Reliability and Validity of the Youth Empowerment Scale–Mental Health in Youth Departing Residential Care and Reintegrating into School and Community Settings

Jacqueline Huscroft-D’Angelo
Alexandra L. Trout
Matthew C. Lambert

University of Nebraska-Lincoln

Ronald Thompson

Boys Town National Research Institute

Abstract

Empowerment has been established as an important factor in resilience in adolescence. It has also been deemed critical for youth with emotional and behavioral disorders to achieve successful outcomes across academic, social, and behavioral domains, especially during a major transition. There is currently one measure used to evaluate empowerment in youth with mental health difficulties, yet it is unclear if this is a reliable measure for youth in therapeutic residential care. The purpose of this study was to examine the reliability and validity of this measure of empowerment in a sample of youth departing therapeutic residential care (N = 138) and to examine whether or not specific factors contribute to varied levels of empowerment. Findings indicate that the empowerment measure is reliable and valid for use with youth departing therapeutic residential care. Overall, youth report high levels of empowerment at discharge from care. None of the predictors in the three multivariate general linear models were statistically significant. Limitations and implications are discussed.

Keywords: empowerment, residential care, aftercare, youth, education, supports, transition

Address correspondence to: Jacqueline Huscroft-D’Angelo, Academy for Child and Family Well Being, University of Nebraska-Lincoln, 247D Barkley Memorial Center, Lincoln, NE 68583–0732. E-mail: jndangelo@unl.edu.

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While some youth skate through adolescence with little uncertainty, for others, this developmental stage brings about tension and conflict as new found independence, changing peer groups, and pending transitions heighten emotional stress (Scales, Benson, & Roehlkepartain, 2011; Walker, Thorne, Powers, & Gaonkar, 2008). Many studies have evaluated the risks and challenges faced by youth during this period, as well as strategies to prevent high-risk behaviors and improve resilience (Benson, 2006). One common underlying factor identified in the risk, prevention, and resilience literature is the concept of youth empowerment. Empowerment is “...an intentional, ongoing process...through which people lacking an equal share of valued resources gain greater access to and control over those resources” (Cornell Empowerment Group, 1989, p. 2). Ultimately, higher levels of empowerment increase one’s ability to promote positive change, to improve quality of life, make sound decisions, or foster a life-style change that is necessary for achieving success (Curtis & Singh, 1996; Turnbull, Turnbull, Erwin, & Soodak, 2006; Walker, Geenen, Thorne, & Powers, 2009). In the last two decades, researchers have consistently found that youth who have higher levels of empowerment demonstrate better outcomes across academic, social-emotional, health, psychological, and behavioral domains (e.g., Benson, 2006; Holden, Crankshaw, Nimsch, Hinnant, & Hund, 2004; Leffert et al., 1998; Scales, Benson, Leffert, & Blyth, 2000; Scales, Benson, Roehlkepartain, Sesma, & van Dulmen, 2006). These findings seem to be robust across gender, race/ethnicity, and socioeconomic status (Scales et al., 2000; Scales et al., 2006).

Empowerment in Youth At-Risk

One group of youths who consistently demonstrate poor outcomes across academic, behavioral, social, and emotional domains are those with or at-risk of emotional and behavioral disorders (Bradley, Doolittle, & Bartolotta, 2008; Epstein, Nelson, Trout, & Mooney, 2005; Wagner & Newman, 2012). The importance of empowerment in this population is strongly emphasized in the professional literature and in fields that support youth at-risk such as mental health, child welfare, and education (Cooper et al., 2015; Scales et al., 2000; Scales et al., 2011; Scales et al., 2006; Ungar & Teram, 2000; Walker et al., 2008). Across these fields, the general consensus is that youth benefit from taking an active role in managing their mental health, academic, and behavioral needs, and should participate in decision making, service planning, and goal-setting activities that relate to their short- and long-term wellbeing (Garland, Lewczyk-Boxmeyer, Gabayan, & Hawley, 2004; Walker et al., 2008). Active engagement becomes even more
critical during pivotal points in the youth's life such as major transitions across schools, service providers, and peer groups. Research supports the idea that youth with significant emotional and behavioral disorders who demonstrate higher levels of empowerment are more likely to have successful transition outcomes (Gowen & Walker, 2009; Walker et al., 2009).

