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Who Goes Where? Exploring Factors Related to Placement Among Group Homes

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Abstract

Despite their widespread use as a placement option for youth with mental health problems, there is relatively little research on group homes for youth. Available data highlight concerns with practices and treatment within group homes and mixed results on youth-level outcomes. However, existing research appears to collapse a wide range of group residential settings into a single amorphous category. This article explores potential variations among group homes to examine whether different programs are systematically serving different types of youth. It examines, in particular, placement in homes using the teaching family model (TFM) versus homes that do not. Findings suggest that demographics are not significantly associated with TFM placement. However, custody status, types of mental health problems, and use of psychotropic medications are. Homes appear to be serving distinct niches within a geographic area. Implications for future research and policy/practice are discussed.

Keywords

mental health; child; group homes; services; mental health; community-based; treatment; residential

The use of group homes for serving youth with emotional and behavioral problems has been controversial in recent years (e.g., Barth, 2004; Behar, Friedman, Pinto, Katz-Leavy, & Jones, 2007; Dishion, McCord, & Poulin, 1999; Dodge, Dishion, & Lansford, 2006). There is a great deal of concern about safety, potential iatrogenic effects, and outcomes for youth placed in such settings. However, the sparse research that has compared outcomes for youth in group residential placements with other types of settings and/or treatments has found mixed effects (e.g., Breland-Noble, Farmer, Dubs, Potter, & Burns, 2005; Chamberlain, Ray, & Moore, 1996; James, Roesch, & Zhang, 2011; Lee, Bright, Svobada, Fakunmoju, & Barth, 2011; Lee & Thompson, 2008). In work to date, the focus on “group residential

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settings” has usually been an amorphous categorization, based on very general categorizations and definitions. However, a cursory examination of the field suggests that group residential facilities vary significantly on a wide range of indicators and serve a wide array of youth (Ireys, Achman, & Takyi, 2006; Lee & Barth, 2011; Pavkov, Negash, Lourie, & Hug, 2010). This article examines variations in types of youth served by different group homes in the same geographic regions.

Numerous reviews have noted that although group residential settings remain a frequently utilized setting for youth (Butler & McPherson, 2007; Leichtman, 2006; Little, Kohm, & Thompson, 2005; Manderscheid & Henderson, 2004; McMillen et al., 2004; Pottick, Warner, & Yoder, 2005), there is a glaring lack of evidence-based interventions in such settings (Burns, Hoagwood, & Mrazek, 1999; Farmer, Dorsey, & Mustillo, 2004; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). There is also a significant concern about treatment and outcomes in group settings (e.g., Arnold & Hughes, 1999; Barth, 2004; Dishion et al., 1999) that have cast doubt on the wisdom of utilizing group residential placements. However, research on the potential benefits and risks of group residential treatment has been mixed (Chamberlain et al., 1996; Handwerk, Field, & Friman, 2000; Lee et al., 2011; Mager, Milich, Harris, & Howard, 2005; Weiss et al., 2005). Literature has been emerging in recent years on this range of topics, but research focused on group residential facilities has been sparse, and there is insufficient literature to address basic questions about characteristics of the settings, services, and youth served to answer the wide array of questions that need to be addressed.

Much of the current literature on group residential care is from one of two types of studies: large national studies of group care (e.g., Aarons et al., 2010; James et al., 2011) or regional programs (e.g., Chamberlain et al., 1996; Hagaman, Trout, Chmelka, Thompson, & Reid, 2010). In both types of studies, the focus has been on factors related to youth characteristics, placement trajectories, and/or outcomes with little attention to the potential variation among/between group residential facilities and, consequently, lack of information about whether the broad category of group residential facilities is serving a common set of youth or whether there are distinct niches and settings that are differentially serving specific subgroups of youth.

Available data paint a picture of youth in residential care as having elevated levels of risk on a wide range of factors. They tend to come from families with low socioeconomic status and extensive histories of problems and risks (e.g., mental health problems, incarceration, family violence; Courtney, McMurtry, & Zinn, 2004; Hagaman et al., 2010; James et al., 2006; Trout et al., 2009). Relatively high rates and levels of behavior problems are also common among youth in residential placements (Breland-Noble et al., 2005; Connor, Doerfler, Toscano, Volungis, & Steingard, 2004; Farmer, Mustillo, Burns, & Holden, 2008; Lyons, Libman-Mintzer, Kieiel, & Shallcross, 1998). However, data also suggest substantial heterogeneity of youth served in group settings (Casey et al., 2008; Trout et al., 2009). In studies that have compared youth in group residential placements with youth in other out-of-home settings, it is unclear whether youth in group settings have more severe problems than youth in other out-of-home placements (e.g., treatment foster care, foster care; Baker, Wulczyn, & Dale, 2005; Breland-Noble et al., 2005).

