The Service Involvement of Children Facing Intergenerational Poverty in Utah

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Overview

Living in poverty subjects children to continuous harm and disadvantage over time, creating substantial risk of continued poverty in adulthood. An understanding of intergenerational poverty (IGP) within the state of Utah is necessary to combat it. This study examines the Department of Human Services (DHS) service involvement of 40,897 children in Utah identified in 2012 as experiencing IGP, compared with 177,856 other children in Utah whose families received public assistance but who were not flagged as experiencing IGP. Among the four participating DHS divisions, substantially higher service involvement among children facing IGP was found for all divisions except one, and these children were more likely to have received services from multiple divisions. These children received their first DHS services earlier on average and were more likely than the comparison group to be introduced to DHS services via the child welfare system, but once served did not demonstrate lengthier average total duration of services in most cases.

Introduction

An understanding of intergenerational poverty (IGP), or "...poverty in which two or more successive generations of a family continue in the cycle of poverty and government dependence" (Intergenerational Poverty Mitigation Act, 2012), is a profound guiding force on public policy and practice. In order to meaningfully address IGP, service agencies must understand how the needs and service involvement of clients facing IGP differ from those of other clients they serve. By understanding the ways in which children experiencing IGP enter, move through, and exit public service systems, agencies can build a framework for identifying needs earlier, staging targeted interventions, and addressing disparities before they grow into wide gulfs of opportunity. Some preventative efforts may seem small in their immediate impact, but will have positive effects which reverberate for generations.

The State of Utah has recognized the reduction of IGP as a significant legislative and policy focus (Intergenerational Poverty Mitigation Act, 2012). To aid in this effort, several Utah state entities have contributed routine statistics to an annual report produced by the state's Intergenerational Welfare Reform Commission. The annual report provides a roadmap to public and private entities acting to curtail IGP within

the state, and updates on continuing efforts to ensure equality of opportunity and family economic stability for

Utahns (Utah Intergenerational Welfare Reform Commission, 2020).

In 2020, Utah's Department of Human Services (DHS) built a foundation for examining the services

received by adolescent clients aged 10-17 identified as experiencing intergenerational poverty, as determined by

Department of Workforce Services (DWS) records. The service involvement of clients experiencing IGP was

matched between several participating DHS divisions, whose involvement continues for this year's research,

including:

- The Division of Child and Family Services (DCFS), who provide child welfare services
  including in-home services, child abuse and neglect prevention services, domestic violence
  services, child protective services, kinship care and foster care;

- The Division of Juvenile Justice Services (DJJS), who provide interventions, supportive services,
  and rehabilitative services to youth offenders;

- The Division of Services for People with Disabilities (DSPD), who oversee home- and
  community-based services for people with disabilities; and

- The Division of Substance Abuse and Mental Health (DSAMH), who oversee prevention,
  treatment, and recovery services for Utahns struggling with mental health problems, or problems
  with alcohol, tobacco, or other drugs.

For 2020's research, these data were compared with the rest of the service population of the same age.

Clients experiencing IGP were found to be more likely to have received services from two or three participating

divisions within the year in which their public assistance was received, suggesting that children experiencing

IGP may be more likely than other clients to demonstrate needs touching on multiple service areas.

2020's research did not examine individual service records or their durations, and pertained to only one

year of service records. Thus it did not conclude that the nature or duration of services received by children

experiencing IGP were different than that of other clients served by any or all divisions.

This 2021 analysis builds upon last year's research by expanding analysis to all children over the age of one year who were identified by DWS, and examining multiple years of services retrieved from divisional data systems (rather than only a single year of service records). It compares clients experiencing IGP with other children identified as experiencing poverty, rather than with other clients who received DHS services whose poverty status was unknown.

Finally, it explores actual services received by these individuals—which divisions and services introduced each cohort to participating DHS services, and aggregate time spent being served by each division. This allows us to understand not only the relative likelihood of each cohort receiving services, but for those who do enter services, whether general service patterns are similar between cohorts.

Differences in match rates or service patterns between cohorts are not necessarily positive or negative. This research is not an evaluation of the effectiveness of DHS or its divisions at addressing IGP, introducing clients to services, or achieving service outcomes for clients. Rather, findings may help to illuminate the service needs of children in Utah experiencing IGP, and to describe the circumstances which bring them into care. This may lead in turn to a greater understanding of and responsiveness to client risk factors, positively influencing care and poverty outcomes.

This new process for multi-divisional matching serves as a foundation for testing a variety of research questions in future years of study, and can incorporate broader needs, outcomes, and demographic data as needed.

Literature Review

In 2019, the United States Census Bureau estimated that 34 million people in the U.S. were living in poverty, a rate of 10.5%. More than 10 million of these were children under the age of 18, whose poverty rate was far greater at 14.4% (U.S. Census Bureau, 2020).

