FINAL EVALUATION REPORT

Grandfamilies Kinship Care

Children's Service Society of Utah

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GRANDfamilies Kinship Care Final Evaluation Report

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195 N 1950 W
Salt Lake City, Utah 84116

Submitted by:

Social Research Institute
College of Social Work, University of Utah
Jorge Arciniegas, MSBA
Natalie Griswold, MSPH
Meghan Broadbent, MS

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Introduction

The number of children living in kinship care has significantly increased in recent years. In 2002, children living with kin following involvement with a child welfare agency exceeded the number of children placed in non-relative foster care arrangements, representing an increase of 55% from reports 40 years prior (Ehrle, Green, & Main, 2003; Scommegna, 2012; Rubin et al., 2008). It is further estimated that a total of 2.6 million children are being raised by a relative caregiver rather than their biological parent(s) along with an additional 7.6 million children living in households headed by grandparents or other relatives instead of their biological parent(s) (Epstein, 2017; ACS, 2010; Baker, Silverstein, & Putney, 2008; CWLA, 2016). This is reflective of the many U.S. federal and state laws stressing the placement of children with kin to reduce the number of non-kinship foster care placements (Greenblatt et al., 2002; Rubin et al., 2008; Wulczyn et al., 2004; Lockwood, Friedman, & Christian, 2015). This shift towards kinship care is favorable among other potential placement types as kinship care has been shown to provide a familiar environment that promotes a child's continued behavioral and emotional development while maintaining family bonds (Jedwab, Xu, & Shaw, 2020; Andersen and Fallesen, 2015, Maclean et al., 2016, Winokur et al., 2009, Winokur et al., 2018). These positive outcomes for children placed in kinship care are evident no matter the type of kinship placement, whether it is an informal, voluntary or formal arrangement (Child Welfare Information Gateway, 2016).

Informal kinship placements are the most common, characterized by a private arrangement made without the involvement of a child welfare agency (Walsh, 2013). Voluntary kinship care instead involves a child welfare agency, but the state does not have legal custody of the child. Lastly, formal kinship care occurs when the state has legal custody of the child while the kinship caregiver maintains physical custody, with rights similar to those of non-relative foster parents. While families with voluntary or formal kinship care arrangements typically receive support from state agencies, research has shown that the majority of kinship placements in the U.S. are informal, leaving a large number of families to cope without assistance from state agencies or local programs (Walsh, 2013; Child Trends Databank, 2019). Regardless of arrangement however, kinship caregivers often face added financial and psychological burdens when taking on the responsibility of raising a kinship child.

Kinship caregivers face myriad challenges in successfully navigating the academic, physical, mental, and emotional needs of the kinship child(ren) in their care (Lawrence-Webb et al., 2003; Smith et al., 2000). Kinship children have often experienced past trauma related to the circumstances that led to their kinship placement, leading to an increased

risk of mental health issues (Littlewood, Strozier, & Whittington, 2014; Baker & Silverstein, 2008; Dunne & Kettler, 2008; Kelley, Whitley, Sipe, & Yorker, 2000; Minkler & Fuller-Thomson, 1999); adding to the complexity of kinship navigation for inexperienced kinship caregivers. Moreover, kinship caregivers generally have limited social networks and resources which ultimately puts a strain on their ability to provide care (Harden et al., 2004, Striker et al., 2003). Informal kinship caregivers in particular are less likely to receive financial or other support compared to non-kinship foster or biological parents as the children in their care are not supported by a number of state and federal funding programs, and caregivers may not be informed of the benefits that they do qualify for such as the Specified Relative Grant or Supplemental Security Income (SSI) (Bavier, 2011; Ehrle & Geen, 2002; Yancura, 2013). However, for children already placed in foster care, formal kinship caregivers often receive fewer support services than non-kinship foster caregivers (Sakai, Lin, & Flores, 2011). Without the safety net of a dedicated kinship navigator program, many kinship caregivers would be left to single-handedly manage the complex needs of their kinship families. Despite a wealth of literature identifying the needs of kinship families and the challenges they face, there is little to no research highlighting whether kinship programs are able to meet the needs of kinship caregivers and their families, and whether services and supports are provided to satisfaction.

In health services, patient satisfaction is a key indicator of program or treatment success, commonly used for quality assurance, process improvement, and better understanding the needs of patients (Manzoor, Wei, Hussain, Asif, & Shah, 2019; Batbaatar et al., 2017). Moreover, patient navigator programs have demonstrated effectiveness in connecting patients to necessary services, increasing patient education, and increasing positive health outcomes while promoting patient satisfaction (Campbell, Craig, Eggert, & Bailey-Dorton, 2010; Kelly et al., 2013; Pedersen & Hack, 2010; Wilcox & Bruce, 2010). Similar to patient navigator programs in the health sector, kinship navigator programs aim to fill a void for kinship families by providing services and support to these families in need. One such program is the GRANDfamilies Kinship Care program (GRANDfamilies) at Children's Service Society of Utah.

PROGRAM DESCRIPTION

The GRANDfamilies Kinship Care program at Children's Service Society of Utah is a kinship navigator program aiming to support kinship families in providing a safe, stable and, when necessary, permanent home for the children in their care. Founded in 2002, the GRANDfamilies program was created to provide inclusive support services for kinship families and to expand on support provided by DCFS. GRANDfamilies has four key components of service: ongoing case management, clinical services, Friend2Friend events (events connecting kinship families to one another), and psychoeducational courses. In addition to GRANDfamilies core components, optional services for informal support groups and clinical counseling are also offered.

GRANDfamilies is unique in that it is the only kinship navigation program that provides curriculum-based psychoeducational services for kinship families in addition to counseling, crisis intervention, advocacy, case management, support groups for caregivers and children, assistance with court cases, as well as help applying for financial assistance, Specified Relative Grant (SPG), Medicaid or the Children's Health Insurance Program (CHIP), guardianship, and more. These services are offered regardless of the kinship caregiver's licensure or involvement with child welfare agencies. Moreover, the GRANDfamilies program does not have a standard dosage of treatment nor recommended timing for discharge. Rather, GRANDfamilies aims to build a kinship community providing kinship families with the ability to receive services and participate in kinship family events on a regular basis regardless of when the family initiated services.

Similarly, DCFS offers support to kinship caregivers such as assistance in accessing any necessary medical, financial, or educational resources to meet the kinship child's needs as required by the agency's Practice Guidelines. According to the DCFS Kinship Care Program Practice Guidelines, kinship support through DCFS is considered treatment as usual for primary kinship caregivers of children receiving foster care or in-home services within the state of Utah. While kinship caregivers across the state are able to contact DCFS for voluntary support, these kinship caregivers may be required to demonstrate appropriate placement requirements and obtain licensure depending on the kinship child's circumstances (DCFS, 2019).

STUDY PURPOSE

The primary objective of this study was to further the understanding and evidence-base of kinship navigation programs by evaluating the impact of GRANDfamilies on access and referrals to services needed as well as kinship caregiver

satisfaction with the kinship navigation program in meeting their family's needs compared to those receiving treatment as usual (TAU) through the Utah Division of Child and Family Services (DCFS) Kinship Care Program Practice Guidelines.

RESEARCH QUESTIONS

The research questions for the current study include:

1. Do GRANDfamilies Kinship Navigator program clients experience increased access and referrals to services needed compared to those receiving kinship support from the Utah Division of Child and Family Services?
2. Do GRANDfamilies Kinship Navigator program clients experience increased satisfaction with services needed compared to those receiving kinship support from the Utah Division of Child and Family Services?

Methods

Design and Setting

This quasi-experimental study utilized prospective data collected from July 2019–Jan 2021 for families receiving kinship support with either GRANDfamilies or DCFS. Data was collected using an electronic Qualtrics pre- and post-survey. The pre-survey was administered at a client's first intake (baseline). Regardless of dosage or duration of services, clients were notified of the post-survey 4 months later via email with a 2 month grace period for follow-up. GRANDfamilies clients receive services at a reduced number of locations across the state of Utah compared to DCFS, primarily serving three of the five regions in Utah: Northern, Salt Lake Valley, and Western. It is possible for clients in the Eastern or Southwestern regions to receive support, therefore data was collected across all regions in the state during the study period and later reduced to common regions of service. Institutional Review Board approval was obtained for this study.