The literature on group residential settings includes a wide range of such settings: from community-based small-group homes, to homes clustered together in campus settings, to large institutional settings, which operate under tremendously diverse licensure, state regulations, and so on (Ireys et al., 2006; Pavkov et al., 2010; Teich & Ireys, 2007). There is also little attention to potential differences in models, interventions, and quality among sites. Hence, all homes that meet general criteria are often lumped together, and differences compared with other types of settings are examined. However, this runs the risk of comparing “apples and oranges” (e.g., “mom-and-pop” community-based group home; structured campus-based program; unlicensed facility).

Within the literature on group homes, there are hints about what would constitute “promising practice” (James, 2011; Lee & Barth, 2011; Lee et al., 2011). The model of group home care with, perhaps, the most substantial empirical support is the teaching family model (TFM; Fixsen & Blase, 2003; Phillips, Phillips, Fixsen, & Wolf, 1974; Wolf, Kirigin, Fixsen, Blase, & Braukmann, 1995; Wolf et al., 1976). This model, based on key elements that are viewed as critical in other current evidence-based interventions (e.g., proactive positively focused discipline, developing youth’s strengths and skills, emphasis on everyday experiences and interactions as opportunities for intervention and development, comprehensive training, supervision, feedback, and support for staff), has shown positive effects in a range of studies across the past three decades (e.g., Braukmann, Kirigin Ramp, & Wolf, 1985; Friman, 2000; Handwerk et al., 2000 Kirigin, Braukmann, Atwater, & Wolf, 1982; Larzelere, Smith, & Daly, 1997; Roose, 1987; Thompson et al., 1996; Timbers, Jones, & Davis, 1981). However, although research on sites that implement the TFM has provided key information to the field, they tend to be either (a) quite dated and have research designs that do not meet current criteria for examining/establishing evidence-based interventions, or (b) conducted at Boys Town (the largest implementer of the model) where generalizability to other settings is unclear. Hence, the TFM appears to be promising, but available empirical support is less than ideal for making such a conclusion.

The existing literature suggests that a wide range of youth with problems are served in a wide variety of group residential settings. What is not clear is whether such youth are relatively randomly distributed across the existing homes or whether there are systematic differences in the types of youth served in different types of settings. Given the field’s current focus on evidence-based interventions, it seems particularly important to examine whether youth who are being served in one of the most promising models of treatment, the TFM, are similar to youth served in group homes that do not utilize this model. Findings from such descriptive analyses may suggest the need for analytic techniques to reflect systematic differences (e.g., propensity scoring), that there are distinct niches for different models within the broader child-serving system, or that different models do, indeed, serve similar types of youth.

The current article begins to explore data from a state-wide quasi-experimental study of group homes (Ballentine, Morris, & Farmer, 2012; Pane, Farmer, Wagner, Maultsby, & Burns, in press). The primary research question is whether Teaching Family and non-Teaching Family homes in the same geographic catchment areas are serving similar youth. Hence, the article examines whether, within the relatively homogeneous category of small-

group homes in a common geographic area, there is evidence of “random” (non-systematic) sorting of youth into homes or if there appears to be differential placement, even among homes that, in a broad definition of settings, would be classified similarly.

Method

Data come from a quasi-experimental study conducted in a southeastern state. The sample was designed to include TFM group homes as well as group homes in the same geographic catchment areas that were not using the TFM (non-TFM). Based on state-level definitions, group homes were defined as residential placements, licensed by either the state’s Division of Social Services or Division of Mental Health, Developmental Disabilities, and Substance Abuse Services that contained no more than 10 beds per home. Geographic location of each TFM program was determined, and all other licensed group homes in the same county were then eligible for inclusion as a non-TFM program. Because of the infrastructure costs and requirements of TFM programs, there were no single stand-alone TFM homes in the state (all homes were part of an agency that ran multiple homes). To assure that agency size would not systematically differ between TFM and non-TFM homes, stand-alone non-TFM homes were eliminated from eligibility. Hence, all eligible agencies operated at least two homes (range = 2–8 homes). From this resulting list, one non-TFM agency was randomly selected from each of the counties that also housed a TFM program.

