# Model Fidelity and Child Well-Being in Family Team Conference: The Interaction Effect of Racial Matching and Child Race

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#### **Abstract**

Family Team Conference (FTC) has been suggested as a promising practice model to effectively reduce racial disproportionality and disparities in child welfare. However, previous studies have noted ongoing challenges to promoting cultural responsiveness in FTC. This study analysed caseworkers' survey data (n = 736) to explore the role of racial matching between caseworkers and children as an effective practice to strengthen the high fidelity of FTC associated with child well-being. The results of the extended regression model indicate that high FTC fidelity was a necessary condition to improve child well-being. However, racial matching was neither a significant factor of child well-being nor a moderator that strengthened the positive association between FTC fidelity and child well-being. Instead, a follow-up analysis showed that caseworkers' competencies for facilitating FTC were a significant moderator to promote the positive effect of FTC fidelity on the well-being of all children regardless of their race. This paper concludes with research and practice implications to make FTC more culturally responsive to achieve its intended outcomes especially for children of colour.



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## Introduction

Racial disproportionality and disparities have been widely recognised as racial equity issues in child welfare systems in the USA. Racial disproportionality refers to 'the underrepresentation or overrepresentation of a racial or ethnic group compared to its percentage in the total population' (Child Welfare Information Gateway [CWIG], 2016, p. 2). In contrast, racial disparities can be defined as 'the unequal outcome of one racial or ethnic group as compared to outcomes of another racial/ethnic group' (CWIG, 2016, p. 2). These increasingly prevalent racial issues have occurred at diverse decision points in the child welfare process. For example, children of colour, especially Black/African American and American Indian/Alaska Native children, are disproportionately represented across initial reports, investigations, substantiation of maltreatment, entries into foster care and exits from care (CWIG, 2016). Furthermore, racial disparities have been largely documented in the literature. Children of colour tend to receive less access to and lower quality of child welfare services to improve their safety, permanency and well-being as compared to white children (Boyd, 2014; Harris and Hackett, 2008).

Although multidimensional factors can contribute to racial disproportionality and disparities, a lack of family engagement has been identified as a highly significant factor (Miller et al., 2012). In response, various family meeting models have been suggested as promising practice models to effectively reduce racial disproportionality and disparities, including Family Team Conference (FTC), Family Group Decision Making (FGDM) and Team Decision Making (TDM). Family meeting models are family-centred, collaborative approaches that bring all stakeholders together to address the complex needs of children and families and promote child welfare outcomes (The Annie E. Casey Foundation, 2013). Family meeting models have been implemented in various decisionmaking points to investigate child safety, find potential placements and develop service and permanency plans (Crea and Berzin, 2009). Previous studies have shown that the core principles of family meeting models, such as family empowerment, cultural respect and community collaboration, are necessary conditions for promoting cultural responsiveness and ultimately reducing racial disproportionality in foster care and racial

disparities in child welfare outcomes (Håøy Nygård and Saus, 2019; Kim et al., 2016; Sheets et al., 2009).

These findings align well with literature that emphasises the importance of high fidelity within family meeting models to achieve their intended outcomes. Model fidelity refers to the extent to which a certain practice model is implemented as it is intended by its guiding principles and procedures (Rauktis et al., 2013). Fidelity monitoring is critical to linking the intended outcomes with the core principles of a specific practice model, addressing significant challenges that prevent its successful implementation and facilitating its successful replication and adaptation different contexts (Merkel-Holguin and Marcynyszyn, Previous studies have demonstrated that high fidelity that ensures the core principles and elements of family meeting models are positively associated with child welfare outcomes (Kim et al., 2019, 2020). However, the effects of family meeting models on child welfare outcomes are still inconclusive and vary across different models (Hollinshead et al., 2017). Notably, there is a relative lack of empirical evidence to support the positive effect of family meeting models on child well-being as compared to other child welfare outcomes, such as safety and permanency.

Moreover, previous studies have noted ongoing challenges to promoting cultural responsiveness in family meeting models mainly due to professionals' lack of cultural knowledge, awareness and skills (Drywater-Whitekiller, 2014). Racial matching between children and caseworkers who facilitate family meetings may be one possible solution to improve the culturally responsive and diverse workforce and services (Barn and Das, 2016; Waites et al., 2004). In child welfare, there have been ongoing debates about the potential effects of racial matching on racial disproportionality and disparities. Some studies argue that racial matching may be beneficial because it may reduce racial prejudices, build trust and rapport and provide culturally responsive services (Chenot et al., 2019; Sawrikar, 2013). In particular, the positive outcomes of racial matching may be significantly greater for people of colour than for white people (Cabral and Smith, 2011). However, others also report some disadvantages of racial matching, such as failure to acknowledge withingroup differences, little effort to build rapport or the limited number of workers of colour (Cheng and Lo, 2018). Therefore, additional research is needed to better understand the potential role of racial matching on the successful implementation and outcomes of family meeting models.

