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Technical Report

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Hall House Evaluation Study Final Project

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Background

Hall House, a Charlotte Housing Authority property, was established to provide safe, transitional housing for 100 families of homeless children in Charlotte, NC from December 16, 2008 to June 30, 2009 at 426 N. Tryon St. Hall House was a collaborative effort between several partners: Charlotte Housing Authority, Charlotte-Mecklenburg Schools, WISH, Salvation Army, A Child's Place, Mecklenburg County Department of Social Services, the City of Charlotte and Mecklenburg County Homeless Support Services. By establishing a temporary housing complex during a time of high unemployment for Charlotte, Hall House freed up space in existing shelters so that more families and individuals could be served.

During the 2008-2009 academic year, there were 2,493 children identified through the McKinney-Vento Act as homeless in the Charlotte Mecklenburg School System. The school effects of an unstable housing situation (pay-by-week motels, doubled-up living, shelters) are increased absences, illness, and mental health issues. Homeless students typically fall behind their peers academically by two to three years. Stabilized housing, such as Hall House, provides students and families with the services and support to help them move beyond their current situation. Stabilizing the home situation, it is hoped, will lead to improvements in academic outcomes and this hypothesized effect of Hall House is the central focus of this evaluation.

Client Referral

Families were referred to Hall House through the Salvation Army or A Child's Place. Each Head of Household was required to be employed or employable and was required to sign a contract outlining the program rules and stipulations of participating in the self-sufficiency program provided. In addition, any family member over 16 was required to pass a criminal background check.

Services

A Program Director was hired by the Salvation Army to oversee the six-month project. The Director managed all on-site staff, program intake and coordination of activities provided by service partners. Charlotte Housing Authority oversaw building operation and maintenance.

Each family was provided with a case manager to assist with the transition to permanent housing. Families examined with their case workers the circumstances and reasons for their current housing situation and established plans to redress these issues for the future. Each family developed a case plan outlining necessary steps to secure and maintain safe and affordable housing. In addition, families were provided with simple meals for their residence (instant oatmeal, snack bars, hot water, coffee, juice, fruit, etc.). Families had access to a common kitchen for preparation of more extensive meals. Living space was based on family size and needs. Volunteers provided after school tutoring and recreational activities for the children and there was no cable television available in the facility.

Outcomes

This report was commissioned to address the following outcomes for Hall House applicable for the period of residency as not all families and students were residents for the entire six-month period:

- Students served by Hall House will see improvement in attendance from the previous year in CMS
- Students served by Hall House will see improvement in academic achievement as evidenced by standardized test scores
- Students served by Hall House will perform better on academic outcomes than a comparison group of McKinney-Vento students with whom they are matched.

Data Collection and Analysis

Participant data, attendance, demographics, and academic records were collected from three sources: A Child's Place, the Salvation Army and Charlotte-Mecklenburg Schools. The analysis was conducted by Richard G. Lambert, PhD, at the Center for Educational Measurement and Evaluation at UNC Charlotte with the assistance of a graduate research assistant, Heather M. Britt.

There were a total of 173 children, preschool to ninth grade, served by Hall House during the period covered by this report. Each of these children received services for all or most of the service period. There were some additional children served by Hall House during this period, but for temporary stays only and they were not included in our sample. We were able to locate comparison children who were exact matches on each of the following variables for 87 of the 173 Hall House children:

- McKinney-Vento eligibility
- Grade level
- Gender
- Ethnicity
- Limited English Proficiency Status
- Exceptionality status
- Free or reduced lunch status

In the few cases where there was more than one potential match for a Hall House child, we randomly selected a match from among the multiple potential matches. Therefore there were 174 children contributing to the analyses, 87 Hall House children and 87 matched McKinney-Vento comparison children. These 174 children retained for analysis represented the following ethnic and racial groups: African American (82.8%, 72 children in each group), American Indian (4.6%, 4 children in each group), White (4.6%, 4 children in each group), Hispanic (1.1%, 1 child in each group), and Multi-racial (6.9%, 6 children in each group). The comparison samples included 49.4% males (43 children in each group) and 50.6% females (44 children in each group). There were 14 children in the comparison samples with identified disabilities, seven in each group. There were no

children with Limited English Proficiency in the comparison samples and all of these 174 children were receiving free lunch.

We examined whether there were differences between the Hall House children and the matched comparison group (matched McKinney-Vento children who did not attend Hall House) using the following outcomes:

1. Percentage of days attended
2. Unexcused absences
3. Grade retention
4. Out of school suspensions
5. In school suspensions
6. End of grade test scores

Results

There was not a statistically significant difference between the groups with respect to percentage of days attended (Hall House: 91.30 %, Matched McKinney-Vento children: 90.98 %). There was not a statistically significant difference between the groups with respect to average number of unexcused absences across the entire academic year (Hall House: 10.29, Matched McKinney-Vento children: 9.76). There was also not a statistically significant difference between the groups with respect to average number of unexcused absences for the spring semester only (Hall House: 5.02, Matched McKinney-Vento children: 5.14).

There was a large and statistically significant difference between the groups in grade retentions (Hall House: 4.6%, Matched McKinney-Vento children: 23.0%). There was a statistically significant difference between the groups in percentage of children having at least one out of school suspension (Hall House: 16.1%, Matched McKinney-Vento children: 28.7%). There was also a difference between the groups in percentage of children having at least one in school suspension (Hall House: 6.9%, Matched McKinney-Vento children: 9.2%), however this difference was not

statistically significant. These results apply to the entire academic year. When we focused our analyses on only the spring semester, the period when the services were provided, there was a difference between the groups in percentage of children with at least one suspension (in school or out of school) (Hall House: 10.3%, Match McKinney-Vento children: 14.9%), however this difference was not statistically significant.