The resulting sample included seven TFM agencies and seven non-TFM agencies. Within these agencies, youth resided in a total of 49 homes (24 TFM homes; 25 non-TFM homes). Agencies on both sides of the study were operating a median of four homes, and each home included 4 to 10 beds (median of 5–6). Nearly all of the programs (85%) were housed within agencies that provided additional types of services for youth, for example, treatment foster care (67%), outpatient therapy (42%), education/day treatment (42%), case management (33%), reunification support (33%), and vocational training (25%).

One of the conspicuous differences between TFM and non-TFM homes was licensing level. In line with the participating state’s Medicaid regulations, homes in the sample were licensed according to the difficulty of youth they were designed to serve and, correspondingly, had different requirements for staffing patterns. The lowest level (Level 1) provided minimal treatment intervention and focused on providing a safe, home-like environment. Level 2 required more severe youth problems for eligibility, and consequently more of a treatment focus, but did not have overnight awake staff. Level 3 required overnight awake staff. Teaching Family homes were overrepresented at Levels 1 and 2 and underrepresented at Level 3. Among Level 1 homes, 12 were TFM and 7 were non-TFM; at Level 2, 9 were TFM and 2 were non-TFM; at Level 3, 3 were TFM and 16 were non-TFM.

Data for the broader study came from multiple sources (e.g., record reviews, observations, in-person interviews with youth and staff, telephone interviews with pre-placement and post-discharge caregivers). The sampling frame for youth included all youth who were served by the participating homes during the study period. This included youth who were living in the homes at the time the study started, as well as youth who entered the homes during the 2-year follow-up. The current analyses focus on data on the youth prior to admission. Such

data came from two sources. For all youth, data were abstracted from the agencies' records. For youth who entered the group home during the 2-year follow-up, additional data on pre-admission variables were gathered via telephone interviews with the youth's primary care provider in the month before admission.

Sample

The analysis cohort included 554 youth. Of these, 154 participants were living in the group home at the time the study began working with the relevant home; the remaining 400 youth were recruited as they were admitted to a participating group home during the 2-year follow-up period in each home. Of these youth, 358 were in Teaching Family homes and 196 were in non-Teaching Family homes.

Measures

Data for these analyses focus on characteristics of the youth at the time of placement to examine whether these differ systematically between TFM and non-TFM homes. Based on prior literature, four domains of variables were included in the study: demographics, child welfare and juvenile justice history, prior residential placement, and mental health status and service history. Demographics included age (in years), race (White vs. non-White; given the very small number of non-White youth who were not African American), and sex. Data on the child's history included custody (state vs. family at the time of placement), history of abuse (dichotomized to indicate youth who had experienced abuse [physical, sexual, emotional] or neglect versus those who had not), and criminal justice history (whether the youth had ever been incarcerated). Previous research has highlighted the importance of placement restrictiveness in residential trajectories. Full placement histories were not available for all youth, so restrictiveness was measured for the youth's residence immediately prior to placement in the focal group home. Levels follow the logic laid out in the Restrictiveness of Living Environment Scale (ROLES; Hawkins, Almeida, Fabry, & Reitz, 1992) to include placements from the least restrictive to the most. The final category includes indicators of the youth's mental health status/history. This includes data on psychotropic medications at the time of placement, history of psychiatric hospitalizations, and severity of symptoms/ problems (measured by the Strengths and Difficulties Questionnaire [SDQ]; Bourdon, Goodman, Rae, Simpson, & Koretz, 2005; Goodman, 2001).

Analysis

For analysis, data were organized into a series of topical domains described above. Mean values and standard deviations or proportions as appropriate were calculated for the complete cohort and again separately for participants in each type of home, TFM and non-TFM. Bivariate comparisons for the latter analyses were based on standard chi-square tests for categorical measures and *t* test for continuous measures; in instances where the latter did not satisfy assumptions of normality, comparisons were based on non-parametric rank procedures (Wilcoxon Kruskal–Wallis).