The purpose of this study is to explore whether racial matching between caseworkers and children represents an effective strategy to promote the high fidelity of family meeting models associated with child well-being, especially for children of colour. This is achieved within the context of a specific family meeting model, FTC, by answering

the following research questions: (i) does FTC fidelity increase child well-being?, (ii) does racial matching moderate the association between FTC fidelity and child well-being? and (iii) does the interaction effect of racial matching differ between white children and children of colour?

## Literature review

## Fidelity of FTC

It is important to acknowledge that FTC is one specific model of family meetings that has been implemented in child welfare systems in the USA. Various family meeting models have been implemented across the world, including the USA, New Zealand, the UK and Canada. Although the original model was initiated in New Zealand, family meeting models are in the stage of scale-up and diffusion by being replicated and adapted to different contexts and cultures (Kim et al., 2019). Therefore, varying family meeting models have somewhat different goals, procedures and activities although they share underlying principles.

Similar to other family meeting models, FTC is a family-empowered and collaborative approach to promoting child and family outcomes. To achieve its intended outcomes, it incorporates major guiding principles that are mainly derived from the wraparound model and individualised education programmes (The Annie E. Casey Foundation, 2013). According to Child Welfare Policy and Practice Group (2001), FTC can empower family members to make their own decisions, identify family strengths, develop an individualised plan for meeting family needs, invite key stakeholders and collaborate with them to achieve shared family goals. Also, it involves retrieving the family's informal support systems and resources, utilising accessible, inclusive and comfortable community-based services, while respecting the family's cultural beliefs. In addition, it includes persistent service provision until a family's goals are achieved, with an outcome-based evaluation to monitor the progress of case plans and make appropriate changes as necessary.

Intended outcomes of a certain practice model cannot be achieved without ensuring high fidelity, where the core principles and elements of the practice model are implemented as they are proposed. Some studies have reported the positive effects of high fidelity of family meeting models on child welfare outcomes. For example, Berzin et al. (2007) found that participants were more likely to perceive the effectiveness of FGDM when the FGDM adhered to its core philosophies, although the positive perceptions were greater for professionals and facilitators than for family members. Previous studies indicated that the core principles

of FTC—family engagement and teamwork—significantly increased children's permanency (Kim *et al.*, 2019) and emotional well-being (Kim *et al.*, 2020).

Furthermore, some studies suggest that family meeting models may be particularly beneficial for children and families of colour because they highlight specific principles that are essential for improving cultural understanding and responsiveness, including cultural respect, family engagement and community-based services. For example, family meeting models require team members to respect families' cultures and identify their cultural strengths (Godinet et al., 2010). Furthermore, family members are empowered to share their concerns and engage actively in decision-making to better meet their cultural needs. Finally, family meeting models highly emphasise active partnerships with communities, where families preserve and integrate their culture. Therefore, they can improve cultural connections and resources for meeting cultural needs and reducing racial disproportionality and disparities in child welfare (Fluke et al., 2011). Some studies provide empirical evidence to support these basic assumptions. Godinet et al. (2010) found that FGDM was effective for reducing both re-entry and out-of-home placements among Hawaiian and Pacific Islander children. Sheets et al. (2009) also reported that FGDM was effective for Black/African American and Hispanic/ Latinx children to increase family reunification and exit faster from the child welfare system.

However, other studies reveal somewhat contrasting results regarding the benefits of family meeting models for families of colour. Rauktis et al., 2011 found that Black/African American families rated lower scores on the fidelity of FGDM than white families. They argued that families of colour were less encouraged to engage in FGDM and less empowered by professionals because of their unconscious biases against families of colour or lack of cultural competencies. If child welfare workers are not culturally competent and responsive, they are less willing to consider and incorporate families' cultural contexts in developing and implementing family meetings with families of colour (Rauktis et al., 2011). Accordingly, family meetings' agenda and process may be predetermined before the actual meetings without considering families' inputs and cultural diversity (Drywater-Whitekiller, 2014). Similarly, Håøy Nygård and Saus (2019) reviewed the literature on family meeting models and concluded that there was little empirical evidence to support that family meeting models were effective for addressing racial disproportionality and disparities in child welfare. Therefore, additional research is needed to determine the efficacy of family meeting models as a method for working with diverse cultural groups and to ensure that family meeting models are implemented with high fidelity while targeting their intended outcomes.