In addition to serving as a protective factor during key transition periods, researchers have also found that empowerment plays a significant role in risk-taking behavior, a notable concern for high-risk youth. For example, studies have found that empowerment influences substance use, behavior, tobacco use, sexual activity, and delinquency (Cooper et al., 2015; Holden, Evans, Hinnant, & Messeri, 2004; Jerden, Burell, Stenlund, Weinehall, & Bergstrom, 2008; Ssewamala et al., 2010; Ungar & Teram, 2000). It has also been suggested that when at-risk youth lack empowerment they tend to be less engaged in school contributing to poor secondary academic outcomes (i.e., failing grades, poor school attendance, drop-out) and post-secondary failures (Wagner, Newman, Cameto, Garza & Levine, 2005; Walker et al., 2009). Finally, when high-risk youth exhibit low levels of empowerment they are less likely to contribute to the planning process or goal setting involved in developing Individualized Education Programs, transition, or service plans (Walker et al., 2009).

Reintegration for Youth Departing Therapeutic Residential Settings

Youth in therapeutic residential care represent a highly vulnerable subgroup of at-risk youth. In the United States, therapeutic residential care serves approximately 40,000 youth annually and is often considered a last resort placement (Frensch & Cameron, 2002; Pecora & English, 2016). Although highly restrictive, it often serves as the most appropriate setting to comprehensively treat complex social, interpersonal, emotional, behavioral, and educational needs (Lyons, Woltman, Martinovich, & Hancock, 2009). At entry, youth typically present with significant mental and behavioral health difficulties (e.g., Duppong Hurley et al., 2009; Griffith et al., 2009, Griffith et al., 2012), and co-occurring academic and physical health needs (Nelson et al., 2013; Parrish, Graczewski, Stewart-Teitelbaum, & Van Dyke, 2001; Trout et al., 2008; Trout, Lambert, Nelson, Epstein, & Thompson, 2015). Despite these risks, many youth make significant treatment gains while in care, and as many as 61% will reintegrate into the home and community before aging out of the system (Child Welfare League of America [CWLA], 2015; Fields, Farmer, Apperson, Mustillo, & Simmers, 2006; Frensch, Cameron, & Preyde, 2009; Larzelere, Daly, Davis, Chmelka, & Handwerk, 2004).
Nearly two-thirds of youth reintegrating into the home and community will return to the home they were living in prior to placement (CWLA, 2015; Farmer, Wagner, Burns, & Richards, 2003; Trout et al., 2010). Initially, the reintegration period may present with fewer challenges due to gains made while in care and to the “honeymoon period” youth often experience during the initial transition (Biehal & Wade, 1996; Harder, Kalverboer, & Knorth, 2011). Although the transition may appear to go well in the short term, pro-social and adaptive behaviors are often not maintained (Courtney & Barth, 1996; Foster & Gifford, 2005; Wall, Koch, Link, & Graham, 2010). As treatment gains diminish over time, familial stress increases and the effect on individual youth functioning appears across academic, behavioral, emotional, and social outcomes (Curry, 2004; Frensch & Cameron, 2002; Leichtman & Leichtman, 2001; Sutherland & Miller, 2012). Ultimately, return rates of reunified youth have been as high as 74%, many of which occur within the first two months (Blader, 2004; Courtney & Barth, 1996; Foster & Gifford, 2005; James et al., 2010; Narendorf & Millen, 2010; Wickizer, Lesser, & Boyd-Wickizer, 1999).

