



Outcomes of the Arizona Kinship Support Services: Impact of Kinship Navigation on Child Permanency Outcomes

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Arizona Kinship Support Services (AKSS) is a Kinship Navigation (KN) program operated by Arizona's Children Association. The program's overarching goal is to enhance the safety, permanence, and well-being of youth by supporting kinship caregivers of children who are at risk of becoming or are dependents of the Arizona Department of Child Safety (DCS). LeCroy & Milligan Associates conducted this study of the AKSS KN program using a quasi-experimental design in accordance with the Title IV-E Prevention Services Clearinghouse, [Handbook of Standards and Procedures Version 1.0](#). This study utilized Arizona DCS administrative data to assess child permanency outcomes of baseline equivalent groups: children in the AKSS KN service intervention group (N=1,462) at 12 months or more post service receipt and children that received DCS services as usual (N=9,832). The children in both study groups were in the custody of DCS in Pima County, Arizona during the study time frame (10/1/2012-10/16/2019) and had exited DCS custody as of 10/16/2019. Baseline equivalence was established using observable characteristics measured in the DCS database including age, gender, race/ethnicity, Title IV-E eligibility, and DCS custody experience.

Results showed that children in the AKSS KN intervention group were significantly more likely to have achieved sustained favorable permanency outcomes than comparison children at 12 months or more post service receipt. Children whose families received AKSS KN intervention services were significantly more likely to be placed in kinship care while in DCS custody, compared to children from the DCS-only comparison group. Kinship care is a desired placement outcome because it is considered to be the least restrictive/disruptive placement while in child welfare custody. Children in the AKSS KN intervention group were also significantly more likely to have exited DCS custody with a permanent placement through reunification, permanent guardianship, or adoption, than children in the comparison group. Intervention children achieved these sustained favorable outcomes regardless of AKSS KN service receipt, intensity, and duration. These results suggest that participating in the AKSS KN program, a family-driven model that allows families to self-select from a variety of services based on their needs and capacity to utilize, can meaningfully improve the permanency outcomes of children and families with child welfare involvement. These results help build the evidence base for the AKSS KN program model and add to the growing body of literature on the sustained favorable effects of KN programs on children and families.

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About LeCroy & Milligan Associates:

Founded in 1991, LeCroy & Milligan Associates, Inc. is a consulting firm specializing in social services and education program evaluation and training that is comprehensive, research-driven, and useful. Our goal is to provide effective program evaluation and training that enables stakeholders to document outcomes, provide accountability, and engage in continuous program improvement. With central offices located in Tucson, Arizona, LeCroy & Milligan Associates has worked at the local, state, and national level with a broad spectrum of social services, criminal justice, education, and behavioral health programs.

INTRODUCTION

Arizona Kinship Support Services (AKSS) is a Kinship Navigation (KN) program operated by Arizona's Children Association (AzCA), with the majority of services provided in Pima County, Arizona. The program's overarching goal is to enhance the safety, permanence, and well-being of youth by supporting kinship caregivers of children who are at risk of becoming or are dependents of the Arizona Department of Child Safety (DCS). LeCroy & Milligan Associates, Inc., an independent research and evaluation firm located in Tucson, Arizona, conducted this study of the AKSS KN program using a quasi-experimental design to examine the impact of AKSS KN services at 12 months or more post case closure on child welfare outcomes of permanency, in accordance with the Title IV-E Prevention Services Clearinghouse, [*Handbook of Standards and Procedures Version 1.0*](#) (Wilson, Price, Kerns, Dastrup, & Brown, 2019).

