrals are screened out, and only a portion of investigated cases are substantiated, the criteria



used to assess risk and credibility carry significant weight. Variations in how reporters identify concerns, how agencies screen cases, and how investigators interpret evidence can all contribute to inconsistencies in outcomes. As a result, examining these processes is essential for identifying potential disparities, particularly among marginalized populations who may be disproportionately represented at various stages of system involvement. Overall, the data highlight not only the scale of child maltreatment in the United States but also the importance of ensuring that child welfare processes are equitable, consistent, and grounded in objective assessment. Understanding the factors that influence referral outcomes is a necessary step toward reducing disproportionality, improving decision-making accuracy, and promoting fair treatment for all children and families involved in the child welfare system.

### Types of Child Abuse

There are various types of abuse and neglect, and the signs and severity may vary significantly from one child to another. Child abuse and neglect is defined as “any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation,” or “an act or failure to act which presents an imminent risk of serious harm” (U.S. Department of Health and Human Services, 2023). This definition emphasizes the legal and moral responsibility of parents and caregivers to ensure the safety, protection, and overall well-being of children. It also highlights that both actions and omissions can constitute maltreatment, underscoring the complexity of identifying and responding to child abuse cases.

There are four primary types of abuse: physical abuse, emotional abuse, sexual abuse, and neglect, each of which presents differently and may require distinct approaches for

identification and intervention. Physical abuse refers to any nonaccidental physical injury inflicted upon a child, including behaviors such as hitting, kicking, shaking, burning, or otherwise causing bodily harm (U.S. Department of Health and Human Services, 2023). While some cases may present with visible injuries such as bruises or fractures, others may be more difficult to detect, particularly when caregivers attempt to conceal harm or when injuries are attributed to accidental causes.

Neglect, the most commonly reported form of maltreatment, involves the failure of a parent or caregiver to provide essential needs such as adequate food, clothing, shelter, medical care, or supervision (U.S. Department of Health and Human Services, 2023). Unlike other forms of abuse, neglect is often closely tied to socioeconomic conditions, including poverty, housing instability, and limited access to resources. This overlap can make it difficult to distinguish between willful neglect and circumstances driven by economic disadvantage, which has important implications for how cases are assessed and addressed within the child welfare system.

Sexual abuse involves the use, coercion, or exploitation of a child for sexual purposes by a parent, caregiver, or other responsible individual. This may include a range of behaviors such as fondling, penetration, exposing a child to sexual acts, or involving a child in pornography or prostitution (U.S. Department of Health and Human Services, 2023). Sexual abuse is often underreported due to stigma, fear, manipulation by the perpetrator, or the child's limited ability to disclose the abuse, making detection particularly challenging for professionals.

Emotional abuse, although less visible than other forms, can have profound and long-lasting effects on a child's development (Trickett et al., 2009). It refers to behaviors that harm a child's psychological well-being or emotional stability, such as constant criticism, rejection, intimidation, or exposure to domestic violence (Trickett et al., 2009). Indicators of emotional

abuse may include anxiety, depression, withdrawal, low self-esteem, or aggressive behavior (Child Welfare Information Gateway, 2019). Because emotional abuse often lacks clear physical evidence, it can be more subjective and difficult to substantiate, which may contribute to inconsistencies in how cases are identified and handled.

Understanding the different types of abuse is essential for accurately identifying maltreatment and ensuring appropriate intervention. However, the variability in how abuse presents, combined with the influence of cultural norms, socioeconomic conditions, and professional judgment, can complicate the assessment process. These complexities further highlight the importance of consistent training, clear guidelines, and culturally informed practice within child welfare systems to ensure that all children are assessed fairly and appropriately.

#### Inconsistencies in Child Welfare

There are many inconsistencies within the Child Welfare System that contribute to unequal outcomes for children and families. Among the most significant is racial disproportionality. Racial disproportionality remains a longstanding concern, as children of color particularly African American, Native American, and sometimes Latino children are reported to child welfare agencies, investigated, and removed from their homes at higher rates than their White peers (Dettlaff & Boyd, 2020). Research shows 11% of Native American children and around 9% of Black children will be exposed to foster care placement by their 18th birthday compared to 5% of White children. In addition, when Black and Native American children are in care they are in placement longer than White children, are less likely to reunify with their families, and are more likely to age out of the system (Dettlaff & Boyd, 2020).

Furthermore, bias in decision-making can occur at every stage of the process, from the initial referral and investigation to case substantiation, service provision, and permanency

planning. Implicit bias, cultural misunderstanding, and lack of adequate training on equitable practices may influence how social workers and mandated reporters interpret risk and safety. In some cases, families of color may face harsher judgments or more invasive interventions for behaviors that might be addressed through supportive services in other communities (Miller et al., 2013).

Another critical inconsistency lies in the system's punitive response to poverty. Many cases labeled as "neglect" are closely tied to economic hardship, housing instability, or limited access to healthcare and childcare conditions that reflect systemic inequality rather than parental intent to harm (Bradt et al., 2015). When poverty is mistaken for neglect, families are often subjected to surveillance and separation instead of being connected to meaningful support or resources (Bradt et al., 2015). This practice not only perpetuates racial and class disparities but also undermines the goal of family preservation.