Poverty is multidimensional and can incorporate complex childhood trauma, resource scarcity, disability, housing insecurity, and institutional disadvantage, creating intricate webs of adversities which correlate with and compound one another (Desmond, 2015). It also exposes children to chronic stressors with

major long-term consequences (Evans & Kim, 2013). The deprivations of poverty affect infant brain

development in early childhood (Hanson et al., 2013; Gregg et al., 2017), as well as inflict continuous harm and

reinforce disadvantage over time, making it harder for children to escape poverty in adulthood (Wagmiller &

Adelman, 2009). For these reasons, children who have faced poverty are at significant risk of continued poverty

in adulthood, as "intergenerational income persistence" often results in continued poverty for children who were

themselves raised in it (Gregg et al., 2017). This applies particularly to the U.S., where social mobility is lower

than in many other Western nations (Isaacs, 2007; Gregg et al., 2017). In fact, 43% of American children raised

in the bottom 20% of family incomes remain in the bottom 20% as adults, and 70% remain in the lower half

(The Pew Charitable Trusts, 2012). Children raised in the highest-income families are least likely to be part of

the lowest-income families as adults and vice-versa, revealing that "all Americans do not have an equal shot at

getting ahead" (Isaacs, 2007).

Public assistance programs which have the effect of increasing household income can help to improve

cognitive performance for children, to alleviate behavioral problems, and to reduce measures of stress (Hanson

et al., 2013). Still, Van Ryzin et al. (2018) argue that broader evidence-based family and school prevention

programs addressing the adverse consequences of poverty are needed to prevent the intergenerational

transmission of poverty. Research shows that initiatives such as early childhood education (Corak, 2006) and

investments in equalizing community educational resources and broadband internet access (Hanson et al., 2013)

can help to address some of the effects of poverty which perpetuate it, in addition to the direct purpose of those

programs. Social problems such as teenage pregnancy (Garwood et al., 2015) and overincarceration (Utah

System of Higher Education, 2014) are also both influenced by and influence poverty, suggesting that public

interventions in these areas may help to address intergenerational poverty as well.

The missions of the DHS divisions participating in this study have direct overlap with poverty and its

transmission: Where child welfare is concerned, conditions of poverty are associated with child maltreatment

(Kelley, 2017; Utah System of Higher Education, 2014). As parents face resource, housing, and employment

insecurity, poverty may also create an environment which mirrors the negative effects of neglect on the lives of

children (Kelley, 2017). Substance abuse, mental health, and involvement in the criminal justice system are all adversities with complicated origins often entangled with poverty (Kelley, 2017). Those living with disabilities are more likely to also be living in poverty, with the "poverty percentage gap" between those with and without disabilities ranging between 7.4% and 8.3% in the years following the Great Recession of the late 2000s (Kraus, 2017). They are also more likely to live with intellectual disabilities which stem from poverty and, by straining family resources, cause poverty (Emerson, 2007).

Addressing childhood poverty with programs and interventions for families can be expected to result in more Utahns and their families being able to meet their basic needs in the present, and to reduce the costs of programs serving these children later in life, and in serving subsequent generations (Utah Intergenerational Welfare Reform Commission, 2015). Programs intended to reduce intergenerational poverty need to account for the many causes and consequences of poverty with a holistic service approach which encompasses the full family, and multiple service areas (Upadhyaya, 2021). The daily struggles of poverty are myriad but remain invisible to those not in poverty (Krumer-Nevo, 2015), and so research is required to better understand the needs of those experiencing IGP, and to protect children from exposure to harms which make them vulnerable to continued poverty in adulthood.

Methods

In order to compare the service involvement of children experiencing IGP with other children experiencing poverty, a data file was provided by DWS containing identifying information for children in each of these groups. The data included clients who received public assistance (PA) in the state of Utah in 2012, including benefits from Temporary Assistance for Needy Families (TANF), child care subsidies, the Supplemental Nutrition Assistance Program (SNAP), and Medicaid services such as the Children's Health Insurance Program (CHIP). The year 2012 was selected to allow for longitudinal study of client service events in the years since. Clients identified as experiencing intergenerational poverty had received at least one month of PA in 2012, and had a parent who had received at least 12 months of PA in both childhood and adulthood. This group will be referred to as "IGP Kids" throughout this document. This study's comparison group consists

of children who received at least one month of PA within 2012, received at least 12 cumulative months of PA, and had parents applying for benefits who had not received at least 12 months of PA in either adulthood or childhood. This second group is considered at risk for poverty, but is not currently experiencing intergenerational poverty, and will be referred to as "Comparison Kids."