The U.S. Children's Bureau has funded over 20 programs in the past 12 years, including the AKSS KN program, to develop and evaluate the KN model. However, literature supporting their efficacy has been limited due to the challenges in meeting rigorous study design and execution standards for evidence-based programs (Rushovich, McKlindon, & Vandivere, 2021). By following the Prevention Services Clearinghouse review criteria, this study seeks to build evidence for the AKSS KN program and to add to the growing body of literature on the favorable and significant effects of KN programs on children and families with child welfare involvement. This quasi-experimental study design builds on the program's pre and post-test evaluation design conducted from 2012-2015 (see LeCroy & Milligan Associates [LMA], 2015; Schmidt & Treinen, 2017; Treinen, Schmidt & Espino, 2014) that was funded by the Children's Bureau Family Connections Discretionary Grant.

This current study utilized Arizona DCS administrative data sets to assess child permanency outcomes while in DCS custody and at DCS exit for children in the AKSS KN service intervention group at 12 months or more post service receipt, compared to a baseline equivalent group of children that received DCS services as usual. The children in both study groups were in custody of DCS in Pima County, Arizona during the study time frame of 10/1/2012 to 10/16/2019 and had exited DCS custody as of 10/16/2019. The intervention group includes 1,462 children whose families received AKSS KN services during the time frame of 10/1/2012 to 10/15/2018, to assess the outcomes of children in the intervention group at least 12 months post their last receipt of AKSS KN service (i.e., KN case closure). The comparison group includes 9,832 children who were in the custody of Arizona DCS during the study time frame whose families received DCS services as usual and did not receive AKSS KN services.



Overall research question of this study: **What impact does AKSS KN services have on child permanency outcomes measured by Arizona DCS administrative data, compared to a baseline equivalent group of children whose families received DCS standard services?**



AKSS Kinship Navigation Program Model

The AKSS KN program provides assistance to families who are raising their relative's children (e.g., grandparents, great-grandparents, aunts, uncles, cousins, siblings and non-relatives/fictive kin). These children come into the care of their relatives for many different reasons including neglect, physical abuse, abandonment, parental drug use, inadequate housing, etc. (Children's Bureau, 2020; Williams, 2020).

The goal of AKSS KN services is to help kinship caregivers navigate the various systems and effectively utilize available community resources. The service model begins with Kinship Navigators completing an intake and assessment of the client's needs. All clients receive information, referral, and connection (IRC) to services, which includes referrals to community-based services and resources. Caregivers can participate in any AKSS KN service,



including topical education, support groups, family events, and information sessions on legal services and permanency options. Caregivers with a higher level of needs are offered more intensive navigation services to assist caregivers in identifying and removing barriers to achieving their goals, and in accessing public benefits, legal services, and existing community systems.



All services are voluntary, non-clinical, client-based, and focused on the expressed needs of the family. Services are family centered, strength based, and provided in a culturally and linguistically appropriate manner. Clients self-select services that meet their needs and unique situation and service length varies by participant needs. The evaluation of the AKSS KN demonstration project from 2012-2015 showed that service utilization can range from one month to five years (LMA, 2015; Schmidt & Treinen, 2017). The end of AKSS KN service is defined in this study as the last date that any service was received and no additional services were sought by the client. Given this definition, permanency outcomes for this current study were assessed at 12 months or more after the caregivers' last date of service with AKSS KN.



Implementation of the AKSS KN services is documented in the [*Program Implementation Manual for AKSS KN Program*](#)® (AzCA, 2017). This Implementation Manual provides service providers with guidance on how to implement the AKSS KN program model with fidelity. This manual reviews the program administration and operations, including key staff positions, training and certification requirements, and supervision standards for AzCA. The core components of implementing the AKSS KN program model are also reviewed, including family outreach and recruitment strategies; screening, intake, and IRC services; navigation services; other family support services; and the recommended duration and intensity of services. This manual also reviews the tools and protocols developed to monitor fidelity of service implementation. Fidelity measures monitored for AKSS KN services during the study time frame and beyond demonstrated that staff implemented services with high fidelity to this model (LMA, 2015; Schmidt & Treinen, 2017). The services received by the caregivers of children in the intervention group of this study are described in the “Participants” section of this report.