Lastly, inconsistencies in how child welfare policies and practices are applied across jurisdictions stem largely from variations in professional judgment, organizational culture, and systemic bias. (LaBrenz et al., 2023). Even when formal guidelines exist, individual and contextual factors such as workload, supervision quality, available resources, and community norms often shape how policies are interpreted and enforced (LaBrenz et al., 2023). These inconsistencies result in uneven treatment of families, where similar cases may be handled differently depending on who conducts the assessment or where the case occurs.

#### Reporting Factors: Sociodemographic

Research shows that the likelihood of a maltreatment allegation being substantiated depends not only on the nature of the report but also on factors such as reporter identity and family demographics, reflecting potential biases within the child welfare process (King, Lawson,

& Putnam-Hornstein, 2013). Children's race, age, and family socioeconomic status influence both the likelihood of being reported to child welfare services and the probability that a report will be substantiated. (King, Lawson, & Putnam-Hornstein, 2013). Specifically, reports involving Black and low-income children were more likely to be substantiated than those involving White or higher-income children, even when controlling for similar allegation types. These findings suggest that systemic bias and societal perceptions about race and poverty shape how risk and credibility are interpreted within the child welfare system (King, Lawson, & Putnam-Hornstein, 2013). These disparities suggest that factors beyond objective evidence of maltreatment may influence how cases are assessed. Reporter perceptions, shaped by professional training, personal experiences, and implicit biases, can affect how risk is interpreted and whether a situation is deemed credible or concerning enough to warrant substantiation

#### Gender

Gender influences assessments and decision-making within the child welfare process. Boys are more likely to be referred for behavioral or externalizing concerns such as aggression, truancy, or delinquency while girls are more often referred for issues related to neglect, emotional distress, or family dysfunction (Kalin, Ahlgren, & Persdotter, 2022). Moreover, social workers tended to interpret boys' behaviors as requiring correction or discipline, whereas girls' situations were more frequently framed as needing protection or emotional support (Kalin, Ahlgren, & Persdotter, 2022). These differences suggest that gendered expectations and stereotypes shape how child welfare professionals perceive and respond to children's circumstances.

#### Neighborhood Characteristics

Child abuse report rates may be associated with neighborhood characteristics. Neighborhoods with greater racial and ethnic diversity were associated with higher rates of child welfare referrals (Klein & Merritt, 2014). Economically disadvantaged neighborhoods with limited social cohesion are more frequently involved with the child welfare system, suggesting that contextual and structural conditions contribute to disproportionality in reporting and system contact (Klein & Merritt, 2014). In diverse communities, cultural misunderstandings and implicit biases can influence how behaviors are interpreted by mandated reporters, leading to disproportionate referrals for families of color.

### Mandated Reporters

Reports on child abuse may also be associated with mandated reporters. Mandated reporters play a significant role in shaping child welfare involvement. Mandated reporters such as teachers, medical professionals, law enforcement officers, and social service providers are legally required to report any suspicion of abuse or neglect, which results in a large proportion of child welfare referrals originating from professional settings. While this legal obligation is intended to protect children, it can also lead to inconsistencies in reporting, as decisions are often influenced by the reporter's professional background, personal biases, and level of training (Giovanni, 1995). For example, professionals who work closely with families in high-poverty or racially diverse communities may be more likely to interpret certain behaviors or conditions as neglect, even when they stem from structural inequities rather than parental intent. Consequently, mandated reporting practices can unintentionally contribute to the overrepresentation of marginalized families in the child welfare system.

### Overreporting

Overreporting occurs across multiple systems, including public agencies and the broader community, particularly among mandated reporters. Particularly due to Failure to report as mandated by law can result in legal penalties, including fines and criminal charges. Mandated reporters are encouraged to err on the side of caution, which may contribute to overreporting and, in turn, foster a culture of fear. (Child Welfare Information Gateway, 2023). These repercussions led to mandated reporters overthinking situations and reporting to ensure their bases are covered. Furthermore, the community is also responsible for overreporting for many reasons. Community members (neighbors, extended family, friends, and the general public) play an inconsistent and often hesitant role in reporting suspected child maltreatment, contributing to both underreporting and overreporting (Perrigo et al., 2024). Perrigo et al. study found that the community is unaware of what constitutes child abuse therefore reports just in case. Variations in cultural norms and child-rearing practices can contribute to overreporting, as community members may misinterpret unfamiliar disciplinary approaches as maltreatment, despite these practices not meeting established legal or child welfare criteria.

There is minimal research that illustrates the disproportionality of Black and Native Families in Child Welfare Services. While there is abundance of research addressing how disproportionality should be diminished there is limited research on why or how disproportionality is occurring in the agencies. It is vital to understand how it is occurring in order to address the issue and ensure it is alleviated.