## Role of racial matching in FTC

One strategy that has emerged to promote cultural responsiveness in child welfare is racial matching between children and professionals of the same racial or ethnic group (Perry and Limb, 2004). Racial matching stems from the assumption that clients of social services tend to prefer caseworkers or other social service providers who share the same cultural background (Chenot et al., 2019). Prior research has examined the impact of racial matching on child welfare outcomes. Rvan et al. (2006) examined the role of racial matching on permanency outcomes and showed that Hispanic/Latinx children were less likely to achieve family reunification when they worked with caseworkers from different cultural backgrounds. Furthermore, racial matching can help child welfare workers build trusting relationships with children and families, encourage family engagement, obtain more accurate and genuine information and avoid racial biases and discriminatory judgements (Chenot et al., 2019). Only a few studies have attempted to examine the potential role of racial matching in the contexts of family meeting models. Waites et al. (2004) conducted focus groups to develop culturally responsive FGDM and identified the positive effect of racial matching on the active engagement of families of colour in FGDM.

Notably, prior studies suggest that the effect of racial matching may differ between racial or ethnic groups. Cabral and Smith (2011) conducted a meta-analysis on the outcomes of racial matching in mental health services and confirmed that the positive effects of racial matching were greater for people of colour than white people. No empirical research has been conducted to directly examine the interaction effects between racial matching and child race in predicting the outcomes of family meeting models. However, some studies have shown that the ethnicity/race of caseworkers and families are associated with utilising family meeting models and achieving their desired outcomes. For example, McCrae and Fusco (2010) found that African-American workers were more likely than white workers to use family meetings. However, Rauktis et al., (2011) indicated that white participants in family meetings tended to report a higher level of fidelity than people of colour. Therefore, it is hypothesised that the interaction effect of racial matching on the association between FTC fidelity and child well-being may be further moderated by child race.

# **Methods**

# Sample and data collection procedures

This study examined major research questions using the survey data collected from caseworkers working at public child welfare agencies in a midwestern state in the USA. In this state, all caseworkers utilised FTC as a statewide practice model to manage their assigned cases. Guided by the core principles and guidelines of FTC, FTC facilitators who were also caseworkers were responsible for coordinating family meetings with multiple stages to expedite permanency and ensure safety and support child well-being. The detailed procedures to implement FTC are described elsewhere in Kim et al. (2016). First, family members are invited to set meeting agendas and determine potential team members. Next, they actively engage in actual family meetings with their selected team members. The main tasks during the meeting stage include welcoming team members, developing meeting goals and ground rules, sharing a family story, assessing families' strengths and needs, developing service and permanency plans and closing with the next steps. Finally, family meetings are held regularly at key decision-making points to update, monitor and evaluate the plans until the case is closed.

The online surveys were administered to the entire population of caseworkers (n=2,310) by collaborating with the state child welfare agencies in 2018. Caseworkers were asked to randomly select one child whose first name came first in alphabetical order among their recently closed cases within 12 months and then complete the online survey based on their experiences with the selected child in FTC. The online survey included a variety of questions to measure caseworkers' self-report on the child's outcomes and individual characteristics (that is, demographics), FTC fidelity and process and their personal and professional characteristics. This study was approved by the Institutional Review Board (ID: 1302010762). Caseworkers voluntarily participated in the study by signing a consent form attached to the online survey. Although they did not receive any financial incentives, they were allowed to complete the survey during their regular work time. The collected data included no identifying information about the selected children nor the caseworkers. Data were confidential and anonymous and stored in a secured electronic database with limited access to protect the privacy of participants.

Although 1,550 caseworkers initially submitted the online surveys (response rate = 67.1 per cent), 128 incomplete responses were screened out. Furthermore, additional responses were deleted because some respondents were supervisors who did not facilitate FTC (n=210) and had no closed cases within the last 12 months (n=476). Accordingly, 736 complete and usable responses were selected for the final analysis.

#### Measures

# Child well-being

In this study, child well-being was defined as an age-appropriate level of child development in the four domains of physical, emotional, social and cognitive well-being. Child well-being was measured by an average score of four items that asked caseworkers to rate these multiple domains on a six-point Likert scale (1 = worsening status 2 = poor status, 3 = marginal status, 4 = fair status, 5 = good status and 6 = optimal status). A higher score represents a higher level of child well-being. This scale showed an excellent level of internal consistency (Cronbach's alpha = 0.91).

## FTC fidelity

FTC fidelity was measured by the modified version of the Wraparound Fidelity Index, Version 4 (WFI-4; Pullmann et al., 2013). This modified version of the fidelity index was used because the guiding principles of FTC were mainly derived from those of the wraparound model (The Annie E. Casey Foundation, 2013). Based on the feedback from the state child welfare agency, ten items were selected and modified from the WFI-4 to fit the contexts of this study and best reflect all guiding principles of FTC. The FTC fidelity index measured the following principles, respectively: (1) family voice and choice, (2) teamwork, (3) natural supports, (4) collaboration, (5) community-based services, (6) cultural respect. (7) individualised plan, (8) strengths-based approach, (9) persistence and (10) outcome-based evaluation. All the items were rated by caseworkers who facilitated family meetings using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), with a higher score indicating a higher level of FTC fidelity. Cronbach's alpha for this index was 0.87, suggesting excellent internal consistency.