METHODS

Study Design

This study utilized a quasi-experimental design, where participants were assigned to an intervention or comparison condition through a non-random process, based on whether their caregiver received the AKSS KN intervention or received DCS services as usual. AKSS KN provides services to support both formal and informal kinship caregivers. However, creating a baseline equivalent comparison group for children in informal kinship care was not possible because child outcomes from informal care are not documented in a standardized system. To maintain study rigor, this study focuses on children in formal kinship care, comparing the permanency outcomes of baseline equivalent intervention and comparison groups using Arizona DCS administrative data. The study protocol was reviewed and approved by ARGUS IRB and the Arizona DCS Research Committee. The intervention group includes 1,462 children whose families received AKSS KN services during the study time frame (10/1/2012 to 10/15/2018) to assess their permanency outcomes at least 12 months post their last receipt of AKSS KN service (i.e., KN case closure). The comparison group includes 9,832 children who were in custody of Arizona DCS during the study time frame and whose families received DCS services as usual. All children in the study had exited DCS custody on or before 10/16/2019.

The overall research question is: **What impact does AKSS KN services have on child permanency outcomes measured by Arizona DCS administrative data, compared to a baseline equivalent group of children whose families received DCS standard services?** Specific indicators examined using DCS administrative data that are aligned with the Clearinghouse include: **Least Restrictive/Disruptive Placement** - use of kinship placement compared to non-kinship placement while in DCS custody; and **Planned Permanent Exit** - exiting DCS custody with a permanent placement status at exit, including reunification, guardianship, and adoption, compared to exiting with a non-permanency placement status.



Study Design Confounds

The Prevention Services Clearinghouse defines two types of study design confounds: “the substantially different characteristics confound, and the n=1 person-provider or administrative unit confound” (Wilson, et al., 2019, pg. 36). **No design confounds were identified per the Clearinghouse guidance.** Intervention and comparison groups were baseline equivalent on demographics, geography (all children resided in Pima County, Arizona), and DCS custody experience characteristics. It is possible that the groups differed on unobserved characteristics, but the researchers are satisfied that the groups are comparable based on the baseline equivalency testing included in this report. The intervention was delivered county-wide with fidelity to the program’s [Implementation Manual](#) (AzCA, 2017) by numerous Kinship Navigators who were trained on the AKSS KN model. Therefore, it is presumed that no n=1 person-provider confound exists, as the intervention condition was carried out in a usual care or practice setting and no program adaptations were made.

Data Collection

A data file of intervention and comparison child cases was created for this study using Arizona DCS administrative data. The Clearinghouse Handbook (Wilson et al., 2019) notes that administrative records from state agencies are assumed to be reliable and have been consistently measured across study groups. Data-sharing agreements were established between the research team and Arizona DCS. All data transfers occurred through a secure File Transfer Protocol system to maintain confidentiality and security.

Intervention Group - The research team provided DCS with demographic information for 7,444 children whose family received AKSS KN services from 10/1/2012 – 10/15/2018 and whose last service receipt was 10/15/2018 or earlier. To compare the permanency outcomes of children while in DCS custody and upon exit, intervention children were included in the study if they had met the AKSS KN service criteria and had exited DCS custody on or before 10/16/2019. This time frame was selected to assess their child permanency outcomes at 12 months or more post case closure with AKSS KN. Demographic information used for matching these children in the DCS database included child and caregiver’s names, dates of birth, gender, and race/ethnicity. Matches were completed by DCS through a computerized algorithm, followed by a manual review for accuracy. A total of **1,462 intervention group** children were matched in the DCS system and met this study inclusion criteria.

Comparison Group - The research team received administrative data for **9,832 comparison children** who met the following study inclusion criteria: they were in DCS custody between the study time frame of 10/1/2012 - 10/16/2019, their families received DCS standard services and did not receive AKSS KN services, and they had exited DCS custody on or before 10/16/2019.



