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Working Together to Achieve Safe and Timely Reunification: A Mixed-Methods Study of Interprofessional Collaboration in the Child Welfare System

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Working Together to Achieve Safe and Timely Reunification: A Mixed-Methods Study of Interprofessional Collaboration in the Child Welfare System

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Abstract

Various professionals play a role in ensuring that foster children achieve safe and timely reunification, including child protective services caseworkers, guardians ad litem, mental health therapists and substance abuse counselors. Guided by ecological systems and relational coordination theories, this mixed methods dissertation explored how communication and joint decision-making between these professionals—two key components of interprofessional collaboration (IPC)—affects the safe and timely reunification of foster children

The quantitative phase involved analysis of administrative data collected from one urban county in a mountain region state. Logistic regressions were run to test if caseworker communication and joint decision-making with guardians ad litem, therapists, and SA counselors was linked to timely reunification ($N = 137$) or safe reunification ($N = 83$). In the qualitative phase, semi-structured interviews were conducted with a sample of caseworkers, guardians ad litem, mental health therapists and substance abuse counselors ($N = 21$) to uncover the process by which these collaborative activities affect safe and timely reunification.

The qualitative findings suggest interprofessional communication facilitates timely reunification by helping professionals make decisions in a timely manner, stay on the same page, and identify the barriers to reunification that need to be addressed. The

findings indicate that joint decision-making expedites reunification because it results in better decisions being made regarding services to provide, and it prevents one professional from dictating whether reunification can occur; However, the qualitative findings also suggest joint decision-making can delay reunification if professionals are in disagreement. In the quantitative phase, only caseworker communication and joint decision-making with guardians ad litem was associated with timely reunification. While the qualitative findings suggest interprofessional communication and joint decision-making can result in safe reunification by leading to more informed decisions being made, this was not supported by the quantitative findings. Overall, the findings have numerous implications for how professionals, agency administrators, and policymakers can enhance case services and facilitate timely reunification by enhancing IPC. The findings will hopefully motivate scholars to conduct additional research that examines how IPC affects child welfare-involved families and encourage policymakers and foundations to provide funding for this type of research.

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The completion of this dissertation would not have been possible without the incredible and unwavering support I received from my dissertation committee. To Dr. Jennifer Bellamy, thank you for being my guiding light throughout my entire doctoral experience and a role model for the scholar I hope to become. To Dr. Amy He, thank you for pushing me to become a better scholar and teaching me how to "let it go." To Dr. Nicole Nicotera, thank you for asking such great questions and for showing me how to conduct rigorous mixed methods research. Thank you *all* for your guidance throughout this treacherous journey, for making yourselves available and accessible whenever I needed you, for devoting your time and attention to my development, for the amazing and inspiring work you do, and, quite simply, for being such wonderful people!

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Chapter One: Introduction

Background of the Problem: Achieving Safe and Timely Reunification

The three primary goals of the child welfare (CW) system are child safety, child permanency, and child well-being (U.S. Department of Human Services [DHHS], 2018b). In severe or high-risk cases, keeping children safe may require removing them from their home and placing them in foster care. In 2017, child protective services (CPS) placed approximately 443,000 children in foster care (DHHS, 2018a). Once a child has been removed from their home, the CW system strives to provide them with a safe permanent living arrangement (i.e., permanency) in a timely manner. Achieving permanency in a timely manner is important as it promotes child well-being. Children need stable relationships to form healthy attachment behaviors which impact future development (Harden, 2004). The longer children remain in foster care, the more likely they are to experience placement changes which have been linked to behavioral problems (Rubin, O'Reilly, Luan & Localio, 2007). Finally, children who age out of foster care because they never achieve permanency are more likely to experience mental and physical health problems, economic hardship, homelessness, and incarceration (Courtney & Dworsky, 2006; Courtney, Dworsky, Brown, Cary, Love, & Vorhies, 2011).

Permanency may be achieved through reunification, adoption, or legal guardianship. However, reunification is the initial, most common, and preferred permanency goal for most children placed out of their home. The Adoption and Safe

Families Act (ASFA, 1997) requires that "reasonable efforts" be made to reunify foster children except in special cases (e.g., murder, manslaughter, serious bodily harm, or parental rights to a sibling were previously terminated). In 2017, 56% of foster children had a permanency goal of reunification and 49% of children who exited foster care were reunified (DHHS, 2018a). ASFA provides two parameters for achieving reunification. First, the child's safety should be the primary concern when determining whether to return a child home. Second, reunification should occur in a timely manner. The federal government considers reunification within 12 months of placement to be timely (DHHS, 2017), which aligns with ASFA's timeframe for holding a permanency hearing to determine if reunification remains an appropriate goal. Overall, these two stipulations create a tense environment where the CW system is pressured to expedite reunification without jeopardizing child safety.

Various professionals play a role in ensuring that foster children achieve safe and timely reunification. Chief among them are CPS caseworkers (caseworkers), guardians ad litem (GALs), mental health therapists (therapists) and substance abuse counselors (SA counselors). Caseworkers assess families' strengths and needs, provide or arrange for their services, monitor their progress, and determine if it is safe to reunify a child (DePanfilis & Salus, 2003). In court-involved CW cases, the Child Abuse Prevention and Treatment Act (CAPTA; 1974) mandates that a GAL be appointed to assess what they believe to be in the child's best interests and to advocate for those interests when case decisions are made, such as what services to provide and if a foster child should be reunified. (DHHS, 2014b). As previously stated, ASFA (1997) mandates that reasonable

efforts be made to reunify children, which includes the provision of services to "facilitate return of the child to his own safe home." Therapists and SA counselors, in particular, frequently provide treatment to CW-involved families as there is a high prevalence of mental health and substance abuse issues among these families. In a nationally representative sample of cases where a child was in foster care with a goal of reunification, 64% of parents required mental health treatment (Dolan, Smith, Casanueva, & Ringeisen, 2012), 65% of parents required substance abuse treatment (Dolan et al., 2012), 40% of school-aged children and adolescents had significant emotional or behavioral problems (Casanueva, Ringeisen, Wilson, Smith, & Dolan, 2011), and 19% of adolescents had substance use disorders (more than double the national prevalence rate; Casanueva et al., 2011).

Caseworkers, GALs, therapists, and SA counselors all have a perspective on the family's strengths, needs, and progress to consider when deciding what services to provide or if a child can be safely reunified (Galyean, Lawson, Jones, Dreyfus, & Berrick, 2018). Indeed, the need for professionals working with CW-involved families to work together—often referred to as interprofessional collaboration (IPC)—is frequently emphasized in the CW literature (Galyean et al., 2018; Han, Carnochan, & Austin, 2007; Jones, Packard, & Nahrstedt, 2002; Lalayants, 2013; Nicholson, Artz, Armitage, & Fagan, 2000). Two critical components of IPC in the CW system which may affect child and family outcomes are communication (Carnochan et al., 2007; DHHS, 2011; Jeffrey & Lloyd, 1997; Phillips, 2016) and joint decision-making (Carnochan et al., 2007; Green, Rockhill, & Burrus, 2008; Usher, Wildfire, Webster, & Crampton, 2010). Findings from

two qualitative studies suggest communication and joint decision-making (e.g., development of case plans together) between caseworkers, court personnel, and treatment providers may improve case monitoring, ensure appropriate services are provided to meet a family's needs as they arise, and prevent families from receiving overwhelming or competing demands (Carnochan et al., 2007; Green et al., 2008).

While the extant CW literature suggests interprofessional communication and joint decision-making may increase the likelihood that a child achieves reunification or permanency (Green et al., 2008; DHHS, 2011), the relationship between these dimensions of IPC and safe and timely reunification have not been directly examined. Most research on IPC in the CW system has focused on identifying factors that promote or inhibit the ability of professionals to work together. Professionals in the CW system may find it difficult to collaborate because of their different mandates, goals, and educational backgrounds (Beeman, Hagemeister, & Edleson, 1999; Darlington, Feeney, & Rixon, 2005); a lack or misunderstanding of one another's roles and responsibilities (Altshuler, 2003; Green et al., 2008); mistrust and a lack of respect (Lalayants, 2013; Lewandowski & GlenMaye, 2002; Spath, Werrbach, & Pine, 2008); frequent turnover (Carnochan et al., 2007; Lee, Benson, Klein, & Franke, 2015); and high workloads (Carnochan et al., 2007; Darlington et al., 2005). Professionals are more likely to collaborate when they see it as beneficial to themselves or the families they serve (Carnochan et al., 2007; Green et al., 2008; Spath et al., 2008), and when they have a history of working together (Haight, Bidwell, Marshall, & Khatiwoda, 2014; Lalayants, 2013). It is interesting that extensive research has been conducted to identify factors that

facilitate or impede collaboration between professionals working with a family involved in the CW system despite the dearth of strong evidence showing that it affects child or family outcomes.

In general, researchers who have investigated how collaboration in the CW system affects children and families have focused on inter*agency* collaboration, which occurs when agencies develop "linkages" between them, such as cross-training, joint funding, memorandum of understanding, and colocation of staff (Bai, Wells, & Hillermeier, 2009; Chuang & Lucio, 2011; Chuang & Wells, 2010; Foster, Wells, & Bai, 2009; He, Lim, Lecklitner, Olson, & Traube, 2015; Hurlburt et al., 2004; Wells & Chuang, 2012). Overall, these studies have produced mixed findings regarding whether interagency collaboration benefits children and families. For example, Bai and colleagues (2009) found that each additional linkage between CPS and mental health agencies was associated with a 7% increase in a child's mental health functioning after one year. However, Foster and colleagues (2010) found that the number of linkages between CPS and community partners (e.g., mental health providers, substance abuse treatment providers, juvenile justice agencies, police, and schools) had no bearing on mental health outcomes for girls. They also found that having more linkages was associated with *increased* externalizing behaviors in boys and that the number of linkages was unrelated to changes in boys' internalizing behaviors. Chuang and Wells (2010) found that the number of linkages between CW and juvenile justice agencies did not significantly impact the likelihood that crossover youth with significant emotional or behavioral symptoms received treatment services. One limitation of the extant literature on how

interagency collaboration relates to child and family outcomes is that the role of IPC is not considered. This is a significant oversight considering frontline professionals are the ones who work directly with children and families.

Study Purpose

This convergent parallel mixed methods study draws upon ecological systems and relational coordination theories to explore how IPC in the CW systems relates to the safe and timely reunification of foster children. The quantitative phase involved an analysis of administrative data from a CW system in an urban county in a mountain region state. Logistic regressions were run to examine if caseworker communication and joint decision-making with GALs, therapists, and SA counselors were associated with the likelihood that a foster child was reunified in a timely manner or experienced post-reunification maltreatment. In the qualitative phase, interviews were conducted with a sample of caseworkers, GALs, therapists and SA counselors working in the county to explore their perspective on how interprofessional communication and joint decision-making affects safe and timely reunification. After analyzing the data within each phase, the findings were examined together to identify points of convergence (i.e., agreement), complementarity (i.e., one set of findings compliments or explains the other), and divergence (i.e., contradictions). Overall, the quantitative results provide data regarding whether interprofessional communication and joint decision-making are related to safe and timely reunification, and the themes that emerged from the qualitative analysis describe the processes underlying this relationship.

Significance of the Study

This is the first study to directly explore how interprofessional communication and joint decision-making affect the safe and timely reunification of children placed in foster care. The findings indicate that these collaborative activities can enhance case planning and case services in several ways. In addition, this study provides empirical evidence that caseworker communication and joint decision-making with GALs is associated with timely reunification. This finding is particularly noteworthy for two reasons. First, it adds to the knowledge base regarding factors that impact timely reunification. Second, it provides quantitative evidence that IPC is associated with a key CW outcome, something which is lacking in the extant literature. Overall, the findings have numerous implications for how professionals, agency administrators, and policymakers can improve CW practice and outcomes through IPC.

Organization of Dissertation

This dissertation contains four additional chapters. Chapter two provides a comprehensive literature review and consists of four sections. In the first section, the constructs safe and timely reunification are defined. Research findings and recent trends regarding the percent of foster children who achieve safe and timely reunification are also presented to show the need for innovative interventions to improve on these outcomes. The second section provides a conceptual overview of IPC and describes two essential components—communication and joint decision-making. The extant literature regarding how these processes may affect CW-involved families is explored. In the third section, the main propositions of ecological systems and relational coordination theories are

delineated and used to provide a theoretical foundation to support the hypothesis that IPC in the CW system is associated with safe and timely reunification. The research questions developed to address the empirical and conceptual gaps in the extant literature, and which guided this dissertation, are provided in the fourth section.

Chapters three through five are focused on the study conducted to explore how interprofessional communication and joint decision-making affect safe and timely reunification in the CW system. Chapter three contains a description of the methodologies of the quantitative and qualitative phases and the process for integrating the findings from each phase. In chapter four, the results from each phase are provided. The discussion and conclusions are presented in chapter five. Findings from each phase are weaved together to provide an integrated analysis of how IPC affects safe and timely reunification. Chapter five also contains a discussion of how the findings align with the extant literature, the contributions and limitations of the current study, and the implications for professionals, agency administrators, policymakers, and researchers.

Chapter Two: Literature Review

The primary purpose of this chapter is to provide empirical and theoretical support for hypothesizing that interprofessional communication and joint decision-making are related to safe and timely reunification in the CW system. The first section of this chapter focuses on safe and timely reunification. These constructs are defined and the (in)ability of the CW to safely reunify children in a timely manner is examined using available data. Also, prior research on factors linked to safe and timely reunification is explored to show the need for innovative interventions, such as IPC, to help the CW system improve on these outcomes. In the second section of this chapter, IPC and two of its key components—interprofessional communication and joint decision-making—are defined. Findings from prior studies of IPC in the CW system are provided which indicate that these two components can enhance case services and lead to better outcomes for families. A limitation of these studies, however, is they did not directly examine whether communication and joint decision-making are associated with safe and timely reunification. Therefore, in the third section of this chapter, the theoretical justification for hypothesizing a relationship exists is presented. Ecological systems theory's (Bronfenbrenner, 1979) propositions regarding the mesosystem are used to describe the role that interprofessional communication and joint decision-making play in supporting a person's functioning and development. Relational coordination theory (Gittell, 2011) is used to provide more clarity regarding how these components lead to improved quality

and efficiency outcomes for a person served by an interprofessional team. Drawing upon both theories, a conceptual model is provided to show the hypothesized relationship that interprofessional communication and joint decision-making have with safe and timely reunification. In the fourth section of this chapter, the research questions developed to explore these relationships are delineated.

Safe and Timely Reunification

Safe reunification. ASFA's (1997) provision that reasonable efforts be made to reunify children has one important qualification: "In making such reasonable efforts, the child's health and safety shall be the paramount concern." While ASFA does not specify what is meant by safety, the primary goal of the CW system—and the impetus for its creation—is to prevent or treat child maltreatment. Therefore, the term safe reunification is used in this dissertation to mean that children placed in foster care do not experience abuse or neglect after returning home. While safety may also be indicated by risk or safety assessments, the lack of maltreatment was chosen because it is a more direct measure of child safety. Surprisingly little research has been conducted to identify the prevalence of post-reunification maltreatment considering reunification is the preferred goal for children placed in foster care and the main purpose of the CW system is to prevent maltreatment (Connell, Vanderploeg, Katz, Caron, Saungers, & Tebes, 2009). The lack of research on post-reunification maltreatment may be because the federal government does not require state CW systems to track or report on this indicator of child safety. It is noteworthy that substantially more research has been conducted to identify predictors of foster care re-entry after reunification (e.g., Barth, Weigensberg, Fisher,

Fetrow, & Green, 2008; Carnochan, Rizik-Baer, & Austin, 2013; Courtney, 1995; Kimberlin, Anthony, & Austin, 2009; Wells & Guo, 1999; Shaw, 2006), an outcome which state CW systems *are* required to track and report on. The findings from these studies are not addressed in the current study because children who are maltreated after exiting foster care may not re-enter foster care (Jonson-Reid, 2003; Kohl, Jonson-Reid, & Drake, 2009).

The majority of studies on predictors of maltreatment following foster care have examined investigated or substantiated reports of maltreatment contained in administrative data systems. One of the best estimates of child maltreatment following placement in care was done by Johnson-Reid (2003) who found that 39% of reunified foster children in Missouri (N = 1,516) were subjects of a report of maltreatment and 15% were victims of a substantiated report of maltreatment within 4.5 years of returning home. Another key study by Connell and colleagues (2009) found that 16% of reunified foster children in Rhode Island (N = 1,208) had a substantiated report of maltreatment within 12 months. They also concluded that the rate of post-reunification maltreatment was at its highest during the first 12 months following reunification.

Using the National Study of Child and Adolescent Well-Being II (NSCAW) dataset, Casanueva, Burfeind, and Tuller (2016) found that 25% of reunified children were subjects of an *investigated or assessed* report of maltreatment within 36 months of returning home. While the rate of substantiated reports was not tracked, the findings from this study are informative given that it is the only study to explore post-reunification maltreatment using a nationally representative sample. Furthermore, reports of

maltreatment that warrant an investigation or assessment can be an indicator or predictor of child safety and overall well-being. Prior studies with large, multi-state samples have shown that whether a report is substantiated or unsubstantiated is not related to future maltreatment, foster care re-entry (Kohl et al., 2009; Johnson-Reid, 2003), or behavioral and developmental well-being (Hussey, Marshall, English, Knight, Lau, Dubowitz, & Kotch, 2005).

Correlates of safe reunification. Given that few studies have examined the prevalence of post-reunification maltreatment, it is not surprising that there is limited knowledge regarding the factors that predict it. In fact, only three studies were located in the literature which sought to obtain this information. Fuller (2005) and Connell et al. (2009) examined predictors of substantiated reports of post-reunification maltreatment using state-level administrative data systems, and Casanueva and colleagues (2016) investigated predictors of investigated or assessed reports of post-reunification maltreatment using the NSCAW II dataset.

Some correlates of maltreatment following placement care relate to characteristics of children. Studies indicate that children are more likely to experience post-reunification maltreatment if they are less than one year old at the time of reunification (Connell et al., 2009; Fuller, 2005), were placed because of neglect (Connell et al., 2009), had a history of foster care placements prior to their most recent episode (Connell et al., 2009), or experienced four or more placement changes while in foster care (Fuller, 2005). While Casanueva and colleagues (2016) found that females were less likely to be subjects of an investigated or assessed report of post-reunification maltreatment, gender has not been

linked to substantiated reports of post-reunification maltreatment (Connell et al., 2009; Fuller, 2005). Two studies found longer lengths of stay in foster care was associated with an increased likelihood of post-reunification maltreatment (Casanueva et al., 2016; Fuller, 2005), while Connell and colleagues (2009) found no relationship. In one study, reunified children were more likely to be maltreated if they were placed in foster care rather than kinship care (Connell et al., 2009), while in another study the likelihood of maltreatment was higher among children placed in kinship care rather than a group home or institution (Fuller, 2005).

Fuller (2005) found that family-level risk factors for post-reunification maltreatment included being reunified with a caregiver with a mental illness or being returned to a single-parent household rather than a two-parent household. Fuller also found that caregiver substance abuse and the provision of post-reunification services did not predict the likelihood of post-reunification maltreatment. Connell and colleagues (2009) did not explore family-level characteristics in their study, and Casanueva et al. (2016) did not provide the results of the family-level factor they examined (e.g., caregiver mental health).

Timely reunification. One of the driving factors behind the creation of ASFA was concern about the rising number of children "drifting" in foster care with no permanent living arrangement (Golden & Macomber, 2009). To promote child permanency, ASFA (1997) shortened the timeframe for when dependency courts had to hold a permanency hearing, from 18 months to 12 months from the date of placement into foster care. The purpose of the permanency hearing is to determine if a child's

current permanency goal (e.g., reunification, adoption, legal guardianship, or emancipation) remains appropriate. If a child with a permanency goal of reunification has not been reunified, a new permanency plan may be adopted. In accordance with the 12-month timeframe for holding a permanency hearing, the federal government considers a child to be reunified in a timely manner when they are returned home within 12 months of placement (DHHS, 2018b).

The federal government requires that state CW systems track and report on their performance in terms of achieving timely reunification. Using the most current data available, figure 1 depicts national trends and variation across states for the percent of

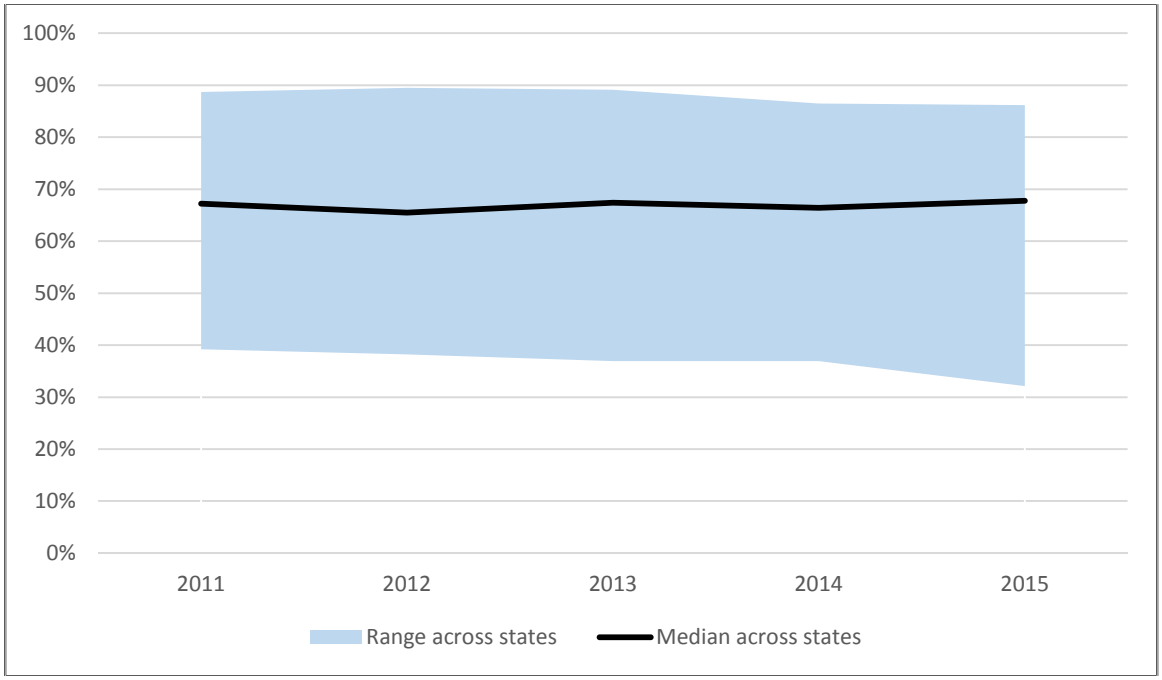

Figure 1: Percent of children reunified in a timely manner across states between 2011 and 2015

children reunified in a timely manner between 2011 and 2015 (DHHS, 2013a; DHHS, 2014a, DHHS, 2016; DHHS, 2017; DHHS, 2018b). A 5-year timeframe was chosen to illustrate the current performance of the CW system, as well as recent trends. The figure shows the considerable variation across state CW systems in terms of the percent of reunified children who were returned home in timely manner. The range across states fluctuated between 50% (2011) and 54% (2015). The figure also shows that approximately one-third of children placed in foster are not reunified in a timely manner. Moreover, the percent of children who achieve timely reunification has remained stagnant over time.