We were able to examine whether there were differences between the groups in end-of-grade (EOG) test scores, by grade level, however there were very low samples sizes of children in each grade level. These results are reported in Table 1. For only the fourth grade exams were there more than 10 children in each group that took the same tests. There was a statistically significant mean difference between the Hall House children ($n=13$, $\text{mean}=348.69$) and the matched McKinney-Vento children ($n=13$, $\text{mean}=338.54$) on their fourth grade math EOG tests. The average math scores for Hall House children were higher than matched McKinney-Vento children in all other grade levels except third grade, however the sample sizes in these grade levels were not sufficient for the observed differences to be statistically significant. There was a large statistically significant overall difference between the Hall House children ($n=39$, 60.5% scored at Levels III or IV) and the matched McKinney-Vento children ($n=38$, 33.3% scored at Levels III or IV) in terms of at or above grade level performance on the EOG math tests.

Similarly, there was an advantage in average fourth grade reading scores for the Hall House children ($n=13$, $\text{mean}=340.23$) over the matched McKinney-Vento children ($n=13$, $\text{mean}=334.92$), however this difference was not statistically significant. Hall House children scored better on average on end-of-grade reading scores than did matched McKinney-Vento children across all grade levels, however the sample sizes in each grade level were not sufficient for the observed differences to be statistically significant. There was an overall difference between the Hall House children ($n=37$, 35.1% scored at Levels III or IV) and the matched McKinney-Vento children ($n=38$, 23.7%

scored at Levels III or IV) in terms of at or above grade level performance on the EOG reading tests, however this difference was not statistically significant.

Future Research

Given that so few children at each grade level could be included in the analyses, it is important to consider these analyses as preliminary. It is also important to acknowledge the possible effects of selection bias on the results. The head of household for each of the families in the treatment condition, as mentioned earlier in the report, had to pass a background check and had to be employable in order to enter Hall House. While there is no evidence that the families in the treatment group were systematically different from other McKinney-Vinto families, it is possible that some in the control condition could not meet these qualifications. It will be important to replicate these analyses with much larger sample sizes. If a retrospective study is again conducted once a larger sample size is accumulated, propensity score matching to create the comparison group is recommended. In addition, a future study is recommended that includes a prospective design with the use of random assignment to Hall House and to a control condition from among a sample of children eligible for the services of the program. Such a prospective study could include a more detailed documentation of exactly what services were received by each family and with what dosage level, attendance data for the children during the exact time frame they are served by the program, and interviews with the families to document their subjective experience with the program. The current study included only measures of academic success as outcome measures. Another advantage of conducting a prospective study could be the inclusion of social functioning ratings of the children as it is possible that their behavior in the school setting was also impacted by the intervention.

Summary

These analyses demonstrate some evidence for differences between Hall House children and matched McKinney-Vento children with respect to grade retentions, out of school suspensions, and end-of-grade test scores. It is important to note that the difference between the groups in retentions was much larger than the actual difference between the total sample of Hall House children (n=173, 7.5% retained) and the total sample of McKinney-Vento children (n=1,988, 9.3% retained), however these two larger groups were not equivalent with respect to the demographic characteristics used in the matching process.

Table 1.
Academic achievement outcomes by grade level.

Grade Level	Group	n	Reading Scale Score		Math Scale Score		Attendance Percentage		Unexcused Absences	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD
K	Comparison	11	-----	-----	-----	-----	92.61	5.66	9.91	9.35
	Hall House	11	-----	-----	-----	-----	93.50	3.40	8.09	4.97
1	Comparison	15	-----	-----	-----	-----	92.39	5.46	7.40	8.24
	Hall House	15	-----	-----	-----	-----	93.77	4.45	7.40	4.97
2	Comparison	13	-----	-----	-----	-----	94.34	4.49	6.54	5.88
	Hall House	13	-----	-----	-----	-----	91.78	8.65	8.69	10.19
3	Comparison	6	330.40	6.15	343.00	8.88	92.79	8.20	3.17	3.66
	Hall House	6	329.17	9.45	339.67	5.54	92.97	4.13	8.17	6.24
4	Comparison	13	334.92	8.58	338.54	9.13	92.47	7.42	8.15	8.39
	Hall House	13	340.23	6.91	348.69	7.44	92.09	4.44	11.92	7.31
5	Comparison	5	341.60	8.20	344.80	9.68	91.44	8.58	11.20	11.03
	Hall House	5	345.40	3.78	346.40	8.73	94.10	1.81	7.00	4.64
6	Comparison	7	343.50	9.18	346.71	7.02	91.32	7.68	8.14	7.63
	Hall House	7	348.57	6.13	351.86	3.34	89.04	10.13	7.71	3.20
7	Comparison	2	336.00	5.66	347.50	3.54	82.67	19.79	18.50	21.92
	Hall House	2	346.00	0.00	361.00	0.00	79.78	8.16	23.50	12.02
8	Comparison	6	353.33	8.16	355.83	6.11	91.65	8.89	5.67	5.43
	Hall House	6	355.80	7.69	358.67	6.35	90.24	12.52	8.50	6.86
9	Comparison	9	136.50	10.61	142.40	12.74	79.31	11.95	26.11	19.93
	Hall House	9	146.20	9.04	147.43	4.24	84.96	12.43	21.22	18.62

Note. End of grade testing in Reading and Math takes place only in third through eighth grades. The ninth grade scores are from the Algebra I and English I tests.