Target Outcomes

The Prevention Service Clearinghouse defines **child permanency** as “the permanency and stability of a child’s living situation (in-home or in foster care) and includes the continuity and preservation of family relationships and connections” (Wilson et al., 2019, p.11). Eligible indicators of child permanency for the Clearinghouse KN programs that were assessed using Arizona DCS administrative data include: **Least Restrictive Placement** and **Planned Permanent Exit**. The two target outcomes were assessed for sustained effects at least 12 months post AKSS KN case closure of the intervention group.

Least Restrictive Placement – The Clearinghouse guidance states that this subdomain assesses the restrictiveness or disruptiveness of out-of-home placement. It focuses on improving the environments/settings into which children are placed, including favoring kinship placements over non-kin or institutional placements or placements. Kinship care is the preferred placement because it is considered to be the least-restrictive placement, which can lessen the trauma of being separated from the child’s parents and maintain connections to the child’s community (Andersen & Fallesen, 2015; CWIG, 2018b; Generations United, 2016; Winokur, Holtan, & Batchelder, 2014, 2018). The binary variable used for this study indicates if the child was placed in a least restrictive/disruptive setting while in DCS custody versus those that were placed in a more restrictive/disruptive setting while in custody.



Following the Clearinghouse’s hierarchies of least restrictive placement, a **favorable result (1=Yes)** was defined as children who received the Arizona DCS service type of kinship care placement with a grandparent or other relative. An unfavorable result (0=No) was defined as children who received any other DCS service type, including placement in a group home, residential treatment center, independent living, non-relative foster care, or a shelter.

Planned Permanent Exit – The Clearinghouse guidance states that planned permanent exits from out-of-home care refer to placements with a more permanent status that includes reunification, permanent guardianship, and adoption. The binary variable used for this study indicates if the child exited DCS custody with a more permanent status versus those who exited DCS with a non-permanent status.



Following the Clearinghouse’s definitions, a **favorable result of planned exit with a permanent status (1=Yes)** was defined in this study as children who exited DCS through reunification, permanent guardianship, or adoption. An unfavorable result of exit with a non-permanent status (0=No) was defined as children who exited DCS by emancipation (i.e., aging out or turning the age of majority without achieving permanency), who ran away and were not able to be located, or who had died while in DCS custody.



Data Analysis

Analysis of baseline equivalency and outcomes of interest were conducted using IBM SPSS Statistics Version 27. The research team conducted independent-samples *t-tests* and computed the *effect size* on continuous demographic variables to determine if the intervention and comparison groups were equivalent in terms of baseline characteristics. This study followed the guidance of the Prevention Services Clearinghouse (Wilson et al., 2019) to calculate effect sizes. The research team used the standardized mean difference effect size metric for variables measured on a continuous scale. The basic formula of the standardized mean difference effect size (*d*) is:

$$d = \frac{\bar{X}_{G2} - \bar{X}_{G1}}{s_p}$$

where the numerator is the difference in group means for the intervention and comparison groups, and the denominator is the pooled standard deviation of the intervention and comparison groups. All standardized mean difference effect sizes were adjusted to provide unbiased estimates of the effect size (Hedges, 1981). Per the Clearinghouse (Wilson et al., 2019) guidelines, baseline effect sizes less than 0.05 were considered equivalent and no further covariate adjustments were required.

Binary outcome variables (e.g., 1=Yes/0=No) were compared by equivalent study groups using a 2 x 2 contingency table and *Pearson's chi-square* (χ^2) statistical test to evaluate how likely it is that any observed difference between the two groups was due to chance. The alpha level used for all statistical tests in this study is $p < 0.05$. For binary outcomes, per recommendations of the Clearinghouse (Wilson et al., 2019), the research team computed effect sizes as *odds ratios* (OR) and then converted them to standardized mean difference effect sizes using the *Cox transformation* (d_{cox}) (Sánchez-Meca, Marín-Martínez, & Chacón-Moscoso, 2003). The OR represents the odds that an outcome of interest will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure (Szumilas, 2010). An OR that is greater than 1 indicates higher odds of the outcome with exposure to the intervention condition. Additionally, a binary logistic regression was performed to assess the impact of service utilization intensity and duration on the target outcomes.