Correlates of timely reunification. Numerous studies have used county or state level samples to identify child- and family-level characteristics associated with the length of time children spend in foster care prior to reunification. The variation across studies in the size and geographical location of the sample may account for some of the contradictory findings described below. In regard to child characteristics, studies have consistently found that infants return home at a slower rate than older children (Akin, 2011; Connell, Katz, Saunders & Tebes, 2006; Courtney & Wong, 1996; Harris & Courtney, 2003; Wulczyn, Orlebeke & Melamid, 2000; Wells & Guo, 1999). Multiple studies have found that reunified African American children spend more time in foster care compared to reunified white children (Connell et al., 2006; Courtney & Wong, 1996; Wulczyn et al., 2000). However, one study found African American children reunify more quickly than white children (McDonald, Poertner, & Jennings, 2007) and two studies found that time to reunification did not differ between African American and

white children (Akin, 2011; Harris & Courtney, 2003). Most studies reviewed found that gender is not associated with time to reunification (Akin, 2011; Connell et al., 2006; Courtney & Wong, 1996; Wells & Guo, 1999; Wells & Guo, 2004). However, two studies reviewed did find that females reunified more quickly than males (Harris & Courtney, 2003; Wulczyn et al., 2000), and one study found males returned home at a faster than females (McDonald et al., 2007). Other child-level factors have consistently been found to be associated with longer lengths of stay in foster care prior to reunification, including previous placement in foster care (Akin, 2011; McDonald et al., 2007), being placed in foster care because of neglect (Akin, 2011; Harris & Courtney, 2003; Courtney & Wong, 1996), being placed in kinship care rather than a foster home (Akin, 2011; Connell et al., 2006; Wulczyn et al., 2000), having a mental health issue (Akin, 2011; Connell et al., 2006; McDonald et al., 2007) or having a developmental or physical disability (Akin, 2011; Connell et al., 2006; McDonald et al., 2007).

In regard to family-level factors, children spend more time in foster care if the caregiver they are reunified with has a mental health (Wells & Guo, 1999) or substance abuse problem (Brook, McDonald, Gregoire, Press, & Hindman, 2010; McDonald et al., 2007). Reunification may also be delayed if a child is returned home to a single-parent rather than a two-parent household (Harris & Courtney, 2003; McDonald et al., 2007). Finally, time to reunification may be longer if the caregiver has a low income, indicated by their eligibility for Title IV-E or Aid to Families with Dependent Children (AFDC) benefits (Courtney, 1996; Wulczyn et al., 2000).

Overall, CW scholars have produced an abundant amount of research findings regarding how child- and family-level factors relate to the safe and timely reunification of children placed in foster care. The knowledge gained from these studies may help professionals assess a child's likelihood of achieving timely reunification or experiencing post-reunification maltreatment. In addition, professionals can use this knowledge to identify risk factors that need to be addressed through their individual efforts (e.g., therapist providing treatment to a parent with bipolar disorder) or collaborative efforts (e.g., therapist and SA counselor coordinating treatment for a parent diagnosed with bipolar disorder and alcohol dependence). However, the findings are limited in how they can help professionals expedite safe and timely reunification given that many of the factors identified are difficult (e.g., household structure and poverty) or impossible (e.g., age, gender, and race/ethnicity) to change. A system-level factor that may promote safe and timely reunification—one which has received little attention and examination by CW scholars—is IPC.

IPC

In this section, IPC is defined and a brief overview of its main components is presented. Two components of IPC—communication and joint decision-making—are described in detail because they appear across models of IPC (e.g., Billups, 1987; Carroll, 1999; Chen, 2010; D'Amour, Ferrada-Videla, San Martin Rodriguez, & Beaulieu, 2005; Gittell, 2011; Kenaszchuck, Reeves, Nicholas, & Zwarenstein, 2010; Pinto, Pinto & Prescott, 1993; Schroder et al., 2011; Temkin-Greener, Gross, Kunitz, & Mukamel, 2004; Vinokur-Kaplan, 1995; West et al., 2012. Moreover, prior studies of IPC in the CW

system have found that families benefit when the professionals serving them communicate (Carnochan et al., 2007; DHHS, 2011; Jeffrey & Lloyd, 1997; Phillips, 2016) and make decisions together (Carnochan et al., 2007; Green et al., 2008; Usher et al., 2010). The findings from these studies are provided to support the hypothesis that these components can promote safe and timely reunification.

Definition and key components. Although there are multiple definitions of IPC, the definition used in this study is "an interprofessional process for communication and decision making that enables the separate and shared knowledge and skills of care providers to synergistically influence the client/patient care provided" (Way, Jones, & Busing, 2000, p.3). This definition was chosen because it highlights the importance of communication and joint decision-making between professionals working with a client. Numerous models of IPC exist which contain other collaborative processes such as identifying common goals (Bronstein, 2003; Gittell, 2011; West et al., 2012), sharing resources (Chen, 2010), building trust (Chen, 2010), mutual respect (Gittell, 2011), defining roles and responsibilities (Billups, 1987), conflict resolution (Billups, 1987; West et al., 2012), and reflecting on team processes and performance (Bronstein, 2003; West et al., 2012). However, communication and joint decision-making are frequently identified as components of IPC across models (e.g., Billups, 1987; Carroll, 1999; Chen, 2010; D'Amour et al., 2005; Gittell, 2011; Kenaszchuck et al., 2010; Pinto et al., 1993; Schroder et al., 2011; Temkin-Greener et al., 2004; Vinokur-Kaplan, 1995; West et al., 2012).

Communication. Communication sets the foundation for effective collaboration given that it underlies many of its other components (Engel, 1994). Professionals who work together to complete a task or address a common problem must communicate to share information, establish shared goals, clarify roles and responsibilities, and resolve conflicts. In people-serving systems like the CW system, interprofessional communication is also the means by which professionals exchange information regarding a shared client (Galyean et al., 2018; Green et al., 2008). They share information about the client's well-being, including assessments that have been completed, the client's strengths and needs, and the client's progress in treatment (Phillips & Walsh, 2019). Professionals may also discuss their respective opinions and recommendations regarding what services may be beneficial to a client or, in the CW context, whether a child should be removed from their home or reunified (Phillips & Walsh, 2019).

Benefits of interprofessional communication in CW. The extant literature suggests that interprofessional communication in the CW system can improve case services and lead to several benefits for families. It is important to note that all the studies located in the literature which explore these relationships used qualitative methodologies and therefore the processes identified were not tested with quantitative analyses. Their findings suggest interprofessional communication in the CW system helps ensure that each professional serving a child or parent has a complete picture of the child and parent's strengths, needs, and level of progress (Carnochan et al., 2007; Gittell, 2011; Green et al., 2008). Relatedly, professionals use the information they receive from other professionals to fulfill their own job responsibilities and provide better quality services to

families (Bronstein, 2003; Gittell, 2011). For example, in the CW context, caseworkers rely on information they receive from a parent's therapist or SA counselor to know what services or supports should be provided and whether it is safe to reunify a child (Galyean et al., 2018). Likewise, SA counselors rely on information they receive from the caseworker regarding a parent's substance use to identify the appropriate level of treatment (Green et al., 2008). Prior studies have also found that when professionals working with a CW-involved family fail to communicate, the family may experience delays in the provision of treatment services or placement (Jeffrey & Lloyd, 1997; Phillips, 2016). Finally, studies have found that interprofessional communication can help prevent professionals from imposing competing or over-whelming demands on families (Green et al., 2008; Haight et al., 2014).

Only one study located in the peer-reviewed literature directly explored how IPC may relate to child permanency. Green and colleagues (2008) interviewed 106 frontline professionals and administrators working for CPS, substance abuse treatment agencies, and the courts. The themes that emerged from the qualitative analysis suggest that when professionals communicate and work as a team (e.g., meet regularly, share responsibility, and hold one another accountable), foster children are likely to achieve permanency more quickly because there is better case monitoring, needed services are provided in a timely manner, parents receive consistent messages from professionals, and parents have the support of multiple professionals. Limitations to the findings, however, are apparent and indicate a need for further research. Specifically, communication with other professionals involved on CW cases (e.g., GALs) was not considered, the findings may only pertain to

families impacted by parental substance abuse, and transferability of the findings is restricted given the study was conducted in one city in northwestern state.

Joint decision-making. Joint decision-making is a process whereby interdependent stakeholders come together to reach an agreement regarding an issue or problem needing to be resolved (Gray, 1989). The impetus for joint decision-making is that it enables better decisions than would be made by individuals acting independently because multiple perspectives are considered, inaccuracies or misunderstandings can be corrected, and the expertise of multiple individuals with different knowledge and skills is considered (Crea, 2010). Common elements of the joint decision-making process include identifying the issue or problem needed to be addressed, sharing information and perspectives related to the issue or problem, brainstorming possible solutions, negotiating differences of opinion, and reaching an agreed-upon solution (Engel, 1964; Gray, 1989; West, 2012). In the CW system, professionals may come together to determine a child's permanency goals, identify services to provide, and decide if a foster child can be reunified (Crea, 2010; Phillips & Walsh, 2019).

Benefits of joint decision-making in CW. Qualitative research findings suggest that professionals serving a CW-involved family can better ensure that they are not placing competing or overwhelming demands on the family when they make decisions together (Haight et al., 2014). Qualitative findings also indicate joint decision-making can result in families receiving services that are appropriately matched to their strengths and needs (Greene et al., 2008). Quantitative research findings from studies of team decision-making meetings (TDMs) are perhaps most relevant to the current study as they indicate

that joint decision-making may be related to child safety and reunification (Usher et al., 2010). In some CW systems, TDMs are held to make critical case decisions such as whether to place a child out of their home or reunify a foster child. An essential component of TDMs is the inclusion of family members, family friends, service providers, and caseworkers in the decision-making process (Usher et al., 2010). A study of 44,000 CW cases in six states concluded that, in cases where a child remained home after a substantiated allegation of maltreatment, the likelihood of another occurrence of substantiated maltreatment within six months was reduced by 38% if a TDM was held at the time of the first substantiation (Usher, et al., 2010). While these findings pertain to children living at home, they suggest joint decision-making helps professionals assess if it is safe for a child to be home. The investigators also found that in cases where a child was placed in foster care, the likelihood of reunification within 12 months was 25% to 43% more likely if a TDM occurred at the time of their removal (Usher et al., 2010). Despite these encouraging findings, it is unknown if joint decision-making between professionals contributed to the positive outcomes achieved because the researchers did not isolate the effects of having professionals working with the family in attendance. This analysis would have been worthwhile considering the attendance rate for service providers (e.g., therapists and SA counselors) ranged from 23% to 59%. This limitation highlights the need for additional research that directly examines if joint decision-making between professionals can help safely reunify children in a timely manner.

Theoretical Foundation

The research findings presented in the previous section provide evidence that interprofessional communication and joint decision-making in the CW system may benefit children and families. However, scholars have yet to directly examine or explain how these processes may be linked to safe and timely reunification. The purpose of this section is to use ecological systems and relational coordination theories to provide a theoretical justification for hypothesizing that interprofessional communication and joint decision-making are related to the safe and timely reunification of children placed in foster care.

In general, IPC scholars frequently fail to apply a theory or model to frame their research studies (D'Amour et al., 2005; Reeves, Goldman, Gilbert, Tepper, Silver, Suter, & Zwarenstein, 2011). Relatedly, there is no preferred or dominant theory that identifies the key components of IPC or explains how it affects clients. Only 3 of the 20 peer-reviewed studies on IPC in the CW system located in the literature used theory to form the research questions or hypotheses, develop the research design, or explain the findings. In one of these studies, Phillips (2016) applied the theory of street-level bureaucracy (Lipsky, 2010) to frame his findings in a qualitative study of GALs' perceptions of factors that facilitate or impede their ability to collaborate with caseworkers. According to street-level bureaucracy, in contexts where frontline professionals are granted autonomy and discretion in how they behave, they may not act or make decisions that align with agency policies (Lipsky, 2010). Phillips (2016) used this proposition to explain the finding that participants placed greater emphasis on how individual-level factors (e.g.,

communication, mutual respect, understanding of roles and responsibilities, having an open mind, and valuing collaboration) impact the likelihood of IPC occurring compared to organizational or systemic factors (e.g., differing mandates and the presence of policies that promote collaboration). The utility of street-level bureaucracy for examining IPC, however, is limited given that it does not describe how professionals should collaborate or why IPC may influence service quality or outcomes. The other two studies located in the literature employed grounded theory to guide their qualitative analyses, but the researchers did not present a theory based on their findings (Carnochan et al., 2007; Spath et al., 2008).

After reviewing theories and models from multiple disciplines, ecological systems theory and relational coordination theory were selected to guide this dissertation as they describe how interprofessional communication and joint decision-making between professionals affect a shared client. In the following sections, the key propositions of each theory that relate to interprofessional communication and joint decision-making are presented. A conceptual model that integrates these propositions is then provided which illustrates how interprofessional communication and joint decision-making relate to the safe and timely reunification of children placed in foster care.

Ecological systems theory: The mesosystem. A central proposition of Bronfenbrenner's (1979) ecological systems theory is that a person's functioning and development is influenced by forces—and the interactions between them—that are present in their environment. These forces and interactions exist within four nested layers, the microsystem (settings with which a person has direct contact), the mesosystem

(connections between settings in the microsystem), the exosystem (settings with which the person does not have direct contact, but which impact them), and the macrosystem (ideologies, cultures, and social institutions).

Ecological systems theory provides a broad framework for conceptualizing environmental factors that influence a person's functioning and development. Its postulations regarding the mesosystem are most relevant to this dissertation as they point to the importance of collaboration between professionals with whom a person interacts. The mesosystem is defined as "a set of interrelations between two or more settings in which the developing person becomes an active participant" (Bronfenbrenner, 1979, p. 209). A child's mesosystem may contain relations between their home, school, friends, after-sports programs, and religious organizations. When a child enters foster care, their mesosystem expands and may include connections with their foster home, child protective services, a therapist or counselor's office, and the dependency courts. Bronfenbrenner (1979) proposes there are several types of "linkages" and joint activities that should occur between settings to positively support a person's functioning and development. These linkages and activities can be categorized as elements of interprofessional communication or joint decision-making.

Communication. According to ecological systems theory, an important linkage in the mesosystem is inter-setting communication, which occurs when persons across settings share information through face-to-face interactions, telephone calls, written messages or other modes of communication (Bronfenbrenner, 1979). The exchange of information should be bidirectional and ongoing (Bronfenbrenner, 1979; Shelton, 2018).

In general, inter-setting communication enables professionals to form a more complete picture of a developing person's functioning and needs. This implies that, in the CW context, caseworkers, GALs, therapists and SA counselors should regularly share information they possess regarding children and parents (e.g., their assessment of the family's strengths and needs, crises that arise and need to be addressed, and a child or parent's level of progress towards achieving treatment or case goals).

Ecological systems theory posits that inter-setting communication also helps establish compatible role expectations and goal consensus across settings (Bronfenbrenner, 1979; Shelton, 2018). Having compatible role expectations means that the demands being placed on a developing person in one setting are complementary to, or, at the very least, do not prevent a person from being able to fulfill the demands placed on them in another setting (Shelton, 2018). This implies that, in the CW system, caseworkers, GALs, therapists, and SA counselors should communicate to ensure that they are not placing competing or overwhelming expectations on children and parents that would inhibit their ability to make progress (e.g., the caseworker schedules parent-child visitation at the same time as a parent's therapy session). Similarly, ecological systems theory suggests that persons working with a developing person should discuss their respective goals to ensure that they are complementary or congruent (Shelton, 2018). Applied to the CW context, this means that caseworkers, GALs, therapists, and SA counselors should be communicating with one another to ensure that they are working towards similar or compatible goals (e.g., sobriety and reunification).

Joint decision-making. According to ecological systems theory, another component of a supportive mesosystem is the presence of joint activities involving persons from multiple settings (Bronfenbrenner, 1979). It suggests that joint activities are an efficient means by which persons from various settings can share information and establish compatible expectations and goals (Shelton, 2018). One example of a joint activity in the CW system is TDMs. As described earlier, TDMs occur when professionals and family members come together to make joint decisions, such as whether a child is ready to be safely reunified and what services or supports should be provided to a family.

Relational coordination theory. A limitation of ecological systems theory is it does not provide a clear and generalizable explanation of how inter-setting linkages or joint activities enhance a person's functioning and development. Relational coordination theory addresses this conceptual gap. Relational coordination is similar to IPC in that it consists of having shared goals, mutual respect, shared knowledge (i.e., of job responsibilities and work processes), frequent communication, timely communication, accurate communication, and problem-solving communication (i.e., communication focused on solving problems rather than laying blame; Gittell, 2011).

A central postulation of relational coordination theory is that greater relational coordination between professionals working with a shared client leads to improved quality and efficiency outcomes for the client (Gittell, 2011). While relational coordination theory was originally developed to examine IPC in the airline industry (Gittell, 2005), it has most frequently been applied in studies of IPC in healthcare

settings. The findings from these studies provide empirical support for the theory's proposed link between IPC and quality and efficiency outcomes. Increased relational coordination in hospital settings has been found to be associated with reduced lengths of stay (Gittell et al., 2000; Gittell, Weinberg, Bennet, & Miller, 2008), greater patient satisfaction (Gittell et al., 2000), and improved quality of care (Havens, Vasey, Gittell, & Lin, 2010). Only one study located in the peer-reviewed literature applied relational coordination theory in a social service context. Bond and Gittell (2010) examined if relational coordination between criminal justice agencies serving parolees predicted recidivism. Contrary to expectations, they found that higher levels of relational coordination was linked to increased recidivism rates. The researchers suspected that better relational coordination might have developed in response to historically high rates of recidivism in the sampled communities. They also suggested high levels of relational coordination might result in improved monitoring and apprehension of re-offenders. The study's methodology may also explain the unexpected findings. Agency leaders completed the measure of relational coordination rather than frontline workers. Agency leaders may not be as "in touch" with the quality of relational coordination occurring between frontline professionals. Also, by measuring relational coordination at the agency level, the degree of relational coordination between professionals working with a specific client could not be directly tied to that client's outcomes.

Scholars who have applied relational coordination theory to examine how IPC is associated with quality and efficiency outcomes have all used Gittell's (2011) instrument to measure relational coordination. This instrument contains seven items, one item for

each of the seven components of relational coordination (shared goals, mutual respect, shared knowledge, frequent communication, timely communication, accurate communication, and problem-solving communication). The scale is designed to measure a unidimensional construct (i.e., relational coordination) and therefore researchers using it cannot examine or compare how each component relates to quality or efficiency outcomes. However, relational coordination theory's explanation of how relational coordination is related to quality and efficiency outcomes indicate that communication is the primary driving factor underlying the relationship. Indeed, four of the seven components of relational coordination involve communication.

Communication. According to relational coordination theory, professionals need to communicate to ensure that everyone serving a shared client has accurate information regarding the client's needs and functioning. The exchange of accurate information enables professionals to identify appropriate services and make informed decisions that will allow the client to achieve a positive outcome (i.e., improved quality; Gittell, 2011). For example, in the CW system, this implies that therapists and SA counselors should provide information to the caseworker that will help the caseworker make an informed decision regarding whether a child can safely be reunified (e.g., whether the parent is maintaining sobriety or safe behaviors). Likewise, therapists and SA counselors may rely on information they receive from the caseworker to identify the appropriate type or level of treatment that will help a parent achieve and maintain their sobriety, so that a child can be safely reunified (e.g., the parent's level of substance use or history of treatment).

Relational coordination theory also proposes that when professionals share information frequently and in a timely manner, they can make decisions without delay and are more responsive to their clients' needs, which helps clients achieve a positive outcome more quickly (i.e., improved efficiency; Gittell, 2011). For example, in the CW system, reunification may be delayed if a caseworker does not have the information they require from a therapist or SA counselor to determine if it is safe to do so, or if the GAL does not communicate with them about whether they are in agreement that reunification is in the child's best interests. Reunification may also be delayed if therapists and SA counselors provide the wrong type or level of treatment because they do not receive adequate information from the caseworker to make an informed decision.

Joint decision-making. While relational coordination theory does not explicitly state that joint decision-making contributes to better quality and efficiency outcomes, it implicitly acknowledges the role it plays. Relational coordination proposes that professionals should communicate to solve problems as they occur to prevent delays and improve efficiency (Gittell, 2011). This implies that professionals should be coming together to make joint decisions about how best to address problems that arise. In the CW context, this occurs when professionals attend a TDM to decide what services or supports should be provided to help safely reunify a child in a timely manner.