Representatives from each participating division linked these clients within their databases, and retrieved all relevant services these clients had received, and the durations of these services. For DCFS and DJJS, all client services were retrieved. For DSAMH and DSPD, results were retrieved from payment systems without full retrospective data. Data for DSAMH is included from July 1, 2006 forward, and data from DSPD from January 1, 2013 forward. Services retrieved amounted to five million individual entries. All personally identifiable information was then removed from the final research document. Services which began after June 30, 2021 were removed from analysis to achieve the same ending date of analysis for all divisions.

For analysis of DHS service intersections, variables were created for each client indicating a) whether they had received services from each of the four participating divisions, b) the first and second participating DHS divisions which served these children, and c) how many days of services they received from each division, excluding overlapping services with the same start and end dates. Age bands were also assigned each client for demographic analysis. (All ages in this study refer to client age as of midnight on December 31, 2012.) Due to the criteria for the Comparison Kids cohort, which required 12 months of cumulative PA, children under one year of age as of the end of 2012 were underrepresented in this cohort. For parity in analysis, these clients were removed from both cohorts. All services received by each client within seven days of initial DHS service exposure were also retrieved, in order to identify services which characterized each cohort's general introduction to department services.

Chi-squared contingency table tests were performed using each of the binary variables, to determine whether any differences in service proportions between the two cohorts were statistically significant. Multiple linear regression analysis incorporating client age were also performed to ensure that these correlations persisted when controlling for age, as the cohorts differed in their average age. Detailed statistical data will not

be presented in this report; however, all references to statistical significance apply a 95% confidence interval ($p < 0.05$).

Results

### Descriptive Data and Service Intersections

Table 1. Study client counts and match rates with each participating division

Cohort	Client Count	Matched (All DHS)		Matched (DCFS)		Matched (DSAMH)		Matched (DSPD)		Matched (DJJS)	
IGP Kids	40,897	18,652	45.6%	8,314	20.3%	14,212	34.8%	205	0.5%	4,984	12.2%
Comparison Kids	177,856	54,934	30.9%	17,788	10.0%	42,684	24.0%	1,935	1.1%	14,975	8.4%
Both	218,753	73,586	33.6%	26,102	11.9%	56,896	26.0%	2,140	1.0%	19,959	9.1%

Children experiencing intergenerational poverty were matched at far higher rates with services from each of the participating DHS divisions except for DSPD, which served the smallest proportion of both cohorts (Table 1). 20.3% of IGP Kids matched with DCFS services compared with 10% of Comparison Kids, more than double the proportion. 34.8% of IGP Kids were matched with DSAMH compared with 24% of Comparison Kids, and 12.2% of IGP Kids with DJJS compared with 8.4% of Comparison Kids. While fewer children overall matched with DSPD, rates were higher for the Comparison Kids cohort, which matched at a rate of 1.1% compared with 0.5% for the IGP Kids cohort. Each of these differences in cohort means are statistically significant.

Divisions differ in their size, and in the number of clients they typically serve. Therefore, the proportion of each cohort matched by a division is not relevant except to compare one cohort's match rate to another within that division. A division matching at a higher rate than another division does not imply that children are being overserved by the first division, or underserved by the second.