To better understand why some youth do not have lasting, successful transitions several studies have been conducted to better understand factors that influence reunification success. While broad, the majority of studies have focused on characteristics related to demographics, family functioning, mental health, behavior, caregiver empowerment and self-efficacy, and perceptions of need during the initial reintegration period (Huscroft-D’Angelo, Trout, Lambert, & Thompson, in press; Nickerson, Colby, Brooks, Rickert, & Salamone, 2007; Trout et al., 2010; Trout, Hoffman, Epstein, & Thompson, 2014; Trout et al., 2013). For example, studies have identified differences in family (i.e., parental discipline, parental stress, number of children in the home) and academics (i.e., GPA at departure, suspensions, expulsions) as contributing factors to long term success or failure for youth (CWLA, 2005; Griffith et al., 2009; Lakin, Brambila, & Sigda, 2007; Lyons, Terry, Martinovich, Peterson, & Bouska, 2001). Although sparse, there have also been studies which have examined constructs closely linked to empowerment such as self-determination, motivation, and hopefulness (Brauers, Kroneman, Otten, Lindauer, & Popma, 2016; Conte, Snyder, & McGuff, 2008). With respect to self-determination and hopefulness, findings reveal that youth departing residential care perceive themselves as average to above average indicating they have the skills and preparedness to be successful post-discharge (Casey et al., 2010). Despite being recognized as a contributing factor to positive outcomes in several key domains and building resil-
ience, no known studies have examined empowerment in youth served in therapeutic residential care or the role it plays during the reintegration period.

One possible reason for this gap in the literature is the lack of validated measures targeting empowerment. Although measures of empowerment have been developed for other populations (i.e., adult mental health consumers, caregivers of youth with emotional and behavioral disorders) presently, there is only one measure of empowerment that exists to evaluate this construct in youth with significant emotional and behavioral disorders. The Youth Efficacy/Empowerment Scale—Mental Health (YES-MH; Walker & Powers, 2007) was designed to assess youths’ perceptions of efficacy and empowerment with respect to managing their own mental health conditions, managing their own services and supports, and using their experience and knowledge to help peers and improve service systems. The YES-MH was adapted from the Family Empowerment Scale (FES; Koren, DeChillo, & Friesen, 1992). The developers of YES-MH have reported evidence of the scale’s internal structure and score reliability for a sample of youth ages 14–21 with significant mental health disorders (N = 185), and exploratory factor analysis methods suggested that items formed three factors (Self, Service, and System) as well as a total score (Walker et al., 2008). The internal consistency of each subscale score was adequate with coefficient alphas of .85 (Self), .83 (Service), .88 (Service), and .91 (Total).

Although Walker and colleagues (2008) provided initial evidence for measuring empowerment with the YES-MH in youth with mental health disorders, a very small percentage of the validation sample were living in residential treatment (9.2%), and none had experienced reintegration. Given the import of empowerment in supporting aspects of the youth’s life (e.g., academics, behavioral, emotional, transition), it is essential to have adequate measures to assess this construct. This would provide an initial step for understanding empowerment in youth departing therapeutic residential care. Therefore, additional studies are needed to understand the reliability of this measure for youth with significantly elevated and multidimensional educational, social emotional, and behavioral risks served in therapeutic residential care. The purpose of this study was twofold (1) to examine the reliability and validity of the YES-MH in a sample of youth departing therapeutic residential care, and (2) to explore if perceptions of empowerment differ across domains based on demographic, family, and academic related characteristics.
Method

Setting

Study participants included youth who had been recently discharged from two therapeutic residential care settings in the Midwest. Both residential programs used an adaptation of the Teaching Family Model (Wolf, Kirigin, Fixsen, Blasé, & Braukmann, 1995) where youth live on campus in a family style environment with a trained Family Teaching couple and a small number of peers. While in therapeutic residential care youth are provided with intensive intervention and supports in areas of education, behavior, relationships, health, and social skills. At departure, youth were approached about participation in a randomized controlled trial (RCT) of an aftercare program, On the Way Home (OTWH; Trout, Tyler, Stewart, & Epstein, 2012). OTWH was developed to address the aftercare needs of youth at-risk and families following a stay in therapeutic residential care. OTWH targets educational and transition difficulties by implementing parent training (i.e., Common Sense Parenting; Burke & Herron, 1996), school dropout prevention (Check & Connect; Christenson, Evelo, Sinclair, & Thurlow, 1997), and homework support. Family Consultants provide direct care services to youth and their families for 12 months following discharge from therapeutic residential care. Family Consultants spend an average of two hours per week with families to review youth school engagement, youth homework progress, and work on targeted youth and family skills (for a complete description of the intervention and service delivery; see Trout et al., 2012; Trout, Jansz, Epstein, & Tyler, 2013; Trout, Lambert, et al., 2013). Data for the current study were collected following youth assent and parent consent to the larger RCT. All procedures were approved by the Institutional Review Boards of the university and participating residential agencies.