Study Population

Participants were eligible for recruitment if they were kinship caregivers age 18 or older who had a kinship child in their care at the time of the survey and were receiving kinship support from GRANDfamilies or DCFS in the state of Utah. GRANDfamilies participants were eligible for inclusion in the study if the kinship caregiver(s) were receiving services from the GRANDfamilies program. DCFS participants were eligible for inclusion if (1) the kinship caregiver(s) had at least one child recently placed in their home, (2) were receiving support through DCFS, and (3) were considered under any of the following (for comparability): Protective Supervision Services, Interstate Compact on the Placement Children, Licensed Kinship Foster Caregivers, and/or kinship caregivers with kinship children in preliminary placement.

A total of 281 participants completed a pre-survey, of which 173 completed both a pre- and post-survey. Of these, 32 DCFS participants who received support outside the common service regions were excluded. Due to the COVID-19 pandemic, an additional 28 participants who responded to the pre-survey during the pandemic were removed from the study analysis due to significant changes in the response rates and population characteristics (Fig. 1), resulting in a final sample of 113 participants with pre- and post-survey responses. Of those, 59% (n=67) were GRANDfamilies participants and 41% (n=46) were DCFS participants. Overall, a higher proportion of DCFS participants who completed a pre-survey responded to a post-survey at follow-up compared to GRANDfamilies participants (72% and 52%, respectively).

Survey Procedures

Informed consent was provided at survey initiation. Staff from GRANDfamilies and DCFS recruited participants at their initial appointment (intake). Intakes were typically conducted in-person with a licensed case-worker, however some

intakes may have occurred over the phone depending on situational circumstances. The staff were briefed on recruitment protocols, including who was eligible to participate and procedures for appropriately establishing informed consent. A recruitment letter was also provided to summarize the purpose of the research, the timeline of pre- and post-survey completion, how long it would take to complete each of the surveys, the gift card compensation received for completion of each of the surveys ($10 gift card for completing the pre-survey and $20 for completion of the post-survey), and researcher contact information. The recruitment letter also included a link to the electronic survey that the participant could follow to complete the survey. The survey and all study-related materials were made available in both English and Spanish. Qualtrics was used for administering, collecting, and storing survey response data during the data collection phase.

Participants were able to complete the survey in-office or at home using a computer or smartphone. Once the investigators received a notification from Qualtrics that a pre-survey was complete, the information was added to a tracking database and the participants were provided their gift card. The first several weeks of pre-survey data collection were monitored closely for appropriate administration. After 4 months of follow-up, participants received a notification of the post-survey sent via preferred means of contact. Because response rates to surveys via email have steadily decreased in recent years, participants were given a grace period of 2 months for response before being considered loss to follow up (Cunningham et al., 2015). The first month of follow-up was reserved for automated email notification of the post-survey, whereas the second month of follow-up included additional outreach from either GRANDfamilies or DCFS staff reminding kinship clients of the post-survey. Similar to the pre-survey, once researchers received notice of post-survey completion, the information was updated in the tracking database and participants were provided their final $20 gift card.

SURVEY METRICS

Overall, the survey consisted of 5 sections and took approximately 7–12 minutes to complete. While kinship families may have more than one kinship child in their care, the survey aimed to collect information pertaining to a kinship child of most concern. Characteristics such as the kinship child's age and gender were collected, as well as circumstances relating to the kinship child's biological parents that led to the kinship child being in the kinship caregiver's care. The survey also covered Protective Factors and child circumstances, with kinship caregivers rating their level of concern about different aspects of the kinship child's well-being and family dynamics. A Global Assessment assessed the degree of access and referral to services needed, including if the kinship caregiver had legal rights over the kinship child, if the kinship caregiver had received the Specified Relative Grant, whether the kinship child was covered under medical insurance, and if the kinship child was receiving or needed receipt of behavioral health services. The survey concluded with a satisfaction questionnaire, followed by additional information collected regarding the number of kinship children in their care and their ages, how long they have been a kinship caregiver, as well as characteristics such as the caregiver's age, gender, and county of residence. These additional measures regarding demographics and other kinship children in the home were provided at the end of the survey in order to mitigate any influence or bias that may occur when responding to the survey. The post-survey consisted of the same questions in the same format and order as pre-survey, with an additional question of satisfaction regarding the betterment of a family's circumstances after having received services or support from GRANDfamilies or DCFS.

Outcome Measures

Target outcomes for kinship navigator programs include child safety, child permanency, child well-being, adult (parent and kinship caregiver) well-being, satisfaction with services and programs, as well as access and referrals to services and programs. While the study initially aimed to evaluate access and referrals to services needed in addition to kinship caregiver satisfaction, the pre-survey measures for access and referrals to services needed did not demonstrate sufficient baseline equivalence for analysis of post-survey outcomes in accordance with guidelines set forth by the Title IV-E Prevention Services Clearinghouse for Kinship Navigation research (ACF, 2019; see baseline equivalence section on page 12 below). Additional baseline measures for establishing equivalence were not available in the data collected (race, ethnicity, socio-economic indicators), further limiting the scope of the analysis to outcomes with sufficient direct pre-measures of the outcome (ACF, 2019). As a result, this study aimed to evaluate kinship caregiver satisfaction with the GRANDfamilies program compared to DCFS.

Table 1. Description of satisfaction questions

	Satisfaction Question	Measure
Caseworker responsiveness	*"Phone calls were quickly answered and my messages were returned by the caseworker."*	Pre- and Post-Survey
Complaints and concerns handled well	*"If I had a complaint, it was handled quickly and to my satisfaction."*	Pre- and Post-Survey
Listened to, involved in plans	*"The staff listened to my ideas and involved me in making decisions about plans and services."*	Pre- and Post-Survey
Receipt of quality, dependable services	*"I [am receiving] good quality, dependable services that match my needs well."*	Pre- and Post-Survey
Treated with respect by staff	*"I was treated with courtesy and respect by the [Grandfamilies or DCFS] staff."*	Pre- and Post-Survey
Improved family circumstances	*"My family's circumstances are better now than before or they are getting better because of [GRANDfamilies or DCFS] services."*	Post-Survey

Kinship caregivers were asked a total of five satisfaction questions at pre- and post-survey related to experiences applicable to both their initiation and receipt of services. One additional satisfaction question related to the betterment of a family's circumstances was provided at post-survey (Table 1). Each of these kinship caregiver satisfaction questions were rated on a 5-point Likert scale ranging from "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree". However, due to limitations with the sample size, there were sparse outcomes in some of the categories, and the response levels were condensed to a 3-point Likert scale of "Disagree", "Neutral", "Agree" (Sullivan & Artino Jr., 2013). A Cronbach's alpha of 0.87 (95% confidence boundaries of [0.84, 0.91]) suggests these items demonstrate sufficient reliability.

Data Analysis and Procedures

R statistical software (R, version 3.5.2) was used for data analysis. Descriptive statistics (e.g., frequencies and percentages) were used to characterize baseline measures and survey responses. Upon completion of data collection, pre- and post-surveys were linked using a common identifier and evaluated for completeness and reference to the same kinship child of concern. Due to the nature of the survey design, there was minimal to no risk of missing data in a completed survey. The data was subset to matching service areas in order to mitigate bias, as well as pre-survey responses that occurred before the COVID-19 pandemic. Repeated measures ordinal logistic regression was used for measures of satisfaction with a pre- and post-response, while ordinal logistic regression was used to evaluate the single post-only measure of satisfaction. Significance was reported at the α=0.05 threshold along with 95% confidence intervals (CI).