Figure 1. Relative cohort match rates and significance, with each division combination *
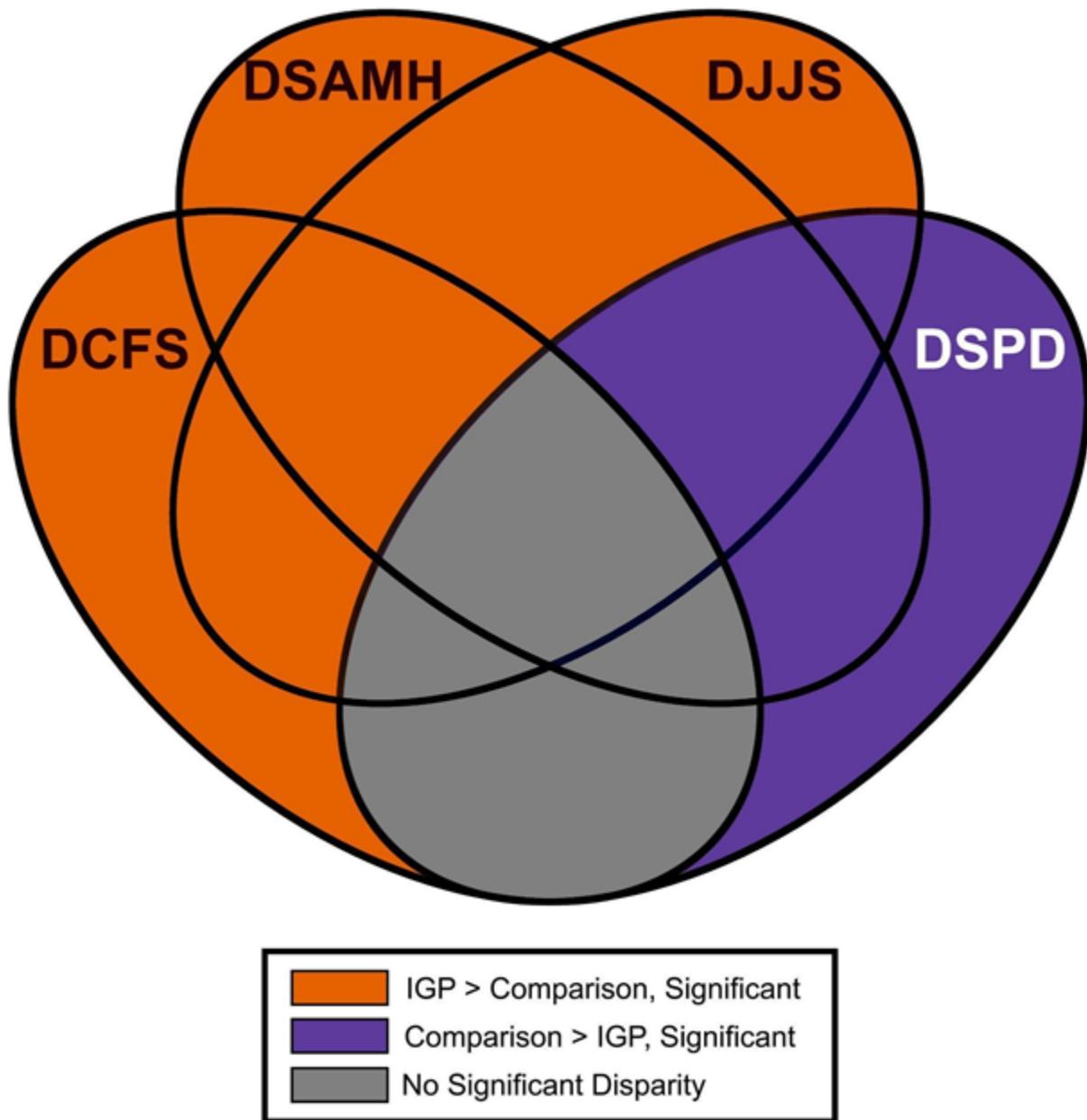
* Shape sizes do not correspond with the number of clients served.

     The Venn diagram above (Figure 1) depicts each of the four participating divisions as an oval, and indicates whether the IGP Kids cohort or Comparison Kids cohort matched at higher rates with services with each combination of divisions, or whether no statistically significant difference was found, as represented by the coloring at each intersection between these ovals. IGP Kids were served at statistically significant higher rates

at every intersection of divisions except those containing DSPD. Of intersections containing DSPD, those also

containing DCFS held no statistically significant difference, while those which included DSAMH and DJJS had

statistically significant overrepresentation among the Comparison Kids cohort. These findings persist when

controlling for age (not pictured), with some minor individual exceptions which pertain to subgroups containing

very few clients from either cohort.

It should be noted that the size of these ovals and intersections do not correspond with the number of

clients served. Accordingly, while DSPD figures are practically meaningful, the intersections colored grey and

purple include very few clients, and so these findings overall demonstrate notably higher representation of IGP

Kids within DHS services. See Appendix Table A for complete counts and percentages of each cohort matched

at each service intersection.

Table 2. Clients served by two or more divisions, by cohort

Cohort	Client Count	Matched (Two or More Divisions)		Matched (Three or More Divisions)		Matched (All Four Divisions)	
IGP Kids	40,897	7,504	18.3%	1,556	3.8%	24	0.06%
Comparison Kids	177,856	18,536	10.4%	3,811	2.1%	133	0.07%
Both	218,753	26,040	11.9%	5,367	2.5%	157	0.07%

IGP Kids are also more represented within DHS when examining the proportion of clients who received

services from multiple divisions in more general terms (Table 2). IGP Kids were far more likely to receive

services from at least two divisions (18.3% of IGP Kids compared with 10.4% of Comparison Kids), and from

at least three divisions (3.8% to 2.1% respectively). Only a tiny portion of either cohort received services from

all four divisions, with Comparison Kids being matched at a higher proportion, 0.07% to 0.06%, less than one

in one thousand clients from either cohort. These cohort differences for matching with two or more divisions

and for three or more divisions are statistically significant; the cohort difference for matching with all four

divisions is not. These findings hold when controlling for age (not pictured).