## THEORETICAL FRAMEWORK

This study is guided by systems theory, which will be used to examine how multiple interacting factors influence child welfare outcomes. The application of systems theory spans multiple levels, including micro, mezzo, eco, and macro systems, all of which play a role in

shaping client outcomes (Julien-Chinn, 2017). Within child welfare, microsystems pertain to individual social workers practice and their engagement with children and families. Mezzo systems refer to the interactions between families, community partners, and service providers, which play a significant role in shaping family outcomes. Ecosystems consist of the work environment and organizational climate, which can influence social workers work ethics which then influences practice with families. At the macro level, organizational culture, values, shared expectations, and decision-making processes significantly influence family outcomes.

The proposed research is grounded in systems theory. Systems theory views individuals as part of complex, interrelated systems such as families, communities, and institutions that influence behavior and functioning (Friedman & Allen, 2014). The research is anchored in systems theory to explain how different systems may influence the disposition of child abuse reporting. Applying systems theory to this research helps explain how multiple layers of influence ranging from individual biases and family dynamics to organizational culture and policy frameworks contribute to the disposition of child abuse reports. For instance, mandated reporters operate within institutional systems that may shape their perceptions of risk, while child welfare agencies make decisions based on procedural guidelines, resource limitations, and societal norms. These systems interact in ways that can either mitigate or reinforce inequities in reporting and case outcomes. This theoretical approach aligns with the study's focus on disproportionality and systemic bias by emphasizing that inequities in child welfare involvement are not isolated incidents, but rather the result of structural interactions among various levels of the social environment. Understanding these interconnections provides a foundation for identifying intervention points that promote fairness, cultural responsiveness, and systemic accountability within child welfare practice.



## Methods

A secondary data analysis will be conducted with data from the Tulare County Department of Child Welfare 2022 Disproportionality Research data. Tulare County is located in the central valley region of California. Tulare County encompasses a mix of urban and rural communities, including the cities of Tulare, Porterville, and Visalia, as well as several smaller unincorporated areas. It is one of California's most agriculturally productive regions but also faces significant socioeconomic challenges, including high rates of poverty, unemployment, and limited access to social services in rural areas (Data USA, n.d.). According to recent census data, Tulare County has a racially and ethnically diverse population, with a majority identifying as Hispanic or Latino, followed by White, African American, and Native American residents (Data USA, n.d.). These demographic characteristics and socioeconomic conditions provide important context for understanding patterns of disproportionality and disparities within the county's Child Welfare Services (CWS) system.

## Measures

The outcome measure for this study will be disposition, defined as the official outcome assigned to a child abuse or neglect referral following investigation. Disposition will be coded into four categories: (1) substantiated, (2) not substantiated. These classifications reflect how Tulare County Child Welfare Services (CWS) determines whether an allegation meets the threshold for abuse or neglect under state guidelines.

Predictor variables will include three following characteristics: race/ethnicity (coded as 1 = Black, 2 = Native American); Mandated Reporter (1 = Yes, 2 = No); response time (1 = immediate, 2 = 10-day); Age of time of referral (0-17), Physical abuse (1=Yes, 2=No), School

staff (1=Yes, 2=No), Law Enforcement Agency (1=Yes, 2=No), Previous referrals (0-10, 10-100), Number of siblings (0-9).

## **Analysis**

Data analysis included descriptive statistics to examine percentages. Descriptive statistics was used to understand the characteristics of the dispositions. A binary logistic regression was conducted to examine whether Age at time of referral, Mandated Reporter, Physical abuse, School reporter, Law Enforcement reporter, Previous referrals, Race, Number of Siblings, and Response time had a significant effect on the odds of observing a substantiated case.

## **Results**

### ***Frequencies and Percentages***

The most frequently observed category of Mandated Reporter was 1 ( $n = 617$ , 75.43%). The most frequently observed category of Physical abuse was other ( $n = 726$ , 88.75%). The most frequently observed category of Response time was 10 days ( $n = 286$ , 34.96%). The most frequently observed category of School reporter was Other referral ( $n = 640$ , 78.24%). The most frequently observed category of Neglect was Neglect ( $n = 435$ , 53.18%). The most frequently observed category of Law enforcement was law enforcement ( $n = 695$ , 84.96%). The most frequently observed category of Previous referrals was 1-9 ( $n = 418$ , 51.10%). The most frequently observed category of Race was Black ( $n = 569$ , 69.56%). The most frequently observed category of Substantiated was All others ( $n = 729$ , 89.12%). Frequencies and percentages are presented in Table 1.