Population characteristics were evaluated in each model for potential impacts on the outcomes of interest including the age and gender of the kinship caregiver and kinship child, region, rurality status, follow-up time, whether the kinship child was living in the home of the kinship caregiver at the time of the survey, as well as the timing of the survey with regard to the COVID-19 pandemic. Each of these covariates were evaluated for multicollinearity with one another using either a Pearson Correlation Coefficient (continuous measures) or Phi Correlation Coefficient (nominal or binary measures) accordingly, with correlations in the range of 0.6–0.7 or higher warranting caution and correlations above 0.8 generally considered multicollinear (Frey, 2018; Taylor, 1990; Kim, 2019). Overall, these model covariates demonstrated little to no risk of multicollinearity, with region and kinship group (GRANDfamilies or DCFS) having the highest degree of correlation at ρ=0.34.

Analysis of variance was used to determine the goodness of fit using likelihood ratio tests (LRT) and comparison of the model Akaike Information Criterion (AIC) scores as an estimator of prediction error compared to an intercept-only null model (Mangiafico, 2016; Christensen, 2019). Measures of Pseudo R^2 (Nagelkerke) were also evaluated as an indicator of performance compared to a null (intercept-only) model (Mangiafico, 2016). Intraclass correlations (ICC) were provided for the raw data as well as mixed effects (adjusted repeatability) for confirmation of estimated sample sizes and proportion of the model variance explained by subject-clusters (Moineddin, 2007; Wu, Crespi, & Wong, 2012; Nakagawa S, Johnson P.D., & Schielzeth H., 2017).

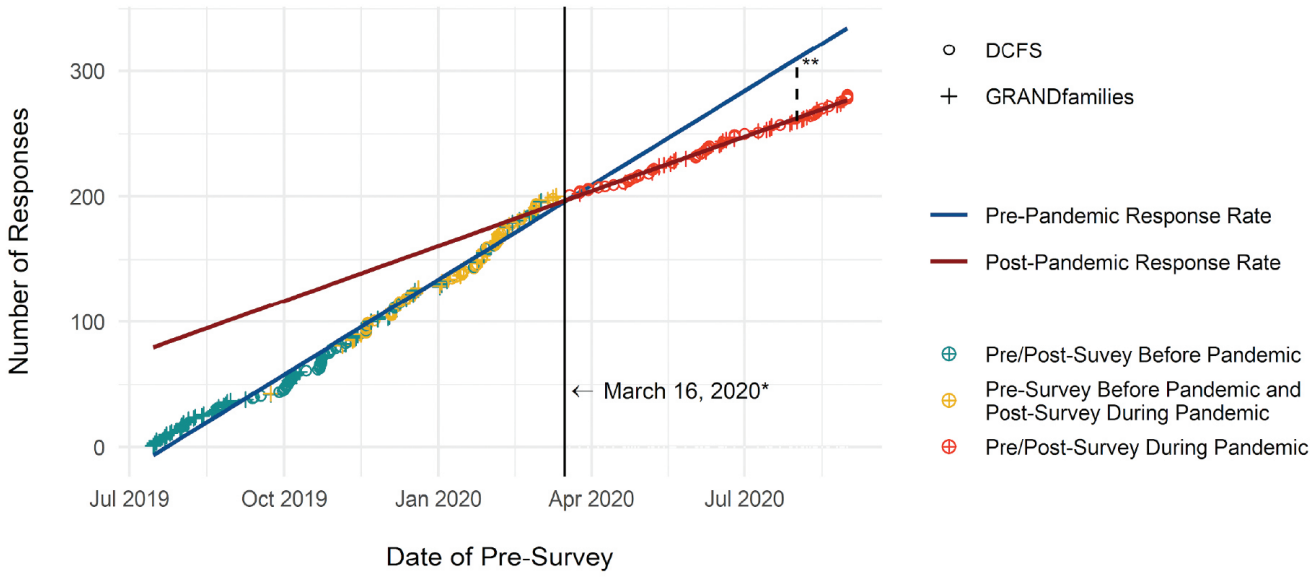
Sample Size

Assuming an α=0.05 type I error rate and moderate effect sizes between study groups (e.g., Cohen's d=0.5, F-value=0.3), ordinal regression requires a minimum total sample size of 102 participants to detect signal with a β=0.20 type II error rate (80% power) (Gelman, A., Jakulin, A., Pittau, M. G., & Su, Y., 2008). For multilevel ordinal logistic regression models, a moderate effect size is similarly assumed along with a moderate ICC between pre- and post-survey responses. Using adaptive quadrature procedures, Ali et al. (2016) demonstrated 86%–99% power for estimates of fixed effects when (a) there are a large number of clusters (n=100) with relatively small size (n<=5), (b) the random effects are expected to be moderate to large, and (c) there is moderate correlation (ICC=0.5). Overall, sample size calculations suggest a minimum of 102 participants with pre- and post-responses. The rate of loss to follow up for this quasi-experimental pre- and post-survey was expected to be high at 45–55%. Taking this into consideration, the target sample size for recruitment in the study was aimed at 300 participants total, with no greater difference than a ratio of 40:60 between study groups.

COVID-19 Pandemic

In the State of Utah, the Utah Department of Health released an official statement of emergency on March 16, 2020, marking statewide closures of all businesses and services, impacting social service programs statewide and ultimately leading to a transition of services to virtual platforms. Data collection began before the onset of the COVID-19 global pandemic and was decidedly continued throughout the pandemic. When examining the response rates over time, we noted a significant 34% drop in the rate of pre-survey completion correlating with the date of March 16, 2020 ($p<0.0001$; Fig. 1). As a result, this date was used as a cut-off in determining whether to include or exclude participants who responded to pre- and post-surveys before or after the pandemic. Participants were grouped by whether they (1) completed a pre-survey or pre- and post-survey *before* the pandemic began, (2) completed a pre-survey *before* the pandemic began and completed a post-survey *after* the pandemic began, or (3) completed a pre-survey or pre- and post-survey *after* the pandemic began.

Figure 1. Impact of COVID-19 on the trajectory of survey response rates



*Official state of emergency declared in Utah due to COVID-19, resulting in state-wide quarantine and restriction of all operations to essential workers only.
**Response significantly decreased due to pandemic (p<0.0001)

There were a total of 281 pre-survey responses, of which 200 were completed before the cut-off date. Of these, 81 pre-survey responses were associated with a post-survey after the cut-off date. Population changes were noted by whether a pre-survey was taken before or during the pandemic for both GRANDfamilies and DCFS. Overall, the age and gender of kinship caregivers differed by the pandemic cut-off date. These changes were noted for the age of the kinship caregiver (Fisher's Exact test: p=0.001) as well as the region and rurality status of kinship families overall and by kinship group (Fisher's Exact test: p<0.0001 and p=0.01, respectively; Cochran-Mantel-Haenszel test: p=0.0004 and p=0.0006, respectively). Based on the impact to response rates and population characteristics, pre-surveys completed after the cut-off date were excluded from the analysis. However, an indicator for whether the post-survey was completed before or during the pandemic began was considered for potential impacts when modeling outcomes.

Baseline Equivalence

Baseline equivalence was evaluated between GRANDfamilies and DCFS for all pre-survey demographic characteristics as well as relevant pre-survey measures on outcomes of interest using Hedges' g or Cox's Index d effect size measures, depending on the nature of the covariate (Hedges, 1981; Sánchez-Meca, 2003). In accordance with guidelines set forth by the Title IV-E Prevention Services Clearinghouse for Kinship Navigation research, measures with baseline equivalence <=0.05 between GRANDfamilies and DCFS were considered satisfactory while measures with baseline equivalence between 0.05 and 0.25 required statistical adjustment (ACF, 2019). Measures with baseline equivalence above 0.25 were considered unsatisfactory and were not used for statistical evaluation. Measures of access and referrals to services needed all demonstrated Hedges' g values >0.25 and as a result were excluded from the study analysis.