Likely due to DWS's criteria for determining IGP status (as detailed in the Methods section above), the

Comparison Kids cohort was slightly older on average than the IGP Kids cohort, averaging eight years old to

seven years old respectively, or a difference of a little under 12 months. Among clients for whom services could

be found, this difference is greater, with the Comparison Kids cohort averaging slightly over 10 years of age

and the IGP Kids averaging slightly over eight years of age. Because older clients will have had more service

history to review, analysis was performed to ensure that the above differences in service involvement persisted

when children of similar age bands as of the end of 2012 were isolated.

Table 3. Study client counts and match rates for any applicable DHS service, by age grouping
(client count and percent of this count matched)

Cohort	Age Group							
	1 - 5 yrs		6 - 10 yrs		11 - 15 yrs		16+ yrs	
IGP Kids	17,614	37%	13,156	49%	7,693	56%	2,434	57%
Comparison Kids	66,528	18%	51,053	33%	40,746	42%	19,529	46%

Higher IGP representation among DHS services persisted for each age band evaluated (Table 3), and

these differences in group means were statistically significant. IGP Kids from the ages of one to five years

matched with any DHS service at a rate of 37%, compared with 18% of the Comparison Kids cohort. Higher

match rates between the IGP and Comparison Kids cohorts persisted at all age bands, with clients aged six to

ten years matching at 49% to 33% respectively, clients aged 11 to 15 years matching 56% to 42%, and clients

16 years of age and older matching 57% to 46%. The higher representation among IGP Kids shrinks somewhat

with older age bands, providing evidence that these individuals may have acute earlier needs in service areas

where Comparison Kids are served later in life.

Table 4. Initial and second divisions providing services, for clients matched with services

Cohort	IGP Kids	Comparison Kids
DHS Clients	18,652	54,934

As Initial Division		
DCFS	6,977 (37.4%)	14,660 (26.7%)
DSAMH	9,592 (51.4%)	32,332 (58.9%)
DSPD	43 (0.2%)	825 (1.5%)
DJJS	2,040 (10.9%)	7,117 (13.0%)

As Second Division		
DCFS	1,112 (6.0%)	2,329 (4.2%)
DSAMH	4,321 (23.2%)	9,539 (17.4%)
DSPD	75 (0.4%)	637 (1.2%)
DJJS	1,996 (10.7%)	6,031 (11.0%)
None	11,148 (59.8%)	36,398 (66.3%)

Examination of each cohort's introduction to the DHS service system (Table 4) suggests somewhat different initial needs between IGP and Comparison Kids. While DSAMH provided initial services to a majority of candidates in both cohorts (51.4% of IGP Kids and 58.9% of Comparison Kids), IGP Kids were relatively more likely than Comparison Kids to be introduced to DHS services via DCFS, 37.4% to 26.7%. A smaller difference is seen in the other direction with Comparison Kids first seeing DJJS at a higher rate than IGP Kids, 13% to 10.9%; and with DSPD, where they were served at a rate of 1.5% to 0.2%.

Examination of second divisions serving clients shows that the initial difference in DSAMH service exposure is later largely offset by IGP Kids served second by that division (23.2% of IGP Kids compared to

17.4% of Comparison Kids), nearly closing that gap. Finally, a notably higher proportion of Comparison Kids who received initial services are not served by a second division compared to IGP Kids, 66.3% to 59.8%. Children in the IGP Kids cohort received their first service from DHS earlier on average, at the age of 7.6 years, while the Comparison Kids cohort were first served on average at the age of 9.1 years. All of these cohort mean differences are statistically significant.

Table 5. Most common DHS services received within 7 days of initial DHS service receipt, by cohort

Service	Division	IGP Kids		Comparison Kids	
Initial Diagnosis and Assessment	DSAMH	8782	35.2%	28608	38.1%
Protective Services Supervision	DCFS	3025	12.1%	5909	7.9%
Substitute Care (Foster)	DCFS	2011	8.1%	4157	5.5%
Individual Direct Service, Treatment	DSAMH	1570	6.3%	5641	7.5%
Protective Services Counseling	DCFS	1556	6.2%	3538	4.7%
Home of Relative/Guardian	DCFS	806	3.2%	1525	2.0%
Family Direct Service, Treatment	DSAMH	715	2.9%	2600	3.5%
Receiving Center	DJJS	705	2.8%	2705	3.6%
Case Management Adjunctive Service	DSAMH	566	2.3%	2239	3.0%
Shelter (Non-Pay)	DCFS	516	2.1%	1070	1.4%
Youth Services Group Home	DJJS	508	2.0%	1837	2.4%
Level 1 Foster Care	DCFS	441	1.8%	591	0.8%
Protective Family Preservation	DCFS	427	1.7%	1093	1.5%
Locked Detention	DJJS	398	1.6%	1849	2.5%
Group Direct Service, Treatment	DSAMH	292	1.2%	1118	1.5%

An examination of the services received by each cohort within seven days of initial DHS service record (Table 5) gives service context to the data in Table 4. Notably, for DCFS services, IGP Kids clients were relatively more likely to receive initial services through court-ordered Protective Services Supervision home-based services (12.1% to 7.9%), and to receive early foster care (8.1% to 5.5%) than Comparison Kids, which may indicate greater Child Protective Services involvement and subsequent court involvement among IGP Kids.