**Table 1**

*Frequency Table for Nominal Variables*

| Variable          | <i>n</i> | %     |
|-------------------|----------|-------|
| Mandated Reporter |          |       |
| Yes               | 617      | 75.43 |
| No                | 201      | 24.57 |
| Missing           | 0        | 0.00  |
| Physical          |          |       |
| Physical          | 92       | 11.25 |
| Other             | 726      | 88.75 |
| Missing           | 0        | 0.00  |
| Response          |          |       |
| Immediate         | 279      | 34.11 |
| 10 days           | 286      | 34.96 |
| Missing           | 253      | 30.93 |
| School            |          |       |
| Other referral    | 640      | 78.24 |
| School referral   | 177      | 21.64 |
| Missing           | 1        | 0.12  |
| Neglect           |          |       |
| Neglect           | 435      | 53.18 |
| Other             | 92       | 11.25 |
| N/A               | 21       | 2.57  |
| Missing           | 270      | 33.01 |
| Law               |          |       |
| Other             | 122      | 14.91 |
| law enforcement   | 695      | 84.96 |
| Missing           | 1        | 0.12  |
| Previous          |          |       |
| 1-9               | 418      | 51.10 |
| 10-100            | 295      | 36.06 |
| Missing           | 105      | 12.84 |
| Race              |          |       |
| Native            | 221      | 27.02 |
| Black             | 569      | 69.56 |
| Missing           | 28       | 3.42  |
| Substantiated     |          |       |
| All others        | 729      | 89.12 |
| Substantiated     | 89       | 10.88 |
| Missing           | 0        | 0.00  |

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*Note.* Due to rounding errors, percentages may not equal 100%.

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*Frequency Table for Nominal Variables***Summary Statistics**

**Summary Statistics**

The observations for Age at time of referral had an average of 8.81 ( $SD = 7.63$ ,  $SE_M = 0.27$ ,  $Min = 0.00$ ,  $Max = 122.00$ ,  $Skewness = 7.93$ ,  $Kurtosis = 116.23$ ). The observations for Number of Siblings had an average of 2.77 ( $SD = 2.06$ ,  $SE_M = 0.07$ ,  $Min = 0.00$ ,  $Max = 9.00$ ,  $Skewness = 0.83$ ,  $Kurtosis = 0.25$ ). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 2.

**Table 2**

*Summary Statistics Table for Interval and Ratio Variables*

| Variable            | $M$  | $SD$ | $n$ | $SE_M$ | Min  | Max    | Skewness | Kurtosis |
|---------------------|------|------|-----|--------|------|--------|----------|----------|
| Ageattimeofreferral | 8.81 | 7.63 | 818 | 0.27   | 0.00 | 122.00 | 7.93     | 116.23   |
| NumberofSiblings    | 2.77 | 2.06 | 815 | 0.07   | 0.00 | 9.00   | 0.83     | 0.25     |

*Note.* '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

**Binary Logistic Regression**

**Introduction** A binary logistic regression was conducted to examine whether Age at time of referral, Mandated Reporter, Physical abuse, School reporter, Law Enforcement, Previous referrals, Race, Number of Siblings, and Response time had a significant effect on the odds of observing the Substantiated category of Substantiated. The reference category for Substantiated was All others.

**Assumptions.** The assumption of absence of multicollinearity was examined.

**Table 3**

*Variance Inflation Factors for Ageattimeofreferral, MandatedReporter, Physical, School, Law, Previous, Race, NumberofSiblings, and Response*

| Variable            | VIF  |
|---------------------|------|
| Ageattimeofreferral | 1.28 |
| MandatedReporter    | 1.47 |
| Physical            | 1.21 |
| School              | 1.94 |
| Law                 | 1.52 |
| Previous            | 1.45 |
| Race                | 1.15 |
| NumberofSiblings    | 1.27 |
| Response            | 1.06 |

## **Results**

The model was evaluated based on an alpha of .05. The overall model was significant,  $\chi(9) = 56.43, p < .001$ , suggesting that Age at time of referral, Mandated Reporter, Physical abuse, School reporter, Law Enforcement, Previous referrals, Race, Number of Siblings, and Response time had a significant effect on the odds of observing the Substantiated category of Substantiated. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere et al., 2000). The McFadden R-squared value calculated for this model was 0.20. The effect of the Age at time of referral was not significant,  $B = -0.06, OR = 0.94, p = .128$ , indicating that Age at time of referral did not have a significant effect on the odds of observing the Substantiated category of Substantiated. The effect of the 2 category of Mandated Reporter was not significant,  $B = -0.73, OR = 0.48, p = .154$ , indicating that observing the 2 category of Mandated Reporter did not have a significant