Participants

Eligible participants included youth who were discharged from the therapeutic residential care programs between 2012–2016 and met the following criteria: (a) were enrolled in grade 8 to 12; (b) returned to a home, school, and community setting within a 60-mile radius of the residential campus or university; and (c) identified with or at-risk of a high-incidence disability. A total of 252 families were approached for participation; 31 did not meet inclusion criteria, 31 declined participation, 6 withdrew consent prior to intake data collection, and 17 families could not be contacted, resulting in a total of 167 consenting families. Data were included for participants who completed at least
80% of the provided items across all measures resulting in a total of 138 youth. Just over half of the participants were male (58.7%) and Caucasian (59.1%). Approximately 98% of the sample had at least one Diagnostic and Statistical Manual of Mental Disorder 5th edition (DSM-5; American Psychiatric Association, 2013) diagnosis and 41% were receiving special education services. All descriptive and demographic data are presented in Table 1.

**Measures**

Data were collected using both standardized and agency-developed measures. Participants were asked to complete the measures approximately four weeks after discharging from the therapeutic residential treatment care setting.

The Family General Information Sheet (FGIS) was used to collect demographic information. The FGIS is a 20-item researcher developed measure designed to gain background information on the youth. All items are completed through self-report and address youth and parent demographic, academic, family, treatment, and medication related information. Individual items were grouped into these domains for analytic purposes and to explore potential demographic differences in levels of perceived youth empowerment.

The YES-MH (Walker & Powers, 2007) has 20 items which are rated on a 5-point scale from *never or almost never* (1) to *always or almost always* (5), and divided into three subscales and a total score. The subscales include Self (confidence and optimism about coping with/managing one’s own condition; 6 items, $\alpha = 0.85$), Services (confidence and capacity to work with service providers to select and optimize services and supports; 7 items, $\alpha = 0.83$), and System (confidence and capacity to help providers improve services and to help other youth understand the service system; 7 items, $\alpha = 0.88$). The Self subscale has a range of 6–30, while the Services and Systems subscales range from 7–35. Each subscale can be used separately, however the sum of their scores yields a total score for overall youth empowerment with a range of 20–100. Higher scores indicate higher levels of empowerment for both the subscale and total scores. The YES-MH was validated in a sample of youth aged 14–21 with significant mental health difficulties (Walker et al., 2008) from various settings including the majority living in the family home (55%) and smaller percentages from foster care, independent living, residential treatment, and correctional facilities.