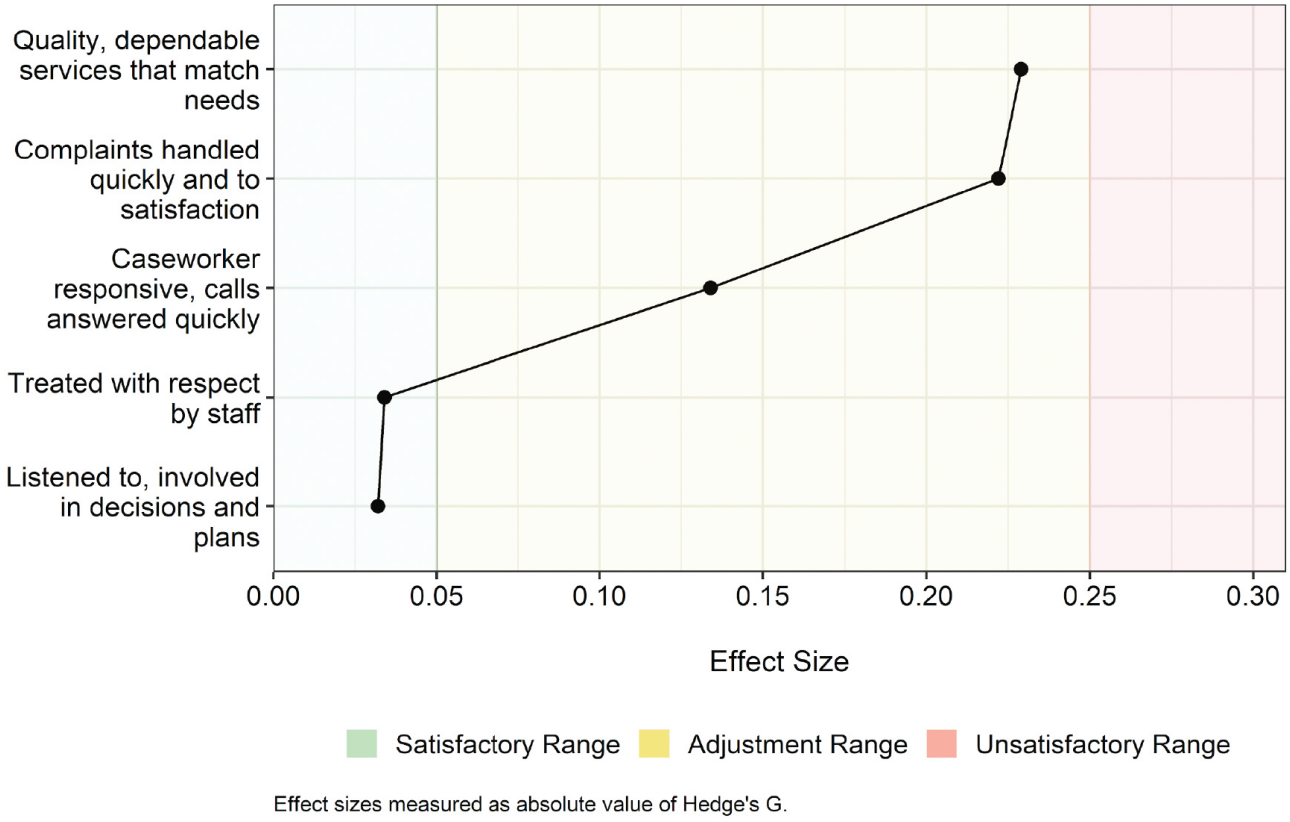
Table 2. Baseline equivalence of pre-survey measures

Section	Measure		Baseline Equivalence*
Demographics	Kinship caregiver age		0.453
	Kinship caregiver gender		0.006
	Kinship child age		0.594
	Kinship child gender		0.021
	Kinship family size		0.034
	Kinship child lives with kinship caregiver**		0.057
	Region	*Northern*	0.342
		Salt Lake Valley	0.233
		Western	0.479
	County	*Box Elder*	0.236
		Cache	0.251
		Davis	0.502
		Salt Lake	0.233
		Utah	0.479
		Weber	0.396
	Rurality status (Urban)		0.236
Services and Referrals	Medicaid or CHIP		0.806
	Granted legal rights		0.366
	Behavioral health services needed		0.369
	Specified relative grant		0.845
	Satisfaction caseworker responsiveness		0.134
	Complaints and concerns handled well		0.222
	Listened to, involved in plans		0.032
	Receipt of quality, dependable services		0.229
	Treated with respect by staff		0.034

*Baseline equivalence was measured via Hedges' g or Cox's Index d. **Living in the home of the kinship caregiver(s) full-time.

Baseline equivalence could not be established for pre-measures of access and referrals to services needed (Table 2). Overall, the majority of demographic measures at pre-survey demonstrated baseline equivalence above the satisfactory and statistical adjustment range with the exception of kinship caregiver and child gender and size of the family (Table 2). However, two of the five satisfaction survey questions answered at the pre-survey demonstrated baseline equivalence below 0.05, with the three remaining satisfaction questions ranging from 0.13 to 0.23 warranting statistical adjustment in their respective outcomes analysis (Table 2, Fig. 2).

Figure 2. Baseline equivalence of the pre-survey measures on the outcome



Effect sizes measured as absolute value of Hedge's G.

Analysis Procedures

Ordinal logistic regression was used for modeling the post-survey-only outcome of satisfaction with the betterment of a family's circumstances after having received support, controlling for necessary covariates and/or pre-measures of interest. Cumulative link mixed models (CLMMs) fitted with adaptive Gauss-Hermite (GH) quadrature approximation and logit link were used to conduct repeated measures ordinal logistic regression to model the change in responses from pre- to post-survey between GRANDfamilies and DCFS while accounting for the repeated measures at the participant-level. These models considered pre-survey scores in the design and thus accounted for any necessary adjustments required based on the results of baseline equivalence. The Hessian condition number was evaluated as an indicator of optimal convergence, with Hessian condition numbers above 10^4 suggesting potential problems with the model fit (Christensen, 2018). GH quadrature was set at a value of 5 to ensure sufficient approximation of model estimates (Lesaffre & Spiessens, 2001). Breslow (2004) and Biswas (2005) suggest higher values of GH quadrature as necessary when a sampling distribution is suspected to be non-Gaussian. This often occurs when there are few observations per cluster in a mixed model, as was the case in our study. The assumption of proportional odds was evaluated using a nominal test of the CLMM models, as well as a Brant test of nominal effects for the ordinal logistic regression model (Agresti, 2011; Mangiafico, 2016; Christensen, 2019).

Results

A total of 113 pre- and post-survey responses were collected. Of these, 59% (n=67) were from GRANDfamilies and 41% (n=46) were from DCFS (Table 3). The average age of GRANDfamilies kinship caregivers was 49.3 years while the DCFS population was slightly younger at 42.8 years. The distribution of identified kinship caregiver gender was equally distributed between both kinship groups (GRANDfamilies versus DCFS) with 80% of respondents identifying as female compared to 19% identifying as male.

Table 3. Pre-survey population characteristics

	Pre-Survey Characteristics		GRANDfamilies (N=67)	DCFS (N=46)
Kinship Caregivers	Average age (years)		49.3 years	42.8 years
	Gender	*Male*	19.4%	19.6%
		Female	80.6%	80.4%
Kinship Child	Average age (years)		7.5 years	4.6 years
	Gender	*Male*	44.8%	45.7%
		Female	55.2%	54.4%
Household	Average kinship family size		1.6 children	1.6 children
	Kinship child lives with kinship caregiver*		94%	93%
	Region	*Salt Lake Valley*	46.3%	37.0%
		Northern	50.7%	37.0%
		Western	3.0%	26.1%
	Rurality	*Urban*	97.0%	95.7%
		Rural	3.0%	4.4%

*Living in the home of the kinship caregiver(s) full-time.