# Racial matching

Racial matching was a binary variable that indicated whether a case-worker was matched with a child from the same racial/ethnic background among six different groups: (i) White/European American, (ii) Black/African American, (iii) Hispanic/Latinx, (iv) Asian/Asian American, (v) Native Hawaiian or Pacific Islander and (vi) American Indian and Alaska Native. For example, Black/African American case-workers were assigned as a racial matching group (1) if they reported that the selected child was Black/African American. Conversely, Black/African American caseworkers were assigned as a non-racial matching group (0) if they worked with the child from different racial/ethnic groups other than Black/African American.

#### Child characteristics

Several child-level factors have been examined in their relationship to child well-being, including demographic characteristics, placements, risk factors and relationships with caseworkers (Lloyd and Barth, 2011).

Consistent with the findings of the previous studies, the following childlevel factors were included in the final analysis as either control variables or instrumental variables supposed to be correlated with an endogenous covariate (that is, FTC fidelity) or a non-random treatment assignment variable (that is, racial matching). 'Child race' was coded as 1 = white children and 0=children of colour. 'Child gender' was also coded as 1 = females and 0 = males. 'Child age' was a continuous variable measured in years. 'Child placement' was coded as 1 if children were removed from their home and placed in out-of-home placements; otherwise, it was coded as 0. 'The severity of challenges' indicated caseworkers' rate on how challenging their child case was to achieve the goals of the child's case plan as compared to other cases they served in the past year, ranging from 1 (not very challenging) to 10 (extremely challenging). This variable was used as a proxy to measure a level of risk factors that prevented children's safety. permanency and well-being. Finally, 'the continuity of a caseworker' was measured by whether the child continued working with a single caseworker during the involvement in the child welfare system (single caseworker = 1 and multiple caseworkers = 0).

#### Caseworker characteristics

Similar to the children' characteristics, caseworkers' characteristics were used as either control or instrumental variables based on the previous findings that caseworkers' demographic, educational and work-related characteristics were associated with child well-being or other child welfare outcomes (Chenot et al., 2019; Ryan et al., 2006). 'Race' was coded as 1 = white caseworkers and 0 = caseworkers of colour. 'Gender' was a binary variable (1 = female and 0 = male), while 'age' was a continuous variable measured in years. 'An educational level' was coded as 1 = master's degree or higher and 0 = bachelor's degree or lower. 'Work experience' was measured by the total months of employment at the public child welfare agency. Finally, 'FTC competencies' were measured by the average score of four items that asked caseworkers to rate levels of their FTC competencies for (i) coordinating family meetings, (ii) managing power and control issues, (iii) resolving conflicts between team members and (iv) addressing non-negotiable issues (Cronbach's alpha = 0.91). A higher score represents a higher level of caseworkers' competencies required for facilitating FTC successfully.

# Data analysis

We used various analytic methods to achieve the purpose of this study. First, descriptive statistics were conducted to describe the characteristics of major variables. Second, two-way ANOVA was utilised to explore

whether FTC fidelity significantly differed by the interaction between racial matching and child race. Finally, Extended Regression Model (ERM) was employed to examine the hypothesised main and interaction effects using Stata version 16. ERM is an advanced technique to estimate unbiased regression coefficients after adjusting for potential errors caused by endogenous covariates, non-random treatment assignment and/or sample selection (StataCorp, 2019).

In this study, ERM is particularly useful to treat FTC fidelity as an endogenous variable, where its true relationship with child well-being is confounded by third factors. FTC fidelity may become an endogenous variable because caseworkers' characteristics (for example, FTC competencies) increase FTC fidelity and then affect child well-being (Bartley et al., 2017). To solve this problem, we included caseworkers' educational level, work experience and FTC competencies as well as children's severity of challenges as instrumental variables correlated with FTC fidelity.

Moreover, racial matching may be problematic because children were not randomly assigned to racial matching or non-racial matching groups per se. It may be possible that children were matched with their caseworkers intentionally based on the similarities of their demographical characteristics. To address potential biases of this non-random treatment assignment, we allowed race, gender and age of children and caseworkers to be correlated with racial matching in ERM as suggested by StataCorp (2019).

ERM also allows for examining interaction effects between independent and endogenous variables. A series of ERMs were performed as follows: Model 1 analysed the main effect of FTC fidelity on child wellbeing. Model 2 examined whether the effect of FTC fidelity on child well-being was moderated by the racial matching status. Model 3 examined how the interaction effect of racial matching significantly differed between white children and children of colour.