Missing Data

Because data was collected from the Arizona DCS administrative data, there were no missing data fields in the dataset received for the intervention or comparison groups.



PARTICIPANTS

This quasi-experimental study included children who were dependents of DCS in Pima County, Arizona between 10/1/2012 and 10/16/2019 and who had exited DCS on or before 10/16/2019. Meeting this criteria, the intervention group includes 1,462 children whose family received AKSS KN services in time frame of 10/1/2012 to 10/15/2018 and 9,832 comparison children whose family received DCS services as usual in this time frame. As AKSS KN services are primarily located in Pima County, the comparison group includes only children in DCS custody in Pima County. The data set was limited to Pima County to avoid the possibility of confounding findings by geography (i.e., the outcomes might differ between study groups if compared across counties in Arizona).

Characteristics of the Study Groups

Random assignment of AKSS KN families was not feasible under the federally funded demonstration project, therefore a quasi-experimental design with one intervention condition and one comparison condition was the next best option to meet the Clearinghouse's study design criteria for review eligibility (Wilson et al., 2019). To mitigate the risk of detecting selection effects and incorrectly interpreting them as intervention effects, the research team conducted baseline equivalence tests on child demographics and total number of location changes and the number of location changes in the last six months while in DCS custody. Additionally, both groups met study inclusion criteria that the children resided in Pima County, Arizona and had exited DCS custody on or before 10/16/2019. Baseline equivalence was established using observable characteristics that were measured in the DCS database. While establishing baseline equivalence reduces the threat of observable baseline differences influencing the analysis, the research team acknowledges that there may still be differences in unobservable characteristics that could influence the findings.

As it was not feasible to collect direct or alternative pre-test measures on the study outcomes, child demographic variables obtained from the DCS database were utilized to test for baseline equivalency. Demographic variable included: age at initial entry into DCS custody (continuous, age in years), gender (male/female), race/ethnicity (White, Non-Hispanic/other than White, Non-Hispanic), and eligible for Title IV-E Federal Adoption Assistance benefits (Yes/No). Title IV-E eligible is the proxy variable for socioeconomic status, with eligibility (1=Yes) indicating that the child's birth family from which they were removed met the qualifying standards for Temporary Assistance for Needy Families (TANF) as established in 1996.

No significant differences were observed between the two study groups for the demographic characteristics of age, gender, race/ethnicity, and Title IV-E eligibility, which produced effect sizes ranging from 0.00 to 0.03 (see Exhibit 1). Baseline effect sizes less than 0.05 are considered equivalent and no further covariate adjustments were required (Wilson et al., 2019).



Exhibit 1. Child Demographic Characteristics – Equivalency of Study Groups

Demographic		DCS Only Comparison Group Mean (SD)	AKSS KN Intervention Group Mean (SD)	t	p	Effect Size
Child age at initial entry into DCS custody (in years)		6.5 (5.2)	6.7 (4.9)	1.101	.27	.03
Child Gender	Proportion Male	.51 (.50)	.51 (.50)	.012	.99	.00
	Proportion Female	.49 (.50)	.49 (.50)			
Child Race/ Ethnicity	Proportion White, Non-Hispanic	.32 (.47)	.31 (.46)	.393	.69	.01
	Proportion Other Than White, Non-Hispanic	.68 (.47)	.69 (.46)			
Proportion Title IV-E Eligible (i.e., low socio-economic status)		.01 (.09)	.01 (.09)	.546	.56	.02
N		9,832	1,462			

Two variables were examined to account for the child's experience while in DCS custody, which could be confounding factors. Two continuous variables were obtained from the DCS database for the study time frame, including total number of location changes and the number of location changes in the last six months while in custody. Exhibit 2 shows that there were no significant differences between the two study groups for DCS custody data, suggesting that the groups are equivalent for these variables and they are not confounding factors.