Conceptual model. Figure 2 provides a conceptual model that was constructed for this study based on the propositions of ecological systems and relational coordination theories. As suggested by both theories, interprofessional communication and joint decision-making are hypothesized to be two key components of IPC between

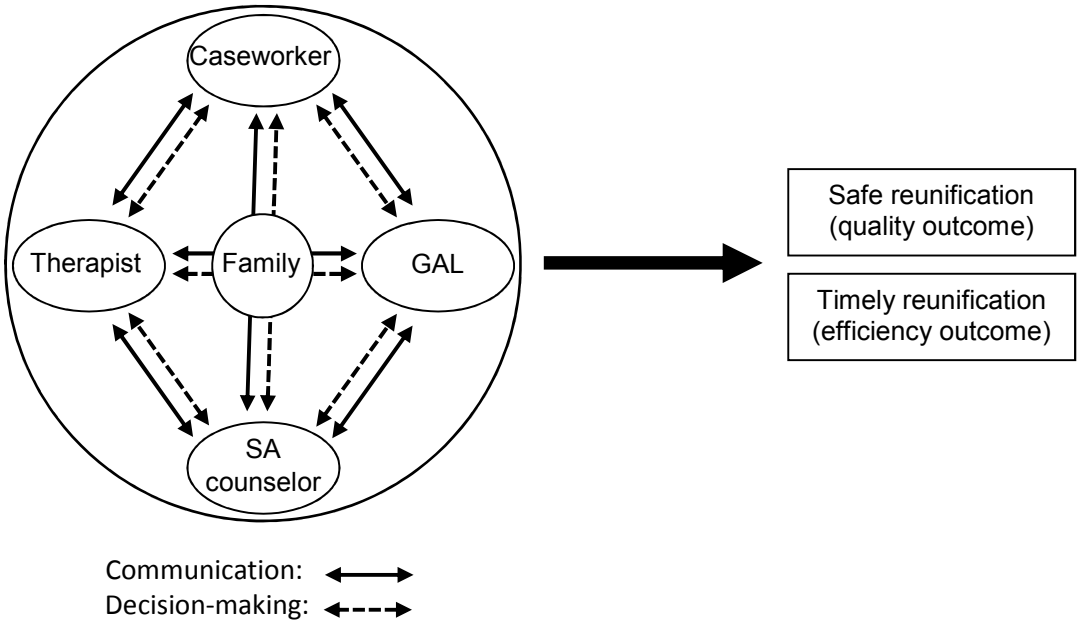

Figure 2: Conceptual model

caseworkers, GALs, therapists, and SA counselors working with a family. Both ecological systems theory and relational coordination theory indicate that when professionals communicate and make decisions together, they are better able to support their shared client. Relational coordination theory provides more clarity regarding how these components benefit a client by suggesting that they contribute to better quality and efficiency outcomes. In the CW system, safe reunification is an indicator of improved quality and timely reunification reflects greater efficiency.

While the model presented depicts collaboration between all pairs of professionals, this study focuses on communication and joint decision-making between caseworkers and each of the other professionals (e.g., GALs, therapists, and SA counselors). Collaboration with caseworkers is targeted given the central role caseworkers play on CW cases. They are the gatekeepers to the CW system in that they

decide whether a case should be opened. They also make the initial decision when a case first opens as to whether a child should be placed in foster care. In addition, caseworkers are the only professional in the CW system who is directly responsible for making reasonable efforts to safely reunify a child in a timely manner. As such, they are required to continually monitor each family and provide or arrange for appropriate services that will help achieve safe and timely reunification.

Research questions

The overarching research question guiding this mixed methods study is how does interprofessional communication and joint decision-making affect safe and timely reunification? The quantitative phase aimed to test if interprofessional communication and joint decision-making are related to the safe and timely reunification of children placed in foster care. The first two research questions focused on timely reunification:

1. Is the frequency of *communication* between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of a child being reunified in a timely manner (i.e., within 12 months)?
    a. Sub-question: Does the strength or significance of the relationship vary across professionals (e.g., GAL, counselor, and therapist)?
2. Is the degree of *joint decision-making* between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of a child being reunified in a timely manner (i.e., within 12 months)?

    a. Sub-question: Does the strength or significance of the relationship vary across professionals (e.g., GAL, counselor, and therapist)?

Research questions three and four focused on whether interprofessional communication and joint decision-making are related to safe reunification:

3. Is the frequency of communication between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of post-reunification maltreatment?
    a. Sub-question: Does the strength or significance of the relationship vary across professionals (e.g., GAL, counselor, and therapist)?
4. Is the degree of *joint decision-making* between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of post-reunification maltreatment?
    a. Sub-question: Does the strength or significance of the relationship vary across professionals (e.g., GAL, counselor, and therapist)?

The qualitative phase aimed to provide a deeper understanding of the process by which interprofessional communication and joint decision-making between caseworkers and GAL, therapists, and SA counselors affect safe and timely reunification. The following research questions were explored:

5. Why, if at all, does interprofessional communication and joint decision-making affect the likelihood of a child being reunified in a timely manner?

6. Why, if at all, does interprofessional communication and joint decision-making affect the likelihood that a child experiences maltreatment after being reunified?

Chapter Three: Methods

Research Design

A mixed methods approach was selected to answer the research questions as the purpose of this study was twofold. First, using administrative data, this study was designed to determine if interprofessional communication and joint decision-making are related to safe and timely reunification (quantitative research question). Second, through semi-structured interviews with a sample of professionals, the study was also designed to uncover the processes underlying this relationship (qualitative research question). Another reason why a mixed methods design was selected is that it allows researchers to triangulate the findings from both phases in order to increase validity and to use the qualitative findings to help explain non-significant or unexpected quantitative results (Bryman, 2006).

The mixed methods design selected for this study was a convergent parallel design where the quantitative and qualitative phases occur simultaneously and independently (Creswell & Plano Clark, 2007; Teddlie & Tashakkori, 2008). An overview of the study's design is provided in figure 3, and an in-depth description of the methods used in each phase is provided in the following sections. In general, the development of measures, sampling, data collection, and data analysis for each phase were completed separately and concurrently. The findings from each phase were then integrated and compared to provide a more comprehensive understanding of how

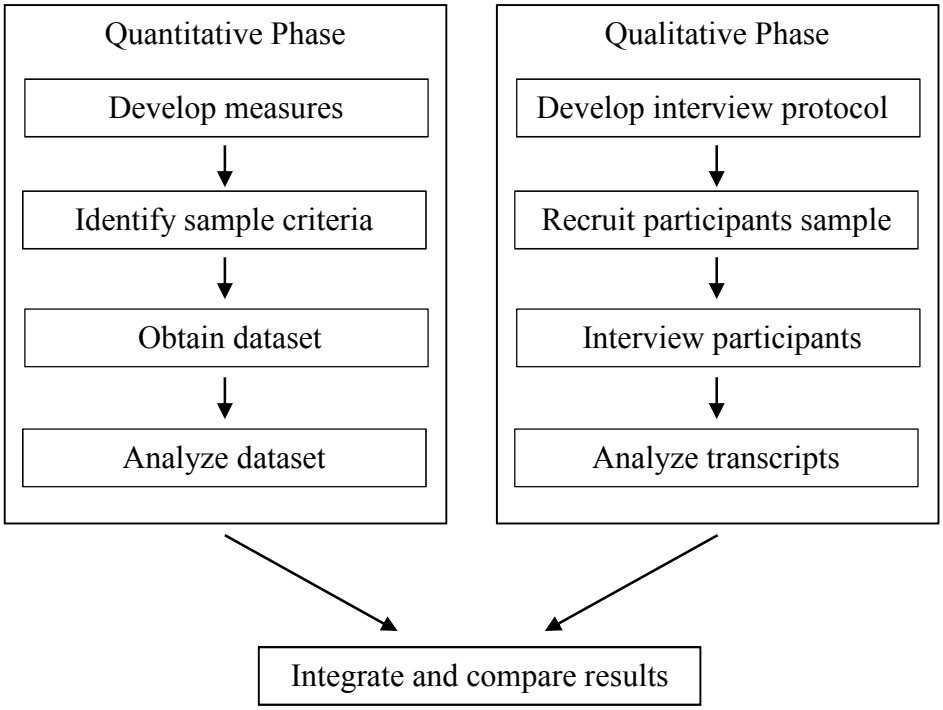

Figure 3: Overview of the convergent parallel design used in this study

interprofessional communication and joint decision-making affect safe and timely reunification.

Quantitative Methods

The quantitative phase involved analysis of administrative data from a mountain region states' Statewide Automated Child Welfare Information System (SACWIS). The SACWIS database is used by caseworkers to document case information, including the start and end dates of services and placements, findings from risk and safety assessments, the dates of contact with case collaterals (e.g., GALs, therapists, and SA counselors), and the reasons why a child exited foster care (e.g., reunification, adoption, legal guardianship, or emancipation). Cases from only one county were examined because the

state has a state-supervised, county-administered CW system which permits variation in policies and practices across counties. For example, counties have different expectations for interprofessional communication or vary in terms of whether they hold TDMs on cases. Logistical limitations (e.g., time and personnel) also constrained the capacity of the principal investigator (PI) to collect and analyze data from multiple counties. Administrative data was used because of the biases associated with other data collection methods, such as self-report and participant observation. Caseworkers may over-report their level of collaboration with GALs, therapists, and SA counselors because they believe it is expected of them (i.e., self-report bias; Donaldson & Grant-Vallone, 2002). Similarly, caseworkers may change their behaviors and collaborate more if they are aware their activities are being observed or monitored (i.e., the Hawthorne effect; McCambridge, Witton, & Elbourne, 2014). While the use of administrative data is not without limitation (as described in chapter five), it was deemed the best available method to track caseworker collaboration with other professionals because the caseworkers documented their activities into the SACWIS with no knowledge that it would be examined for this study. Another reason why administrative data was used to answer the quantitative research questions is that casework practice is frequently monitored and evaluated using administrative data and the PI wanted to show CW administrators how it could be used to track caseworker collaboration with other professionals.

Data Collection. The one county recruited to participate in this study was chosen for three main reasons. First, it is an urban county with a population of children in foster care that is large enough for statistical analyses. Second, the county holds formal TDMs

when a case first opens and every 90 days thereafter, and documents whether GALs, therapists, and SA counselors were invited to and attended each meeting. This was important because, as described in the measures section below, the attendance rate of professionals at TDMs was used as an indicator of joint decision-making. Third, according to an auditor of CW cases in the state, the selected county is one of the top three counties in the state in regard to the quality of its administrative data (R. Reed, personal communication, November 10, 2017).

The PI contacted the deputy director of the CW division at the county DHS to explain the purpose of this study and solicit the county's participation. The deputy director agreed to participate and share the data contained in the SACWIS that was needed for this study. Data use agreements were then created between the University of Denver and the state and county DHS, and an expedited review protocol was approved by the institutional review board at the University of Denver. The PI previously worked as a caseworker and supervisor in the state and was familiar with its SACWIS. The PI was therefore able to provide a list of the information needed to a data analyst at the county DHS. The data analyst downloaded the requested data to a series of excel spreadsheets, which were then electronically transferred to the PI via a secure file transfer protocol.

Sampling. The population of interest for this study was children who (1) had been placed in foster or kinship care through court action (i.e., non-voluntary cases), (2) were in a family that received mental health or substance abuse treatment, and (3) were reunified between May 1, 2012 and August 31, 2018. Children in foster *and* kinship care were included to more accurately represent the population of children in out of home

placements. In a nationally representative sample of children placed out of their home, 50% were in a foster home and 47% were in kinship placement (Casanueva, Tueller, Dolan, Smith, & Ringeisen, 2012). Only children placed through court action were sampled because GALs are not involved in voluntary cases. Court-involved cases were identified by a variable in the SACWIS which indicates if a child was placed through court action or a voluntary placement agreement with the child's legal guardian. Given that this study examines caseworker collaboration with therapists and SA counselors, at least one of these professionals had to have been involved with the family while a child was in foster or kinship care. Families met this criterion if, while the child was in placement, the SACWIS contained a service authorization for mental health or substance abuse treatment, the caseworker communicated with a therapist or SA counselor, or a therapist or SA counselor was invited to or attended a TDM. Children placed before May 2012 were excluded because at that time the county was participating in a randomized control trial that influenced how reports of maltreatment were investigated and assessed. Children were sampled until the time that the data was pulled from the SACWIS system (August 2018) in order to maximize the sample size for the planned analyses.

Overall, 167 children from 272 families met the above criteria. The initial analytic plan was to examine all children using multilevel modeling with children (level 1 unit) nested within families (level 2 units). However, interprofessional communication and joint decision-making were measured at the family level and therefore the values did not vary across families. In addition, preliminary analyses revealed little variation across children within a family regarding whether they reunified in a timely manner or were

safely reunified. For instance, there were only five families where some children reunified within 12 months and other children reunified in more than 12 months. For safe reunification, there were only two families where some children experienced post-reunification maltreatment and others did not. Given this lack of variation, one child was randomly selected from each family and single-level analyses were conducted. This resulted in a final sample of 167 children. The sample was reduced to 137 children after listwise deletion (the handling of missing data is described below). All 137 children were included in the sample for research questions 1 and 2 (i.e., factors associated with timely reunification). Only children who reunified in a timely manner and had complete data (n = 83) were included in the sample for research questions 3 and 4 (i.e., factors related to safe reunification).

Measures.

Dependent variables.

Timely reunification. The number of months a child was in foster care prior to reunification was calculated as the time difference between the date a child was placed in foster care and the date they left foster care with an exit reason of "return home." Based off federal guidelines (DHHS, 2017), timely reunification was then measured with a dichotomous variable indicating whether a child reunified within 12 months (0 = *no*; 1 = *yes*).

Safe reunification. The dataset contained variables that indicated the dates for all reports of abuse and neglect received by the county DHS for a child and whether the report was investigated/assessed. Safe reunification was measured with a dichotomous

variable indicating whether a child was the subject of an investigated or assessed report of abuse or neglect within 12 months of the date they reunified (0 = *no;* 1 = *yes)*. Substantiation of a report could not be examined because the county DHS practices differential response, which means that not all reports of maltreatment accepted for investigation or assessment are required to be substantiated or unsubstantiated. The differential response approach allows CW systems to select from one of two approaches for handling such reports: They can conduct a traditional investigation to determine if maltreatment occurred and make a finding of substantiated maltreatment, unsubstantiated maltreatment, or inconclusive; Or, they can proceed with an alternative assessment response where the goal is to identify the family's strengths and needs rather than determine if maltreatment occurred (Child Welfare Information Gateway, 2014). Overall, this means that the dataset does not indicate if some of the accepted reports of maltreatment regarding a child were substantiated or unsubstantiated. This is not, however, a significant limitation. As noted in chapter two, studies with large, multi-state samples have shown that whether a report is substantiated or unsubstantiated is not necessarily associated with future maltreatment or foster care re-entry (Kohl et al., 2009).

Independent variables.

Interprofessional communication. Continuous variables were created to measure the frequency of communication between (1) caseworkers and GALs, and (2) caseworkers and therapists/SA counselors. Frequency of communication was operationalized as the average number of days per month that the professionals communicated via telephone, email, or a face-to-face interaction. Therapists and SA

counselors had to be combined because the data does not distinguish between contacts with therapists and contacts with SA counselors. Since this study focused on whether reunification occurred within 12 months, communication was only tracked between the date of placement and the date of reunification *or* 12 months from the date of placement, whichever occurred first.

Overall, the frequency of communication was calculated using variables in the dataset related to caseworker contacts with GALs and therapists/SA counselors, and the attendance of these professionals at TDMs. The dataset provides the dates of all contacts between caseworkers and GALs, and caseworkers and therapists/SA counselors. Each unique GAL and therapist/SA counselor has a numeric identifier which allows for distinguishing between contacts with multiple therapists/SA counselors who may be working with a family. The dataset also contains variables indicating the dates of all TDMs held on a case, who was invited, and who attended.

For GALs, if a child was reunified within 12 months, the frequency of communication was calculated as the number of days where the caseworker and GAL communicated while the child was in placement divided by the number of months the child was in placement; if a child was not reunified within 12 months, it was calculated as the number of days where the caseworker and GAL communicated during the first 12 months of placement divided by 12. It was assumed that a GAL was involved throughout a child's placement period since the sample was restricted to court-involved cases and a GAL is required for all such cases.

Calculating the frequency of caseworker communication with therapists/SA counselors was more complicated because multiple therapists/SA counselors could be involved, and a therapist/SA counselor may not have been involved throughout a child's time in placement. The first step was to identify the start and end date for each unique therapist/SA counselor working with a family. While the dataset contains the start and end date of service authorizations for mental health and substance abuse treatment, service authorizations do not capture treatment paid for by Medicaid, private insurance, or self-pay. In 69 of the 70 cases with no service authorizations for mental health or substance abuse treatment, there was evidence of therapist/SA counselor involvement in the caseworker contact and TDM attendance logs. Therefore, an alternative method was used to determine the start and end date for each unique therapist/SA counselor's involvement. The start date was set as the earliest of three dates: the first date of contact with a caseworker, the first date the therapist/SA counselor was invited to a TDM, or the first date the therapist/SA counselor attended a TDM. Similarly, the involvement end date was set as the latest of three dates: the last date of contact with a caseworker, the last date the therapist/SA counselor was invited to a TDM, or the last date the therapist/SA counselor attended a TDM.

The second step was to calculate the total number of months that a caseworker could have had contact with each therapist/SA counselor prior to reunification (if children reunified within 12 months) or during the first 12 months of placement (if child did not reunify within 12 months). The values were summed across providers to determine the total number of months where contact could have occurred with any therapist/SA

counselor. For example, if there were two therapists on a case, and there were three months where contact could have occurred with the first therapist and five months where contact could have occurred with the second therapist, the total number of months where contact could have occurred with a therapist/SA counselor on the case would be eight.

The third step was to calculate, for each unique therapist/SA counselor, the number of days where contact with a caseworker occurred during the months where it could have occurred (i.e., the therapist/SA counselor was involved and the child was in placement). The number of days that contact occurred was then summed across therapists/SA counselors on a case. Returning to the prior example, if the caseworker had four contacts with the first therapist and five contacts with the second therapist, the total number of days of contact with a therapist/SA counselor would be nine.

Finally, the total number of days of contact with any therapist/SA counselor on a case was divided by the total number of months where contact could have occurred with any therapist/SA counselor on the case to obtain the average number of days per month where contact occurred. In the prior example, this would be nine days of contact divided by eight months which produces an average of 1.13 days of contact per month between the caseworker and therapists/SA counselors on the case.

Joint decision-making. The county DHS holds a formal TDM when a case first opens and at least every 90 days thereafter. The attendance rate of GALs and therapists/SA counselors at these TDMs was used as an indicator of the degree of joint decision-making that occurred with caseworkers. TDMs are an opportunity for professionals to come together to make case decisions. If a professional does not attend

these meetings, they are not participating in the decision-making process. Caseworker attendance was not measured because they are required to attend all TDMs.

The attendance rates were calculated similarly for GALs and therapists/SA counselors. For each professional, the rate was first measured with a continuous variable that reflected the number of times they attended a TDM divided by the number of times a TDM was held. If a child reunified within 12 months, only TDMs held prior to reunification were counted; If a child did not reunify within 12 months, all TDMs during the first 12 months of placement were counted. For GALs, it was assumed that they could have attended all the TDMs during this time frame because the sample was restricted to court-involved cases. For therapists/SA counselors, only TDMs held while they were involved were examined. A histogram of the attendance rate for each professional showed three distinct groupings—no attendance (0% of TDMs attended), some attendance (20.0% to 83.3% of TDMs attended), and full attendance (100% of TDMs attended). Therefore, for each professional, a categorical variable was created to indicate the degree of joint decision-making that occurred with caseworkers (1 = *no TDMs attended*, 2 = *some TDMs attended*, 3 = *all TDMs attended*).

Covariates. Other factors found to be related to safe or timely reunification were controlled for in the analyses.

Child-level factors. Child's age at the time of placement was measured in years with a continuous variable. Dichotomous variables were used to control for gender (0 = *female*; 1 = *male*; the SACWIS does not provide options for gender identities other than male or female), placement type (0 = *foster home*; 1 = *kinship home*), and whether the

child experienced one or more placement changes while in foster care (0 = *no*, 1 = *yes*). Placement type was operationalized as the placement where the child was placed for the longest period prior to reunification (if child reunified within 12 months) or during the first 12 months of placement (if child did not reunify within 12 months). Race/ethnicity was controlled for with a series of dummy variables for white (0 = *no;* 1 = *yes*), African American (0 = *no;* 1 = *yes*), Hispanic (0 = *no*; 1 = *yes*), and other (0 = *no*; 1 = *yes*). The SACWIS uses the term Hispanic and does not distinguish between race and ethnicity. Placement length was measured with a continuous variable measuring the number of months a child was in placement prior to reunification.

Family-level factors. Family structure was measured with a dichotomous variable (0 = *single parent*; 1 = *unmarried/married couple*). While the dataset distinguished between unmarried and married couples, these categories were combined to maximize statistical power and because preliminary analyses revealed no differences between these groups in terms of their relationship with safe and timely reunification. Findings from a standardized risk assessment completed by caseworkers at the time of the initial investigation/assessment were used to control for multiple other family-level factors. The risk assessment contains items that assess factors found to be related to safe and timely reunification, including maltreatment type ("current allegation is for neglect" and "current allegation is for abuse"), caregiver substance abuse ("primary caregiver has a substance abuse use problem" and "secondary caregiver has a substance use problem"), caregiver mental health ("caregiver[s] has history of mental health treatment"), and child's history of foster care placement ("Prior CPS removal from household"). The risk

assessment classifies families as having a low, moderate, or high risk for future maltreatment. A prior evaluation of the risk assessment (Orsi, 2014) found it has moderately strong reliability for assessing factors associated with future neglect (Kappa = .52) and strong reliability for assessing factors related to future abuse (Kappa = .67). The risk assessment also showed predictive validity, with rates of subsequent referrals, assessments, findings, and case openings rising as the risk level increased (Orsi, 2014). Given that no families in the sample were classified as low risk, a dichotomous variable was created to measure risk (0 = *moderate*, 1 = *high*). It is not surprising that no families scored as low risk given that the sample was restricted to children who had to be placed out of their home to keep them safe. It should be noted that the analyses described below were run with the items from the risk assessment that captured factors found to be related to safe and timely reunification rather than the risk level, and the results were consistent. Therefore, the risk level was used in lieu of the individual items in order to provide a more parsimonious model.

Poverty could not be controlled for in the analysis. Initially, poverty was to be controlled for with a variable indicating if a family was IV-E eligible. Families are deemed IV-E eligible if their household income is below the threshold to receive the now defunct Aid to Families with Dependent Children benefits. However, after receiving the dataset, the PI learned that IV-eligibility is not determined for children whose initial placement was in kinship care (33.3% of the sample). No other variables were identified in the dataset which could be used as a measure of poverty. In general, the child poverty rate in the county examined (12.9%) is close to the state child poverty rate (14.2%), but

noticeably lower than the national child poverty rate (17.5%; U.S. Census, 2017b). However, these figures apply to all children—the poverty rate of CW-involved children in the county could not be located.