Similar to the caregivers, the age of the primary kinship child was higher for GRANDfamilies respondents compared to DCFS (7.5 and 4.6 years; respectively), and there were slightly more female kinship children than male (55.2% and 54.4%; respectively) (Table 3). Both GRANDfamilies and DCFS kinship families had 1–2 kinship children in their care, with over 90% of kinship having the kinship child(ren) live with them full-time (Table 3). Overall, the majority of GRANDfamilies kinship caregivers reportedly received services in the Northern region followed by Salt Lake Valley and Western, whereas DCFS kinship families equally received support in the Northern and Salt Lake Valley regions, followed by Western. Regardless, over 95% of kinship families were reportedly urban (Table 3).

Survey Responses

The majority of kinship caregivers were reportedly satisfied, with over 50% reporting satisfaction regardless of pre- and post-survey or kinship group (Table 4, Fig. 3). Overall, GRANDfamilies kinship caregivers reported a higher level of satisfaction at both pre- and post-survey compared to DCFS. Satisfaction reported at post-survey follow-up generally

increased or remained the same for GRANDfamilies, whereas satisfaction decreased for the majority of satisfaction measures for DCFS (Table 4, Fig. 3).

Overall, an 88% majority of GRANDfamilies kinship caregivers were equally as satisfied from pre- to post-survey with their caseworkers responsiveness, whereas DCFS kinship caregivers decreased satisfaction by 13% from pre- to post-survey (87% versus 74%, respectively; Table 4, Fig. 3). Satisfaction with how well complaints and concerns were handled had the lowest reports of satisfaction at pre- and post-survey, regardless of kinship group. However, GRANDfamilies and DCFS both saw an increase in satisfaction at post-survey (72% and 70%, respectively; Table 4, Fig. 3).

When asked about satisfaction with how kinship caregivers were being listened to and involved in the planning and decisions of their family's services, GRANDfamilies satisfaction increased slightly at post-survey with 88% of kinship caregivers reportedly satisfied compared to a 9% decrease in satisfaction with DCFS at post-survey (87% to 76%; Table 4, Fig. 3). From pre- to post-survey, the question of whether families were receiving quality, dependable services that matched their needs had the greatest decrease in satisfaction regardless of kinship group. In contrast, the question of how clients were treated by staff demonstrated the highest proportion of satisfaction, with 96% of GRANDfamilies kinship caregivers reporting satisfaction at pre- and post-survey and DCFS reporting 93% and 83% satisfaction at pre- and post-survey, respectively (Table 4; Fig. 3).

Table 4. Distribution of Satisfaction Responses from Pre- to Post-Survey

Measures of Satisfaction		GRANDfamilies (N=67)		DCFS (N=46)	
		Pre-Survey n (%)	Post-Survey n (%)	Pre-Survey n (%)	Post-Survey n (%)
Caseworker responsiveness	*Agree*	59 (88)	59 (88)	40 (87)	34 (74)
	Neutral	6 (9)	4 (9)	2 (4)	4 (9)
	Disagree	2 (3)	8 (17)	4 (9)	8 (17)
Complaints and concerns handled well	*Agree*	46 (69)	48 (72)	29 (63)	32 (70)
	Neutral	19 (28)	17 (25)	12 (26)	7 (15)
	Disagree	2 (3)	2 (3)	5 (11)	7 (15)
Listened to, involved in plans	*Agree*	58 (87)	59 (88)	40 (87)	35 (76)
	Neutral	6 (9)	6 (9)	3 (7)	4 (9)
	Disagree	3 (4)	2 (3)	3 (7)	7 (15)
Receipt of quality, dependable services	*Agree*	54 (81)	52 (78)	33 (72)	33 (72)
	Neutral	11 (16)	12 (18)	10 (22)	4 (9)
	Disagree	2 (3)	3 (4)	3 (7)	9 (20)
Treated with respect by staff	*Agree*	64 (96)	64 (96)	43 (93)	38 (83)
	Neutral	1 (1)	2 (3)	2 (4)	4 (9)
	Disagree	2 (3)	1 (1)	1 (2)	4 (9)
Improved family circumstances	*Agree*	-	53 (79)	-	25 (54)
	Neutral	-	11 (16)	-	13 (28)
	Disagree	-	3 (4)	-	8 (17)

The greatest difference in reported satisfaction between GRANDfamilies and DCFS was noted for the post-survey only question regarding the improvement of a kinship family's circumstances after receiving services. Overall, 79% of GRANDfamilies kinship caregivers were reportedly satisfied compared with only 54% of DCFS kinship caregivers (Table 4; Fig. 4). Moreover, only 4% of GRANDfamilies kinship caregivers reported dissatisfaction with the improvement of their kinship family's circumstances while 17% of DCFS kinship caregivers reportedly dissatisfied (Table 4; Fig. 4).

Figure 3. Distribution of Reported Satisfaction: Pre- and Post-Survey

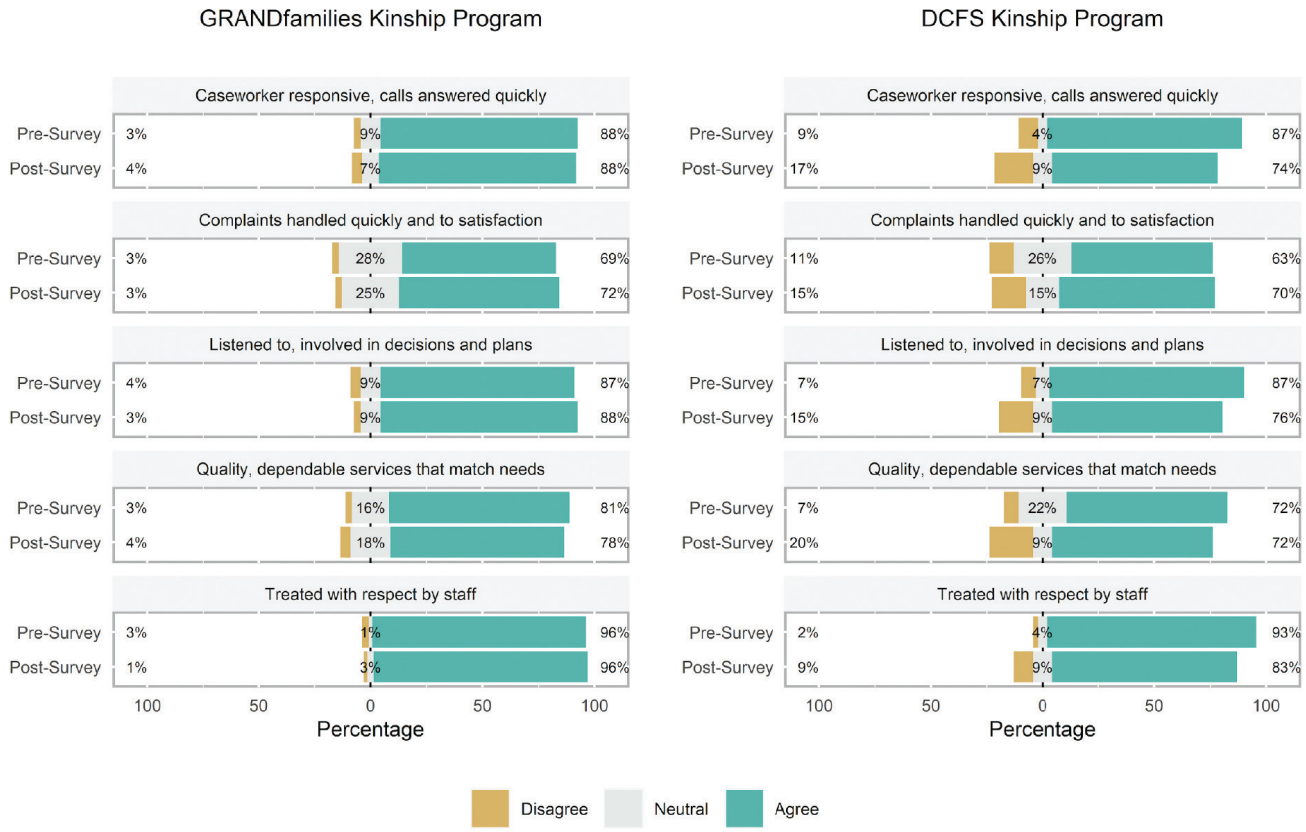
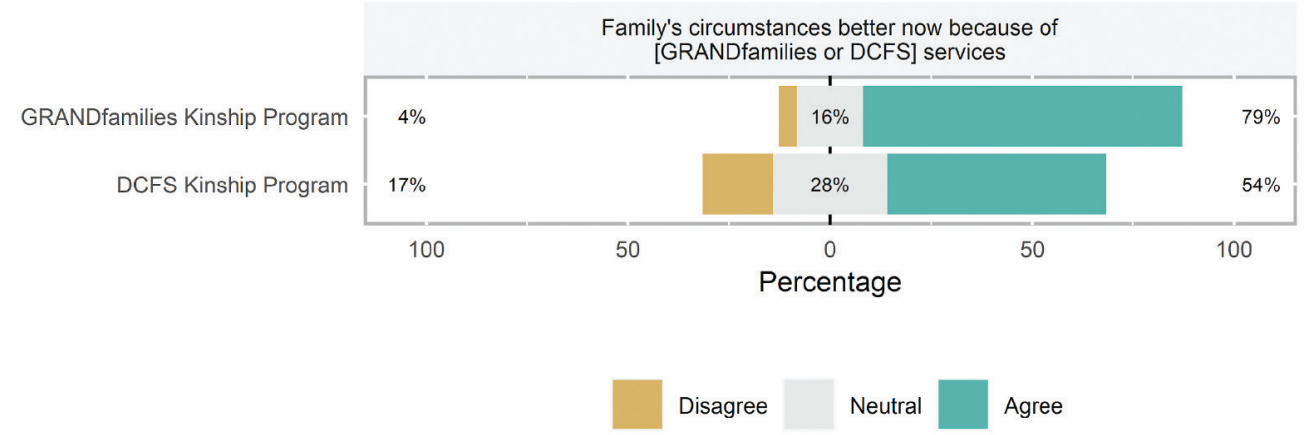