Exhibit 2. Baseline Equivalency of Arizona DCS Custody Data from 10/1/2012 to 10/16/2019

DCS Custody Data	DCS Only Comparison Group Mean (SD)	AKSS KN Intervention Group Mean (SD)	t	p	Effect Size
Total number of location changes while in DCS custody	3.1 (3.3)	3.2 (3.8)	1.449	.15	.04
Number of location changes in last 6 months while in DCS custody	.01 (.10)	.01 (.11)	.035	.97	.00
N	9,832	1,462			



AKSS KN Services Received by the Intervention Group

The 1,462 children in the intervention group were in the care of 890 adults who received AKSS KN services during the study time frame. Services utilization data is shown at the adult level in Exhibit 3 so that data is unduplicated, as adults were caring for an average of two and range of one to seven children while using services. Including all AKSS KN services offered (navigation, IRC, support groups, education sessions, clinics, etc.), caregivers received an average of almost five service counts (11.0 SD), median of two, and a range of one to 170 service counts (“Service count” refers to the number of times a service was received and recorded in the database).

Adults with a high level of service counts received more intensive case management based on a higher level of expressed need). Looking at navigation and IRC services only, caregivers received an average of 3.3 service counts (7.2 SD), median and mode of one, and a wide range of one to 108 navigation and IRC service counts. Other peripheral services (including support groups, education sessions, clinics, etc.) averaged 1.6 service counts per caregiver (5.9 SD), a median and mode of zero, and range of zero to 122. This data suggests that while many caregivers did not elect to participate in these services, some caregivers utilized peripheral services such as support groups on a regular basis.

The average length of time that caregivers received AKSS KN services was 2.5 months (3.4 SD), with a median of two months, mode of one month, and range of one month to about five years. The end of AKSS KN services was defined for this study as the last date that any service was received and no additional services were sought by the client, indicating a KN case closure. Given this definition, child permanency outcomes for this study were assessed at 12 months or more after the caregivers’ last date of service/ AKSS KN case closure. The length of time that child outcomes were assessed for sustained effects post case closure ranged from 12 to 84 months, with an average of 49.5 months (18.7 SD), median of 51 months, and mode of 50 months.

Exhibit 3. AKSS KN Service Measure Statistics for Adult Caregivers of Children in the Intervention Group

Intervention Group Service Measures	Mean (SD)	Median	Mode	Range	N (Caregivers of AKSS KN Children)
Total AKSS KN Service Count (including Navigation, IRC, and other peripheral services)	4.9 (11.0)	2	1	1-170	890
Navigation/IRC Count	3.3 (7.2)	1	1	1-108	890
Other Peripheral Service Count	1.6 (5.9)	0	0	0-122	890
Duration of AKSS KN Intervention Services (in Months)	2.5 (3.4)	2	1	1-62	890
Length of Time from Last AKSS KN Service Date/Case Closure to DCS Outcomes Inquiry (in Months)	49.5 (18.7)	51	50	12-84	890



Child Permanency Outcomes

Indicators of child permanency that are eligible for review by the Clearinghouse (Wilson et al., 2019) and were assessed in this study using Arizona DCS administrative data are the **Least Restrictive/Disruptive Placement** and **Planned Permanent Exit**, measured as defined above.

Least Restrictive/Disruptive Placement While in DCS Custody

The study data showed that **children whose families received AKSS KN intervention services were significantly more likely to be placed in the less restrictive/disruptive setting of kinship care while in DCS custody** (75.0%, n=1,096), compared to children from the DCS-only comparison group (70.2%, n=6,905) ($\chi^2=13.820$, $p=.00$) (Exhibit 4). Conversely, children in the DCS-only comparison group (29.8%, n=2,927) were significantly more likely to be placed in the more restrictive/ disruptive setting of a group home, residential intervention center, independent living, non-relative foster care, or a shelter while in DCS Custody, compared to children in the AKSS KN intervention group (25.0%, n=366). The OR shows that the odds of children being placed in a less restrictive/ disruptive setting of kinship care while in DCS custody is 1.27 times more likely with exposure to the AKSS KN intervention than to DCS services as usual. This sustained favorable effect was demonstrated for the treatment group at 12 months or more beyond the end of the intervention.