A primary aim of the study was to identify factors associated with home assignment (TFM vs. non-TFM). Toward this end, a series of logistic regression models (SAS 9.2; PROC

LOGISTIC; SAS Institute Inc., 2011) were estimated regressing a dichotomous proxy variable denoting group home assignment (group: TFM = 1; non-TFM = 0) on various putative predictive factors in two different analytic stages: bivariate and multivariate. In the former, odds ratios were estimated for each candidate predictor in a series of bivariate analyses wherein each predictor was entered into the model singularly. For the latter, two separate methods of data reduction were applied. The first was based on a staged multivariate approach while the second applied a branch and bound algorithm to derive a series of nested models.

For the staged analysis, variables within each domain were tested as a block. If the block was significant as determined by increments in $-2 \log$ likelihood scores, variables within the domain were subjected to data reduction using a stepwise variable selection procedure; entry criteria for the latter were set at a liberal $p < .15$, whereas inclusion criteria were maintained at $p = .05$. Selected variables were subsequently pooled across domains to estimate a final model; age, race, and sex were included in all models. Max-rescaled R^2 statistics, indices of concordance c (area under the receiver operating characteristic [ROC] curve), and $-2 \log$ likelihood statistics were used to assess fit.

The second nested approach to data reduction was based on the branch and bound algorithm of Furnival and Wilson (1974). Per this procedure, a specified number of reduced models (five) were derived based on the highest likelihood score (chi-square) statistic for all possible sizes between one to five effect models. That is, using logistic regression procedures, the dichotomous outcome measure for group was regressed on the 13 candidate indicators to derive optimal one, two, three, four, and five variable solutions as determined by score criteria. Among the five estimated models, a given model was selected over the next most simple model only if the difference in likelihood scores (as tested by a 1 df chi-square statistic) indicated that the increase in model fit was significantly ($p < .05$) improved by the additional measure. All models included age, race, and sex as covariates. As above, max-rescaled R^2 statistics, indices of concordance c (area under the ROC curve), and $-2 \log$ likelihood statistics were used to assess fit.

Missing Data

Data come from record reviews and interviews with the youth's pre-admission parent/guardian/caregiver (PGC). For participants without a PGC interview, participant information was necessarily based on records data; in instances where a PGC interview was available, dichotomous variable responses were coded as positive if either data source was endorsed. Analyses to compare youth with and without a parent/guardian interview suggested that they were very similar, except that youth without PGC interviews had been in the group home longer at the time of the initial in-home interview.

Using this approach, overall rates of missing data were small for most variables and did not differ significantly between youth in TFM and non-TFM homes. The only place where there were significant missing data was the SDQ. Data on severity of psychiatric problems, measured by the SDQ for the current analyses, come from PGC reports about the month prior to the youth's placement in the focal group home. As it was not viable to conduct such interviews with youth who were already living in the group homes at the time the study

started, SDQ scores for these 169 participants were multiply imputed using a two-step process. An initial imputation model based on a Markov Chain Monte Carlo algorithm ($m = 5$ imputations) was used to establish a monotone missing data pattern; variables for the latter model included measures from the child history and mental health status domains (see above) as well as the initial in-home SDQ measurement. Subsequent missing values were imputed in the second step using regression procedures as described by Rubin (1987); the model for the latter imputations was based on the same variables referenced above. Data from the five analyses were combined into single estimates and tested as described by Schafer (1997). All analyses were run with both existing and imputed SDQ data. Given a lack of difference in outcomes between these analyses, all reported findings are based on imputed data, so that all youth could be included in analyses.

Results

The first column of Table 1 shows the overall description of youth served in the participating homes. The sample was very diverse demographically. It was evenly split on sex (51.7% male) and race (46.3% non-White). Among the non-White participants, the majority (70%) were African American, with 14% identified as multi-racial, 8% American Indian, and 6% Hispanic. The sample had a mean age of approximately 15, with a range of 4 to 20. The SDQ that captured youth's behavior in the month immediately prior to placement shows levels of problems, on average, in the "high difficulties" (i.e., clinical) range for total problems, conduct problems, and hyperactivity. Emotional problems averaged in the "medium difficulties" (i.e., borderline) range. Wide standard deviations on these measures underscore the substantial variation in presenting problems seen among the youth.