## Results

# Descriptive statistics of major variables

Table 1 depicts descriptive information about all variables included in ERM. The average score of child well-being was 5.09 (Standard Deviation [SD] = 0.76), suggesting children tended to have a good status of well-being when they exited from the child welfare system. On average, caseworkers reported that the fidelity of their FTC was 3.87 (SD = 0.55) out of 5. A total of 69.7 per cent of caseworkers (n = 486) worked with children from the same racial/ethnic background. For children's characteristics, 72.7 per cent were white children and 50.9 per cent were females. The average age of the children was 7.76 years (SD = 5.57). A larger number of children were removed from their

Table 1. Descriptive statistics of major variables.

Variables	Frequency/Mean	Per cent/Standard Deviation 0.76		
Child well-being (range 1–6)	5.09			
FTC fidelity (range 1–5)	3.87	0.55		
Racial matching				
Racial matching	486	69.7%		
None-racial matching	211	30.3%		
Child race				
White children	533	72.7%		
Children of colour	200	27.3%		
Child gender				
Female	374	50.9%		
Male	361	49.1%		
Child age (years)	7.76	5.57		
Child placement				
Out-of-home	457	62.2%		
In-home	278	37.8%		
Child continuity of a caseworker				
Single caseworker	227	32.8%		
Multiple caseworkers	465	67.2%		
Child severity of challenges (range 1–10)	4.26	2.61		
Caseworker race				
White caseworkers	544	77.7%		
Caseworkers of colour	156	22.3%		
Caseworker gender				
Female	598	84.9%		
Male	106	15.1%		
Caseworker age (years)	35.19	10.66		
Caseworker educational level				
Master's degree or higher	92	12.8%		
Bachelor's degree or lower	627	87.2%		
Caseworker work experience (years)	3.51	4.61		
Caseworker FTC competencies (range 1–5)	4.42	0.64		

home and placed in out-of-home placements (n = 457, 62.2 per cent) and had worked with more than one caseworker until the case was closed (n = 465, 67.2 per cent). Caseworkers reported that their child, on average, faced a moderate level of challenges as compared to other cases that they served (M = 4.26, SD = 2.61). For caseworkers' characteristics, the majority of the caseworkers were white (n = 544, 77.7 per cent) and female (n = 598, 84.9 per cent) with the average age of 35.19 years (SD = 10.66). Only 12.8 per cent of the caseworkers had master's degrees or higher and they had worked as caseworkers at public child welfare agencies for 3.51 years (SD = 4.61), on average. The average score of their FTC competencies was 4.42 (SD = 0.64) out of 5.

# Two-way ANOVA for FTC fidelity

Table 2 shows the results of two-way ANOVA that explored the main and interaction effects of racial matching and child race on FTC fidelity.

Page 12 of 20 Jangmin Kim et al.

**Table 2.** Two-way ANOVA for the main and interaction effects of racial matching and child race on FTC fidelity.

Racial matching		Non	Non-racial matching			Total		
N	М	SD	N	M	SD	N	М	SD
426	3.87	0.51	77	4.00	0.60	503	3.89	0.53
57	3.81	0.72	133	3.90	0.46	190	3.87	0.55
483	3.86	0.54	210	3.94	0.52	693	3.88	0.53
$F(1) = 4.27^*$								
F (1)= 2.20								
F (1)= 0.18								
	N 426 57	N M 426 3.87 57 3.81	N M SD  426 3.87 0.51 57 3.81 0.72	N         M         SD         N           426         3.87         0.51         77           57         3.81         0.72         133           483         3.86         0.54         210           F           F         F	N         M         SD         N         M           426         3.87         0.51         77         4.00           57         3.81         0.72         133         3.90           483         3.86         0.54         210         3.94           F (1) = 4.27*         F (1) = 2.20	N         M         SD         N         M         SD           426         3.87         0.51         77         4.00         0.60           57         3.81         0.72         133         3.90         0.46           483         3.86         0.54         210         3.94         0.52           F (1) = 4.27*           F (1)=2.20	N         M         SD         N         M         SD         N           426         3.87         0.51         77         4.00         0.60         503           57         3.81         0.72         133         3.90         0.46         190           483         3.86         0.54         210         3.94         0.52         693           F (1) = 4.27*           F (1) = 2.20         7         7         10	N         M         SD         N         M         SD         N         M           426         3.87         0.51         77         4.00         0.60         503         3.89           57         3.81         0.72         133         3.90         0.46         190         3.87           483         3.86         0.54         210         3.94         0.52         693         3.88           F (1) = 4.27*           F (1) = 2.20

<sup>\*</sup>p < 0.05.