Kinship Placement While in DCS Custody



The odds of children being placed in the least restrictive/disruptive setting of **kinship care while in DCS custody is 1.27 times more likely with exposure to the AKSS KN intervention than to DCS services as usual**. This sustained favorable effect was achieved by the intervention group at **12 months or more** beyond the end of the intervention.

Exhibit 4. Placement Setting While in Arizona DCS Custody by Study Group

Placement while in DCS Custody	DCS Only Comparison Group % (n)	AKSS KN Intervention Group % (n)	χ^2	p	Effect Size
Placed in kinship care while in DCS custody (i.e., least restrictive/disruptive setting).	70.2% (6,905)	75.0% (1,096)	13.820	.00	OR = 1.27 $d_{Cox} = .15$
Placed a group home, residential intervention center, independent living, non-relative foster care, or shelter while in DCS custody (i.e., more restrictive/disruptive setting).	29.8% (2,927)	25.0% (366)			
N	9,832	1,462			



Permanency at DCS Exit

The study data showed that **children whose families received AKSS KN intervention services were significantly more likely to have exited out-of-home care and DCS custody to a more permanent placement status of reunification, guardianship, or adoption** (96.4%, n=1,410), than children in the comparison group whose family received DCS services as usual (94.0%, n=9,244) ($\chi^2=13.986$, $p=.00$). Conversely, children in the DCS comparison group (6.0%, n=588) were significantly more likely to have exited out-of-home care and DCS custody with a non-permanent status, compared to children in the intervention group (3.6%, n=52).

Exiting with a non-permanent status is defined as those who became emancipated or “aged out” of DCS custody, children who ran away and were not able to be located, or children who died while in DCS custody. The OR shows that the odds of children exiting DCS custody with a planned permanent placement status is 1.72 times more likely with exposure to the AKSS KN intervention than DCS services as usual. This sustained favorable effect was demonstrated for the treatment group at 12 months or more beyond the end of treatment.

Permanency at Exit from DCS Custody



The odds of children exiting out-of-home care and DCS custody with a permanent placement status of **reunification, guardianship, or adoption is 1.72 times more likely with exposure to the AKSS KN intervention** than to DCS services as usual. This sustained favorable effect was achieved by the intervention group at **12 months or more** beyond the end of the intervention.

Exhibit 5. Permanency Status at Exit from DCS Custody by Study Group

Permanency Status at DCS Exit	DCS Only Comparison Group % (n)	AKSS KN Intervention Group % (n)	χ^2	p	Effect Size
Permanent placement status of reunification, guardianship, or adoption at DCS exit	94.0% (9,244)	96.4% (1,410)	13.986	.00	OR = 1.72 $d_{\text{Cox}} = .32$
Non-permanent placement status of emancipation, runaway, or deceased at DCS exit	6.0% (588)	3.6% (52)			
N	9,832	1,462			



Impact of Service Receipt on Permanency Outcomes for the Intervention Group

The AKSS KN program service model allows caregivers to self-select services that meet their unique needs. Because of the variability in service type, intensity, and duration of the intervention group, a logistic regression was performed for the intervention group on each child permanency outcome with three service utilization variables: (1) total count of navigation and IRC services received (continuous); (2) total count of peripheral services received other than navigation and IRC (e.g., support groups) (continuous); and (3) duration of service receipt (continuous measured in months). This test served to determine if achieving a favorable outcome by the intervention group was impacted by service type, intensity, and duration of AKSS KN services received.