Analytic approach. To describe the sample, means and standard deviations were generated for continuous variables, and frequencies were obtained for dichotomous and categorical variables. Four logistic regression models were run to answer the research questions. The first two models tested if interprofessional communication and joint decision-making was associated with the likelihood of a child achieving timely reunification, while controlling for age, gender, race/ethnicity, placement type, family structure, and family risk level. The only difference between the two models was the reference group used for the categorical joint decision-making variables—"no TDMs attended" served as the reference group in the first model and "some TDMs attended" was the reference group in the second model. The reference group was rotated to explore comparisons between all three groups and evaluate how the likelihood of timely reunification changed as the degree of TDM attendance increased.

The third and fourth model examined if interprofessional communication and joint decision-making was related to the likelihood of a child experiencing repeat maltreatment, while controlling for age, gender, race/ethnicity, placement type, family structure, family risk level, placement length, and change in placement. As before, the reference group for joint decision-making was the only difference between the models. Notably, placement length and change in placement were only included as covariates in the models examining predictors of safe reunification because—as discussed in chapter

two—they have been found to be linked to safe but not timely reunification. All analyses were conducted in Stata Version 15 (StataCorp, 2017a)

In logistic regression, the probability of an event occurring for an observation is predicted using a nonlinear function of the predictor variables. The coefficients provided in a logistic model—known as logits—are the natural log of the probability of the event occurring (Tabachnick & Fidell, 2013). Odds ratios (ORs) were generated in Stata and are provided in the results section to enhance interpretability. ORs are a measure of how the probability of an event occurring changes with a one-unit increase in a predictor variable. An OR below 1 indicates a decreased probability while an odds ratio above 1 suggests a greater probability (Tabachnick & Fidell, 2013).

Diagnostic testing. Several steps were taken to ensure the models satisfied the assumptions of logistic regression, which include independence of errors, adequate ratio of cases to variables, linearity in the logit, and the absence of multicollinearity, univariate outliers, and influential observations (Tabachnick & Fidell, 2013). Independence of errors was satisfied by selecting only one child per family. An adequate ratio of cases to variables is necessary to ensure that one variable, or a combination of variables, does not perfectly or almost perfectly predict if an observation belongs to one category of the dependent variable (e.g., all white children or all white female children achieved timely reunification). The presence of perfect or near perfect prediction may bias the results (Allison, 2008). Stata automatically tests this assumption when running logistic regressions and provides a warning message in the output if it is violated (StataCorp., 2017b). The Box-Tidwell method was used to test the assumption of linearity in the logit

(i.e., a linear relationship between each continuous predictor variable and the logit of the dependent variable). Specifically, an interaction term between each continuous variable and its natural log was included in the model. If the interaction term was significant, the linearity in the logit assumption was considered to be violated (Tabachnick & Fidell, 2013). Multicollinearity (i.e., high correlations between predictor variables) was explored by examining each variable's variance inflation factor (VIF). The VIF is a measure of how much each variable's regression coefficient is affected by other variables in the model. A VIF below 10 was considered acceptable (O'Brien, 2007). Potential outliers in the solution were considered to be observations with an absolute standardized residual (i.e., observed probability minus predicted probability) greater than 3.29 (Tabachnick & Fidell, 2013). Influential observations are those that have a strong influence on a model's coefficients. Observations with an absolute DFBETA (i.e., difference in beta) value greater than 1 were considered influential and worthy of further investigation (Cohen, Cohen, West, & Aiken, 2003). DFBETA is a measure of how much a regression coefficient would change if the observation was not included in the analysis (Cohen et al., 2003).

Missing data. On average, variables were missing values for 2.0% of the children in both the timely reunification sample and the safe reunification sample. For each sample, all variables except for joint decision-making with therapists/SA counselors had less than 3.0% missing values. Values for joint decision-making with therapists/SA counselors were missing for 10.8% of children in the timely reunification sample and 14.3% of children in the safe reunification sample. With the exception of one case, the

missingness for this variable was explained by the fact that either no TDM was held while the child was in placement (1.8% of the sample in the timely reunification model and 2.9% of the sample in the safe reunification model), or no TDM was held while a therapist/SA counselor was involved (8.4% of the sample in timely reunification model and 11.4% of the sample in the safe reunification model). Overall, if only cases where a therapist/SA counselor *could have* attended a TDM are examined, the extent of missingness is below 3.0% across variables in both samples.

Options for dealing with missing data include mean replacement, regression imputation, and multiple imputation. Replacement and imputation were not conducted for two reasons. First, it would not be appropriate to impute values for joint decision-making with therapists/SA counselors because it was impossible for a therapist/SA counselor to have attended a TDM. Second, the extent of missingness was minimal on the remaining variables (< 3.0%) and it has been suggested that missingness below 10% is ignorable (Bennett, 2001). Therefore, complete case analysis was used where only children with complete data were included in the regression models.

Qualitative Methods

The qualitative phase involved semi-structured telephone interviews with a sample of caseworkers, GALs, therapists and SA counselors ($N = 21$) who worked in the county whose data was examined in the quantitative phase. An interview format was chosen over focus groups because some focus group participants may dominate the conversation, and some participants may be less talkative or candid in a group setting. Furthermore, scheduling is often a challenge with busy professionals—such as those

working in the CW system—and individual interviews enabled the PI to better accommodate this particular barrier to participation.

Sampling. The sampling method for the qualitative phase was purposive in that only certain professionals currently working with CW-involved families in the county were interviewed. Additional criteria for participation included having worked with CW-involved families in the county for at least one year and having worked on at least two cases where a child was placed in foster or kinship care. These criteria were established to increase the likelihood of participants having had experiences to draw upon when answering the interview questions.

Various recruitment strategies were employed given that the professionals of interest worked in different setting and most did not have publicly available contact information. Overall, participants were recruited through email, fliers, and social media (see Appendix A for recruitment materials). To recruit caseworkers, the PI drafted an email which an administrator at the county DHS forwarded to all permanency caseworkers in the agency (n = 53). Permanency caseworkers work with families from the time the initial investigation/assessment is completed until the time the case is closed. To recruit GALs, the PI sent a recruitment email to all GALs eligible for judicial appointment on CW cases in the county (n = 14). A list of all such GALs and their email addresses was available on the website for the agency that oversees GALs in the state.

To recruit therapists and SA counselors, the PI consulted with a service coordinator at the county DHS to identify the mental health and substance abuse treatment agencies that the county contracted with most frequently, and which provided

services to families in the county through Medicaid. Four agencies were identified—three that provide both mental health and substance abuse treatment and one that offered substance abuse treatment only. The treatment coordinator connected the PI with administrators at three of the agencies who could assist with recruitment. The PI drafted a recruitment email which was then sent by the agency administrator to all therapists and SA counselors employed at the agency. To recruit therapists and SA counselors in the fourth agency, a recruitment flier was placed in the office mailboxes of all therapists and SA counselors. Finally, due to a low initial response rate by therapists and SA counselors from these four agencies, the PI posted the recruitment flier on a social media site for social workers in the state. Given the various recruitment strategies employed, the PI was unable to determine the number of therapists and SA counselors who could have participated in an interview. It should also be noted that it is not possible to know how many of the caseworkers, GALs, therapists and SA counselors who received a recruitment email or flier met the eligibility criteria for the study.

The recruitment materials directed professionals interested in participating to a website where they could read the consent form (see Appendix B) and complete a brief questionnaire about their demographic and professional background (see Appendix C). There were 29 professionals who indicated they were interested in participating in the study by completing the online questionnaire (11 caseworkers, 6 GALs, 7 therapists, and 5 SA counselors). However, one GAL and one therapist did not meet the eligibility criteria for participation. Five of the 11 caseworkers were chosen to participate in an interview. Caseworkers were selected with varying years of experience to obtain the

perspective of both new (i.e., 2 years of experience) and more veteran caseworkers (i.e., 5 or more years of experience). In total, 21 professionals were interviewed (5 caseworkers, 5 GALs, 6 therapists, and 5 SA counselors). This is well above the recommended sample size of 12 interview participants to yield saturation of themes (Guest, Bunce, & Johnson, 2006).

Participant characteristics. Demographic and professional characteristics of the interview participants overall and by profession are provided in table 1. Most participants were female (81.0%) or white (85.7%). Notably, 50% of the therapists in the sample identified as male and 60% of the GALs in the sample identified as Hispanic/Latina. The sample was highly education, with more than half of participants having a graduate degree (57.1%) and almost one quarter having a law degree (23.8%). All participants with a law degree were GALs, which is explained by the fact that GALs are required to be attorneys in the state where the study was conducted. In the overall sample, there was good distribution regarding the field where participants earned their highest degree. However, some fields were associated with particular professions: Caseworkers had degrees in social work or psychology, all GALs had law degrees, therapists had degrees in psychology or counseling, and SA counselors had degrees in social work or counseling.

Participants had worked in their profession in the county for six years on average ($M = 5.75$, $SD = 5.26$). In the overall sample, there was good representation of professionals with varying levels of experience: Approximately one-third of participants worked in the county for 1 to 2 years, approximately one-third worked in the county for 3

Table 1
Demographic and professional characteristics of professionals in the qualitative sample

	All (N = 21)	Caseworkers (n = 5)	GALs (n = 5)	Therapists (n = 6)	SA counselors (n = 5)
Characteristic	*n (%)*	*n (%)*	*n (%)*	*n (%)*	*n (%)*
Gender					
Female	17 (81.0)	5 (100.0)	4 (80.0)	3 (50.0)	5 (100.0)
Male	4 (19.0)	0 (0.0)	1 (20.0)	3 (50.0)	0 (0.0)
Race					
White	18 (85.7)	4 (80.0)	5 (100.0)	6 (100.0)	3 (60.0)
Non-white	3 (14.3)	1 (20.0)	0 (0.0)	0 (0.0)	2 (40.0)
Hispanic or Latino/a	3 (14.3)	0 (0.0)	3 (60.0)	0 (0.0)	0 (0.0)
Highest degree					
4-year college	2 (9.5)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)
Graduate	12 (57.1)	3 (60.0)	0 (0.0)	4 (66.7)	5 (100.0)
Law	5 (23.8)	0 (0.0)	5 (100.0)	0 (0.0)	0 (0.0)
PsyD	2 (9.5)	0 (0.0)	0 (0.0)	2 (33.3)	0 (0.0)
Field of highest degree					
Social work	6 (28.6)	3 (60.0)	0 (0.0)	0 (0.0)	3 (60.0)
Psychology	4 (19.0)	2 (40.0)	0 (0.0)	2 (33.3)	0 (0.0)
Counseling	6 (28.6)	0 (0.0)	0 (0.0)	4 (66.7)	2 (40.0)
Law	5 (23.8)	0 (0.0)	5 (100.0)	0 (0.0)	0 (0.0)
Years worked in the county	M = 5.75 SD = 5.26	M = 3.31 SD = 1.49	M = 9.83 SD = 8.60	M = 5.88 SD = 4.09	M = 3.95 SD = 2.97
1 to 2	6 (28.6)	2 (40.0)	1 (20.0)	0 (0.0)	2 (40.0)
3 to 4	7 (33.3)	2 (40.0)	1 (20.0)	3 (50.0)	2 (40.0)
5 or more	8 (38.1)	1 (20.0)	3 (60.0)	3 (50.0)	1 (20.0)
Num. families worked with where child in foster care					
2 to 5	4 (19.0)	0 (0.0)	0 (0.0)	1 (16.7)	3 (60.0)
6 to 10	2 (9.5)	0 (0.0)	0 (0.0)	1 (16.7)	1 (20.0)
More than 10	15 (71.5)	5 (100.0)	5 (100.0)	4 (66.7)	1 (20.0)

to 4 years, and approximately one-third worked in the county for 5 or more years. However, caseworkers and SA counselors had less experience relative to GALs and therapists—80% of caseworkers and 80% of SA counselors worked in the county for less than four years while 60% of GALs and 50% of therapists worked in the county for more

than five years. Most participants (71.5%) had worked with more than 10 families where a child was placed in foster or kinship care. The SA counselors in the sample had the least experience working this population—more than half (60.0%) had only worked with 2 to 5 five families where a child was placed in foster or kinship care.

Data collection. The PI conducted one semi-structured telephone interview with each participant. The interviews were 45 minutes long on average (*SD* = 10.26) and ranged in length from 34 to 78 minutes. With the participants' consent, the interviews were audio recorded and transcribed by an online transcription service. One participant did not wish for the interview to be recorded but allowed the PI to take notes. The interview transcripts were checked by the PI and a MSW student—who served as a research assistant on the qualitative phase of this study—to ensure they were transcribed correctly. Participants received a $20 Amazon.com gift card as an incentive and thank you for participating.

Measures. The online questionnaire asked participants about their demographic characteristics and professional background (see Appendix C). Four multiple choice questions asked participants about their demographic characteristics, including their gender (*female, male, non-binary/gender non-conforming, prefer to self-describe, or prefer not to say*), race (*African American or black, white, American Indian or Alaskan Native, Asian, other, or prefer not to say*), highest level of education (*less than high school, high school graduate/GED, technical/vocational school, 2-year college degree/associate's degree, 4-year college graduate, graduate degree, law degree, PhD, or other*), and field of highest degree (*social work, law, education, psychology, sociology,*

criminal justice, counseling, or other). Participants were also asked if they identified as Hispanic or Latino/a (*yes or no*). Two multiple choice questions asked about their professional background and experience, including their primary role in the CW system (*caseworker, GAL, mental health therapist, substance abuse counselor, or other*) and the approximate number of families they had worked with where a child was placed in foster or kinship care by the county DHS (*less than 2 families, 2 to 5 families, 6 to 10 families, 11 to 15 families, 16 to 20 families, or more than 20 families*). Participants were also asked to provide the number of years and months they had served in their primary position in the county.

The semi-structured interview guide consisted of four main sections (see Appendix D for the complete interview guide). The questions in the first section aimed to get participants to start thinking about how they collaborate with other professionals in the CW system (e.g., "*What does it look like when collaboration is going well"* and "*What type of information do you typically provide to [professional]"*). The second section contained one question to get professionals to start thinking about—and to collect data regarding—how IPC affects their work and CW-involved families in general: "*How, if at all, does collaboration between you and caseworkers affect your ability to do your job as a [caseworker, GAL, therapist, and SA counselor]?"*). If necessary, participants were prompted to describe how interprofessional communication and joint decision-making in particular impacted their work (e.g., *"How, if at all, does having information about the family help you?"*).

The questions in the third and fourth sections were directly related to the aims of the qualitative phase—to understand how interprofessional communication and joint decision-making affect whether a child is safely reunified in a timely manner. The third section focused on timely reunification (e.g., *"What role, if any, does collaboration between you and [professional] play in the length of time it takes to reunify a child who is in foster or kinship care?"*); the fourth section targeted safe reunification (e.g., *"How, if at all, does collaboration between you and [professional] help assess if it is safe to reunify a child?"*). If necessary, prompting questions were asked regarding how interprofessional communication and joint decision-making may influence how quickly a child is reunified or whether a child is safely reunified (e.g., *"When you think in general about families involved in the child welfare system, do you think joint decision-making between you and caseworkers plays any role in the length of time it takes to reunify a child?")*

Data analysis. The qualitative data analysis involved three main stages: The development of codes, the application of codes, and the categorization of quotes. In the first stage (development of codes), the PI and research assistant read three transcripts each and then met to develop a preliminary list of codes (i.e., codebook). As is common in qualitative research, the codebook was refined throughout the coding process. The final list of codes is provided in table 2, along with definitions and example quotes that exemplify their usage. Most codes were causation codes which focus the search on causes and consequences in order to answer "why" questions (Saldana, 2013). The basic structure for a causation code is "cause > consequence." In this study, causation codes

Table 2
Codes applied to interview transcripts in the qualitative phase

Code	Definition	Example quote
Communication > Safe reunification	Participant describes how, or indicates that, communication between professionals affects ability to assess child safety or likelihood of child being maltreated after reunification.	"If we talked more often, we could really give more of an update about how someone is doing in treatment and what their recovery looks like, how stable it looks and if we have any concerns, and then hopefully keep the kiddos safer and the family safe and together."
Joint decision > Safe reunification	Participant describes how, or indicates that, joint decision-making affects ability to assess child safety or likelihood of child being maltreated after reunification.	"I think there may be things that they are seeing that you're not, or vice versa. And I think that when you're both able to look at something and say that you feel confident and positive about reunification, or about safety, or that these things have been addressed, I think that you're always coming from a place where it's more likely…And so I think being able to talk through your experiences with the family and with the child and where things are at, I think is a better decision as a team approach to make that, rather than someone making that decision by themselves who maybe doesn't have multiple perspectives."
Communication > Timely reunification	Participant describes how, or indicates that, communication between professionals affects the time it takes for child to be reunified.	"[If] I'm not getting that information from the therapist, I don't have the full picture of if a parent is actually doing everything to address the concerns that resulted in the kiddos being removed, to be able to then say those issues have been resolved, I can move these kids

		home. And so, it just, it can delay things.
Joint decision > Timely reunification	Participant describes how, or indicates that, joint decision-making between professionals affects the time it takes for child to be reunified.	"It's just kind of that group processing. 'Cause sometimes it will lead you to a better answer than you would have had on your own. And so, I think, that that would naturally speed things up for families."
Communication not > Safe reunification	Participant describes how, or indicates that, communication between professionals does not impact ability to assess child safety or likelihood of child being maltreated after reunification.	Never applied
Joint decision not > Safe reunification	Participant describes how, or indicates that, joint decision-making does not affect ability to assess child safety or likelihood of child being maltreated after reunification.	Never applied
Communication not > Timely reunification	Participant describes how, or indicates that, communication between professionals does not affect the time it takes for child to be reunified, or that it may delay reunification.	"I think the reality is that there are so many outside factors—whether it is parent's progress, kid's progress, who the supervisor is of both of them—that there isn't particularly that much rhyme or reason between how well the caseworker and I are collaborating and what the end results are because there are cases where they closed fairly painlessly and quickly where we weren't really collaborating or talking all that often."

Joint decision not > Timely reunification	Participant describes how, or indicates that, joint decision-making between professionals does not affect the time it takes for child to be reunified or that it may lead to unsafe reunification.	"But, yeah, most of mine, I've had good collaboration on, I think the ones that have affected reunification is not due to anything as far as collaboration goes."
Do not make decisions together	Participant indicates they are not involved in decision making process.	"Treatment providers really don't have a role in decision-making on if a child and parent should be reunified. We can't make those calls because we've never seen the interaction between the parent and child. We don't know how they interact. That's really more the decision from the department. But our input on how they're doing in treatment heavily influences their decision to reunify."
Discuss	Quotes to discuss because they appear important but do not fit with existing code.	n/a

were applied to sections of the text where participants explained how interprofessional communication affects safe reunification (*communication > safe reunification*), interprofessional joint decision-making affects safe reunification (*joint decision > safe reunification*), interprofessional communication affects timely reunification (*communication > timely reunification*), and interprofessional joint decision-making affects timely reunification (*joint decision > timely reunification*).

To increase the trustworthiness of the findings, codes were created to capture instances where participants indicated interprofessional communication and joint

decision-making may *not* impact safe and timely reunification, or that these collaborative process may delay reunification or lead to "unsafe" reunification (e.g., *communication not > safe reunification* and *joint decision not > safe reunification*). After the coding process began, it was evident that therapists and SA counselors in the sample were often not involved in making case decisions related to placement and reunification. Therefore, a code was developed to flag quotes raising this issue (*not involved in decision-making*). Finally, one code was applied (*discuss*) to quotes which appeared important but did not fit within an existing code. The PI and research assistant reviewed these quotes together to determine if the quote should be coded and, if so, if an existing or new code should be used.

In the second stage of the qualitative data analysis, the PI and research assistant used consensus coding to code the transcripts in dedoose Version 8.0.35 (Dedoose, 2018). The PI and research assistant independently coded each transcript. They then met to compare how they applied the codes to a transcript and resolve discrepancies. The transcripts were coded incrementally (i.e., in batches) to provide an opportunity for the PI and research assistant to refine the codebook and compare how they applied the codes to increase consensus.

In the third stage of the qualitative data analysis, the PI and research assistant used the constant comparative method outlined by Lincoln and Guba (1985) to categorize the quotes associated with each code. The following process was followed for each code: First, one quote was read and placed in a category by itself. Second, a second quote was read and, if it represented a similar process as the first code, it was placed in the same

category; if the quote described a different process, it was placed into a new category. This process—where quotes were either placed into an existing category with other quotes that reflected a similar process or placed into a new category—was followed for each quote until they had all been categorized. It was a lengthy (i.e., approximately 20 hours) and iterative process where categories were refined and quotes were shifted from one category to another in order to ensure that all quotes within a category described a similar process. In the end, the final set of categories represented the themes in the data.

Methodological rigor. Several steps were taken throughout the qualitative phase to increase the trustworthiness of the findings, including member checking, peer debriefing, use of a second coder, a negative case analysis, and maintaining an audit trail (Lincoln & Guba, 1985). Member checking was accomplished by having participants complete an online survey where they indicated the extent of their agreement with each of the main findings on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). The PI elected to conduct member checking via the survey rather than a follow-up interview because of the participants' busy schedules. Eleven participants (52.36%) completed the survey and, depending on the finding, 81.8% to 100.0% agreed or strongly agreed (M = 88.9%). Appendix E provides a table with the survey items and the full results.

The PI met with an expert in mixed methods and qualitative research four times throughout the study (i.e., peer debriefing) to enhance the methodologies employed, and identify and address any biases on the part of the PI. The expert provided feedback on the interview protocol, the codebook, the analytic process, and the findings. Investigator bias

was also reduced by using two coders and consensus coding. It was important to have a second coder in this study because the PI's prior CW experience and familiarity with prior studies of IPC may have biased his perception. The second coder—who had prior research experience but limited knowledge of the CW system and CW research—had a more objective lens for viewing the data. In general, having a second individual independently code the transcripts and assist with the categorization of quotes helped "keep in check" the PI's preconceived notions and expectations.