Figure 4. Distribution of Reported Satisfaction: Post-Survey Only



Odds of Increased Satisfaction

CASEWORKER RESPONSIVENESS

GRANDfamilies was significantly associated with increased satisfaction regarding caseworker responsiveness (Table 5). The results of the model demonstrate a 9.9-fold increase in the odds of GRANDfamilies kinship caregivers having increased satisfaction compared to DCFS kinship caregivers (OR=9.88, 95% CI=[1.07,92.29], p=0.04; Table 5). The effect of GRANDfamilies on increased kinship caregiver satisfaction appears to be strong compared to DCFS, however the 95% confidence intervals are wide suggesting potential sparse-data bias. While the true estimate of effect may be lower or higher than an odds ratio of 9.9, the results are consistently significant with the odds ratio and 95% confidence interval above the null value.

The pre-survey measure was significantly associated with satisfaction reported at post-survey (p=0.02) while the interaction of satisfaction responses from pre- to post-survey between GRANDfamilies and DCFS had a notable impact on the outcome but did not appear to be statistically significant (p=0.09). The age of the kinship caregiver demonstrated significant impacts on the model as a potential confounder and, although non-significant, was retained in the model, improving the AIC and estimated standard errors.

Overall, the model sufficiently demonstrated proportional odds among all the covariates (Table 5). While the model explains a relatively small portion of the variation in the outcome (Nagelkerke Pseudo R2=0.19), it provided a significantly better fit from an intercept-only model with null effects (LRT: p<0.0001; Table 5). The among-subject variation in the intercept was fairly high, with over 75% of the variation in the outcome of satisfaction accounted for by the correlation of a kinship caregiver's repeated measure from pre- to post-survey (ICC=0.77; Table 5).

COMPLAINTS AND CONCERNS HANDLED WELL

There was no significant difference in satisfaction with how well staff handled complaints and concerns between GRANDfamilies and DCFS (OR=1.85, 95% CI=[-0.58, 1.8]; p=0.31; Table 6). Similarly, the interaction of pre- versus post-survey response and kinship group was non-significant. The age of the kinship caregiver was identified as a potential confounder and was ultimately kept in the model, while the length of follow-up and whether the kinship child was living with the kinship caregiver demonstrated notable effects on the outcome of satisfaction, but were not statistically significant (p=0.08 and 0.09, respectively) (Table 6).

Overall, the model demonstrated a significantly better fit compared to an intercept-only model with null effects (LRT: p=0.0009), with half of the variation in the outcome accounted for by the correlation of a participant's repeated measure from pre- to post-survey (ICC=0.44; Table 6). However, the model appeared to violate the assumptions of proportional odds suggesting a non-proportional slope effect between GRANDfamilies and DCFS at the differing response levels by whether the kinship child is living with the kinship caregiver at the time of the survey (Table 6). Further evaluation of this non-proportionality and use of a partial proportional odds or multinomial model is suggested.

LISTENED TO, INVOLVED IN PLANS

Overall, the GRANDfamilies program was strongly associated with increased satisfaction in feeling listened to and involved with service plans (Table 7). The results of the model demonstrate a 3.7-fold increase in the odds of GRANDfamilies kinship caregivers having increased satisfaction compared to the DCFS kinship caregivers, but ultimately was not significant (OR=3.73; 95% CI=[0.93,14.96]; p=0.06) (Table 7). Whether the kinship child was still living with the kinship caregiver had a significant impact on the outcome of satisfaction, resulting in a 4.1-fold increase in the odds of increased satisfaction at post-survey follow-up (p=0.02; Table 7). The interaction of satisfaction responses from pre- to post-survey between GRANDfamilies and DCFS did not appear to be statistically significant. The age of the kinship caregiver demonstrated significant impacts on the model as a potential confounder and, although non-significant, was retained in the model, improving the AIC and estimated standard errors.

While the model explains a relatively small portion of the variation in the outcome (Nagelkerke Pseudo R2=0.11), it provided a significantly better fit from an intercept-only model with null effects (LRT: p=0.011; Table 7). Just under 40% of the variation in the outcome of satisfaction was accounted for by the correlation of a participant's repeated measure from pre- to post-survey (ICC=0.49), with a sufficient demonstration of proportional odds for the model overall.

RECEIPT OF QUALITY, DEPENDABLE SERVICES

There was a notable but non-significant difference in satisfaction between GRANDfamilies and DCFS regarding the perception of having quality, dependable services that met the family's needs well (OR=3.51; 95% CI=[-0.22, 2.72]; p=0.09; Table 8). Although similarly non-significant, the age of the kinship caregiver was found to have confounding effects on the outcome and was retained in the model, improving both the AIC and estimated standard errors of the estimates. Overall, the model demonstrated a significantly better fit compared to an intercept-only model with null effects (LRT: p=0.0002), with over half of the variation in the outcome accounted for by the correlation of a participant's repeated measure from pre- to post-survey (ICC=0.59; Table 8). However, the model appeared to violate the assumptions of proportional odds suggesting a non-proportional slope effect between GRANDfamilies and DCFS at the differing response levels from pre- to post-survey (Table 8). Further evaluation of this non-proportionality and use of a partial proportional odds or multinomial model is suggested.

TREATED WITH RESPECT BY STAFF

Overall, the GRANDfamilies program was significantly associated with increased satisfaction regarding respectful treatment by staff (Table 9). The results of the model demonstrate a near 14-fold increase in the odds of GRANDfamilies kinship caregivers having increased satisfaction compared to DCFS kinship caregivers (OR=13.95; 95% CI=[1.13,173.3]; p=0.04); Table 9). The effect of GRANDfamilies on increased kinship caregiver satisfaction appears to be strong compared to DCFS, however the 95% confidence intervals are wide suggesting potential sparse-data bias. While the true estimate of effect may be lower or higher than an odds ratio of 14, the results are consistently significant with the odds ratio and 95% confidence interval above the null value.