Data from record reviews and interviews with preadmission guardians/caregivers show a historical pattern of risk factors and extended service trajectories. Approximately 30% of the youth had experienced a psychiatric hospitalization at some point prior to their placement in the group home. The majority (73%) had documented exposure to maltreatment (abuse/neglect) in their admissions chart, and more than half (54%) were currently in the custody of the state. Approximately one fifth of the sample had been incarcerated in a correctional facility at some point in their life. In addition, nearly half were on at least one psychotropic medication at the time of placement. While this number is not particularly high, given the level of problems, it is noteworthy that the majority of these youth who were taking medication at the time of placement were on more than one psychotropic medication (72%).

These portraits suggest a group who had substantial environmental and individual risk factors; however, well over half (60%) were living at home immediately prior to their placement in the current group home. An additional 16% were residing in foster care (kin or non-kin), and a slightly smaller percentage (13%) entered the group home as a lateral transition from another group home. Ten percent were placed in the group home as a step-down from a more restrictive setting (residential treatment, hospital, correctional facility). Slightly over 1% of youth ($n = 6$) entered the group home immediately following a run-away episode.

The final two columns in Table 1 provide data on characteristics of youth by home model (e.g., Teaching Family vs. non-Teaching Family). In terms of demographics, TFM and non-TFM homes appear to serve the same types of youth. However, on the other included domains, there are significant differences between youth served in the two types of homes. Although youth in both types of homes show relatively high rates of exposure to abuse, Teaching Family homes serve significantly more youth who are currently in the custody of the state, and non-Teaching Family homes serve a majority of youth who remain in their families' custody ($p < .001$). In line with this, Teaching Family homes serve more youth who come into the group home from foster care ($p < .05$).

Youth's emotional and behavioral problems and evidence of treatment history differ significantly between the two types of homes. Non-TFM homes serve youth who have significantly more severe symptoms and who have more substantial indicators of psychiatric treatment (higher rates of previous hospitalization [$p < .01$], psychotropic medications at time of placement [$p < .001$], and polypharmacy [$p < .01$]).

These descriptive statistics suggest substantial differences between youth served in TFM and non-TFM homes. However, multivariate analyses were complicated by the substantial multicollinearity among the predictor variables. To get around this issue, a series of within-domain models were run, and the best predictor from each subset was retained for a final cross-domain model. In this final model (see Table 2), youth in TFM homes were significantly more likely to be in state custody, to have lower levels of hyperactivity, and (marginally) to have lower rates of psychotropic medication use.

These results suggest that Teaching Family and non-Teaching Family homes were serving somewhat different groups of youth. However, as noted above, the distinction between TFM and non-TFM homes was confounded by the distinction between levels of licensure (Levels 1, 2, and 3). TFM homes primarily licensed as Level 1 or 2 and non-TFM homes overrepresented among the Level 3 homes. Given Medicaid eligibility for these levels of care, differences in severity of youths' problems may be based on differences in levels of care between the two models. Analyses within level of care support this general hypothesis. Level 1, 2, and 3 homes show the expected linear pattern of increased severity of problems as level increases. When analyses control for level of licensing, SDQ scores are not significantly different between TFM and non-TFM homes within level. However, there were some differences between TFM and non-TFM homes within a given level of licensure. At Level 1 (where there is the most adequate sample size in both TFM and non-TFM arms to make within-level comparisons), TFM homes were serving significantly more youth in state custody than non-TFM homes (90% vs. 62%, $p < .001$) and significantly more youth from minority racial/ethnic groups (57% vs. 38%, $p < .01$). In Level 3 homes, this racial/ethnic result was reversed, with TFM homes serving a significantly lower percentage of youth from racial/ethnic minorities (33% vs. 61%, $p < .01$).

Discussion

This article has explored whether group homes in the same geographic localities are serving distinct types of youth. The short answer appears to be “yes.” The longer answer suggests a somewhat more nuanced and complicated picture.

One of the concerns with access to care is related to demographic differences—Are a subset of youth preferentially admitted to different types of services? Following literature in the field (Friman, 2000; Handwerk et al., 2000; James, 2011; Wolf et al., 1995), the current study posited that Teaching Family programs were delivering a promising model of care, and non-Teaching Family programs would be delivering more eclectic and untested models of treatment. Hence, it would be concerning if disadvantaged groups within society were not being served by Teaching Family programs. There is no evidence of this in these data. Teaching Family and non-Teaching Family programs show very similar demographic profiles on race, sex, and age. Overall, and in Level 1 licensed homes (where the sample size was adequate to evaluate placement differences among youth with similar levels of difficulties), youth in state custody and youth from racial/ethnic minority groups were more likely to be in TFM homes. Hence, in terms of demographics, there is no evidence of reduced access to promising programs for vulnerable subgroups.