The percentage of racial matching was greater for white children (84.6 per cent =  $426/503 \times 100$ ) than for children of colour (30.0 per cent =  $57/190 \times 100$ ). No significant difference in FTC fidelity was detected between racial groups (F (1) = 2.20, p > 0.05). However, children in the non-racial matching group (M = 3.94, SD = 0.52) had a significantly higher level of FTC fidelity as compared to those in the racial matching group (M = 3.86, SD = 0.54). More specifically, white children in the non-racial matching group showed the highest score on FTC fidelity, whereas children of colour in the racial matching group showed the lowest score. However, this interaction effect was not statistically significant (F (1)=0.18, p > 0.05).

# Extended regression models for child well-being

Model 1 in Table 3 presents the main effects of major variables on child well-being. FTC fidelity was positively associated with child well-being (B=0.50, p < 0.05) even after adjusting for the possible error of its endogeneity. However, the main effect of racial matching on child well-being was not significant after considering the possible error of its non-random treatment assignment (B=0.13, p > 0.05). Of control variables, child well-being significantly decreased when children were older (B=-0.03, p < 0.001) and faced more severe challenges that prevented their safety, permanency and well-being (B=-0.04, p < 0.001). Conversely, child well-being significantly increased when children were placed in out-of-home placements (B=0.21, p < 0.001). Regarding the endogeneity of FTC fidelity, it was positively associated with caseworkers' competencies for facilitating FTC (B=0.20, p < 0.001). In contrast, it was negatively associated with children's severity of challenges (B=-0.02, p < 0.01). For the non-random treatment assignment, white

**Table 3.** ERM for the main and interaction effect of FTC fidelity, racial matching and child race on child well-being.

Variables	Model 1		Model 2		Model 3	
	В	SE	В	SE	В	SE
Child well-being						
FTC fidelity (a)	0.50*	0.22	0.53*	0.24	0.41	0.26
Racial matching (b)	0.13	0.28	0.31	0.59	-0.10	0.80
Child race (c)	0.00	0.17	-0.01	0.17	-0.40	0.58
Child gender	0.04	0.06	0.04	0.06	0.03	0.06
Child age	$-0.03^{***}$	0.01	$-0.03^{***}$	0.01	$-0.03^{***}$	0.01
Child placement	0.21***	0.06	0.21***	0.06	0.22***	0.06
Child continuity of a caseworker	-0.02	0.06	-0.02	0.06	-0.01	0.06
Child severity of challenges	$-0.04^{***}$	0.01	$-0.04^{***}$	0.01	$-0.04^{**}$	0.01
(a) $\times$ (b)			-0.04	0.12	-0.09	0.19
(a) × (c)					0.19	0.20
(b) $\times$ (c)					-0.30	0.96
(a) $\times$ (b) $\times$ (c)					0.00	0.25
FTC fidelity						
Caseworker educational level	-0.01	0.07	-0.01	0.07	-0.01	0.07
Caseworker work experience	0.00	0.00	0.00	0.00	0.00	0.00
Caseworker competencies	0.20***	0.03	0.20***	0.03	0.20***	0.03
Child severity of challenges	$-0.02^{**}$	0.01	$-0.02^{**}$	0.01	$-0.02^{**}$	0.01
Racial matching						
Child race	1.44***	0.13	1.44***	0.13	1.43***	0.13
Child gender	-0.08	0.13	-0.08	0.13	-0.10	0.13
Child age	0.01	0.01	0.01	0.01	0.01	0.01
Caseworker race	0.86***	0.13	0.86***	0.13	0.87***	0.13
Caseworker gender	-0.13	0.19	-0.13	0.19	-0.15	0.19
Caseworker age	0.01	0.01	0.01	0.01	0.00	0.01
Error correlations						
FTC fidelity and child well-being	-0.08	0.18	-0.08	0.18	-0.09	0.18
Racial matching and child well-being	-0.16	0.25	-0.17	0.26	0.20	0.25
FTC fidelity and racial matching	$-0.13^{*}$	0.06	$-0.13^{*}$	0.06	$-0.14^{*}$	0.06
$\chi^2$ (df)	72.06***		72.13***		76.60***	

<sup>\*</sup>p < 0.05.

children were more likely than children of colour to be matched racially with caseworkers (B = 1.44, p < 0.001). The same pattern was also found for white caseworkers (B = 0.86, p < 0.001).

As seen in Models 2 and 3, any significant outcomes were not found in the two- and three-way interactions among FTC fidelity, racial matching and child race in the association of child well-being. In other words, racial matching did not significantly moderate the association between FTC fidelity and child well-being (B = -0.04, p > 0.05, see (a)  $\times$  (b) in Model 2). Similarly, the interaction effect of FTC fidelity and racial matching did not significantly differ between white children and children of colour (B = 0.00, p > 0.05, see (a)  $\times$  (b)  $\times$  (c) in Model 3).