effect on the odds of observing the Substantiated category of Substantiated. The effect of the other category of Physical Abuse was significant,  $B = 1.47$ ,  $OR = 4.33$ ,  $p = .006$ , indicating that observing the other category of Physical Abuse increases the odds of observing the Substantiated category of Substantiated by approximately 333.46% relative to the Physical Abuse category of Physical. The effect of the School reporter referral category of School reporter was not significant,  $B = 0.73$ ,  $OR = 2.07$ ,  $p = .221$ , indicating that observing the School reporter referral category of School reporter did not have a significant effect on the odds of observing the Substantiated category of Substantiated. The effect of the law enforcement category of Law enforcement was significant,  $B = -1.03$ ,  $OR = 0.36$ ,  $p = .023$ , indicating that observing the law enforcement category of Law decreases the odds of observing the Substantiated category of Substantiated by approximately 64.24% relative to the other category of Law. The effect of the 10-100 category of Previous referrals was not significant,  $B = -0.37$ ,  $OR = 0.69$ ,  $p = .387$ , indicating that observing the 10-100 category of Previous referrals did not have a significant effect on the odds of observing the Substantiated category of Substantiated. The effect of the Black category of Race was significant,  $B = -1.05$ ,  $OR = 0.35$ ,  $p = .005$ , indicating that observing the Black category of Race decreases the odds of observing the Substantiated category of Substantiated by approximately 64.98% relative to the Native category of Race. The effect of the Number of Siblings was not significant,  $B = 0.11$ ,  $OR = 1.12$ ,  $p = .235$ , indicating that Number of Siblings did not have a significant effect on the odds of observing the Substantiated category of Substantiated. The effect of the 10 days response time category of Response was significant,  $B = -1.60$ ,  $OR = 0.20$ ,  $p < .001$ , indicating that observing the 10 days category of Response decreases the odds of observing the Substantiated category of Substantiated by approximately 79.91%

relative to the immediate category of Response. Table 4 summarizes the results of the regression model.

**Table 4**

*Logistic Regression Results with Ageattimeofreferral, MandatedReporter, Physical, School, Law, Previous, Race, NumberofSiblings, and Response Predicting Substantiated*

| Variable              | <i>B</i> | <i>SE</i> | $\chi^2$ | <i>p</i> | <i>OR</i> | 95.00% CI     |
|-----------------------|----------|-----------|----------|----------|-----------|---------------|
| (Intercept)           | -0.37    | 0.66      | 0.31     | .577     | -         | -             |
| Ageattimeofreferral   | -0.06    | 0.04      | 2.32     | .128     | 0.94      | [0.87, 1.02]  |
| MandatedReporter2     | -0.73    | 0.51      | 2.04     | .154     | 0.48      | [0.18, 1.31]  |
| Physicalother         | 1.47     | 0.53      | 7.59     | .006     | 4.33      | [1.53, 12.30] |
| SchoolSchool referral | 0.73     | 0.60      | 1.50     | .221     | 2.07      | [0.65, 6.67]  |
| Lawlaw enforcement    | -1.03    | 0.45      | 5.19     | .023     | 0.36      | [0.15, 0.87]  |
| Previous10-100        | -0.37    | 0.43      | 0.75     | .387     | 0.69      | [0.30, 1.60]  |
| RaceBlack             | -1.05    | 0.37      | 8.03     | .005     | 0.35      | [0.17, 0.72]  |
| NumberofSiblings      | 0.11     | 0.09      | 1.41     | .235     | 1.12      | [0.93, 1.34]  |
| Response10 days       | -1.60    | 0.39      | 17.13    | < .001   | 0.20      | [0.09, 0.43]  |

*Note.*  $\chi^2(9) = 56.43$ ,  $p < .001$ , McFadden  $R^2 = 0.20$ .

### ***Introduction***

A Fisher's exact test was conducted to examine whether Substantiated and Race were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 2 levels in Race: Native and Black.

### ***Results***

The results of the Fisher exact test were significant based on an alpha value of .05,  $p = .021$ , suggesting that Substantiated and Race are related to one another. Since the Fisher's exact test was conducted for a 2x2 contingency table, the odds ratio was calculated,  $OR = 0.57$ . This indicates that the odds of observing Substantiated (All others) and Race (Native) is 0.57 times as likely as observing Substantiated (Substantiated) and Race (Native). The following level

combinations had observed values that were greater than their expected values: Race (Black): Substantiated (All others) and Race (Native): Substantiated (Substantiated). The following level combinations had observed values that were less than their expected values: Race (Native): Substantiated (All others) and Race (Black):Substantiated (Substantiated). Table 5 presents the results of the Fisher's exact test.

**Table 5**

*Observed and Expected Frequencies*

| Race   | Substantiated |               | OR   | <i>p</i> |
|--------|---------------|---------------|------|----------|
|        | All others    | Substantiated |      |          |
| Native | 188[190.47]   | 33[22.96]     | 0.57 | .021     |
| Black  | 517[490.40]   | 52[59.13]     |      |          |

*Note.* Values formatted as Observed[Expected].

**Chi-square Test of Independence**

***Introduction***

A Chi-square Test of Independence was conducted to examine whether Substantiated and Race were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 2 levels in Race: Native and Black.

***Assumptions***

The assumption of adequate cell size was assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). All cells had expected values greater than zero, indicating the first condition was met. A total of 100.00% of the cells had expected frequencies of at least five, indicating the second condition was met.



**Variance inflation factors.** Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10. Table 3 presents the VIF for each predictor in the model.

## ***Results***

The results of the Chi-square test were significant based on an alpha value of .05,  $\chi^2(1) = 5.56$ ,  $p = .018$ , suggesting that Substantiated and Race are related to one another. The following level combinations had observed values that were greater than their expected values:

Substantiated (Substantiated): Race (Native) and Substantiated (All others): Race (Black). The

following level combinations had observed values that were less than their expected values:

Substantiated (All others): Race (Native) and Substantiated (Substantiated): Race (Black). Table 6 presents the results of the Chi-square test.