Proportions of DSAMH services received are relatively higher among Comparison Kids across the board without particular outliers, providing evidence that while this cohort's early service experience is characterized by earlier involvement with DSAMH, the nature of this involvement may not dramatically differ

between cohorts. DJJS data reveals a higher relative appearance of Locked Detention services for Comparison Kids (2.5% to 1.6%), which may indicate a slightly higher likelihood of Comparison Kids first entering DHS services having been determined to be an immediate threat to their community, or awaiting the serving of a sentence ordered by the juvenile court.

As indicated previously, the IGP Kids cohort were far more likely to become DHS clients overall. Thus it should be noted that this data only compares the distribution of services for those individuals who became clients, not the proportion within each cohort who received a given service (where the IGP Kids cohort would likely have far higher served percentages for most of these services).

Table 6. Average days served by division to each cohort, and when limited to division clients from each cohort

	Average Days (IGP Kids)		Average Days (Comparison Kids)		Statistically Significant Correlation With IGP Status
	Full Cohort	Clients Served by Division	Full Cohort	Clients Served by Division	
DCFS	144 days	707 days	72 days	724 days	Strong positive correlation between IGP and days served for full cohort, no significant correlation on days served for those who receive services.
DSAMH	<1 day	1 day	<1 day	2 days	No practical correlation either for full IGP cohort, or for those who received services.
DSPD	4 days	730 days	23 days	2098 days	Strong negative correlation with days served for full cohort, and especially strong negative correlation on days served for those receiving services (DSPD services often persist for multiple years).
DJJS	12 days	103 days	11 days	128 days	No practical correlation for full IGP cohort, relatively small but significant negative correlation for those receiving services.

The total duration of division services received by each cohort (excluding concurrent services with the same start and end date) was also examined (Table 6). The "Full Cohort" measure indicates the average days of services received per person and answers the question "What average service involvement would we expect with this division, from a child in Utah experiencing intergenerational poverty, compared to a child experiencing situational poverty?" The "Clients Served by Division" measure indicates the average days of services received only for those actually served by each division, and answers the question: "For those clients who enter division services, how many days of service would we expect them to receive?" Many clients in each

cohort are receiving and will continue to receive services, so these figures are not lifetime estimates, only averages recorded from service records thus far.

In order to ensure that these service differences were not attributable to differences in cohort average age, multiple linear regressions incorporating age and IGP status (membership in IGP Kids cohort) were performed, with the following results:

- For the full cohort, IGP status held a strong positive correlation with days served for DCFS (144 days served on average for IGP Kids cohort compared to 72 for the Comparison Kids cohort), a strong negative correlation with days served for DSPD (4 days for the IGP Kids and 23 for the Comparison Kids), and correlations which not were practically significant for both DJJS and DSAMH, due to the extremely small mean differences recorded. While clients in the IGP Kids cohort are more likely to receive services with DJJS or with DSAMH, there is not evidence that a child from this cohort would, on the average, be served more in aggregate by either of these divisions.

- For clients who received services, IGP status held a very strong negative correlation with days served for DSPD (730 days served on average compared to 2,098 days for the Comparison Kids cohort, a difference of nearly four years). IGP status had a small but significant negative correlation for DJJS service duration (103 days for the IGP Kids cohort to 128 days for the Comparison Kids cohort), and no practically significant correlation for DCFS and DSAMH.

Discussion, Limitations and Recommendations for Policy and Practice

This new platform for matching detailed service information between DHS divisions has yielded greater understanding of the service involvement of children in Utah experiencing intergenerational poverty. IGP clients were substantially overrepresented among all participating divisions except DSPD, and at each service intersection (combination of divisions providing services) except those featuring DSPD. They were also far more likely to have been served by two or by three divisions, suggesting complex needs which require multiple service areas to address. These findings persisted when controlling for age, but narrowed over time, suggesting

that IGP clients may receive DHS services earlier in life, which other children experiencing poverty may still receive later. Children will differ in how their needs are diagnosed, and how they enter and proceed through service systems related to those needs. Still, these results provide important evidence both for earlier and more frequent DHS service involvement among youth experiencing IGP.