The Academic Competence Evaluation Scales (ACES; DiPerna & Elliott, 2000) is a self-report measure of academic and behavioral functioning designed to assess the skills, attitudes, and behaviors that influence educational outcomes. There are 68 items which are ranked on a
<table>
<thead>
<tr>
<th>Variable/Level</th>
<th>$n$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic</strong></td>
<td></td>
</tr>
<tr>
<td>Male ($n = 138$)</td>
<td>138 (58.7%)</td>
</tr>
<tr>
<td>Race/ethnicity ($n = 137$)</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>81 (59.1%)</td>
</tr>
<tr>
<td>African American</td>
<td>23 (16.8%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>20 (14.6%)</td>
</tr>
<tr>
<td>American Indian</td>
<td>1 (&lt;1.0%)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>10 (7.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (1.5%)</td>
</tr>
<tr>
<td>Age M (SD)</td>
<td>15.42 (1.50)</td>
</tr>
<tr>
<td><strong>Family</strong></td>
<td></td>
</tr>
<tr>
<td>Living with biological family member ($n = 130$)</td>
<td>95 (73.1%)</td>
</tr>
<tr>
<td>Marital status of caregiver ($n = 133$)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>49 (36.8%)</td>
</tr>
<tr>
<td>Divorced</td>
<td>37 (27.8%)</td>
</tr>
<tr>
<td>Single</td>
<td>37 (27.8%)</td>
</tr>
<tr>
<td>Separated</td>
<td>7 (5.3%)</td>
</tr>
<tr>
<td>Widowed</td>
<td>3 (2.3%)</td>
</tr>
<tr>
<td>Annual household income ($n = 132$)</td>
<td></td>
</tr>
<tr>
<td>&lt; $30,000</td>
<td>67 (50.8%)</td>
</tr>
<tr>
<td>$30,001-$50,000</td>
<td>32 (24.2%)</td>
</tr>
<tr>
<td>&gt; $50,001</td>
<td>33 (25.0%)</td>
</tr>
<tr>
<td>Children under 18 in home ($n = 132$)</td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>78 (59.1%)</td>
</tr>
<tr>
<td>3–5</td>
<td>50 (37.8%)</td>
</tr>
<tr>
<td>&gt;5</td>
<td>4 (3.1%)</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td></td>
</tr>
<tr>
<td>Receiving special education services ($n = 138$)</td>
<td>56 (40.6%)</td>
</tr>
<tr>
<td>Returned to school previously attended ($n = 131$)</td>
<td>60 (45.8%)</td>
</tr>
<tr>
<td>Free and reduced lunch ($n = 128$)</td>
<td>80 (62.5%)</td>
</tr>
</tbody>
</table>

*Note.* Each variable indicates the number of respondents per item because missing data were present.
five point Likert-type scale (0 = never to 4 = almost always) and are also ranked on importance (0 = not important to 2 = critical). Completion takes approximately 10–15 minutes and includes three measures of academic skills (reading/language arts, mathematics, critical thinking) and four behavioral measures of academic enablers (motivation, study skills, engagement, interpersonal skills). The range for Youth Academic Skills is 30–150 and the range for the Youth Academic Enablers is 38–190 with higher scores indicating greater levels of academic competence. Measures of scorer and test-retest reliability are very high (>0.90 and 0.88) and indicators of construct and convergent validity reveal that it is a strong measure of academic and behavioral functioning. For this study, only the subscales in the academic enablers were used.

Data Analysis

Score reliability. Prior to computing the primary inferential analyses, we entered and cleaned the data, and computed basic descriptive statistics to provide an overview of the sample. Next, coefficient alpha (Cronbach’s alpha) was computed for each YES-MH subscale score. Internal consistency estimates were evaluated based on Nunnally’s (1978) guidelines where values below 0.70 are considered inadequate (i.e., unreliable), values between 0.70 and 0.80 are considered acceptable for recently developed research instruments, and values above 0.80 are considered adequate for applied settings (e.g., schools, social services, mental health settings).

Convergent validity. Although there are several areas which contribute to the success of youth post-discharge, school engagement and academic success are highly important. Academic attainment is a predictor of future employment, post-secondary attendance, and financial independence. The ACES was selected as a measure for convergent validity due to the role academics plays in both short and long term outcomes. Moreover, the ACES aims to measure competence which is a multidimensional construct composed of the skills, attitudes, and behaviors of a learner that contribute to academic success in the classroom. Four ACES academic enablers subscales (i.e., motivation, engagement, interpersonal skills, study skills) overlap with the construct of empowerment. Pearson product-moment correlations were computed between YES-MH subscale scores and ACES subscale scores (see Table 2). The magnitude of the correlation coefficients was evaluated against the general criteria suggested by Cohen (1988): correlation coefficients between 0.10 and 0.29 are considered small, between 0.30 and 0.49 are considered moderate, and between 0.50 and 1.00 are considered large. Correlations closer to 1 (i.e., large correlations) indicate stronger relationships between YES-MH and ACES scores. Although
both measures have overlapping constructs, it was important to account for the academic functioning of this population. This is an area in which this sub-group consistently demonstrates poor performance. Despite making gains while in care, many continue to function below grade level even with newly developed skills (Bemak, Chung, & Siroskey-Sabdo, 2005; Benson, 2006; Holden et al., 2004; Leffert et al., 1998; Scales et al., 2000; Scales et al., 2006). Therefore, small to moderate correlations between the YES-MH and ACES scores were anticipated.