**Table 6**

### *Observed and Expected Frequencies*

| Substantiated | Race        |             | $\chi^2$ | $df$ | $p$  |
|---------------|-------------|-------------|----------|------|------|
|               | Native      | Black       |          |      |      |
| All others    | 188[197.22] | 517[507.78] | 5.56     | 1    | .018 |
| Substantiated | 33[23.78]   | 52[61.22]   |          |      |      |

*Note.* Values formatted as Observed[Expected].

## **Chi-square Test of Independence**

### ***Introduction***

A Chi-square Test of Independence was conducted to examine whether Substantiated and Law were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 2 levels in Law: other and law enforcement.

### ***Assumptions***

The assumption of adequate cell size was assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). All cells had expected values greater than zero, indicating the first condition was met. A total of 100.00% of the cells had expected frequencies of at least five, indicating the second condition was met.

### ***Results***

The results of the Chi-square test were significant based on an alpha value of .05,  $\chi^2(1) = 13.61$ ,  $p < .001$ , suggesting that Substantiated and Law are related to one another. The following level combinations had observed values that were greater than their expected values:

Substantiated (Substantiated): Law (other) and Substantiated (All others):Law (law enforcement). The following level combinations had observed values that were less than their expected values: Substantiated (All others): Law (other) and Substantiated (Substantiated):Law (law enforcement). Table 7 presents the results of the Chi-square test.

**Table 7**

#### *Observed and Expected Frequencies*

| Substantiated | Law        |                 | $\chi^2$ | $df$ | $P$    |
|---------------|------------|-----------------|----------|------|--------|
|               | other      | law enforcement |          |      |        |
| All others    | 97[108.71] | 631[619.29]     | 13.61    | 1    | < .001 |
| Substantiated | 25[13.29]  | 64[75.71]       |          |      |        |

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*Note.* Values formatted as Observed[Expected].

## **Chi-square Test of Independence**

### ***Introduction***

A Chi-square Test of Independence was conducted to examine whether Substantiated and Mandated Reporter were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 2 levels in Mandated Reporter: 1 and 2.

### ***Assumptions***

The assumption of adequate cell size was assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). All cells had expected values greater than zero, indicating the first condition was met. A total of 100.00% of the cells had expected frequencies of at least five, indicating the second condition was met.

### ***Results***

The results of the Chi-square test were significant based on an alpha value of .05,  $\chi^2(1) = 6.63$ ,  $p = .010$ , suggesting that Substantiated and Mandated Reporter are related to one another. The following level combinations had observed values that were greater than their expected values: Substantiated (Substantiated): Mandated Reporter (1) and Substantiated (All others): Mandated Reporter (2). The following level combinations had observed values that were less than their expected values: Substantiated (All others): Mandated Reporter (1) and Substantiated (Substantiated): Mandated Reporter (2). Table 8 presents the results of the Chi-square test.

### **Table 8**

*Observed and Expected Frequencies*

|               | MandatedReporter |             | $\chi$ | $df$ | $p$  |
|---------------|------------------|-------------|--------|------|------|
|               | 1                | 2           |        |      |      |
| Substantiated |                  |             |        |      |      |
| All others    | 540[549.87]      | 189[179.13] | 6.63   | 1    | .010 |
| Substantiated | 77[67.13]        | 12[21.87]   |        |      |      |

*Note.* Values formatted as Observed[Expected].

## Chi-square Test of Independence

### *Introduction*

A Chi-square Test of Independence was conducted to examine whether Substantiated and Physical were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 2 levels in Physical Abuse: Physical Abuse and other

### *Assumptions*

The assumption of adequate cell size was assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). All cells had expected values greater than zero, indicating the first condition was met. A total of 100.00% of the cells had expected frequencies of at least five, indicating the second condition was met.

### *Results*

The results of the Chi-square test were not significant based on an alpha value of .05,  $\chi(1) = 2.03, p = .154$ , suggesting that Substantiated and Physical could be independent of one another. This implies that the observed frequencies were not significantly different than the expected frequencies. Table 9 presents the results of the Chi-square test.

**Table 9***Observed and Expected Frequencies*

| Substantiated | Physical  |             | $\chi$ | $df$ | $p$  |
|---------------|-----------|-------------|--------|------|------|
|               | Physical  | other       |        |      |      |
| All others    | 86[81.99] | 643[647.01] | 2.03   | 1    | .154 |
| Substantiated | 6[10.01]  | 83[78.99]   |        |      |      |

*Note.* Values formatted as Observed[Expected].

**Chi-square Test of Independence*****Introduction***

A Chi-square Test of Independence was conducted to examine whether Substantiated and Neglect were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 3 levels in Neglect: Neglect, Other, and 7.

***Assumptions***

The assumption of adequate cell size was assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). All cells had expected values greater than zero, indicating the first condition was met. A total of 83.33% of the cells had expected frequencies of at least five, indicating the second condition was met.