Among those served by DHS, IGP Kids were relatively more likely to be first served by DCFS than the Comparison Kids. Examination of services received reveal that these IGP clients were relatively more likely to enter court-ordered or foster services which generally follow from allegations of abuse or neglect. Examination of Child Protective Services data in future years may provide a window into life events which precipitate child welfare involvement. While IGP Kids clients were far more likely to be served by DJJS overall, they were less likely to enter DHS services through this division, and far less likely to enter DJJS care via locked detention. This may be a result of the fact that IGP Kids clients tended to enter DHS services far earlier on average (8.5 years of age compared to 10 years of age for the Comparison Kids cohort), characterizing their earlier DHS service involvement as exposure to child welfare rather than juvenile justice systems.

IGP status was characterized by far more days of services received on average from DCFS, and far fewer days served with DSPD. For those who entered each division's services, average duration of services with DSPD was far shorter for IGP Kids clients, and somewhat lower for DJJS services.

This study has some limitations. First, for methodological reasons infants under the age of one as of the end of 2012 needed to be removed from this analysis. It is possible that individuals who receive PA as infants differ from other children (particularly given the fact that PA is often requested by parents, and particularly by single mothers, early in their children's lives), so this study's results should not be generalized to infants younger than one year. Additionally, the fact that DSAMH and DSPD data were pulled from systems without full retrospective service records affect results (likely understating overall service participation from these divisions, and their representation of early services received, for example). This data limitation is not expected to affect conclusions, as this study's research design is organized around cohort comparisons, with appropriate age controls.

Second, plans to incorporate broader demographic analyses into this study to ensure results held for varied groups were delayed, as the decision to use the complete PA cohort provided by DWS rather than compute cohorts from service data meant that gender, race, and ethnicity data could not be incorporated from division source systems. Examining racial equity in public services is important to DHS's priorities, and if possible a way will be devised to add such information to the dataset in future analyses. Next, divisions differ in their approach to service delivery in ways which may disproportionately affect one cohort or another, and which are not accounted for in this study. For funding reasons, DSPD employs a waiting list, and clients waiting for services who did not receive services are not included in this analysis. Similarly, many clients transition directly from one division's services to another in more subtle ways than this service analysis can account for: Internal DSPD data suggests that up to half of all DSPD clients who receive residential services under the age of 25 have had prior DCFS involvement, including Child Protective Services reports and investigations, or prior DCFS custody. Many child clients also transition from child welfare custody to juvenile justice custody as circumstances warrant. Some client groups may have a path through the system which gets lost in the noise of high-level analysis such as this, which more specialized future study might uncover.

Finally, while significant and meaningful correlations and differences have been identified, further work is needed to achieve causal explanations. For example, IGP Kids were far more involved with DCFS, and it can be inferred from services received that these children were more likely to be reported as potential victims of abuse or neglect. But it cannot be said whether these differences are the result of differing home environments, or to other factors which make suspected abuse or neglect more likely to be noticed and reported.

In order for IGP research to have an ongoing and meaningful impact, processes for identifying those at risk for IGP and for incorporating this client knowledge into service delivery must be developed. Knowing the risk factors and service pattern differences of clients experiencing IGP is not enough; communication must take place to ensure that caseworkers are aware of a client's IGP status, and evidence-based services deployed at the individual and family level as warranted, early in a client's service history. As a multi-generational concern, intergenerational poverty requires a multi-generational, holistic approach (Upadhyaya, 2021). IGP-aware

service delivery could begin with routine client matches with the Department of Workforce Services and notification of DHS caseworkers, or via the development of an automated platform for flagging clients experiencing IGP in divisional source data systems to influence service delivery.

Next, further research is needed to develop and evaluate interventions (both new programs and targeted applications of existing service packages) proven to address the factors which create and propagate IGP. This research should a) examine IGP-centered pilot programs and services in Utah and other states and study their impacts to guide practice development, b) evaluate the success of new measures and programs within the state, and c) perform other research as needed, including studies into contemporary concerns which intersect with IGP, and quasi-experimental designs applying already available data.

With a greater understanding of intergenerational poverty within the state of Utah, and an apparatus for putting this understanding into practice, DHS can fulfill the Commission's charge to identify and address the disparities and environments which perpetuate poverty, and assure more equal opportunities for all Utahns.

References

Corak, M. (2006). Do Poor Children Become Poor Adults? Lessons from a Cross County Comparison of Generational Earnings Mobility. *Research on Economic Inequality 13*(1), 143-188.

Desmond, M. (2015). Severe Deprivation in America: An Introduction. *RSF: The Russell Sage Foundation Journal of the Social Sciences 1*(2), 1-11.

Emerson, E. (2007). Poverty and People With Intellectual Disabilities. *MRDD Research Reviews 13*, 107-113.

Evans, G. W., & Kim, P. (2013). Childhood Poverty, Chronic Stress, Self-Regulation, and Coping. *Child Development Perspectives 7*(1), 43-48.