To further increase the credibility of the findings, the PI and research assistant conducted a negative case analysis where quotes that run contrary to the conclusions are sought out and used to refine the findings (Lincoln & Guba, 1985). This was accomplished by coding quotes that indicated that interprofessional communication and joint decision-making does not influence whether a child is safely reunified or reunified in a timely manner, or that these collaborative processed results in delayed or unsafe reunification (e.g., *communication not > timely reunification*). The findings from the negative case analysis are integrated throughout the results section. Finally, the PI maintained an audit trail (see Appendix F) to document all activities and decisions made throughout the qualitative phase.

Integration of Quantitative and Qualitative Findings

The quantitative and qualitative findings are integrated in chapter five—the discussion of the results. Points of convergence (i.e., agreement), complementarity (i.e., one set of findings compliments or explains the other), and divergence (i.e., contradictions) are identified and discussed. In general, the quantitative findings indicate

whether interprofessional communication and joint decision-making have a statistically significant relationship with safe and timely reunification. The qualitative findings explain the processes underlying these relationships, and provide insight into why they are, or are not, statistically significant.

Chapter Four: Results

The results from the quantitative and qualitative phases are divided into two main parts in this chapter. The first part contains the quantitative and qualitative findings related to how interprofessional communication and joint decision-making affect timely reunification (research questions 1, 2, and 5). The second part presents the quantitative and qualitative results for how interprofessional communication and joint decision-making are associated with safe reunification (research questions 3, 4, and 6). In each part, the quantitative findings are provided first, followed by the qualitative findings. An in-depth examination of how they converge and diverge is presented in chapter five.

Timely Reunification

Quantitative Results

Sample characteristics. Characteristics for children in the timely reunification sample ($N = 137$) are provided in table 3. Children were seven years old on average ($SD = 5.22$), with the youngest child being one week old and the oldest child being 17.5 years old. The sample was almost equally balanced in terms of gender (male = 54.0%; female = 46.0%). Half the sample was white (49.6%), while one quarter was African American (26.3%) and one quarter was Hispanic (24.1%). Most children in the sample were in a foster home (63.5%) for all or most of their time in placement. More than half of the children were removed from an unmarried or married couple (59.9%), and the remainder

were removed from a single parent home. Almost two thirds were living with a family assessed as having a high risk for future maltreatment (63.5%).

Table 3
Sample characteristics for timely reunification model (N = 137)

	N	%
Child characteristics		
Age (years)	*M* = 6.83, *SD* = 5.22	
Gender		
Female	63	46.0
Male	74	54.0
Race/Ethnicity		
White	68	49.6
African American	36	26.3
Hispanic	33	24.1
Placement type		
Foster home	87	63.5
Kinship home	50	36.5
Family characteristics		
Family structure		
Single parent	55	40.2
Unmarried/married couple	82	59.9
Risk level		
Moderate	50	36.5
High	87	63.5
Dependent variable		
Reunified in a timely manner	86	62.8
Independent variables		
Comm. with GALs	*M* = 2.39, *SD* = 1.93	
Comm. with therapists/SA counselors	*M* = 1.07, *SD* = 1.14	
Decision-making with GALs		
No TDMs attended	17	12.4
Some TDMs attended	72	52.6
All TDMs attended	48	35.0
Decision-making with therapists/SA counselors		
No TDMs attended	73	53.3
Some TDMs attended	31	22.6
All TDMs attended	33	24.1

Most children in the sample (62.8%) were reunified in a timely manner. On average, caseworkers communicated with a child's GAL approximately two times per month ($M = 2.39$, $SD = 1.93$), and they communicated with the therapists/SA counselors working with a family roughly once a month ($M = 1.07$, $SD = 1.14$). A GAL attended some TDMs for half of the children in the sample (52.6%), and all TDMs for approximately one third (35.0%) of the children. GALs did not attend any of the TDMs held for 12.4% of the children in the sample. The absence of joint decision-making between caseworkers and therapists/SA counselors was more pronounced. Therapists/SA counselors did not attend any TDMs for half (53.3%) of the children; they attended some TDMs for 22.6% of the children and all TDMs for 24.1% of the children.

Research question 1a: Is the frequency of communication between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of a child being reunified in a timely manner? The results of the logistic regression models testing if interprofessional communication or joint decision-making are associated with the likelihood that a child is reunified in a timely manner are presented in table 4. As described in the methods section, the only difference between the models is whether no TDM attendance (model 1a) or some TDM attendance (model 1b) is used as the reference group. It should be noted that the coefficients for the remaining variables are the constant across models.

The results indicate that children in the sample were 50% more likely to be reunified in a timely manner when the frequency of communication between their caseworker and GAL increased by one day per month on average ($OR = 1.48$, $p = 0.003$).

The frequency of communication between caseworkers and therapists/SA counselors was not linked to the timely reunification of children.

Table 4
Results of logistic regression models predicting timely reunification (N = 137)

	Model 1a		Model 1b	
	OR	*95% CI*	*OR*	*95% CI*
Child characteristics				
Age (years)	0.95	0.88-1.02	0.95	0.88-1.02
Gender (ref. = female)				
Male	0.67	0.29-1.54	0.67	0.29-1.54
Race/ethnicity (ref. = white)				
African American	2.14	0.75-6.08	2.14	0.75-6.08
Hispanic	1.48	0.53-4.15	1.48	0.53-4.15
Placement (ref. = foster)				
Kinship home	1.02	0.43-2.41	1.02	0.43-2.41
Family characteristics				
Structure (ref=single)				
Unmarried/married couple	0.80	0.34-1.89	0.80	0.34-1.89
Risk level (ref = moderate)				
High	1.17	0.51-2.70	1.17	0.51-2.70
Independent variables				
Comm. with GALs	1.48**	1.14-1.90	1.48**	1.14-1.90
Comm with therapists/SA counselors	0.91	0.59-1.40	0.91	0.59-1.40
Decision-making with GALs				
No TDMs attended	-	-	12.18**	2.35-63.11
Some TDMs attended	0.08**	0.02-0.43	-	-
All TDMs attended	0.21	0.04-1.15	2.57*	1.05-6.31
Decision-making with therapists/SA counselors				
No TDMs attended	-	-	1.84	0.65-5.20
Some TDMs attended	0.54	0.19-1.54	-	-
All TDMs attended	1.35	0.45-4.03	2.48	0.73-8.42

Research question 1b: Does the strength or significance of the relationship between interprofessional communication and timely reunification vary across professionals? Caseworker communication with GALs was found to be significantly

related to timely reunification (*OR* = 1.48, *p* = 0.003), but caseworker communication with therapists/SA counselors was not significantly associated with timely reunification.

Research question 2a: Is the degree of joint decision-making between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of a child being reunified in a timely manner? Relative to children whose GALs attended no TDMs, children whose GALs attended some TDMs were 92% *less* likely to be reunified in a timely manner (see model 1a; *OR* = .08, *p* = .003). It is worth noting that the coefficient for full TDM attendance by GALs in model 1a approached significance (*p* = .073) and suggested children were less likely to be reunified when their GAL attended all TDMs rather than no TDMs (*OR* = .21). Children were found to be 2.6 times more likely to be reunified in a timely manner when their GAL attended all TDMs compared to some TDMs (see model 1b; *OR* = 2.57, *p* = .039). Overall, the findings from both models suggest children have a greater likelihood of being reunified in a timely manner when their GAL attends all or no TDMs rather than only some TDMs. The attendance of therapists/SA counselors at TDMs did not have a significant relationship with the likelihood of timely reunification.

Research question 2b: Does the strength or significance of the relationship between joint decision-making and timely reunification vary across professionals? Joint decision-making between caseworkers and GALs was found to be significantly linked to timely reunification, but joint decision-making between caseworkers and therapists/SA counselors was not significantly associated with timely reunification.

Diagnostic testing. Both models converged and Stata did not produce a warning messages that perfect or near-perfect prediction occurred. There was no indication that multicollinearity was a concern (highest VIF = 1.78). The Box-Tidwell test indicated the assumption of linearity of the logit was satisfied. No outliers were detected in the solution (largest standardized residual = 2.93) and no influential observations were identified (largest DFBETA = .61).

Qualitative Results

Research question 5: Why, if at all, does interprofessional communication and joint decision-making affect the likelihood of a child being reunified in a timely manner? Five themes emerged from the data which capture the processes by which interprofessional communication and joint decision-making affect the likelihood of a child being reunified in a timely manner. Figure 4 depicts these processes and provides the percent of participants who endorsed each one. Interprofessional communication was found to impact timely reunification by influencing (1) the timeliness of the decision to reunify, (2) whether professionals are on the same page as to goals and expectations, and (3) the identification of barriers to preventing reunification; Joint decision-making was found to affect timely reunification by (4) influencing the quality of decisions professionals make about services and (5) creating a system of checks and balances where no single professional can dictate if a child is returned home. These themes are described in detail below.

Communication affects the timeliness of decision regarding reunification. Almost three-quarters of the participants (71.4%) described how caseworker

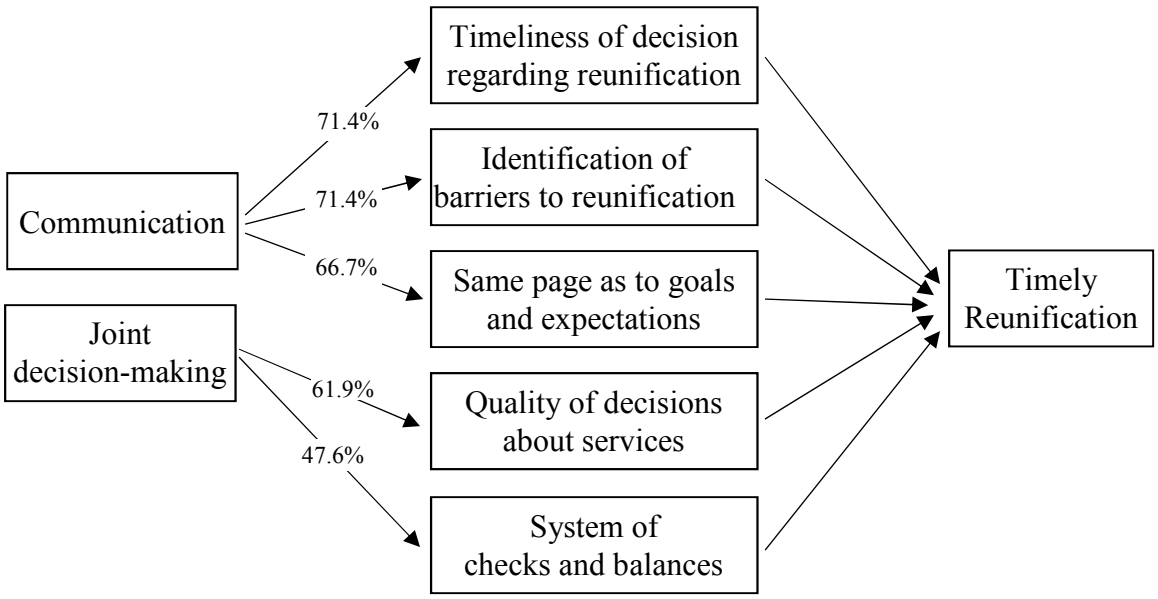

Figure 4: Qualitative findings regarding how interprofessional communication and joint decision-making affect timely reunification

communication with GALs, therapists, and SA counselors influences the ability of caseworkers and GALs to make a timely decision regarding whether a child can be reunified. According to participants, therapists and SA counselors are not directly involved in making the decision to reunify a child. Rather, per court order, the caseworker and GAL make this decision together. However, therapists and SA counselors play an important role in providing information to the caseworker and GAL so that they can make this determination. Caseworkers discussed how, before they can decide to return a child home, they need to know from therapists and SA counselors if a parent is attending treatment consistently, engaging in treatment, maintaining their sobriety, and, in general, showing safe and stable behaviors. When asked if communication with other professionals may influence how long it takes to reunify a child, caseworkers responded:

> "Definitely. Yeah, because if I don't have somebody telling me this mom has been engaged in treatment, or this dad has been—this dad came and did his DV evaluation, he's getting started—then I don't have that information, and I can't just go off of what parents are telling me, so I can't recommend something when I don't know all of the information."

> "Going back to the situation that I told you where I'm not getting that information from the therapist, I don't have the full picture of if a parent is actually doing everything to address the concerns that resulted in the kiddos being removed to be able to say those issues have been resolved, I can move these kids home. And so, it definitely just, it can delay things."

Therapists and SA counselors agreed with caseworkers' perceptions of how a lack of communication can delay reunification. One SA counselor stated, "Sometimes the caseworkers are waiting on information from treatment to say that a client's coming, their [drug tests] are clean and they're waiting for that information to make decisions around should we reunify." Similarly, a therapist commented, "If that information is not back to the caseworker that the client is actually engaged, then that would certainly hinder reunification."

According to GALs in the sample, their ability to make a timely decision regarding whether to reunify a child is affected by whether the caseworker provides information to them. GALs described how they need to receive reports (e.g., case progress reports) and assessments (e.g., risk assessments) that have been completed by

the caseworker. In addition, they discussed how, because they usually do not have releases of information with therapists and SA counselors, they rely on caseworkers to provide treatment progress reports, copies of psychological or substance abuse evaluations, and the results of drug tests. One GAL stated, "my time frame of being able to independently gain everything I need to get in order to make that decision can be bogged down. Especially when that information is already sitting in someone else's file, or on someone else's desk." Another GAL described a case where they were waiting to recommend reunification until a parent had successfully completed treatment: "And realistically, had I known that she had completed some of the stuff she completed, and had [the caseworker] passed that information on to me, I could have made that recommendation probably a good two month earlier."

GALs also noted that they want caseworkers to keep them abreast of how things are going throughout the case so that they feel prepared to make a decision about reunifying a child when the time comes. When GALs are not receiving regular updates, they need to "backtrack" and spend time gathering information. In addition, GALs appreciated it when caseworkers informed them ahead of time if they are going to be recommending reunification at a court hearing so that the GAL has time to gather the information they need to make a decision: "If they are going to be recommending some major change...I do appreciate getting a head's up so that I have the information to take the position and not stall the process."

Communication is needed to keep professionals on the same page. Another theme that emerged from the qualitative data is that caseworker communication with

GALs, therapist, and SA counselors helps these professionals stay on the same page regarding goals and expectations for families, which in turn facilitates reunification. Two-thirds of the participants (66.7%) endorsed this theme. One GAL, when talking about a case where they communicated well with the caseworker, stated:

> "I think if the two of us weren't in communication and the rest of the team as well, to keep everybody updated and in the loop, I think [reunification] would have taken a lot longer. And so we wouldn't know for sure that we were working towards return home as opposed to a step down to a foster home."

According to therapists and SA counselors, when they do not have regular communication with caseworkers to ensure they are on the same page, reunification may be delayed because a child or parent is not working on the things in treatment that need to be resolved so the child can return home. When asked how communication with caseworkers may impact the length of time before a family is reunified, one SA counselor responded, "It could make it shorter if we were able to collaborative better and have an idea of, again, like what their actual areas of concern are." One therapist talked about a case where the caseworker would not reunify a child because the parent had not worked on their trauma in therapy, but the therapist was unaware that this was a requirement. The therapist stated:

> "Well, that was never communicated during the time that I was seeing her. We were working on her mood management and learning how to speak in a way that

you could be heard and not be reactive and not misjudge other people…But that piece of, 'This is what we were really concerned about,' was not communicated."

Other participants described how, when professionals are not on the same page, a situation can arise where one professional believes a family is ready to be reunified but another professional does not. When talking about their collaboration with GALs, one caseworker commented:

"If we're not on the same page, I can see where that would linger something out, if there is something that they really needed to see from parents, worries that they have. And I think that's where we need to, like I said, address those things along the way versus coming to the end of something and then realizing they don't have what they need to make those decisions."

Communication helps identify barriers that need to be addressed.

Approximately three-quarters of the participants (71.4%) described how caseworker communication with GALs, therapists, and SA counselors facilitates timely reunification because they are made aware of, and can then address, the issues that are preventing a child from returning home. Speaking about other professionals in general, one caseworker stated:

"I need them to be communicating to me about barriers that, or complicated factors that, are coming up. I need them to let me know about these things ahead of time so that we can problem solve along the way, so that we're not looking at,

we're getting close to our time crunch of needing to make determinations about returning a kid home and we can't."

Caseworkers noted that they need to know from therapists and SA counselors whether a child or parent is progressing in treatment, and any concerns that the provider has so that they can be addressed and the child can be reunified (e.g., lack of engagement, positive drug tests, and mental health crises). Similarly, GALs wanted to be made aware of any barriers to reunification so that they can brainstorm solutions with other professionals, or advocate that additional services and supports be put in place. One GAL commented, "I had a parent who couldn't get their psych eval done, and really there didn't seem to be enough assistance in making that happen. Had I known about that earlier, we could've been much farther in the process."

Participants also described how they when they are made aware of situations where a family member is not meeting expectations for behaviors or treatment, they are better able to hold them accountable and keep them on the path to reunification. One caseworker stated, "I have one case there I'm constantly in communication with therapists and substance abuse providers, and we're really able to wrap around mom and hold mom accountable, and we see if she's starting to slip off a bit." A GAL commented, "If we know what's going on for the other people on the team, it's easier to kind of keep the family in one direction as opposed to them not following through or being able to make excuses."

It should be noted that two therapists indicated that interprofessional communication may delay reunification. They described how when they inform

caseworkers of problems that arise with a family—such as a lack of engagement in treatment, new safety concerns, or unstable behaviors—the caseworker may decide that a child cannot return home until these issues are addressed. One of the therapists stated, "If families are not engaging in the services that have been determined by the department for them to engage in…I think that certainly does delay their reunification when the department is made aware that they aren't engaging in those services."

Joint decision-making influences the quality of decisions about services. Over half of the participants (61.9%) described ways in which joint decision-making affects the quality of decisions regarding what services should be provided to a family to resolve the issues preventing reunification. According to these participants, when multiple professionals working with a family participate in the decision-making process, they can blend their perspective and expertise to determine how to best address the issues preventing reunification. Participants indicated that therapists and SA counselors, in particular, play an important role in making decisions about the appropriate type or level of treatment to provide a child or parent. One of the therapists in the sample stated, "I will work with caseworkers and we'll make decisions about the appropriateness of treatment, and who would be a good fit for the group and who might be ready to commit to something like that." A caseworker commented:

> "I think it's ideal when all of us can develop the support plan together with the other professionals…The mental health or substance abuse professionals can provide a lot of information about what they think is gonna be most successful and beneficial for the family. They know that because, number one, that's their

expertise; and number two, they've seen the family be successful with certain things and not as successful, or maybe not as beneficial with other things."

Participants also described how the process of making decisions together—the sharing of perspectives, experience and expertise—may lead to more creative and "out of the box" solutions to the complex issues preventing reunification. GALs in the sample stated:

> "If we just stick to, 'Well, this is what we do in 95% of the cases,' that may not work. Instead, if we both kind of use our experience and our background to look and see, 'Well, what are the alternatives?'. And I think it, that collaborative, and making those joint decisions, and having to talk through all of those things in order to do that can be very helpful for reunification."

> "Two heads are always better than one. Everybody's seeing these families from a different perspective…. And so, I think, when you kind of are able to work as a team, and say, 'Here's what I'm seeing. And here's what I'm thinking. And my suggestion.' I think that always opens the door for other people to kinda say, 'Yeah, here's what I'm seeing also. And I think maybe if we did this...' It's just kind of that group processing. Cause sometimes it will lead you to a better answer than you would have had on your own. And so, I think, that that would naturally speed things up for families, if we're coming up with better plans in general. Things that are a better fit for them."

Therapists and SA counselors discussed cases where their lack of involvement in making decisions about what treatment to provide a family resulted in the family receiving the wrong type or level of treatment, which, in turn, delayed reunification. One therapist talked about a case where "months were kind of wasted" because the caseworker did not involve them in making decisions about how best to address a two-year old child's trauma response to their parent and the caseworker arranged for the wrong model of therapy. One SA counselor described a case where the caseworker made the unilateral decision to provide outpatient treatment to a parent rather than inpatient treatment—which is what the SA counselor believed the parent needed. According to the SA counselor, the parent was unsuccessful in outpatient treatment and eventually placed in an inpatient facility. The SA counselor commented:

> "And so it was like the 11th month of the case by the time my client got into inpatient and got her feet under her. She couldn't stop using by herself and outpatient wasn't working. And so there was just kind of some barriers where finally when they called us and we recommended inpatient, the caseworker finally relented."

Joint decision-making creates a system of checks and balances. Almost half of the participants (47.6%) indicated that joint decision-making creates a system of checks and balances where no one professional has complete control of when a child is reunified, which can facilitate or delay reunification. It can expedite reunification in situations where one professional is reluctant to reunify a child and another professional is able to

convince them otherwise. One caseworker described a case where they were against reunifying a child because the child was doing poorly in therapy, but another professional working with the family helped them see why reunification was still appropriate. The caseworker stated, "They were really able to kind of lay out this youth's reasoning for why he wasn't successful, and we were able to make that decision together…And it was an awesome transition for him, although I was pretty worried about it." One GAL talked about how caseworkers help her recognize when there are no longer any safety concerns preventing reunification:

> "My focus in the case is more on best interests, which includes safety. The Department and caseworkers, and their training, tends to focus them more towards safety, specifically. And so, I think that sometimes having that focus, and then having that training, can kind of refocus me so that I'm not being like, 'We've got these five issues with school,' and they're like, 'But they could go home and address those.' Sometimes, I'm thinking in terms of, 'Okay, how do I get this kid his IEP?' And they're thinking of, 'How can we get this kid home and get him an IEP?'"

However, the system of checks and balances created when professionals make decisions together can also delay reunification. According to participants, this occurs when the professionals disagree about whether to reunify a child and they cannot resolve their difference of opinion. This barrier to reunification was only reported by caseworkers and GALs in the sample who, as noted earlier, must be in agreement on when to reunify a

child. One caseworker stated, “When people aren’t in agreement, then families are stuck, kind of waiting for a decision to be made either one way or another, and they kind of get stuck in limbo.” Both caseworkers and GALs noted that when they are unable to resolve their differences of opinion regarding whether to reunify a child, they may have to go to court to have the judge decide, which can take time. One caseworker stated, “If it’s a court-involved case, you have to have a contested hearing and then getting that scheduled, it takes sometimes months. And then it’s a whole process where families have to sit and wait and wait and wait.” Similarly, a GAL commented, “If we need to have hearings over and over again, it can delay things. It can take weeks to get through the court hearings.”