The pre-survey measure was strongly associated with satisfaction reported at post-survey (p=0.067). However, the interaction of satisfaction responses from pre- to post-survey between GRANDfamilies and DCFS did not appear to be statistically significant (p=0.16; Table 9). The age of the kinship caregiver demonstrated significant impacts on the model as a potential confounder and, although non-significant, was retained in the model, improving the overall AIC and estimated standard errors (Table 9).

Overall, the model sufficiently demonstrated proportional odds among all the covariates (Table 9). While the model explains a relatively small portion of the variation in the outcome (Nagelkerke Pseudo R2=0.13), it provided a significantly better fit from an intercept-only model with null effects (LRT: p=0.013; Table 9). The among-subject variation in the intercept was moderately high, with 64% of the variation in the outcome of satisfaction accounted for by the correlation of a kinship caregiver's repeated measure from pre- to post-survey (ICC=0.643; Table 9).

IMPROVED FAMILY CIRCUMSTANCES

The GRANDfamilies program was significantly associated with increased satisfaction regarding the improvement of [their] family's circumstances (Table 10). The results of the model demonstrate a 3.4-fold increase in the odds of GRANDfamilies kinship caregivers having increased satisfaction compared to the DCFS kinship caregivers (OR=3.36; 95% CI=[1.33, 8.83]; p=0.01; Table 10). Some of the pre-survey satisfaction measures requiring adjustment demonstrated wide 95% confidence intervals, suggesting potential sparse-data bias in the responses of these pre-survey measures, however the outcome of increased satisfaction regarding improved family circumstances for GRANDfamilies compared to DCFS demonstrated a reasonable 95% confidence interval with a significant odds ratio consistently above the null value.

Overall, the model sufficiently demonstrated proportional odds among all the covariates (Table 10). None of the pre-survey measures that were required for statistical adjustment of satisfaction were significant in the model (Table 10). The identified gender of the kinship caregiver demonstrated significant effects, with male kinship caregivers being

5.9x more likely to report increased satisfaction at post-survey compared to female kinship caregivers (OR=5.87, 95% CI=[1.42,36.17],p=0.03; Table 10) . The age of the kinship caregiver was identified as a potential confounder and, although non-significant, improved the AIC and estimated standard errors of the model when retained (Table 10). Overall, the model explained 35% of the variation in the outcome (Nagelkerke Pseudo R2=0.35) and demonstrated a significantly better fit compared to an intercept-only model with null effects (LRT: p<0.0001; Table 10).

Table 5. Satisfaction: Caseworker Responsiveness

Measure	OR	OR Std. Error	95% CI	z-value	p-value
GRANDfamilies*	9.88	3.11	[1.07,91.29]	2.02	0.043
Pre-Survey Response**	7.59	2.44	[1.33,43.49]	2.28	0.023
Kinship Caregiver Age	0.99	1.03	[0.93,1.05]	-0.45	0.653
Interaction: Group* and Survey Timing**	0.15	3.05	[0.02,1.37]	-1.68	0.094
Cut Point 1: Disagree | Neutral	0.01	6.33			
Cut Point 2: Neutral | Agree	0.06	5.68			
Random Effects (Repeated Measure) Variance=10.83; Std. Dev.=3.29 Nominal Test of Proportional Odds: GRANDfamilies: p=0.35 Pre-Survey Response: p=0.35 Kinship Caregiver Age: p=0.88 Interaction: p=0.59			Likelihood Ratio Test (ANOVA) Null model: AIC=242.55 Final model: AIC=223.43; χ^2=29.11; p<0.0001 Nagelkerke Pseudo R2=0.19 Intraclass Correlation (ICC): Pre- and Post-Response: 0.669 Adjusted Repeatability: 0.767 Hessian Condition Number: 7.2^4		

*GRANDfamilies compared to DCFS. **Pre-survey scores compared to post. OR=Odds Ratio. Std.=Standard. CI=Confidence Interval.

Table 6. Satisfaction: Complaints and concerns handled well

Measure	OR	OR Std. Error	95% CI	z-value	p-value
GRANDfamilies*	1.85	1.84	[-0.58,1.80]	1.01	0.311
Pre-Survey Response**	0.74	1.67	[-1.30,0.70]	-0.59	0.558
Kinship Caregiver Age	0.98	1.02	[-0.06,0.008]	-1.44	0.151
Follow-up Time (days)	1.05	1.03	[-0.01,0.09]	1.70	0.089
Kinship Child Living With Kinship Caregiver†	2.89	1.87	[-1.17,2.29]	1.69	0.091
Interaction: Group* and Survey Timing**	1.02	1.95	[-1.29,1.32]	0.03	0.977
Cut Point 1: Disagree | Neutral	2.55	3.80			
Cut Point 2: Neutral | Agree	5.08	3.82			
Random Effects (Repeated Measure) Variance=2.59; Std. Dev.=1.61 Nominal Test of Proportional Odds: GRANDfamilies: p=0.06 Pre-Survey Response: p=0.36 Kinship Caregiver Age: p=0.14 Follow-up Time: p=0.65 Child Living With Caregiver: p=0.01 Interaction: p=0.62			Likelihood Ratio Test (ANOVA) Null model: AIC=361.09 Final model: AIC=350.56 χ^2=24.53; p=0.0009 Nagelkerke Pseudo R2=0.13 Intraclass Correlation (ICC): Pre- and Post-Response: 0.578 Adjusted Repeatability: 0.441 Hessian Condition Number: 8.6^4		

*GRANDfamilies compared to DCFS. **Pre-survey scores compared to post. †"Yes" compared to "No."
OR=Odds Ratio. Std.=Standard. CI=Confidence Interval.

Table 7. Satisfaction: Listened to, involved in plans

Measure	OR	OR Std. Error	95% CI	z-value	p-value
GRANDfamilies*	3.73	2.03	[0.93,14.96]	1.86	0.063
Pre-Survey Response**	2.28	1.93	[0.64,8.22]	1.26	0.209
Kinship Caregiver Age	0.98	1.02	[0.95,1.01]	-1.05	0.294
Kinship Child Living With Kinship Caregiver†	4.15	1.90	[0.18,14.67]	2.21	0.027
Interaction: Group* and Survey Timing**	0.32	2.40	[0.06,1.76]	-1.31	0.190
Cut Point 1: Disagree | Neutral	0.08	3.24			
Cut Point 2: Neutral | Agree	0.28	3.04			

Random Effects (Repeated Measure)
Variance=2.12; Std. Dev.=1.45

Nominal Test of Proportional Odds:
GRANDfamilies: p=0.21
Pre-Survey Response: p=0.61
Kinship Caregiver Age: p=0.97
Child Living With Caregiver: p=0.28
Interaction: p=0.64

Likelihood Ratio Test (ANOVA)
Null model: AIC=242.07
Final model: AIC=237.59; χ^2=16.48; p=0.011
Nagelkerke Pseudo R2=0.11

Intraclass Correlation (ICC):
Pre- and Post-Response: 0.447
Adjusted Repeatability: 0.391

Hessian Condition Number: 9.7^4

*GRANDfamilies compared to DCFS. **Pre-survey scores compared to post. †"Yes" compared to "No".
OR=Odds Ratio. Std.=Standard. CI=Confidence Interval.