***Results***

The results of the Chi-square test were significant based on an alpha value of .05,  $\chi^2(2) = 6.21$ ,  $p = .045$ , suggesting that Substantiated and Neglect are related to one another. The following level combinations had observed values that were greater than their expected values: Substantiated (Substantiated): Neglect (Neglect), Substantiated (All others):Neglect (Other), and

Substantiated (Substantiated): Neglect (7). The following level combinations had observed values that were less than their expected values: Substantiated (All others): Neglect (Neglect), Substantiated (Substantiated): Neglect (Other), and Substantiated (All others): Neglect (7). Table 10 presents the results of the Chi-square test.

**Table 10**

*Observed and Expected Frequencies*

| Neglect | Substantiated |               | $\chi^2$ | $df$ | $p$  |
|---------|---------------|---------------|----------|------|------|
|         | All others    | Substantiated |          |      |      |
| Neglect | 371[375.47]   | 64[59.53]     | 6.21     | 2    | .045 |
| Other   | 86[79.41]     | 6[12.59]      |          |      |      |
| 7       | 16[18.13]     | 5[2.87]       |          |      |      |

*Note.* Values formatted as Observed[Expected].

**Chi-square Test of Independence**

***Introduction***

A Chi-square Test of Independence was conducted to examine whether Substantiated and Previous were independent. There were 2 levels in Substantiated: All others and Substantiated. There were 2 levels in Previous: 1-9 and 10-100.

***Assumptions***

The assumption of adequate cell size was assessed, which requires all cells to have expected values greater than zero and 80% of cells to have expected values of at least five (McHugh, 2013). All cells had expected values greater than zero, indicating the first condition was met. A total of 100.00% of the cells had expected frequencies of at least five, indicating the second condition was met.

## Results

The results of the Chi-square test were not significant based on an alpha value of .05,  $\chi(1) = 1.37, p = .242$ , suggesting that Substantiated and Previous could be independent of one another. This implies that the observed frequencies were not significantly different than the expected frequencies. Table 11 presents the results of the Chi-square test.

**Table 11**

*Observed and Expected Frequencies*

| Substantiated | Previous    |             | $\chi$ | $df$ | $p$  |
|---------------|-------------|-------------|--------|------|------|
|               | 1-9         | 10-100      |        |      |      |
| All others    | 373[377.55] | 271[266.45] | 1.37   | 1    | .242 |
| Substantiated | 45[40.45]   | 24[28.55]   |        |      |      |

*Note.* Values formatted as Observed[Expected].

## Discussion

This project enhanced the understanding of disproportionality within Child Welfare Services (CWS) and explored how information gathered during the referral process may shape decisions regarding whether a report is substantiated or not substantiated. It was further solidified that many factors lead to disproportionality in CWS from an individual social worker to the agency's culture. The findings of this study indicate that referrals involving Native American children are substantiated at higher rates than those involving Black children, despite Native Americans representing a smaller proportion of the overall community. This pattern highlights the importance of examining how specific factors present at the referral stage may influence substantiation outcomes. Identifying predictors such as race, type of allegation (e.g., physical abuse), and response time provides valuable insight into how decisions are being made within the child welfare system.

Understanding the role of these factors is critical because it allows the agency to further investigate why these variables are associated with substantiated outcomes and whether they reflect actual differences in risk or inconsistencies in decision-making practices. For example, the higher substantiation rate among Native American referrals may point to differences in reporting patterns, interpretation of risk, cultural misunderstandings, or systemic factors embedded within the investigation process. Similarly, the influence of response time and allegation type suggests that procedural and contextual elements may shape how cases are prioritized and ultimately determined.

Furthermore, the findings indicated that referrals made by law enforcement were less likely to be substantiated compared to other reporter types. This pattern may reflect differences



in how situations are identified and reported rather than differences in actual maltreatment. Existing research suggests that mandated reporters are encouraged to err on the side of caution when making reports, as failure to report suspected abuse can result in legal consequences. As a result, overreporting can occur, particularly in situations where concerns do not meet the threshold for child abuse or neglect.

While it is understandable that law enforcement officers prioritize child safety and act cautiously, this practice may lead to an increased number of referrals that do not result in substantiation. Overreporting can contribute to families becoming involved with Child Welfare Services (CWS) unnecessarily, creating a history of prior referrals even when maltreatment is not present. This is important because prior system involvement may influence how future referrals are perceived, screened, and prioritized.

Additionally, this study found that response time was a significant predictor of substantiation, with immediate responses more likely to result in substantiated findings. This suggests that how referrals are categorized and prioritized at intake may shape investigation outcomes. When overreporting contributes to a higher volume of referrals, it may strain agency resources and impact response time decisions, potentially influencing which cases receive immediate attention.

Overall, these findings highlight the interconnected nature of reporting practices, system involvement, and decision-making within CWS. Each decision made at the referral stage carries important implications for children and families, reinforcing the need for clear reporting guidelines, consistent screening practices, and a balanced approach that protects children while minimizing unnecessary system involvement.