Safe Reunification

Quantitative Results

Sample characteristics. The characteristics of children in the safe reunification sample ($N = 83$) are provided in table 5, and are similar to the characteristics of children in the timely reunification sample. Children ranged in age from 2 weeks to 17 years old ($M = 6.44$, $SD = 5.47$). The sample was equally split in terms of gender (50.6% = male and 49.4% = female). Half the sample was White (48.6%) and there were equal proportions of Hispanic (26.5%) and African American (25.3%) children. Almost two thirds of the children spent all or most of their placement period in a foster home (63.9%) and slightly more than one third experienced a placement change (39.8%) while in out of home care. The shortest placement duration was 23 days and the longest was 364 days

Table 5
Sample characteristics for safe reunification model (N = 83)

	N	%
Child characteristics		
Age (years)	*M* = 6.44, *SD* = 5.47	
Gender		
Female	41	49.4
Male	42	50.6
Race/Ethnicity		
White	40	48.2
African American	21	25.3
Hispanic	22	26.5
Placement type		
Foster home	53	63.9
Kinship home	30	36.1
Placement change		
No	50	60.2
Yes	33	39.8
Time to reunification (months)	*M* = 7.63, *SD* = 2.84	
Family characteristics		
Family structure		
Single parent	36	43.4
Unmarried/married	47	56.6
Risk level		
Moderate	28	33.7
High	55	66.3
Dependent variable		
Investigated/Assessed referral	15	18.1
Independent variables		
Comm. with GALs	*M* = 2.75, *SD* = 2.13	
Comm. with therapists/SA counselors	*M* = 1.14, *SD* = 1.26	
Decision-making with GALs		
No TDMs attended	13	15.7
Some TDMs attended	37	44.6
All TDMs attended	33	39.8
Decision-making with therapists/SA counselors		
No TDMs attended	45	54.2
Some TDMs attended	17	20.5
All TDMs attended	21	25.3

(*M*= 7.63 months, *SD*= 2.84 months). Approximately half of the children were removed from an unmarried or married couple (56.6%), and two thirds were with a family assessed as having a high risk for future maltreatment (66.3%).

Fifteen of the 83 children (18.1%) were subjects of an investigated/assessed report of maltreatment within one year of being reunified. Caseworkers communicated with the children's GALs almost three times per month on average (*M* = 2.75, *SD* = 2.13), which is more frequently than in the timely reunification sample (*M* = 2.39). This difference is expected given that the safe reunification sample is limited to children who reunified in a timely manner, which was more likely to occur when the frequency of caseworker-GAL communication was higher. Caseworkers communicated with therapists/SA counselors about once a month (*M* = 1.14, *SD* = 1.26), which is similar to the rate in the timely reunification sample (*M* = 1.07). No difference was anticipated since caseworker communication with therapists/SA counselors was not associated with timely reunification.

The proportion of children whose GALs attended some TDMs was lower in the safe reunification sample relative to the timely reunification sample (44.6% versus 52.6%). This discrepancy aligns with the finding that timely reunification was less likely on cases where the GAL attended only some TDMs. The rates of no TDM attendance and full TDM attendance by GALs were slightly higher in the safe reunification sample (15.7% and 39.8%, respectively) relative to the timely reunification sample (12.4% and 35.0%, respectively). This is expected given that timely reunification was more likely to occur when GALs attended no or all TDMs. As found in the timely reunification sample,

therapists/SA counselors did not attend any TDMs for approximately half of the children (54.2%), and they attended some TDMs for roughly one quarter of the children (20.5%) and all TDMs for one quarter of the children (25.3%).

Research question 3a: Is the frequency of communication between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of a child being safely reunified? The results of the logistic regression models testing if interprofessional communication or joint decision-making are related to safe reunification are provided in table 6. As before, the only difference between the two models is whether no TDM attendance (model 2a) or some TDM attendance (model 2b) serves as the reference group, and the coefficients for the remaining variables are constant across models. Neither the frequency of caseworker communication with GAL nor the frequency of caseworker communication with therapists/SA counselor were found to be associated with the likelihood of a child being safely reunified.

Research question 3b: Does the strength or significance of the relationship between interprofessional communication and safe reunification vary across professionals? No differences were detected by profession. Both caseworker communication with GALs and caseworker communication with therapists/SA counselors were not significantly associated with safe reunification.

Research question 4a: Is the degree of joint decision-making between a caseworker and the GAL, therapist(s), or counselor(s) working with a CW-involved family associated with the likelihood of a child being safely reunified? The attendance

rate of GALs at TDMs and the attendance rate of therapists/SA counselors at TDMs were not found to be related to safe reunification.

Table 6
Results of logistic regression models predicting safe reunification (N = 83)

	Model 2a		Model 2b	
	OR	95% CI	OR	95% CI
Child characteristics				
Age (years)	0.98	0.84-1.14	0.98	0.84-1.14
Gender (ref. = female)				
Male	3.71	0.71-19.30	3.71	0.71-19.3
Race/ethnicity (ref. = white)				
African American	0.60	0.08-4.66	0.60	0.08-4.66
Hispanic	0.99	0.12-8.35	0.99	0.12-8.35
Placement (ref. = foster)				
Kinship home	0.43	0.07-2.67	0.43	0.07-2.67
Time to reunification (mths)	1.14	0.83-1.57	1.14	0.83-1.57
Placement change	13.81**	2.04-93.22	13.81**	2.04-93.22
Family characteristics				
Structure (ref. = single)				
Unmarried/married couple	2.50	0.42-15.06	2.50	0.42-15.06
Risk level (ref. = moderate)				
High	46.12**	3.02-704.47	46.12**	3.02-704.47
Independent variables				
Comm. with GALs	0.88	0.56-1.38	0.88	0.56-1.38
Comm. with therapists/SA counselors	1.41	0.64-3.12	1.41	0.64-3.12
Decision-making with GALs				
No TDMs attended	-	-	6.57	0.59-72.77
Some TDMs attended	0.15	0.01-1.69	-	-
All TDMs attended	0.57	0.06-5.45	3.71	0.57-24.33
Decision-making with therapists/SA counselors				
No TDMs attended	-	-	2.13	0.27-16.84
Some TDMs attended	0.47	0.06-3.72	-	-
All TDMs attended	1.19	0.18-7.78	2.53	0.31-20.67

Research question 4b: Does the strength or significance of the relationship between joint decision-making and safe reunification vary across professionals? No differences were found regarding how the attendance rate of GALs or the attendance rate of therapists/SA counselors was related to safe reunification. Both relationships were not significant.

Diagnostic testing. Both models converged and Stata did not produce a warning messages that perfect or near-perfect prediction occurred. There was no evidence that multicollinearity was a concern (highest VIF = 2.00). The Box-Tidwell test found that the assumption of linearity of the logit was satisfied. Two children had large residuals indicating they may be outliers ($z = 3.07$ and $z = 4.68$). The model was run without these children to assess if the model estimates changed. There was no difference in terms of which variables were significantly related to safe reunification and the ORs ratio for significant variables (risk level and placement change) changed by less than .01. Four children had absolute DFBETA values greater than 1 for TDM attendance by therapists/SA counselors or risk level. Excluding these children from the analysis did not change the significance level for these variables. Notably, the OR for risk level did increase from 46.12 to 66.56 when they were removed from the analysis.

Qualitative Results

Research question 6: Why, if at all, does interprofessional communication and joint decision-making affect the likelihood of a child being safely reunified?

Two themes emerged from the qualitative data regarding how interprofessional communication and joint decision-making influence safe reunification. Both components

of IPC were found to help professionals make informed decisions about whether it is safe for a child to return home. These processes, and the percent of participants who endorsed them, are shown in figure 5.

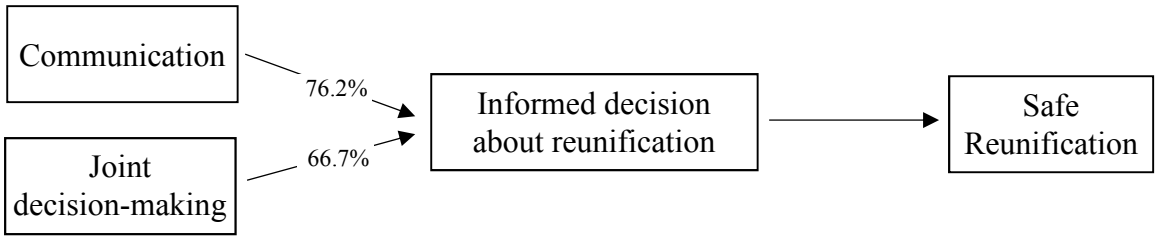

Figure 5: Qualitative findings regarding how interprofessional communication and joint decision-making affect safe reunification

Communication helps make an informed decision about if it is safe to reunify.

One theme that emerged from the qualitative data was that communication helps the caseworker and GAL make an informed decision regarding whether it is safe to reunify a child or if the child is likely to be maltreated if they return home. This theme was endorsed by three quarters of the participants (76.2%). While therapists and SA counselors do not recommend whether a child should be returned home, they provide important information that helps the caseworker and GAL determine if a child can be safely reunified. Consequently, caseworker communication with therapists and SA appears to be particularly important when it comes time for the caseworker and GAL to make this decision. Therapists in the sample stated, "Our job is to provide guidance and information with which then they can make a decision," and "Caseworkers will often ask my impressions about where a parent might be in terms of their ability to keep kids

safe…So although I don't weigh in on a decision, they do pick my brain in terms of my impressions." One caseworker summarized it nicely by saying:

> "The treatment providers, either mental health or substance use, they don't necessarily get to make that decision. However, the guardian ad litem and I definitely are communicating with them to find out if they feel as though the parents are making enough progress, and stable enough to have their kid returned home. So let's say that a mental health therapist comes to me and says she's continuing to have a mental health episode every six months or whatever, then the guardian ad litem and I are gonna take that information and weigh that in determining what's in the best interest of the kid. So if we feel as though that need is, if we feel as though that area of concern is too significant, and we can't return the kid home, then we obviously use that information."

No participants were aware of a case where a lack of communication between professionals was a contributing factor to a child being maltreated after returning home. However, two therapists described cases where neither the caseworker, nor the GAL, consulted with them prior to returning a child home. In fact, the therapists did not learn that the child had been reunified until after it had occurred. Both therapists expressed their concern about the family not having adequate supports in place. One of the therapists stated, "I think this family needed support to reunify, and like they already made the decision to do it, but it could be good for them to have support in doing it, but that wasn't advocated for."

Joint decision-making helps make an informed decision about if it is safe to reunify. Two thirds of the participants (66.7%) described how joint decision-making can lead to more informed decisions regarding whether it is safe to reunify a child. This theme only applied to caseworkers and GALs as they are the only professionals who make this determination. Caseworkers and GALs discussed how, when they make the decision together to reunify a child, they share any information they have to make sure they have a complete picture of any risk factors or safety concerns that are present. As one GAL stated, "There may be things that they are seeing that you're not, or vice versa." Relatedly, caseworkers and GALs indicated that, by sharing their perspectives when making a decision about whether to reunify, they are effectively triangulating the information they have to make an informed decision. Participants stated:

> Caseworker: "It always makes me feel better in that I'm making good decisions for the kids that I'm working with, and the parents working with, if I have other professionals validating that, like, 'Yeah, I totally agree with you,' or, 'Hey, I'm a little worried, maybe we should hold off for a bit and here's why.'"

> GAL: "I think that when you're both able to look at something and say that you feel confident and positive about reunification, or about safety, or that these things have been addressed, I think that you're always coming from a place where it's more likely. If we're both seeing it, then it's probably more likely really happening. And so I think being able to talk through your experiences with the family and with the child and where things are at, I think it is a better decision as

a team approach to make that, rather than someone making that decision by themselves who maybe doesn't have multiple perspectives."

Participants suggested that in addition to facilitating the sharing of information about a family, joint decision-making allows for a blending of professionals' experience and expertise to make an informed decision about whether it is safe to reunify a child. One GAL stated, "If we're working together well, and we're playing off each other's strengths in areas where we don't have as much training or information, that can kind of help with that safety determination." Another GAL commented, "I think those life experiences, as well as training, are both helpful backgrounds for a GAL and a caseworker to bring to the table as we're discussing whether or not it's safe for this kid to go live with mom or dad."

It is worth noting that no therapists or SA counselors stated that they should be, or wanted to be, more involved in the decision regarding whether a child should be reunified. In fact, several therapists and SA counselors explicitly acknowledged that they were not in a position to make this decision because they did not have enough information. All of the therapists and SA counselors in the sample provided individual therapy to the child or the parent and, as several noted in the interviews, they therefore could not assess how the child and parent interacted with one another and if the parent was displaying safe behaviors around the child.

Chapter Five: Discussion

Guided by ecological systems and relational coordination theories, this dissertation employed a mixed methods approach to explore how caseworker communication and joint decision-making with GALs, therapists, and SA counselors affects the safe and timely reunification of children placed in foster care. In the quantitative phase, administrative data was examined to test if the frequency of communication and the degree of joint decision-making had a statistical relationship with safe and timely reunification. In the qualitative phase, interviews were conducted with a sample of caseworkers, GALs, therapists, and SA counselors to identify the processes underlying these relationships. In this final chapter, the results from each phase are integrated. Points of convergence and divergence are identified, and potential explanations for the differences are provided. In addition, when possible, the qualitative findings are used to explain significant and non-significant quantitative findings. The overall findings are then compared with those of prior studies, and their contributions to the knowledge base related to IPC in the CW system are highlighted. Finally, the limitations of the findings and their implications for practice, policy, and future research are presented.

Integration of Quantitative and Qualitative Findings

How does caseworker communication and joint decision-making with GALs, therapists, and SA counselors affect timely reunification?

Effects of interprofessional communication on timely reunification. The quantitative findings suggest the likelihood of a child being reunified in a timely manner grows as the frequency of communication between their caseworker and GAL increases. However, the frequency of communication between caseworkers and therapists and SA counselors was not found to be statistically related to timely reunification. These quantitative findings are partially congruent with the qualitative findings which suggest caseworker communication with GALs and caseworker communication with therapists and SA counselors influences whether a child returns home in a timely manner. The qualitative findings indicate caseworker communication with these professionals facilitates timely reunification by allowing the caseworker and GAL to make a timely decision regarding reunification, ensuring that professionals are on the same page regarding their goals and expectations, and helping to identify the issues that need to be addressed in order for reunification to occur.

While the qualitative findings suggest caseworker communication with therapists and SA counselors should have been related to timely reunification in the quantitative phase, they also offer some insight into why no relationship was found. Participants in the qualitative phase stated that it was ultimately the caseworker and GAL who made the decision to reunify. Therefore, even if the caseworker receives the information they need from the therapist and SA counselor to be able to assess if a child can return home, the decision may be delayed if the caseworker and GAL are not communicating, or if the caseworker and GAL are not in agreement on whether to reunify. Some therapists and SA counselors in the qualitative sample also described how caseworkers and GALs

sometimes returned children home without speaking with them, which implies that caseworker communication with therapists and SA counselors may not be a determinant of timely reunification. In addition, some therapists and SA counselors in the qualitative sample described how their communication with caseworkers may delay reunification in situations where the caseworker is made aware of safety concerns with a family. Perhaps the advantages and disadvantages of caseworker communication with therapists and SA counselors cancel each other, resulting in a null effect.

It is also important to acknowledge the measurement limitations that could explain why caseworker communication with therapists and SA counselors was not associated with timely reunification in the quantitative phase. One aspect of the administrative dataset which presented a methodological challenge in this study is that it did not indicate which therapists or SA counselors involved on a case were working with which family member (e.g., a parent versus a child, or one child versus another child in a family). Consequently, caseworker communication with therapists and SA counselors was measured at the family level. More importantly, it was not possible to directly connect caseworker communication and joint decision-making with a child's therapist or SA counselor to that child's outcome.

Effects of joint decision-making on timely reunification. The degree of joint decision making between caseworkers and GALs was found to be related to timely reunification in the quantitative phase: Children were more likely to be reunified in a timely manner when their GAL attended no or all TDMs, rather than only some TDMs. In other words, timely reunification was less likely when the GAL attended only some of

the TDMs held for a child. The degree of joint decision-making between caseworkers and therapists and SA counselors was not linked to timely reunification in the quantitative phase.

The qualitative findings suggest that joint decision-making can facilitate timely reunification because better decisions are made regarding what services to provide a family to resolve the issues preventing a child from returning home. Contrary to the quantitative findings, the qualitative findings indicate that involving therapists and SA counselors in making these types of decisions is particularly important as they may be more qualified than other professionals to identify the appropriate type and level of treatment for a family. The incongruence in the findings from each phase may be explained by the qualitative finding that caseworkers do not always follow the recommendations of therapists and SA counselors. This suggests that even if a therapist or SA counselor attended a TDM, a joint decision may not have been made. The measurement problems described in the prior section regarding caseworker collaboration with therapists and SA counselors (i.e., the inability to identify the therapist or SA counselor working with the child whose outcome was examined) may also explain why joint decision-making between these professionals was not found to be associated with timely reunification in the quantitative phase.

The qualitative findings do not provide insight into why timely reunification may be more likely when a GAL attends no TDMs or all TDMs—rather than only some of the TDMs—that are held for a case. Perhaps when a GAL does not attend any TDMs, they are less involved on the case and are willing to "go along with" with the caseworker

when they want to proceed with reunification. It could also be that GALs in the sample did not attend any TDMs on cases that were progressing well and the child was on track to reunify in a timely manner. Timely reunification may be more likely when a GAL attends all TDMs because they are kept up to date on how a case is progressing, which, as suggested by the qualitative findings, helps them be prepared to make the decision to reunify when the time comes. Perhaps when a GAL only intermittently attends TDMs, they delay the decision-making process because they need to get caught up on the case and conduct their independent investigation prior to agreeing to return a child home.

How does caseworker communication and joint decision-making with GALs, therapists, and SA counselors affect safe reunification?

Effects of interprofessional communication on safe reunification. Neither caseworker communication with GALs, nor caseworker communication with therapists and SA counselors, was found to be linked to safe reunification in the quantitative phase. This null finding was unexpected given the qualitative finding that caseworker communication with these professionals leads to more informed decisions being made regarding whether it is safe to return a child home. Participants in the qualitative phase indicated it was particularly important that caseworkers communicate with the therapists and SA counselors prior to returning a child home in order to assess whether the parent has made sufficient progress in treatment and is showing safe and stable behaviors. At the same time, participants stated that caseworkers and GALs have the final say in whether a child is reunified, and therapists and SA counselors discussed cases where caseworkers returned children home without consulting with them. The aforementioned measurement

problems related to capturing caseworker communication with therapists and SA counselors may also explain why it was not associated with safe reunification in the quantitative phase. However, these measurement limitations do not apply to caseworker communication with GALs. One reason why caseworker communication with GALs may not have been related to safe reunification in the quantitative phase is that caseworkers and GALs are required to decide together whether to reunify a child. This implies that children would not be reunified, and therefore could not experience post-reunification maltreatment, if the caseworker and GAL were not communicating.

Effects of joint decision-making and safe reunification. In the quantitative phase, the likelihood of a child experiencing post-reunification maltreatment was not found to be related to joint decision-making between caseworkers and GALs, or joint decision-making between caseworkers and therapists and SA counselors. The qualitative findings help explain these null findings. According to participants in the qualitative sample, therapists and SA counselors may provide information to help the caseworker and GAL determine whether it is safe to reunify a child, but they are not directly involved in making the decision. The qualitative finding that caseworkers and GALs must be in agreement to reunify a child helps explain why joint decision-making between these professionals did not have a relationship with safe reunification in the quantitative phase. As noted previously, this requirement implies that a child could not be returned home, and therefore could not experience post-reunification maltreatment, if the caseworker and GAL did not make the decision to reunify together.

Comparison with Prior Research Findings and Study Contributions

Findings related to timely reunification. It is not possible to compare the present study's quantitative findings regarding how caseworker communication and joint decision-making with GALs, therapists, and SA counselors relate to timely reunification with those from prior studies because this is the first study to test for a statistical relationship. Only one qualitative study was located in the peer-reviewed literature which explored how IPC relates to permanency-related outcomes in the CW system. Similar to the findings in the present study, Green and colleagues (2008) found that interprofessional communication can help children achieve permanency more quickly by enhancing case monitoring—which includes the identification of issues needing to be addressed—and helping to keep professionals on the same page. While the participants in that study did not describe how interprofessional communication facilitates timely decisions about reunification, they did indicate that, as in the present study, it helps keep caseworkers informed as to the extent of progress a child or parent is making in treatment. Green and colleagues also found that joint decision-making facilitates timely permanency because it helps families receive services matched to their strengths and needs, which is similar to the finding in the present study that joint decision-making can lead to better decisions being made about what services to provide a family. Notably, Green and colleagues did not find that joint decision-making creates a system of checks and balances which can impact how quickly a child achieves permanency. The absence of this theme in their study findings may be explained by the fact that GALs were not

included in their sample, and this theme only pertained to joint decision-making between caseworkers and GALs in the present study.

As in the present study, other qualitative studies exploring the benefits IPC in the CW system in general have found that interprofessional communication can help professionals identify issues that need to be addressed (Carnochan et al., 2007), keep professionals on the same page as to their expectations for families (Haight et al., 2014), and keep caseworkers abreast of a child or parent's progress in treatment (Carnochan et al., 2007). In addition, as in the present study, other CW scholars have found that joint decision-making in the CW system can enhance the quality of decisions made because multiple perspectives are presented, and decisions are informed by the expertise and experience of a diverse group of professionals (Crea, 2010; Usher et al., 2010).

Findings related to safe reunification. Situating the present studying's findings regarding safe reunification in the extant literature is challenging since no quantitative or qualitative studies were located in the literature which directly explored how caseworker communication and joint decision-making may affect this outcome. As noted above, prior research findings indicate interprofessional communication in the CW system can help ensure that caseworkers are informed as to a child or parent's progress in treatment (Carnochan et al., 2008), which participants in the present study suggested helps caseworkers makes an informed decision regarding whether it is safe to return a child home. As in the present study, prior research findings also indicate that joint decision-making between the professionals working with a CW-involved family can lead to better quality decisions being made (Crea, 2010; Usher et al., 2010). However, no prior studies

have quantitively tested if interprofessional communication and joint decision-making has a direct relationship with safe reunification.