In terms of psychiatric symptoms, the picture is less clear. Here, non-Teaching Family programs were serving youth with significantly more severe psychiatric symptoms, more pronounced histories of treatment for psychiatric problems, more polypharmacy, and higher rates of psychiatric hospitalization. Hence, youth whose level of problems suggests the need for the most rigorous programs are not as likely to be served in what appears to be the most promising model of group home treatment.

Overall, if the study’s findings were to be grossly simplified, it appears that Teaching Family programs are serving more of a child welfare population (higher rates of state custody, moving from foster care, lower levels of mental health problems), and the non-Teaching Family programs are serving youth with more severe psychiatric problems and histories (higher levels of symptoms, higher rates of prior hospitalizations, more medications, and polypharmacy).

It appears that the TFM and non-TFM programs may focus on somewhat distinct niches within the service system. As noted in the description of participating programs, the sample includes homes that are licensed at three levels of care (based on their staffing/organization to serve youth with different levels of severity). There are substantial number of both TFM and non-TFM homes at the lowest level, more TFM homes at the mid-level, and more non-TFM homes at the highest level. Hence, if triaging were being done by appropriately matching licensing level with severity of youths’ problems, we would expect to see the observed higher severity of youth in non-Teaching Family homes. As noted above, severity of youth’s problems was not associated with placement in a particular model of home within level. Hence, the findings suggest matching youth with level of care and do not support substantial effects of demographic characteristics on placement among youth with comparable levels of need.

Limitations

This research provides one of the first glimpses at variation within the amorphous category of group homes. However, it has several limitations. First, it was conducted in a single state. Representativeness of these findings to other states or geographic areas is unknown. Second, all included agencies operated at least two group homes. Hence, the full range of homes, particularly the small single-home operations, is not included in these results. As it is highly unlikely that such homes would be implementing the TFM, this sample dramatically overrepresents Teaching Family programs. Third, this initial examination of distinctions among homes focuses only on characteristics of youth at the time of placement. Additional work is needed to examine patterns of outcomes among these homes and models (Griffith et al., 2009; Robst, Rohrer, Dollard, & Armstrong, 2014; Trout et al., 2010). Fourth, there is no information about how or why the included youth were placed in their respective homes. Additional information about referral practices (and other macro/system-level factors) would be very helpful in understanding the distribution observed here (Fedoravicius, McMillen, Rowe, Kagotho, & Ware, 2008). Finally, there are many factors, besides model, that differ between and among homes. Licensing level is a confounding variable in the current study. Whether this is specific to the sampled area or suggests a potential niche for TFM homes in the continuum of group homes cannot be known with the current study. There are also additional variations within the studied homes that have not been captured in these analyses (e.g., shift staff vs. couples, model of care among non-TFM homes, degree of implementation of model). Each of these may be related to youth who are served in a particular home and to outcomes of care.

Conclusion

This set of findings of differences suggests that a great deal of more research is needed on the processes and practices that result in observed placement patterns. Group homes are often lumped together as a category, but there appear to be clear differences in the types of youth served in various homes. Current findings suggest that concerns about access based on demographics are not supported in these analyses. Other findings, though, suggest that programs operating the most promising models may not be serving the most difficult youth. Given Teaching Family's focus on live-in families and family-style living, it is not surprising that they are under-represented among the programs that are staffed to serve the most difficult youth, with 24/hr awake staff. This observed difference may fit well with the operating model, but it may suggest the need for additional work on other models (or modifications of the TFM, for example, Daly et al., 1998) to serve youth with more severe problems and histories.

At present, very little is known about group homes. Even less is known about subtypes of homes within this amorphous category. The current findings begin to shed light on the variations apparent among group homes. Homes operating in the same geographic areas, but utilizing different models of care, appear to be serving distinct subgroups of youth. Additional work from this study will examine services and practices within these settings and outcomes for youth among and across homes. Attention to this level of detail and differentiation appears to be needed to understand the complexities and variations in these

community-based settings and to recognize the potential and limitations of talking about service settings as though they were homogeneous groupings. Such information is critical for making informed policy and treatment decisions, for assessing adequacy of empirically supported models of treatment, and for understanding intervention effects and possibilities across the wide range of existing programs.