Garwood, S. K., Gerassi, L., Jonson-Reid, M., Plax, K., & Drake, B. (2015). More Than Poverty: The Effect of Child Abuse and Neglect on Teen Pregnancy Risk. *Journal of Adolescent Health 57*, 164-168.

Gregg, P., Jonsson, J. O., Macmillan, L., & Mood, C. (2017). The Role of Education for

Intergenerational Income Mobility: A comparison of the United States, Great Britain, and

Sweden. *Social Forces 96(1), 121-152.*

Hanson, J. L., Hair, N., Shen, D. G., Shi, F., Gilmore, J. H., Wolfe, B. L., & Pollak, S. D. (2013). Family

Poverty Affects the Rate of Human Infant Brain Growth. *PLOS One 8*(12).

Intergenerational Poverty Mitigation Act, Utah Code 35A-9-102.

https://le.utah.gov/xcode/Title35a/Chapter9/C35A-9_1800010118000101.pdf

Isaacs, J. B. (2007). *Economic Mobility of Families Across Generations.* The Brookings Institution.

https://www.brookings.edu/wp-content/uploads/2016/06/11_generations_isaacs.pdf

Kelley, F. (2017). Child welfare involvement and contexts of poverty: The role of parental adversities,

social networks, and social services. *Children and Youth Services Review 72,* 5-13.

Kraus, L. (2017). 2016 Disability Statistics Annual Report. *NH: University of New Hampshire*.

https://disabilitycompendium.org/sites/default/files/user-uploads/2016_AnnualReport.pdf

Krumer-Nevo, M. (2015). Poverty-Aware Social Work: A Paradigm for Social Work Practice with

People in Poverty. *British Journal of Social Work 46*(6), 1793-1808.

Van Ryzin, M., Fishbein, D., & Biglan, A. (2018). The Promise of Prevention Science for Addressing

Intergenerational Poverty. *Psychology, public policy, and law : an official law review of the

University of Arizona College of Law and the University of Miami School of Law*, *24*(1), 128–

143.

The Pew Charitable Trusts. (2012). *Pursuing the American Dream: Economic Mobility Across

Generations.*

https://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/economic_m

obility/pursuingamericandreampdf.pdf

Upadhyaya, S., Blocker, C. P., Houston, H. R., & Sims, M. R. (2021). Evolving two-generation services

    to disrupt the intergenerational effects of poverty and promote family well-being. *Journal of*

    Business Research 125, 324-335.

U.S. Census Bureau. (2020). *Income and Poverty in the United States: 2019.*

    https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-270.pdf

Utah Intergenerational Welfare Reform Commission. (2015). *Utah's Plan for a Stronger Future.*

    https://jobs.utah.gov/edo/intergenerational/igp5_10yearplan.pdf

Utah Intergenerational Welfare Reform Commission. (2020). *Utah's Ninth Annual Report on*

    Intergenerational Poverty, Welfare Dependency, and the Use of Public Assistance.

    https://jobs.utah.gov/edo/intergenerational/igp20.pdf

Utah System of Higher Education. (2014). *Building Utah's Future through Higher Education.*

    https://ushe.edu/wp-content/uploads/pdf/reports/building_utahs_future.pdf

Wagmiller, R. L., & Adelman, R. (2009). *Childhood and Intergenerational Poverty: The Long-Term*

    Consequences of Growing Up Poor. National Center for Children in Poverty.

Appendix Table A. Relative cohort match rates, with services from all division combinations

Single Divisions	Cohort	Client Count	DCFS		DSAMH		DSPD		DJJS	
	IGP Kids	40,897	8,314	20.3%	14,212	34.8%	205	0.5%	4,984	12.2%
	Comparison Kids	177,856	17,788	10.0%	42,684	24.0%	1,935	1.1%	14,975	8.4%

Two Divisions		DCFS & DSAMH		DCFS & DSPD		DCFS & DJJS	
	IGP Kids	5,242	12.8%	79	0.2%	1,843	4.5%
	Comparison Kids	10,522	5.9%	423	0.2%	4,408	2.5%

		DSAMH & DSPD		DSAMH & DJJS	
	IGP Kids	153	0.4%	3,307	8.1%
	Comparison Kids	1,098	0.6%	9,745	5.5%

		DSPD & DJJS	
	IGP Kids	57	0.1%
	Comparison Kids	346	0.2%

Three Divisions		DCFS, DSAMH, & DSPD		DCFS, DSAMH, & DJJS		DCFS, DSPD, & DJJS		DSAMH, DSPD, & DJJS	
	IGP Kids	66	0.2%	1,479	3.6%	24	0.1%	57	0.1%
	Comparison Kids	324	0.2%	3,404	1.9%	138	0.1%	339	0.2%

All Divisions		DCFS, DSAMH, DSPD, & DJJS	
	IGP Kids	24	0.1%
	Comparison Kids	133	0.1%