<sup>\*\*</sup>p < 0.01.

<sup>\*\*\*</sup>p < 0.001.

## **Discussion and conclusion**

This study explores the role of racial matching as a culturally responsive strategy to improve the FTC fidelity and strengthen its positive impact on intended outcomes, especially for children of colour who face overrepresentation and disparities in the child welfare system. As we hypothesised, high FTC fidelity was essential for improving child well-being. This finding supports the results of a meta-analysis showing that it is necessary to regularly monitor model fidelity to enhance the effectiveness of child welfare interventions (Casillas et al., 2016). However, caseworkers reported lower rates of FTC fidelity when they were racially matched with children. This racial matching was neither a significant factor of child well-being nor a moderator that strengthened the positive association between FTC fidelity and child well-being. Similarly, the interaction effect of racial matching did not significantly differ between children of colour and white children. The overall findings imply that the high fidelity of FTC including cultural respect and other important principles for improving cultural responsiveness (for example, family engagement and community-based services) are beneficial for enhancing the well-being of all racial groups of children in FTC regardless of their racial matching.

In this study, racial matching was not an effective strategy to strengthen the positive impact of FTC fidelity on the well-being of children of colour. This insignificant finding is not consistent with the previous literature suggesting the positive effects of racial matching in family meeting models (Waites et al., 2004). Several explanations may account for these findings. First, the lower degree of FTC fidelity for children racially matched with caseworkers may happen because of the unexpected consequences of racial matching. Although there are several advantages of racial matching discussed in the literature, some disadvantages of racial matching have been reported in child welfare as well. For example, as Cheng and Lo (2018) found, racially matched caseworkers may be less likely to empower and build strong partnerships with children and families in FTC due to their presumption that they already know their own cultural group, thus failing to acknowledge within-group differences.

Another possible explanation may stem from caseworkers' self-report on FTC fidelity. Unlike the observation data, the self-reported data may measure biased FTC fidelity based on caseworkers' subjective beliefs (Sawrikar, 2013). Furthermore, different outcomes may be found if FTC fidelity was measured by family members or other stakeholders. Rauktis *et al.* (2011) found that the perceptions of fidelity significantly differed between different members of groups in FGDM. These different perceptions of fidelity are inevitable because family meetings consist of diverse

team members with different purposes, values, backgrounds, experiences and powers (Merkel-Holguin and Marcynyszyn, 2015). Therefore, additional research is needed to examine the role of racial matching by measuring FTC fidelity with objective observation data or comparing the perceived fidelity between multiple stakeholders.

It is also important to acknowledge that the non-significant effects of racial matching in this study may occur because the simple use of children's and caseworkers' races did not capture the true meanings or underlying assumptions of racial matching. Racial matching is grounded in the benefits of interpersonal similarities and shared worldviews between service users and professionals (Cabral and Smith, 2011). Although the same racial or ethnic groups share cultures and experiences to some degree, considerable variability also exists within the same groups (Fluke et al., 2011). Therefore, future research should directly measure the true meanings of racial matching, such as the congruence of racial identity, instead of using race as a proxy variable (Cabral and Smith, 2011). In addition, it is possible that another aspect of matching may be more beneficial for a certain group of children of colour in FTC. For example, Sawrikar (2013) indicated that language matching was specifically effective for encouraging the active engagement of newly arrived immigrant families in child welfare. It is also important to examine the intersection of race with other social identities, such as gender, to better understand the complexity and variability of racial matching in predicting outcomes of family meeting models (Barn and Das, 2016; Rauktis et al., 2011).

The key findings of this study raise another important question regarding what strategies other than racial matching are helpful to make FTC more culturally responsive with high fidelity to achieve its intended outcomes. Some studies argue that caseworkers' attitudes, competencies and skills to work with diverse cultural groups may be more effective for increasing the successful implementation and outcomes of family meetings than simply being racially matched (Barn and Das, 2016; Godinet et al., 2010). Barn and Das (2016) found that although racial matching provided some positive benefits, such as improving cultural knowledge among FGDM participants, its positive benefits were less likely to occur if racially matched facilitators did not have enough willingness and capacities to encourage family empowerment and engagement. Thus, it can be hypothesised that caseworkers' competencies to successfully facilitate FTC may be needed to reinforce the positive effects of FTC fidelity on child well-being.