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Table 1

Sample Characteristics: Non-Teaching Family and Teaching Family Group Homes.

Sample characteristics	Full sample (<i>N</i> = 554)	Non-teaching family (<i>n</i> = 196)	Teaching family (<i>n</i> = 358)	Level of significance
	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	<i>M</i> (<i>SD</i>) or %	
Demographics				
Age	14.7 (2.0)	14.7 (2.1)	14.7 (2.0)	.7256
White	53.6%	51.0%	54.7%	.4148
Male	51.7%	52.5%	51.7%	.9833
Child welfare and juvenile justice				
Any abuse	73.0%	70.3%	74.4%	.3306
Jail	20.6%	19.4%	21.3%	.6032
DSS custody	54.3%	39.2%	62.3%	<.0001
Residence prior to placement				
Home/relative	60.3%	61.9%	59.3%	.5965
Foster care	15.8%	11.3%	18.2%	.0466
Group home	12.8%	13.1%	12.6%	.8710
Residential treatment	5.6%	7.7%	4.4%	.1268
Jail	4.3%	6.0%	3.5%	.1968
Runaway	1.2%	0.0%	1.9%	.0732
Mental health status				
Mean number of MH diagnoses	1.8 (1.0)	2.0 (1.0)	1.7 (1.0)	.0012
MH hospitalization	29.5%	37.7%	25.0%	.0020
Any MH medications	49.4%	59.7%	43.7%	.0004
Mean number of MH medications	1.2 (1.5)	1.5 (1.6)	1.0 (1.4)	.0001
Polypharmacy	35.8%	44.1%	31.3%	.0031
SDQ				
Total difficulties	19.3 (7.3)	20.7 (17.8)	18.5 (10.2)	.0141
Emotional symptoms	4.4 (2.5)	4.7 (4.8)	4.2 (4.4)	.0353
Conduct problems	5.6 (2.9)	5.8 (5.7)	5.4 (4.0)	.1447
Hyperactivity/inattention	5.7 (2.9)	6.4 (5.3)	5.3 (4.8)	.0031
Licensure level of group home				
Level 1	51.7%	40.3%	57.5%	.0001
Level 2	25.2%	9.2%	34.1%	<.0001
Level 3	23.1%	50.5%	8.4%	<.0001

Note. SDQ = Strengths and Difficulties Questionnaire; DSS = Department of Social Services; MH = mental health.

Table 2

Multivariable Logistic Regression Models: Domain Models and Final Model.

Domain models	Est.	SE	χ^2	p value	OR	-95% CI	+95% CI
Child welfare and juvenile justice							
Any abuse							
Jail							
DSS custody	1.06	0.21	26.36	<.0001	2.89	1.93	4.32
Residence prior to placement							
Restrictiveness							
Mental health status							
MH hospitalization							
Any MH medications	-0.71	0.19	13.53	.0002	0.49	0.34	0.72
Mean number of MH medications							
SDQ							
Total difficulties							
Emotional symptoms							
Conduct problems							
Peer relationship problems							
Hyperactivity/inattention	-0.21	0.04	25.91	<.0001	0.81	0.75	0.88
Final model							
Age	0.02	0.05	0.16	.6936	1.02	0.93	1.12
Male	0.33	0.20	2.82	.0928	1.40	0.95	2.06
White	0.32	0.20	2.60	.1068	1.38	0.93	2.04
DSS custody	0.81	0.21	15.04	.0001	2.24	1.49	3.37
Any MH medications	-0.38	0.22	3.20	.0737	0.68	0.45	1.04
SDQ-Hyperactivity	-0.10	0.05	4.01	.0454	0.91	0.83	1.00

Note. Model fit: Likelihood ratio $\chi^2 = 40.9623$; $df = 6$; $p < .0001$; Max-rescaled $R^2 = .1071$; concordance Index $c = 0.668$. OR = odds ratio; CI = confidence interval; SDQ = Strengths and Difficulties Questionnaire; DSS = Department of Social Services; MH = mental health.