**Differences by demographics.** Specific items from the FGIS were grouped into three domains of predictors (demographic, academic, and family) for organizational and analytic purposes. Categories for several of the predictors were collapsed into dichotomies or trichotomies for analytic purposes (e.g., race, income, etc.). The demographic domain was comprised of youth gender, age, and race/ethnicity (white versus non-white). The academic domain consisted of special education status, whether the youth returned to their previous school, and youth’s current grade. Predictors in the family domain included biological parent status, marital status, annual household income, and the number of children currently living in the home.

Multivariate generalized linear models (GLMs) were computed to examine the degree to which predictors in each domain were related to youth empowerment. The generalized linear models were computed separately for each domain (e.g., set of predictors), and included only the main effects of the predictors. A significant multivariate test (i.e., Wilk’s Lambda [\(\lambda\)]) for an individual predictor indicated that the predictor was significantly related to at least one of the outcome variables. Post-hoc analyses (one-way ANOVA or independent-samples \(t\)-test) were used to further probe significant multivariate tests. Alpha was set at 0.05 for all inferential analyses.

Partial eta square (\(\eta_p^2\)) and Cohen’s \(d\) effect sizes were computed for statistically significant multivariate effects and post-hoc univariate effects, respectively. General guidelines suggest that \(\eta_p^2 \leq 0.01\) is a small effect, \(\eta_p^2 \leq 0.06\) is a moderate effect, and \(\eta_p^2 \geq 0.14\) is a large effect (Cohen, 1988). The same set of general guidelines suggest that \(d = 0.20\) represents a small effect, \(d = 0.50\) represents a moderate effect, and \(d \geq 0.80\) represents a large effect.

**Results**

Overall, youth perceived themselves to have high levels of empowerment. The YES-MH Self subscale scores ranged from 6 to 30 with a mean of 23.63 (\(SD = 4.82\)). The Services and Systems subscale
scores ranged from 7 to 35 with means of 26.17 ($SD = 5.69$) and 22.79 ($SD = 6.96$), respectively. The Total scale scores ranged from 20 to 80 with a mean of 72.59 ($SD = 13.99$).

**Score Reliability and Convergent Validity**

Coefficient alpha was computed separately for each YES-MH subscale score. Coefficient alpha was 0.89, 0.86, and 0.89 for the Self, Services, and Systems subscale scores, respectively. The reliability estimates suggest that the three scores are reliable measures of empowerment constructs, and are suitable for use in therapeutic residential treatment programs.

All correlation coefficients for the YES-MH and ACES subscales were positive, and ranged from 0.07 to 0.32. Fourteen of the 15 correlations were small and one correlation was of moderate magnitude. All correlations were statistically significant at the 0.05 alpha level except for the coefficient between the YES-MH Systems score and the ACES Interpersonal score ($r = 0.07$). Table 2 lists the correlation coefficients between YES-MH subscale scores and ACES subscale scores.

**Differences by Demographics**

None of the predictors in the three multivariate general linear models were statistically significant (see Table 3). However, several individual predictors demonstrated marginally significant (e.g., $p < 0.10$)

<table>
<thead>
<tr>
<th>ACES Academic Enablers</th>
<th>YES-MH</th>
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<tbody>
<tr>
<td></td>
<td>Self</td>
</tr>
<tr>
<td>Total</td>
<td>0.28</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>0.29</td>
</tr>
<tr>
<td>Engagement</td>
<td>0.22</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.24</td>
</tr>
<tr>
<td>Study Skills</td>
<td>0.21</td>
</tr>
</tbody>
</table>

*Note. ACES items are ranked on a 5-point Likert-type scale (0 = never to 4 = almost always) and ranked on importance (0 = not important to 2 = critical). The range for Youth Academic Skills is 30–150 and the range for the Youth Academic Enablers is 38–190 with higher scores indicating greater levels of academic competence. YES-MH items are rated on a 5-point scale from never or almost never (1) to always or almost always (5), and divided into three subscales that have a range of 7–30 (Self), 8–40 (Service and System) and a total score ranging from 23–110. Higher scores reflect higher levels of perceived empowerment. *ns not statistically significant. All correlations were significant at the 0.05 alpha level except where noted.*
multivariate effects. For the academic domain, whether or not a youth was returning to a previous school upon discharge from residential care exerted a marginal multivariate effect on YES-MH scores. Youth returning to a previous school had higher Self (24.20 vs. 22.21; $d = 0.36$) and Service (26.80 vs. 24.63; $d = 0.34$) scores than peers attending a new school following discharge. Both of these univariate effects were statistically significant at the 0.05 alpha level, but the multivariate effects were not significant.