A logistic regression model of being placed in the least restrictive/disruptive setting of kinship care while in DCS custody (1=Yes/0=No) as the dependent variable, and the three continuous service variables as the independent variables showed no relationship between service utilization and placement in a kinship care setting for the AKSS KN intervention group ($r^2=.000$). Similarly, a logistic regression model of achieving a permanent placement of reunification, guardianship, or adoption at DCS exit (1=Yes/0=No) as the dependent variable, and the three continuous service variables as the independent variables showed no relationship between service utilization and achieving permanency at exit for the AKSS KN intervention group ($r^2=.000$).



Children whose caregivers **received AKSS KN intervention services achieved sustained favorable child permanency outcomes** (i.e., statistically significant and in the desired direction at least 12 months beyond the end of the intervention) **regardless of self-selected service type, intensity, and duration**. This finding suggests that this **family-driven model**, which allows families to select from a **variety of AKSS KN services**, empowers families to receive the level of services that they need and have the capacity to utilize, supporting sustained favorable child permanency outcomes.

DISCUSSION

This quasi-experimental study utilized Arizona DCS administrative data to examine permanency outcomes for children of families served by the AKSS KN intervention, compared to a baseline equivalent group of children whose families received DCS services as usual. **Children in the AKSS KN intervention group were significantly more likely to have achieved sustained favorable child permanency outcomes at 12 months or more post KN case closure than children in the DCS comparison group.** The findings of this study contribute to the growing body of literature on the favorable and significant effects of KN programs on children and families with child welfare involvement, and build the evidence base for the AKSS KN program model.





Children in the AKSS KN intervention group had higher rates of being placed in the least restrictive/disruptive setting of kinship care while in DCS custody, compared to children of families who received DCS services as usual.

Placement in kinship care while in child welfare custody can benefit children by fostering protective factors (Littlewood, 2015; Littlewood, et al., 2021). Kinship placements can offer children a sense of stability and a more familiar environment, help maintain the child's connections with their birth and extended family, and help preserve the child's cultural identity (Andersen & Fallesen, 2015; CWIG, 2018; Generations United, 2016; Konjin et al., 2019; Winokur et al., 2018). With an ever-increasing demand for kinship placements for children in the child welfare system, the need for evidence based KN programs continues to grow. The results of this study suggest that participating in the AKSS KN program can significantly improve child placement outcomes into kinship care while in child welfare custody.



Children in the AKSS KN intervention group also had higher rates of exiting DCS custody with a placement permanency status of reunification, guardianship, or adoption, than children of families who received DCS services as usual.

Favorable permanency outcomes at DCS exit were achieved by the AKSS KN intervention group at 12 months or more post KN case closure. These results suggest that participating in the AKSS KN program can meaningfully improve the permanency outcomes of children and families across the spectrum of outcome types. AKSS KN services provide education to caregivers about the child's need for permanency and the different options available. AKSS KN also provides supportive services so that caregivers can be successful in providing permanency for the child in their care once they have exited DCS custody.



Of importance to KN practitioners, the study results showed that children in the intervention group achieved sustained favorable outcomes with any level of AKSS KN service type, intensity, and duration received by their caregiver.

KN services at the IRC level are the most cost effective and sustainable for programs to meet a family's needs. Families with higher self-expressed needs can then utilize a wider range and/or greater intensity of services. This finding suggests that the AKSS KN family-driven model, which allows families to select from a variety of services, empowers families to receive the level and amount of services that they need, which in turn supports achieving sustained favorable child permanency outcomes. This finding is consistent with related KN research the promotes the use a KN service delivery model that is tailored to a wide variety of needs of multigenerational families (Littlewood, 2015; Littlewood, et al., 2021).



The results of this study help build the evidence base for the AKSS KN program model and add to the growing body of literature on the favorable and significant effects of KN programs on children and families with child welfare involvement. It is the hope that the results of this study provide evidence for national Clearinghouses to rate the AKSS KN program as an evidence-based model, which could expand funding and programmatic opportunities for practitioners to best meet the needs of caregivers and families navigating the child welfare system through the KN model.

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