To test this alternative hypothesis, a follow-up analysis was conducted using the same process of the ERM conducted above. Findings showed that the interaction effect of worker competencies on the association between FTC fidelity and child well-being was significant (B=0.16, p < 0.05). A simple slope test, also known as a pick-a-point approach, was conducted additionally to probe the significant interaction effects at

the low (M -1SD), average (M) and high (M+1SD) levels of caseworkers' FTC competencies. As seen in Figure 1, the positive effect of FTC fidelity on child well-being was strengthened as caseworkers reported higher levels of FTC competencies. However, this interaction pattern did not significantly differ between white children and children of colour (B=-0.03, p>0.05). This finding implies that FTC can improve positive outcomes for all racial groups of children by ensuring high fidelity (for example, cultural respect) when caseworkers were competent to effectively facilitate family meetings, manage power and control issues, resolve conflicts between diverse team members and address non-negotiable issues.

# Implications for social work practice

Drawing the key findings of this study, this paper concludes with useful implications for child welfare agencies and professionals who facilitate FTC. First, it is important to ensure and monitor core principles and strategies to enhance cultural responsiveness throughout the FTC process, especially as they relate to family empowerment and cultural respect. For example, family meetings should develop culturally responsive teams to identify and acknowledge family strengths and focus on family needs, while allowing flexible processes (Drywater-Whitekiller, 2014). Furthermore, culturally responsive facilitators can co-create culturally responsive plans with families and other team members to keep children

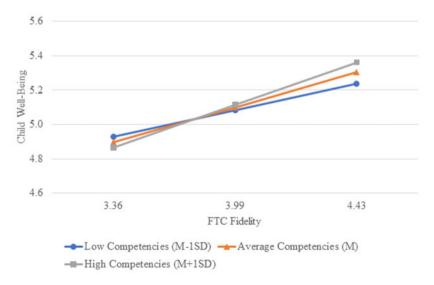


Figure 1: Interaction effect of caseworkers' FTC competencies.

safe, find their permanent homes and support their well-being (Waites et al., 2004).

Furthermore, child welfare agencies should develop caseworkers' competencies for the successful implementation of FTC. American Humane Association and the FGDM Guidelines Committee (2010) suggest that the success of family meeting models should require ongoing training, supervision and organisational support. For example, child welfare workers can participate in classroom training to learn the core principles and processes of FTC and build their awareness, knowledge and skills to successfully facilitate FTC. In addition, coaching and mentoring allow new child welfare workers to collaborate with experienced workers on preparing and coordinating family meetings. Coaches can play a significant role in improving child welfare workers' FTC competencies by supervising day-to-day operations in FTC, modelling FTC principles and providing organisational support to ensure high model fidelity (American Humane Association and the FGDM Guidelines Committee, 2010).

It is also important to provide cultural humility training for child welfare workers to work successfully with diverse populations of children and their families in FTC. This training will allow caseworkers to improve cultural knowledge and skills and to critically analyse their cultural biases and systemic racism. This could include ongoing self-assessment and dialogue among agency practitioners and supervisors. In addition, social service agencies should seek out opportunities for dialogue with diverse cultural communities and organisations to develop community-wide partnerships to bring cultural resources and develop culturally responsive policies and practices (Barn and Das, 2016).

Families have addressed many issues that occur in their lives by utilising their varied strengths and natural support systems. It is incumbent upon social workers to recognise, respect and acknowledge family strengths in their work with the overrepresented number of children of colour in the child welfare system. Furthermore, findings from our study highlight the need for social workers to engage in anti-racist practice and advocate for changes at the individual, institutional and cultural levels (Dominelli, 1989). When FTC is implemented in social work practice in a culturally responsive and respectful manner with children and families of colour, family empowerment and strengths can be maximised to promote child safety and well-being as well as long-term family sustainability.

# Limitations

Some limitations are worth highlighting. In this study, FTC fidelity was measured by a modified version of the valid wraparound index that showed high internal consistency. However, this modified index was designed to measure the core principles of FTC specifically during the meeting process. Therefore, it did not comprehensively measure the essential elements of FTC for the entire process of FTC from preparation to follow-up. Furthermore, as we discussed above, FTC fidelity was measured solely by caseworkers who facilitated FTC, which may result in the underestimation of fidelity perceived by other team members, such as children and families. As Merkel-Holguin and Marcynyszyn (2015) suggest, a more valid scale should be developed and used to comprehensively measure the major principles and elements across the entire processes of FTC and captures fidelity perceptions of all FTC participants. A similar measurement issue may exist for child well-being. In this study, it was measured by caseworkers' professional judgement. Therefore, the measures of well-being may be under or overestimated as compared to those self-reported by children themselves or measured by objective diagnostic criteria.

Furthermore, the major findings of this study should be interpreted with caution when they are applied to other family meeting models or child welfare systems because the data were collected from a single public child welfare system. Although FTC shares major principles with FGDM or TDM, it operates with somewhat different meeting structures, activities and roles from the other family meeting models (The Annie E. Casey Foundation, 2013). Future research can compare the effects of racial matching on child welfare outcomes across different family meeting models.

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