Table 8. Satisfaction: Receipt of quality, dependable services

Measure	OR	OR Std. Error	95% CI	z-value	p-value
GRANDfamilies*	3.51	2.11	[-0.22,2.72]	1.68	0.094
Pre-Survey Response**	1.82	1.78	[-0.53,1.72]	1.04	0.298
Kinship Caregiver Age	0.98	1.02	[-0.07,0.01]	-1.10	0.269
Interaction: Group* and Survey Timing**	0.73	2.15	[-1.83,1.18]	-0.41	0.680
Cut Point 1: Disagree | Neutral	0.01	3.38			
Cut Point 2: Neutral | Agree	0.11	3.09			

Random Effects (Repeated Measure)
Variance=4.76; Std. Dev.=2.18

Nominal Test of Proportional Odds:
GRANDfamilies: p=0.05
Pre-Survey Response: p=0.03
Kinship Caregiver Age: p=0.1
Interaction: p=0.33

Likelihood Ratio Test (ANOVA)
Null model: AIC=319.81
Final model: AIC=305.13; χ^2=24.68; p=0.0002
Nagelkerke Pseudo R2=0.14

Intraclass Correlation (ICC):
Pre- and Post-Response: 0.630
Adjusted Repeatability: 0.591

Hessian Condition Number: 7.4^4

*GRANDfamilies compared to DCFS. **Pre-survey scores compared to post. OR=Odds Ratio. Std.=Standard. CI=Confidence Interval.

Table 9. Satisfaction: Treated with respect by staff

Measure	OR	OR Std. Error	95% CI	z-value	p-value
GRANDfamilies*	13.95	3.62	[1.13,173.3]	2.05	0.040
Pre-Survey Response**	5.38	2.51	[0.89,32.6]	1.83	0.067
Kinship Caregiver Age	0.98	1.03	[0.92,1.04]	-0.67	0.505
Interaction: Group* and Survey Timing**	0.14	3.98	[0.01,2.15]	-1.41	0.160
Cut Point 1: Disagree | Neutral	0.007	7.15			
Cut Point 2: Neutral | Agree	0.02	6.23			
Random Effects (Repeated Measure) Variance=5.93; Std. Dev.=2.44 Nominal Test of Proportional Odds: GRANDfamilies: p=0.6 Pre-Survey Response: p=0.7 Kinship Caregiver Age: p=0.24 Interaction: p=0.41			Likelihood Ratio Test (ANOVA) Null model: AIC=148.16 Final model: AIC=143.82; χ^2=14.34; p=0.014 Nagelkerke Pseudo R2=0.13 Intraclass Correlation (ICC): Pre- and Post-Response: 0.558 Adjusted Repeatability: 0.643 Hessian Condition Number: 9.3^4		

*GRANDfamilies compared to DCFS. **Pre-survey scores compared to post. OR=Odds Ratio. Std.=Standard. CI=Confidence Interval.

Table 10. Satisfaction: Improved family circumstances

Measure		OR	OR Std. Error	95% CI	t-value	p-value
GRANDfamilies*		3.36	1.62	[1.33,8.83]	2.52	0.01
Complaint response** Neutral	*Neutral*	6.13	4.45	[0.37,185.87]	1.21	0.22
	Agree	8.92	4.28	[0.56,253.65]	1.51	0.13
Phone call**	*Neutral*	0.30	3.37	[0.03,3.16]	-0.99	0.32
	Agree	1.21	2.70	[0.17,9.02]	0.20	0.84
Quality services**	*Neutral*	0.32	5.46	[0.008,8.23]	-0.67	0.51
	Agree	1.60	5.42	[0.04,41.91]	0.28	0.78
Kinship Caregiver Age		1.00	1.02	[0.97,1.03]	0.15	0.88
Kinship Caregiver Gender Male		5.87	2.24	[1.42,36.17]	2.20	0.03
Cut Point 1: Disagree | Neutral		1.31	3.27			
Cut Point 2: Neutral | Agree		10.06	3.42			
Nominal Test of Proportional Odds**: GRANDfamilies: p=0.94 Kinship Caregiver Age: p=0.95 Kinship Caregiver Gender: p=0.99 Complaint (Neutral): p=0.99 Complaint (Agree): p=0.99 Responsive (Neutral): p=0.56 Responsive (Agree): p=0.86 Quality services (Neutral): p=0.99 Quality services (Agree): p=0.99			Likelihood Ratio Test (ANOVA) Null model: AIC=168.78 Final model: AIC=151.25; χ^2=30.69; p<0.0001 Nagelkerke Pseudo R2=0.35			

*GRANDfamilies compared to DCFS. **Compared to "Disagree". OR=Odds Ratio. Std.=Standard. CI=Confidence Interval.

Discussion

This study aimed to evaluate kinship caregiver satisfaction as well as access and referrals to services needed as a result of receiving kinship support from either GRANDfamilies or DCFS. While investigators were unable to assess the degree of access and referrals to services needed due to problematic baseline equivalence, the study results demonstrated a significant increase in the odds of satisfaction with program services received for the GRANDfamilies Kinship Navigator program compared to DCFS. Overall, kinship caregivers receiving services from GRANDfamilies were significantly more satisfied than those receiving support from DCFS regarding respectful treatment by staff, caseworker responsiveness, and improved family circumstances—with notable effects for whether kinship caregivers felt listened to and involved in plans. While some of the model estimates demonstrated wide 95% confidence intervals, these findings are consistently significant and are sustained for at least four months after the initiation of kinship services.

Overall, these findings related to satisfaction have important practical implications that can be used to target the overarching success of a kinship navigator program. Client satisfaction has become an increasingly important attribute for social and health programs in the public sector not only for understanding client experiences, but also informing process improvement, administrative effectiveness, as well as uptake and continuation of services (Manzoor et al., 2019). Future research should seek to include qualitative measures of satisfaction and experiences from kinship families receiving kinship navigator services.

Surprisingly, the interaction of pre- and post-survey by kinship group (GRANDfamilies or DCFS) was not statistically significant, and may be due to the sustainment of satisfaction demonstrated by the GRANDfamilies Kinship Care program. In addition, the indicator for whether a post-survey was taken before or during the pandemic was not a significant predictor on any of the satisfaction outcomes, nor was it found to convey confounding effects on covariate estimates. This may be related to the pandemic having a widespread impact for all kinship families regardless of the kinship group, and that both GRANDfamilies and DCFS shifted to virtual services at a similar time. Additionally, the study population consisted of kinship families who began receiving services before the pandemic, potentially suggesting the population who responded at pre-survey before the pandemic was more similar and therefore more similar in regard to their responses at follow-up. Future research should aim to evaluate the impacts of COVID-19 on the needs of kinship families as they navigate complex family dynamics during a pandemic.

Since this study focused on families receiving kinship navigator services in a reduced number of regions across the state of Utah, these findings are not generalizable to kinship services provided state-wide. In addition, there were very few families in rural areas and even fewer who responded at post-survey follow-up, limiting these findings to a mostly urban population. These differences in service areas may be related to the challenge of establishing sufficient baseline equivalence of survey measures, additionally limiting the number of study outcomes available for analysis. Furthermore, the reduced number of locations available for data collection in addition to the COVID-19 pandemic limited the sample size available for analysis. A larger sample size would have likely increased the statistical power of the models as well as the appropriate estimation of standard errors of model estimates, thus reducing the risk of Type I and Type II errors.

Finally, this study was quasi-experimental and relied on measures of self-report. While this limits the ability of the study investigators to randomize participants and mitigate bias, there are ethical constraints to the design of randomized, controlled research in social and behavioral services. As such, future research should seek opportunities for a more rigorous prospective design with randomization, as well as the differing impacts of kinship family circumstances and population characteristics such as race, ethnicity, and socio-economic status on reported satisfaction. Lastly, future research should aim to evaluate longer durations of sustained effects on a larger sample size of kinship families, outcomes not included in this study, as well as the dosage and interaction of different kinship services received.

Conclusion

The GRANDfamilies Kinship Navigator program demonstrated a significant increase in kinship caregiver satisfaction compared to those receiving support from DCFS, with sustained effects of at least 4 months. Specifically, kinship caregivers receiving services from the GRANDfamilies program were significantly more satisfied with their treatment by staff, caseworker responsiveness, and improved family circumstances compared to DCFS kinship caregivers. Overall, this research adds to the evidence-base of GRANDfamilies as an effective kinship navigator program and supports the continuation of program services for families in need of kinship services and supports. As evidence for this service is still emerging, continued research and examination of the program's effectiveness is recommended.

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