Study Contributions. The present study's findings add to the limited knowledge base regarding how interprofessional communication and joint decision-making affect CW outcomes. This is the first study to directly explore how these components of IPC relate to safe and timely reunification. The finding that caseworker communication and joint decision-making with GALs is statistically associated with timely reunification is particularly noteworthy. In addition to advancing our knowledge of the factors that impact timely reunification, this finding provides quantitative evidence that IPC is associated with a key CW outcome, something which is lacking in the extant literature.

While caseworker collaboration with therapists and SA counselors was not found to be statistically related to safe or timely reunification, this should not be viewed as evidence that a relationship does not exist. The measurement problems related to capturing collaboration between these professionals may have been a factor. In addition, statistical tests of significance cannot prove that a null hypothesis is true (i.e., that there is no relationship)—they can only provide information that indicates whether the null hypothesis should be retained or rejected. Indeed, the qualitative findings indicate several benefits of caseworker communication and joint decision-making with therapists and SA counselors (e.g., timely decision-making, identification of barriers to reunification, being on the same page, and more informed decision-making). Overall, the present study's findings have numerous implications for professionals, agency administrators, policymakers, and researchers.

Implications

Implications for professionals. The findings indicate that caseworkers and GALs who are working with a foster child should communicate with one another as it may help reunify the child in a timelier manner. These professionals typically have busy schedules which may make it challenging for them to maintain regular communication. However, doing say may help them resolve cases sooner and reduce their caseload. Given their busy schedules, it may behoove them to establish a schedule for regular communication where they set times well in advance to communicate. This may help ensure that GALs are kept abreast of how cases are progressing so that they can make a decision to reunify a child when the time comes and not stall the process. The qualitative findings provide insight into what caseworkers and GALs should communicate about in order to facilitate timely communication: Caseworkers should provide GALs with information related to the child and parent's progress in treatment (e.g., treatment progress reports, drug screens, and attendance records), and give advance notice when they will be recommending that a child returns home; Caseworkers and GALs should discuss their goals and expectations to ensure they are on the same page; They should also share information regarding any barriers to reunification which they are aware of so that they can be addressed.

The findings also suggest that GALs should make a concerted effort to fully participate in the decision-making process by attending all TDMs held for a child as it may increase the likelihood of the child returning home in a timely manner. Caseworkers may be able to facilitate GAL attendance by scheduling the TDM for a time when the

GAL can attend, or by providing the GAL with notice of when the TDM will be held well ahead of time so that the GAL can plan their schedule accordingly. If a GAL is unable to attend a TDM in person, it may be beneficial to arrange for them participate via telephone or video conference.

The finding that joint decision-making between caseworkers and GALs creates a system of checks and balances which can facilitate or delay timely reunification has several implications for how these professionals work together. It implies that when they disagree over whether to reunify a child, they should try to resolve their difference of opinion rather than relying on the court to do so, which can take a long time. The way in which participants in the qualitative phase described how another professional convinced them to proceed with reunification despite their initial objections suggest it is important for professionals to keep an open-mind and be willing to listen to another professional's perspective and reasoning. In addition, they may be more likely to resolve disagreements that arise between them when they explore the reasons why they disagree, identify things they can agree on, remain respectful, do not take it personally when they disagree, and focus on what is best for the child and what the family needs (Phillips & Walsh, 2019).

The qualitative findings indicate that caseworkers should be communicating with the therapists and SA counselors working with a family, as it can help facilitate timely decision-making, identify barriers to reunification, and ensure that they are on the same page regarding goals and expectations. Caseworkers should communicate to therapists and SA counselors the issues that they want the therapist or SA counselor to address in treatment, and therapists and SA counselors should inform caseworkers about their

client's extent of progress in treatment, drug screen results, attendance, and any safety concerns that arise. The qualitative findings also suggest that caseworkers should involve therapists and SA counselors when making decisions about the type or level of treatment to provide. Moreover, some participants believed that caseworkers need to trust and rely more on the treatment recommendations provided by therapists and SA counselors because of their expertise and experience working with a child or parent.

Despite the fact that caseworker communication and joint decision-making with GALs, therapists, and SA counselors were not found to be associated with safe reunification in the quantitative phase, participants in the qualitative phase believed that these collaborative activities results in better decisions being made regarding whether it was safe to reunify a child. The findings imply that, prior to returning a child home, caseworkers should be communicating with therapists and SA counselor to gather information regarding the parent's ability to maintain safe and stable behaviors. The findings also indicate that caseworkers and GALs should decide together when to reunify a child because the blending of their perspectives, expertise, and experience will lead them to make a more informed decision. It should be acknowledged that this finding may not have strong implications for caseworkers and GALs working in the county where this study was conducted as they are already required to make joint decisions regarding reunification.

Implications for agency administrators. Administrators in the agencies that employ or oversee caseworkers, GALs, therapists and SA counselors also have a role to play in facilitating and promoting interprofessional communication and joint decision-

making between them. It should be noted that each CW system may have its own unique set of factors that are impeding or facilitating IPC. Therefore, agency administrators should talk with the professionals working on the frontlines of their CW system about their experiences with IPC, including what has helped and what has hindered their ability to collaborate. Agency administrator should use the information they collect to guide their selection of interventions to facilitate IPC in their CW system.

However, there are some general ways in which agency administrators may be able to support interprofessional communication and joint decision-making. They can implement policies that require regular interprofessional communication (e.g., biweekly or monthly) and specify what information should be shared and by when. For example, CPS administrators can implement a policy that requires caseworkers to consult with the therapist or SA counselor working with a family prior to returning a child home so that they can adequately assess if it is safe to do so, and to keep the therapist or SA counselor informed as to when the child will be returned home. Administrators can also implement policies that require and provide guidance for joint decision-making (e.g., what decisions should be made jointly and which professionals should be involved in making decisions about services or reunification). Relatedly, administrators from CPS, mental health treatment agencies, substance abuse treatment agencies, and agencies that oversee GALs can develop memorandum of understanding that delineate clear expectations for interprofessional communication and joint decision-making to ensure that they are on the same page. In order to motivate professionals to comply with these policies and

expectations, administrators could include measures of IPC in their performance evaluations for their employees.

Agency administrators can also facilitate interprofessional and joint decision-making by holding regularly occurring TDMs on cases. In doing so, it is important that they promote the attendance of all professionals working with the family. This may be accomplished by scheduling the meetings well in advance so that professionals can plan accordingly, or by arranging for professionals to participate by phone or video conference if necessary.

The findings suggest that agency administrators should develop processes and structures that help caseworkers, GALs, therapists, and SA counselors resolve disagreements that arise when they make decisions together regarding what service to provide a family or whether a child should be reunified. Some participants in the qualitative sample stated that it was helpful when their supervisor or an agency administrator became involved when this occurred, though they did not elaborate on why this was the case. Perhaps it is useful to have a third-party act as a mediator or have someone with more experience and expertise help with problem-solving. Agency administrators may be able to facilitate conflict resolution by forming an interagency committee with representatives from CPS, mental health treatment agencies, substance abuse treatment agencies which reviews cases and provides a recommendation when the frontline professionals are unable to resolve their differences of opinion. Providing trainings to caseworkers, GALs, therapists, and SA counselors on conflict resolution

skills could also help by equipping them with the knowledge and skills to resolve disagreements amongst themselves (Begley, 2009; Hartman & Crume, 2014).

Agency administrators may want to offer other trainings that have the potential to improve interprofessional communication and joint decision-making. Findings from prior studies indicate that professionals working in the CW system may be more motivated to collaborate with one another when they have been trained on the benefits of IPC (Carnochan et al., 2007; Lalayants, 2013; Phillips, 2016). In addition, cross-training on roles and responsibilities may promote interprofessional communication by helping professionals understand how other professionals rely on information they provide to do their job (Altshuler, 2003; Carnochan et al., 2007; Gittell, 2011).

Implications for policymakers. CW policymakers have primarily focused on improving collaboration in the CW system by promoting interagency collaboration through large-scale initiatives like Systems of Care (DHHS, 2010) and the Regional Partnership Grants (DHHS, 2013b). As discussed in chapter one of this dissertation, there are mixed findings regarding whether interagency collaboration leads to better outcomes for CW-involved children and families. The findings from the present study—combined with those of prior studies exploring the benefits of IPC—imply that CW policymakers should begin paying greater attention to studying and promoting IPC in the CW system. Specifically, funding should be provided to help agency administrators implement structures and processes that can facilitate IPC. Federal and state dollars should also be allocated to fund state- or national-level studies of IPC in the CW system. The following section outlines some of the studies which are needed at this time to advance our

knowledge of how IPC affects CW-involved families, and to identify interventions that can promote IPC as a means of achieving better outcomes for these families.

Implications for researchers. CW scholars should conduct a quantitative study that tests the conceptual models provided in figures 4 and 5 (i.e., the processes by which interprofessional communication and joint decision-making affect safe and timely reunification). While interprofessional communication and joint decision-making was not found to be related to safe reunification in the present study, this may be due to measurement limitations which future studies should try to overcome. Indeed, perhaps the largest limitation of the present study is that caseworker communication and joint decision-making with the therapist or SA counselor working with a specific child or parent could not be connected to that child's outcome. Future quantitative studies should seek to overcome this methodological challenge to evaluate if the results differ from those obtained in the present study. If other administrative datasets available do not link each professional to the client they serve, researchers could obtain permission to contact the professionals directly to ask who their client is, or researchers can work with agency staff to make the necessary connections.

Additional research is also needed to examine why children may be less likely to achieve timely reunification when their GAL attends some TDMs rather than none. Understanding the reasoning behind this finding may provide insight into how to overcome this issue. Relatedly, studies should explore the factors that can facilitate or impede the attendance of professionals at TDMs to help identify ways to ensure that they can fully participate in making case decisions.

CW scholars should test if other components of IPC that were described in chapter two (e.g., identifying shared goals, mutual respect and trust, and understanding of roles and responsibilities) are related to safe and timely reunification. Such studies may need to use self-report measures to capture these qualitative aspects of IPC as they may not be reflected in administrative datasets. Self-report is a more feasible method for capturing IPC in the CW system compared to observational methods. It would be challenging to observe multiple professionals who, throughout the course of the day, engage in numerous activities related to several different cases. CW researchers interested in exploring multiple components of IPC—and the quality of IPC—should consider using the Aston Team Performance Inventory which has good validity and reliability (ATPI; Callea, Urbini, Benevene, Cortini, Di Lemma, & West, 2014). The ATPI has been used in national-level studies in England to measure how IPC relates to client well-being on multidisciplinary health care teams (Borrill et al., 2001) and multidisciplinary mental health care teams (West et al., 2012). CW researchers may be reluctant to use the ATPI given its length (27 items), which may result in a low response rate when administered to professionals working in the CW system because of their large workloads and busy schedules. A shorter measure that may be of interest to CW researchers is the 7-item Relational Coordination Survey, which also has good validity and reliability (Gittell, 2011). It has been used in numerous studies to test how IPC relates to patient well-being in health care settings (e.g., Bond & Gittell, 2010; Gittell et al., 2000; Gittell et al., 2008; Havens et al., 2010).

CW scholars should also investigate how IPC affects other indicators of child and family well-being. Given that the findings from the present study and prior studies suggest better IPC can enhance case planning and case services, it is likely that it can help achieve other positive outcomes for CW-involved families, such as placement stability, improved behavioral health, and greater satisfaction with services. For example, the findings from the present study suggest that when professionals collaborate, they have a more complete understanding of the issues that need to be resolved, and they provide more appropriate services to address these issues. If the identified issue is a child's behavior problems in the foster home, IPC may result in the child and foster parent receiving the services and support they need to mitigate these behaviors, which may prevent a placement disruption. CW scholars should also explore if IPC can help prevent adverse outcomes for children living at home, such as repeat maltreatment or placement in foster care.

Future research should also address the lack of family voice in the current study. The current study only examined the perspective of *professionals* on how IPC affects safe and timely reunification. While caseworkers, GALs, therapists, and counselors are well-positioned to describe how IPC influences their ability to help families achieve safe and timely reunification, they cannot speak directly for the families they serve. Future studies should explore the perspective of families on how the frequency or quality of collaboration between the professionals they work with impacts their ability to be successful (i.e., to achieve safe and timely reunification) and their satisfaction with the services they receive.

The current study did not explore moderating factors which may influence whether caseworker communication and joint decision-making are associated with safe and timely reunification. Perhaps it is more important that professionals engage in these collaborative practices on high risk cases where a family has more complex needs that must be resolved in order for the child to return home in a timely manner; interprofessional communication and joint decision-making may be less essential on low risk cases where the family's needs may be more easily resolved. It is also possible that the primary method of contact (e.g., face-to-face, telephone, or email) used by professionals on a case may affects whether interprofessional communication is related to safe or timely reunification. Several participants in the qualitative phase indicated that professionals communicate more efficiently and effectively when they meet in person. Future research should explore whether risk level, method of contact, or other factors (e.g., parental substance abuse, parental mental health, or child's age) have a moderating effect on how IPC relates to safe and timely reunification.

Finally, the findings indicate that scholars should develop and test interventions that promote caseworker communication and joint decision-making with GALs to facilitate timely reunification. Overall, the extant IPC literature lacks rigorous research testing whether structures or processes designed to enhance IPC are successful. The authors of a recent Cochrane Systematic Review of studies testing interventions to improve IPC in healthcare—an industry leading the way in IPC—found that the studies reviewed neglected to include reliable or valid instruments to measure whether the interventions were associated with changes in the frequency or quality of IPC (Reeves,

Pelone, Harrison, Goldman, & Zwarenstein, 2017). As described earlier, interventions which researchers may want to test in the CW system include the implementation of policies that require and guide interprofessional communication and joint decision-making, TDMs, processes for conflict-resolutions, and trainings. In addition, scholars should consider using the design team model approach where they would work closely with frontline professionals and agency administrators in a particular CW system to design and test interventions that meet the unique needs of that system (Caringi, Strolin-Goltzman, Lawson, McCarthy, Briar-Lawson,& Claiborne, 2008; Lawson, Anderson-Butcher, Peterson, & Barkdull, 2003).

Limitations

Limitations of the quantitative findings. One limitation of the quantitative findings is that they are affected by the quality of the administrative data used to produce them. More specifically, the findings are based on the assumption that caseworkers accurately and completely documented their case activities. Caseworkers may have communicated more or less frequently with GALs, therapists, and SA counselors than is reflected in the data; Likewise, the data may not accurately capture when a GAL, therapist or SA counselor was invited to or attended a TDM. As discussed in chapter three, alternative means of obtaining data, such as self-report or observational studies, have inherent biases which would influence the findings, and a state auditor of CW cases stated that the county examined was one of the top three in state in terms of its data quality.

Several measurement limitations should also be acknowledged. As previously noted, it was not possible to directly connect caseworker communication and joint decision-making with a child's therapist or SA counselor to that child's outcome. This limitation may be slightly mitigated by the fact that for half of the children in the sample (49.6%), there was only one therapist or SA counselor involved with the family. Notably, 29.9% had two therapists or SA counselors, and 20.4% had more than two therapists or SA counselors involved with their family.

The way in which joint decision-making was measured also has its limitations. Some participants in the qualitative phase stated that joint decisions are sometimes made outside of a TDM. Therefore, measuring joint decision-making by TDM attendance may not have captured the full extent of joint decision-making that occurred on a case. However, participants in the qualitative phase indicated that TDMs were useful because they brought professionals together to make case decisions. In addition, a multi-state study of TDMs found that they are linked to timely reunification and reduced rates of repeat maltreatment (Usher et al., 2010).

Another limitation of the findings is that the quality of communication and joint decision-making was not examined in this study. According to IPC scholars, communication should occur in a timely manner (Gittell, 2011), the information shared should be accurate (Gittell, 2011; Temkin-Greener et al., 2004), and relevant information should be shared with professionals who need it to fulfill their job responsibilities (Gittell, 2011; Schroder et al., 2011). In regard to joint decision-making, the quality of the process, and of the decision made, may be negatively affected when one professional

monopolizes the conversation (West, 2012); professionals are reluctant to present their recommendations because of power imbalances due to differences in positions, professional status, or personal identity (McGrath, 1984; West, 2012); or professionals engage in groupthink—a tendency for groups to be focused on avoiding conflict and reaching consensus and unwilling to discuss controversial issues or advocate for an unpopular viewpoint (West, 2012). The PI attempted to acquire caseworkers' contact notes and notes from TDM meetings to see if they could be used to assess the quality of communication and joint decision-making, but the County DHS was unable to provide these documents because they may contain confidential information regarding clients. Overall, the purpose of this study was to examine if the occurrence of interprofessional communication and joint decision-making was linked to safe and timely reunification; it did not intend to measure the quality of these processes.

Finally, the generalizability of the quantitative findings is limited. The population of interest in the quantitative phase was children placed in foster or kinship care through a court order in an urban county in a mountain region state. The quantitative findings may not be generalizable to children placed in residential settings, children placed through a voluntary placement agreement, or children outside of the county of interest. There are several characteristics of the county and state examined in the current study which should be considered when evaluating the generalizability of the findings. It is an urban county with a median household income higher than the national average ($69,553 versus $57,652; U.S. Census, 2017a). IPC may be less likely to be related to timely reunification in rural or poorer counties, where a lack of resources and services is a large barrier to

reunification. In addition, GALs in the county (and the state as a whole) must be attorneys, which is not a requirement in all states. Perhaps caseworker collaboration with non-attorney GALs—who may play a less active role in court proceedings than attorney GALs—is less likely to be associated with timely reunification. It should also be noted that the percentage of children who achieve timely reunification in the state where the study was conducted is higher than the national median (79.9% versus 67.8%). This may indicate that the state has practices in place to facilitate timely reunification or that the state has effectively addressed many of the barriers to timely reunification. Other states may have issues preventing timely reunification which cannot be overcome or compensated for by IPC (e.g., lack of treatment services, high rates of parental substance abuse, or high rates of poverty). In general, future quantitative studies should be conducted with a more geographically diverse population to obtain more generalizable findings that can inform the development of practice standards for IPC across CW systems.

Limitations of the qualitative findings. The qualitative findings may be biased by the fact that participants in the qualitative phase self-selected into the study, rather than being chosen at random. It is possible that professionals who wanted to participate may have had different experiences with IPC compared to the professionals who chose not to participate. Professionals who participated may have been motivated to do so because they had more negative experiences with IPC or because they believe that IPC is important. Perhaps professionals who did not participate do not believe that IPC is an important practice in the CW system. If they did participate, there may have been more

qualitative findings that suggest caseworker communication and joint decision-making with other professionals is not related to safe and timely reunification. It should be noted, however, that participants described both positive and negative experiences of IPC, and they described ways in which it can and cannot facilitate safe and timely reunification.

The trustworthiness of the qualitative findings may be limited because only half of the participants (52.4%) completed the survey used for member checking. Participants who did not complete the survey may not have agreed with the findings. Moreover, they may have intentionally not provided their feedback because they wanted to avoid conflict or were worried about offending the PI. However, the professionals who participated in this study have busy schedules which likely contributed to their lack of response. In addition, by and large, participants who completed the survey agreed with the findings.

Finally, the transferability of the qualitative findings is limited since all of the participants worked in one urban county in a mountain region state. Caseworkers, GALs, therapists and SA counselors who work in the county of interest may have a different perspective on how interprofessional communication and joint decision-making affect safe and timely reunification than those who work in another county or state. Professionals who serve CW-involved families in other counties or states may see other, larger barriers to safe and timely reunification which cannot be overcome by IPC. For instance, professionals working with CW-involved families in rural counties may perceive that a scarcity of resources and services to support families is the main factor limiting their ability to help families achieve these outcomes. Relatedly, the lack of treatment services in rural communities may limit the opportunity for IPC and, therefore,

professionals in these communities may not consider it an important component of their practice. Additional qualitative studies exploring the process by which IPC affects CW-involved families should be conducted with a sample of professionals from several different CW systems in order to compare their experiences and perspectives.

Conclusion

Caseworkers, GALs, therapists and SA counselors each play a role in helping CW-involved families safely reunify in a timely manner. The present study is the first to directly explore how collaboration between these professionals impacts the likelihood of a child achieving safe or timely reunification. Overall, the findings indicate that caseworker communication and joint decision-making with GALs, therapists, and SA counselors can enhance case planning and case services in several ways. Perhaps the most noteworthy finding is that caseworker communication and joint decision-making with GALs was associated with the likelihood of a child achieving reunification in a timely manner. This finding is particularly illuminating given that prior studies have not quantitatively tested if IPC is related to a key CW outcome. In general, the findings from this study imply that professionals, agency administrators, and policymakers should devote time and resources to facilitate IPC in the CW system. This study's finding will hopefully motivate CW scholars to conduct additional studies that examine how IPC affects CW-involved family, and lead policymakers and foundations to provide funding opportunities for such research.

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Appendix A

Recruitment Email for Interview Participants

Dear [Caseworkers/Mental Health Therapists/Substance Abuse Counselors/Guardians ad Litem],

My name is Jon Phillips and I am a doctoral student at the Graduate School of Social Work at the University of Denver. I am conducting a study that looks at collaboration between the different professionals working with families involved in the child welfare system. I am interested in learning from you how you think child welfare professionals should collaborate, and if you think collaboration between child welfare professionals has an impact on the families you serve. I am looking to conduct phone interviews with [Caseworkers/Mental Health Therapists/Substance Abuse Counselors/Guardians ad Litem] who meet the following criteria:

1. **Currently work** with children, parents, or families involved with the child welfare system in **[name removed for confidentiality] County**.
2. Have worked with families involved with the child welfare system in **[name removed for confidentiality] County** for at least **one year.**
3. Have worked on **at least two cases** where a child was **placed in foster or kinship care** by the **[name removed for confidentiality]** County Department of Human Services.

As a thank you for your time, I will be providing all participants with a **$20 Amazon.com gift card.**

If you meet these criteria and are willing to participate in a 45 to 60 minute phone interview, please go to https://udenver.qualtrics.com/jfe/form/SV_cwKFIhjcUYuLTF3 to learn more about the project, answer a few eligibility questions, and provide your contact information so a researcher can contact you to schedule an interview. You may also contact me at jon.phillips@du.edu or 303-868-7299.