One challenge in this research is the inability to fully determine how each factor directly influences the disposition of substantiated cases versus not substantiated. While this study identified predictors of substantiation among African American and Native American referrals, it does not explain the underlying mechanisms driving these relationships. As a result, the findings show *what* factors are associated with substantiation, but not *why* or *how* these factors shape decision-making. This limitation highlights the need for future research to further examine how race, allegation type, and response time directly impact case outcomes. There is also the possibility of omitted variable bias. Factors such as worker experience, implicit bias, caseload size, supervision, and agency culture were not included in the analysis but may play a significant role in decision-making. Without accounting for these influences, the model may not fully explain variation in substantiation outcomes. Together, these challenges highlight the complexity of child welfare decision-making and reinforce the need for future research that incorporates qualitative data, multiple jurisdictions, and additional variables to better understand the processes driving substantiation outcomes.

By examining these relationships more closely, Child Welfare Services can begin to identify whether disparities are driven by structural inequities, bias, or variations in practice. This understanding is essential for developing targeted interventions, improving consistency in assessments, and ensuring that all families are evaluated fairly. Ultimately, exploring why these factors influence substantiation outcomes can support more equitable decision-making and help reduce disproportionality within the child welfare system.

## Recommendations

Based on the findings and reflections of this study, several recommendations can be made to improve practice and inform future research. First, enhanced training on child abuse reporting

should be made available to mandated reporters, particularly law enforcement and other professionals who frequently interact with families. This training should focus on clearly defining what constitutes suspected child abuse and neglect, distinguishing it from situations related to poverty or unmet needs. Given time constraints and limited resources, this training could be delivered through accessible online modules or videos that allow for ongoing learning and periodic refreshers. Additionally, when situations do not meet the threshold for suspected child abuse or neglect, mandated reporters should be encouraged to connect families with appropriate community-based resources. Many families come to the attention of Child Welfare Services due to unmet needs rather than intentional harm, and providing access to services such as housing assistance, food support, mental health services, or parenting resources may help address underlying concerns without formal system involvement. Because mandated reporters often have established relationships with families, they are in a unique position to offer guidance and referrals that can prevent unnecessary child welfare reports.

Another important recommendation is the implementation of ongoing cultural competency and cultural humility training for Child Welfare Services (CWS) staff that goes beyond policy-focused requirements such as the Indian Child Welfare Act (ICWA) and active efforts. While current training emphasizes legal mandates once a case is opened, there is a need for more comprehensive education on the diverse cultural practices, values, and child-rearing norms present within Tulare County's communities. Providing staff with a deeper understanding of cultural differences can improve their ability to accurately assess risk and avoid misinterpretation of behaviors that may be culturally normative. Although the agency encourages the use of cultural humility, meeting families where they are and recognizing them as experts of their own lived experiences, not all families feel comfortable sharing personal or cultural

information with government agencies. This reluctance may stem from fear, mistrust, or previous negative experiences with institutional systems. As a result, relying solely on family self-disclosure may not be sufficient for informed decision-making.

Providing structured training that incorporates cultural awareness, community-specific knowledge, and practical examples can help bridge this gap. Such training would better equip social workers to make informed, equitable decisions, reduce the risk of cultural bias, and strengthen engagement with families. Ultimately, enhancing cultural understanding within CWS practice can contribute to more accurate assessments, improved trust with communities, and a reduction in disproportionality within the child welfare system.

**Conclusion:**

The findings of this study reinforce ongoing concerns regarding disproportionality within the child welfare system. Although Black and Native American children represent a relatively small proportion of Tulare County's population, both groups remain overrepresented in referrals, and Native American children in this sample were more likely to have their cases substantiated. These patterns suggest that disparities are not limited to system entry but persist throughout key decision-making stages. Such findings raise critical questions about whether substantiation outcomes are driven solely by differences in risk or whether they are also influenced by institutional processes, reporting practices, and cultural interpretation.

This study highlights the complexity of decision-making within Child Welfare Services and underscores the importance of examining how multiple factors—both individual and systemic interact to shape outcomes. The significance of predictors such as race, allegation type, and response time suggests that substantiation decisions may be influenced by more than

objective evidence alone. These results point to the need for greater consistency, transparency, and accountability in how referrals are assessed and investigated.

Overall, this project supports the need for continued efforts to improve fairness and equity in child welfare practice. Strengthening policy frameworks, enhancing staff training, and promoting culturally responsive and informed approaches are essential steps toward reducing disparities and ensuring that all families are treated equitably. In addition, agencies must critically examine their own data and practices to identify patterns of inequity and implement targeted improvements.

Future research should build on these findings by exploring the underlying mechanisms that drive disparities in substantiation outcomes, particularly the role of race, allegation type, and response time. Incorporating qualitative approaches and additional variables such as worker decision-making processes and family context will be essential for gaining a more comprehensive understanding. Ultimately, advancing this line of research is crucial for developing a child welfare system that not only protects children but also operates with fairness, cultural awareness, and integrity.

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