Thank you,

Jon Phillips

The Institutional Review Board at the University of Denver has approved this study. The principal investigator is Jon Phillips and the faculty sponsor is Dr. Jennifer Bellamy. The IRB project number is 1216873.

Recruitment Flier/Social Media post for Interview Participants

Study on Interprofessional Collaboration in the Child Welfare System

($20 Amazon.com gift card as a thank you for participation)

HOW DO YOU THINK PROFESSIONALS WORKING IN THE CHILD WELFARE SHOULD COLLABORATE?

DO YOU THINK COLLABORATION BETWEEN CHILD WELFARE PROFESSIONALS HAS AN IMPACT ON THE FAMILIES THEY SERVE?

My name is Jon Phillips and I am a doctoral student at the Graduate School of Social Work at the University of Denver. I am conducting a study that seeks to answer these questions. I am interested in learning from you how you think child welfare professionals should collaborate, and if you think collaboration between child welfare professionals has an impact on the families you serve. I am looking to conduct phone interviews with substance abuse counselors who the following criteria:

1. **Currently work** with children, parents, or families involved with the child welfare system in **[name removed for confidentiality] County**.

4. Have worked with families involved with the child welfare system in **[name removed for confidentiality] County** for at least **one year.**

5. Have worked on **at least two cases** where a child was **placed in foster or kinship care** by the **[name removed for confidentiality]** County Department of Human Services.

As a thank you for your time, I will be providing all participants with a **$20 Amazon.com gift card.**

If you meet these criteria and are willing to participate in a 45 to 60 minute phone interview, please contact me at jon.phillips@du.edu or 303-868-7299.

Thank you,

Jon Phillips

Appendix B

Consent Form for Interview Participants

Title: A Mixed-Methods Study of Interprofessional Collaboration in the Child Welfare System
Researcher(s): Jon Phillips, LSW, University of Denver
Faculty sponsor/Advisor: Jennifer Bellamy, PhD, University of Denver

Description: You are being asked to participate in this study because you currently work with child welfare-involved families in [name removed to protect confidentiality] County. By doing this research, we hope to learn about your perspective on interprofessional collaboration in the child welfare system, including what it looks like and how it may impact families involved in the system. We will be interviewing 24 professionals who currently work in the [name removed to protect confidentiality] County child welfare system.

Procedures: If you agree to participate in this research study, you will be asked to complete a brief survey that asks questions about your work experience to ensure you meet the following eligibility criteria for participation:

1) You currently work with families involved in the child welfare system in [name removed to protect confidentiality] County as a caseworker, substance abuse counselor, mental health therapist, or guardian ad litem.
2) You have worked with child welfare-involved families in [name removed to protect confidentiality] County for at least one year
3) You have worked with at least two child welfare-involved families in [name removed to protect confidentiality] County where the child was placed in foster or kinship care.

If you meet these criteria, you will then be asked a few questions about your demographic characteristics. The survey will take approximately 2-3 minutes to complete.

After you complete the survey, you will be contacted by the lead researcher of this study, Jon Phillips, if you are selected to participate in the telephone interviews. The interviews will last approximately 45 to 60 minutes. The questions will ask about how you collaborate with other professionals in the child welfare system, and how collaboration between you and other professionals may impact family reunification. In addition, you will be asked to review the researcher's findings after your transcript is analyzed and provide feedback to ensure the researcher interpreted your statements correctly. This may be done over email or by telephone, whichever is preferable to you.

Voluntary participation: Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any questions for any reason without penalty. If you choose to not answer a question or to end the interview before it is completed, your

employer will not be informed of this decision. Your employer will also not know if you participated in this interview or what you say during the interview.

Compensation: You will receive a $20 Amazon.com electronic gift card as a thank you for your participation. The gift card will be sent upon completion of the initial interview (even if you decide to not answer some questions or choose to stop the interview). No compensation will be provided for reviewing and providing feedback on the researcher's findings.

Audio recording: With your consent, the interview will be audio recorded and then transcribed by an online transcription service or research assistant. Having a recording of the interview will assist the researchers in making sure they accurately represent your perspective. The audio recordings and transcription files will be named with an ID created by the research team (i.e., not your name). Only members of the research team will listen to and have access to the audio recordings. If you do not wish to have your interview audio recorded, you may still participate in the interview and the interviewer will take notes.

Potential risks and/or discomforts may include feeling bad by being asked to reflect on something you don't like about yourself as a professional or something you don't like about working collaboratively. It is also possible you would feel discomfort by being asked a question that makes you think about a past or present case involving a child who experienced maltreatment. Finally, your professional reputation may be negatively impacted if you disclose something you did that was inappropriate and there is a breach of confidentiality (i.e., an authorized individual accesses the data collected and links it to you).

Questions: If you have any questions about this project or your participation, please feel free to ask questions now or contact Jon Phillips at 303-868-7299 or jon.phillips@du.edu at any time. You may also contact the faculty sponsor of this study, Dr. Jennifer Bellamy, at 303-871-2392 or Jennifer.Bellamy@du.edu. If you have any questions or concerns about your research participation or rights as a participant, you may contact the DU Human Research Protections Program by emailing IRBAdmin@du.edu or calling 303-871-2121 to speak to someone other than the researchers.

1. Do you agree to participate in the study described above?
    a. Yes—I agree to participate in this study
    b. No—I do not wish to participate in this study

2. Do you agree to having your interview audio-recorded to help the researchers accurately represent your perspective? (Only members of the research team will listen to and have access to the recordings)
    a. Yes—My interview may be audio-recorded
    b. No—My interview may not be audio-recorded.

Appendix C

Questionnaire for Interview Participants

In order to save time during the interview, I would like to collect a little background information about you now.

1. Which of the following best describes your current position?
    a. Caseworker
    b. Guardian ad litem
    c. Mental health therapist
    d. Substance abuse counselor
    e. Other

2. How long have you been in this position?
    a. Years:
    b. Months:

3. Approximately how many families have you worked with where a child was placed in foster or kinship care by the [name removed to protect confidentiality] County Department of Human Services? _____

4. How would you describe your gender?
    a. Female
    b. Male
    c. Non-binary/gender non-conforming
    d. Transgender
    e. Prefer to self-describe: _____
    f. Prefer not to say

5. How would you describe your race/ethnicity? (please select all that apply)
    a. African American or Black
    b. American Indian or Alaskan Native
    c. Asian
    d. Hispanic, Latino, or Latina
    e. White
    f. Other: _____
    g. Prefer not to say

6. What is your *highest* level of education?
    a. Less than high school
    b. High school graduate/GED
    c. Some college/post-secondary school/Technical school
    d. 4-year college graduate
    e. Graduate degree

f. Law degree
g. PhD
h. Other: _____
i. Prefer not to say

7. In what field is your highest degree?
    a. Education
    b. Psychology
    c. Sociology
    d. Criminal justice
    e. Social work
    f. Law
    g. Other: _____
    h. Prefer not to say

8. Please provide the following information so that we may contact you to schedule a time for the interview if you are selected to participate
    a. First name:
    b. Phone number:
    c. Email address:

Appendix D

Semi-Structured Interview Protocol for Caseworkers

Introduction:
Thank you for taking the time to participate in this interview. As you know, this interview is being conducted for a study looking at what collaboration looks like between professionals who work in the child welfare system, and how it may impact families involved in the system. We are also interested in learning how collaboration between professionals could be improved.

Before we get started, can you tell me if you had a chance to look over the consent form? [If they have not reviewed it, read it to them].

Do you have any questions or concerns about the consent form or anything else?

I also have to explicitly ask, do you agree to participate in this interview?

Okay, great, it looks like we are ready to begin.

Components of Collaboration
I want to start off by getting a better idea of how professionals working in the child welfare system collaborate. I am specifically interested in how you may collaborate with mental health therapists, substance abuse counselors, and guardians ad litem.

1. If you think about cases you have worked on where these other professionals are involved, what does it look like when collaboration is going well?
    a. PROMPT: What does it look like when collaboration is not going well?
    b. PROMPT: Can you provide an example?

2. What role, if any, does communication between you and these other professionals play when you are working with one another?
    a. PROMPT: What type of information do you typically provide to these professionals?
    b. PROMPT: What type of information do you want these professionals to communicate to you?
    c. PROMPT: In an ideal world, how frequently do you think you and these professionals would be communicating with one another for a given case?

3. Next, I want to ask you about joint decision-making, you know, when professionals working with the same family make decisions together. What role, if any, do you think joint decision-making plays when you are working with these professionals?

a. PROMPT: Can you describe how you and these professionals make decisions together? (when and where)
d. PROMPT: What types of decisions, if any, do you make with these professionals?
    i. Which professionals are involved in making the decision regarding when or if to reunify a child who has been removed from their home?

Collaboration and Reunification

Now that we have talked a bit about what it means to collaborate, I am interested in learning how collaboration between you and these professionals impacts you as a caseworker.

4. How, if at all, does collaboration between you and these professionals affect your ability to do your job as a [caseworker]?

5. Now, I'd like to talk a little bit about how collaboration may impact the families you work with. Specifically, I am wondering how it can impact family reunification for kids who are in foster or kinship care.

6. What role, if at all, does collaboration between you and these professionals play in the length of time it takes to reunify a child who is in foster or kinship care?
    a. PROMPT: Can you give an example of a case you worked on where collaboration between you and these professionals played a role in the length of time it took for a child to reunify? (If they provide an example of a time it helped, ask if they can think of a time it delayed reunification)
    b. PROMPT: When you think in general about families involved in the child welfare system, do you think *communication* between you and these professionals plays any role in the length of time it takes to reunify a child?
    c. PROMPT: When you think in general about families involved in the child welfare system, how do you think *joint decision-making* between you and these professionals influences the length of time it takes to reunify a child?

7. Next, I'm curious if you think collaboration between you and these professionals helps you assess if a family is ready to be reunified?
    a. PROMPT: Is there any way in which collaboration between you and these professional may help you determine if it is safe to reunify a child?
    b. PROMPT: Is there any way in which collaboration between you and these professional helps you determine what supports are necessary for a child to be safely reunified?
    c. PROMPT: What role, if any, does communication between you and these professionals play in helping you assess if it is safe to reunify a child?

d. PROMPT: What role, if any, does joint decision-making between you and these professionals play in helping you assess if it is safe to reunify a child?

Those are all the questions I had prepared. Is there anything you want to add that you think is important for me to know?

Great, what email address would you like me to send the $20 Amazon.com gift card to?

Before I let you go, I wanted to ask if you would be interested in reviewing and giving feedback on the conclusions I make after reviewing this interview. It would help me make sure that I capture and interpret everything you say correctly. I won't be able to provide additional compensation. Is that something you are able to do?

Thank you once again for your time!

Semi-Structured Interview Protocol for
mental health therapists, substance abuse counselors and guardians ad litem

Introduction:
Thank you for taking the time to participate in this interview. As you know, this interview is being conducted for a study looking at what collaboration looks like between professionals who work in the child welfare system, and how it may impact families involved in the system. We are also interested in learning how collaboration between professionals could be improved.

Before we get started, can you tell me if you had a chance to look over the consent form? [If they have not reviewed it, read it to them].

Do you have any questions or concerns about the consent form or anything else?

I also have to explicitly ask, do you agree to participate in this interview?

Okay, great, it looks like we are ready to begin.

Components of Collaboration
I want to start off by getting a better idea of how professionals working in the child welfare system collaborate. I am specifically interested in how you may collaborate with child welfare caseworkers who work for the Department of Human Services.

1. If you think about cases you have worked on with caseworkers, what does it look like when collaboration is going well?
    a. PROMPT: What does it look like when collaboration is not going well?
    b. PROMPT: Can you provide an example?

2. What role, if any, does communication between you and caseworkers play when you are working with one another?
    e. PROMPT: What type of information do you typically provide to caseworkers?
    f. PROMPT: What type of information do you want caseworkers to communicate to you?
    g. PROMPT: In an ideal world, how frequently do you think you and caseworkers would be communicating with one another for a given case?

3. Next, I want to ask you about joint decision-making, you know, when professionals working with the same family make decisions together. What role, if any, do you think joint decision-making plays when you are working with caseworkers?
    a. PROMPT: Can you describe how you and caseworkers make decisions together? (when and where)

h. PROMPT: What types of decisions, if any, do you and caseworkers make together?

Collaboration and Reunification

Now that we have talked a bit about what it means to collaborate, I am interested in learning how collaboration between you and caseworkers may affect you as a {GAL/mental health therapist/substance abuse counselor].

4. How, if at all, does collaboration between you and caseworkers affect your ability to do your job as a [GAL/mental health therapist/substance abuse counselor]?
    a. How does joint decision-making influence your ability to do your job as a therapist?
    b. How does having information about the family help you?

Now, I'd like to talk a little bit about how collaboration may impact the families you work with. Specifically, I am wondering how it can affect family reunification for kids who are in foster or kinship care.

5. What role, if at all, does collaboration between you and caseworkers, play in the length of time it takes to reunify a child who is in foster or kinship care?
    a. PROMPT: Can you give an example of a case you worked on where collaboration between you and the caseworker played a role in the length of time it took for a child to reunify? (If they provide an example of a time it helped, ask if they can think of a time it delayed reunification)
    b. PROMPT: When you think in general about families involved in the child welfare system, what role do you think *communication* between you and caseworkers plays in the length of time it takes to reunify a child?
    c. PROMPT: When you think in general about families involved in the child welfare system, do you think *joint decision-making* between you and caseworkers plays any role in the length of time it takes to reunify a child?

6. Next, I'm curious if you think collaboration between you and caseworkers helps assess if a family is ready to be reunified?
    a. PROMPT: Is there any way in which collaboration between you and the caseworker may help you determine if it is safe to reunify a child?
    b. PROMPT: What role, if any, does communication between you and the caseworker play in helping you assess if it is safe to reunify a child?
    c. PROMPT: What role, if any, does joint decision-making between you and the caseworker play in helping you assess if it is safe to reunify a child?

Those are all the questions I had prepared. Is there anything you want to add that you think is important for me to know?

Great, what email address would you like me to send the $20 Amazon.com gift card to?

Before I let you go, I wanted to ask if you would be interested in reviewing and giving feedback on the conclusions I make after reviewing this interview. It would help me make sure that I capture and interpret everything you say correctly. I won't be able to provide additional compensation. Is that something you are able to do?

Thank you once again for your time!

Appendix E

Survey Administered to Conduct Member Checking (n = 11)

Finding	Strongly Disagree %	Disagree %	Neither agree nor disagree %	Agree %	Strongly Agree %
Caseworker communication with GALs, mental health therapists, and substance abuse counselors influences the ability of some of these professionals to make decisions regarding if or when a child can be reunified. In general, professionals need information from other professionals to be able to assess if it is safe for a child to be returned home. If they do not receive this information, or if the information is not received in a timely manner, reunification may be delayed.	9.1	0.0	9.1	27.3	54.6
Mental health therapists and substance abuse counselors usually do not make a recommendation regarding whether or not a child should be reunified. This decision is made by the caseworker and guardian ad litem. However, mental health therapists and substance abuse counselors provide information to the caseworker and guardian ad litem which helps them make an informed decision regarding whether a child should be reunified.	9.1	0.0	0.0	27.3	63.6
When caseworkers have regular communication with GALs, mental health therapists, and substance abuse counselors, it helps them make sure they are on the same page regarding their goals and expectations for a family. Being on the same page can help families reunify in a timely manner because the family doesn't receive mixed messages regarding what they need to do. In addition, therapists and substance abuse counselors need to be on the same page with the caseworker and GAL regarding what the family should address in treatment so that a child can be returned home.	9.1	0.0	0.0	27.3	63.6
When caseworkers have regular communication with GALs, mental health therapists, and substance counselors—and information is being shared between these professional's—they are made aware of and can address any issues that arise which may be preventing reunification (e.g., crises, new safety concerns, and relapse).	0.0	0.0	9.0	27.3	63.6

When professionals make decisions together they are more likely to be on the same page regarding goals for the family (e.g., reunification) and the steps that need to be taken to accomplish those goals. This can help facilitate reunification because families do not receive mixed messages regarding what they need to do. In addition, each professional's concerns are more likely to get addressed so you don't end up in a situation where one professional wants to reunify a child but another professional doesn't because something has not been addressed.	9.1	0.0	9.1	45.5	36.4
When caseworkers make decisions together with GALs, mental health therapists, and substance abuse counselors, they make more informed decisions because they can draw on the perspective and expertise of everyone involved. They may then make more informed decisions regarding what services to provide a family in order to resolve the issues preventing a child from reunified.	0.0	0.0	0.0	36.4	63.6
Joint decision-making between caseworkers and GALs, mental health therapist, and substance abuse counselors creates a system of checks and balances where no one professional has complete control of when a child is reunified, which can both facilitate and delay reunification. It can expedite reunification in situations where one professional is reluctant to reunify a child and another professional is able to convince them otherwise. However, it can delay reunification when professionals disagree over whether a child should be reunified because it takes time to resolve this disagreement (e.g., they may need to go to court to resolve the disagreement which takes time).	0.0	9.1	9.1	72.7	9.1
Caseworkers rely on information they receive from other professionals to make an informed decision regarding whether or not it is safe to reunify a child.	0.0	0.0	18.2	36.4	45.5
Caseworkers and GALs are responsible for making the decision regarding whether or not to reunify a child. By making the decision together, they are more likely to make an informed decision regarding whether it is safe to do so because they can share information they have and draw upon each other's experience and expertise. While mental health therapist and substance abuse counselors do not directly make the decision about whether a child should reunify, they provide information which helps caseworkers and GALs make an informed decision.	0.0	0.0	0.0	63.6	36.4

Appendix F

Audit Trail for Qualitative Phase

1. Development of interview protocol
    a. Developed preliminary list of interview questions.
    b. Met with Dr. Nicole Nicotera—an expert in qualitative and mixed methods research—to review and refine questions.
2. Recruitment of participants
    a. Caseworkers: I drafted a recruitment email which was forwarded by an administrator at the County DHS to all permanency caseworkers
    b. GALs: I sent the recruitment email to all GALs with contracts with the County Judicial System to be appointed on Dependency and Neglect court cases. A list of all such GALs was publicly available on the OCR (Office of Child's Representative) website.
    c. Mental health therapists and substance abuse counselors: I consulted with service coordinator at the county DHS to identify which mental health agencies and substance abuse treatment agencies were most frequently used. Four agencies identified. identified four agencies.
        i. For three agencies, I was connected with administrators who forwarded my recruitment email to all of their mental health therapists and substance abuse counselors.
        ii. For fourth agency, I was unable to get a return call from the person I was told to contact. I dropped off recruitment fliers which we placed in staff mailboxes, and I posted the study information on a Facebook group page for social workers.

3. Interviews
    a. Interested respondents completed online Qualtrics survey with consent form, eligibility questions, and demographic questions.
    b. Conducted over four-week time frame.
    c. Conducted over the phone by lead researcher.
    d. All but one interview recorded. One participant asked that the interview not be recorded and instead the interviewer took detailed notes.
    e. Participants given a $20 Amazon.com gift card at the completion of the interview
    f. Interviewed a sixth MH therapist after I had interviewed 5 MH therapists because she is the DHS Liaison for one of the MH providers. She had responded when I was still trying to complete 5 interviews but stopped responding to emails to schedule the interview. She then reached out after I completed 5 to see if she could still do it. Because of her role as a liaison, I decided to include her.

4. Memos
    a. Memos written while conducting the interviews to note:
        i. Emerging themes
        ii. Salient/unique points made which should be included in the write-up
        iii. Complicating factors for the interview (e.g., participant sounded distracted or lots of background noise)
        iv. Complicating factors for the analysis (e.g., hard to separate communication from joint decision making; therapists and counselors do not make direct recommendation regarding reunification/just provide info)
        v. Possible codes to use
5. Transcription
    a. Interview recordings transcribed by an online transcription service and then checked for accuracy by PI and research assistant.
6. Coding
    a. PI and research assistant each read three transcripts (the same transcripts) and then met to develop preliminary list of codes.
    b. Picked one transcript and each coded it independently using the preliminary list of codes. Then compared coding to develop consensus version
        i. Notes from first comparison:
            1. One coder tended to break things up more into smaller quotes than the other (e.g., separating each piece of info communicated rather than coding them all together as one excerpt)
            2. Appears to be confusion over when to use "moderating factors"
            3. Need to talk about when to use "collab->timely reunify" vs "services/treatments->timely reunification". There are times when participant discusses all at once how collab leads to better services which then facilitate timely reunification. Maybe code these with both codes? (The same issues goes for collab->safe reunify vs services/treatment->safe reunification
    c. Met with Dr. Nicotera to review list of codes and how they were applied. Dr. Nicotera did not recommend any changes.
    d. PI and research assistant independently coded two more transcripts and developed consensus version.

        i. Added code to capture quotes where participants indicate mental health therapists and substance abuse counselors were not involved in making decisions about placement and reunification.
        ii. Refined definitions of codes used for negative case analysis, so they not only included instances where participants say IPC does not lead to better outcomes, but that these things may lead to worse outcomes.
    e. PI and research assistant independently coded three more transcripts and met to develop consensus version. No new codes added.
    f. PI and research assistant independently coded remaining transcripts and met to develop consensus version
7. Categorization of codes
    a. PI printed out quotes associated with each code and cut them out. PI and research assistant categorized the codes together using the constant comparative method described by Lincoln and Guba (1985). It took five sessions to categorize the codes, a total of approximately 20 hours.
    b. For many quotes, participants would talk about a benefit of interprofessional communication or joint decision-making (e.g., case monitoring improved), but it was not clear if they were saying this then led to quicker or "safer" reunification. In those instances, PI viewed the quote in context to make the determination. If it was not clear that a participant was saying it ultimately led to quicker or safer reunification, the quote was not used to support the theme.
    c. Discussed with Dr. Nicotera whether it made sense to conduct stability check of the categories. Decided against it because if a category only had one or two quotes, it would not be considered a theme.
    d. Met with Dr. Nicotera to review preliminary findings. Dr. Nicotera suggested we look closer to see if there are quotes that indicate how IPC may lead to negative outcome (e.g., delay reunification or unsafe reunification).