For the family domain, whether or not a caregiver is a biological parent exerted a marginal multivariate effect on YES-MH scores. Univariate post hoc analyses revealed that these two groups significantly differed on Service scores with children of non-biological parents (e.g., adoptive parents, grandparents, foster parents) reporting higher scores than their peers residing with a biological parent (27.50 vs. 24.99; $d = 0.40$).

**Discussion**

The purpose of this study was to assess the reliability and validity of the YES-MH scores for youth transitioning out of therapeutic residential care and to examine potential differences in levels of em-

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Results of the Multivariate General Linear Models</th>
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<tbody>
<tr>
<td></td>
<td>Wilk’s Lambda</td>
</tr>
<tr>
<td><strong>Demographic</strong></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.96</td>
</tr>
<tr>
<td>Age</td>
<td>0.90</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>0.97</td>
</tr>
<tr>
<td><strong>Family</strong></td>
<td></td>
</tr>
<tr>
<td>Biological parent</td>
<td>0.95</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.99</td>
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<tr>
<td>Annual household income</td>
<td>0.92</td>
</tr>
<tr>
<td>Children under 18 in home</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td></td>
</tr>
<tr>
<td>Receiving special education services</td>
<td>1.00</td>
</tr>
<tr>
<td>Returned to previous school placement</td>
<td>0.94</td>
</tr>
<tr>
<td>Grade level</td>
<td>0.84</td>
</tr>
</tbody>
</table>
powerment across variables critical for successful reintegration. With regard to the reliability, results suggest that the YES-MH scores are reliable for assessing empowerment in this population. All subscale scores met adequate reliability estimates being .86 and higher.

The YES-MH also demonstrated initial validity evidence for this population. With the exception of the YES-MH Systems and the ACES Interpersonal scales scores, the convergent validity correlations between the YES-MH subscale scores and the ACES scores were small to moderate in magnitude. These results align with literature evaluating the potential role empowerment plays in academics and a student’s ability to carry out an action or task (Heslin & Klehe, 2006). It was also not surprising to see the lack of non-significant correlations between the YES-MH Systems and the ACES Interpersonal scales. The Interpersonal scale assesses cooperative learning behaviors necessary to interact with others, while the Systems subscale examines how one individually interacts and navigates a system to improve services or supports for themselves and others. Essentially, there is only one item that assesses individual levels of interaction or cooperation among peers (i.e., I help other young people learn about services and supports that might help them).

In regards to the youth self-reports, overall, youth reported high levels of empowerment on the YES-MH. These findings are consistent with previous studies examining youth perceptions of preparedness early on in reintegration. Soon after reintegration, youth are often still experiencing the gains made while in care including educational progress due to established school routines and additional school supports, improved quality of life, and improved externalizing and internalizing behaviors (Adair et al., 2005; Joyce, Fontanella, & Phillips, 2013; Ringle, Thompson, & Way, 2015; Robst et al., 2013; Trout et al., 2013). However, previous studies have also found that youth departing therapeutic residential care report higher skills in other areas of behavior and social competence domains, possibly overestimating their abilities (Carter, Lane, Pierson, & Glaeser, 2006; Casey et al., 2010). Some have referred to this overestimation as positive illusionary bias, where self-report and actual competence differ substantially (Casey et al., 2010; Evangelista, Owens, Golden, & Pelham, 2008). Others have acknowledged similar difficulty with self-report bias and inflated scoring in social and intellectual domains (Kruger & Dunning, 1999). For example, Kruger and Dunning suggested that overestimation in these domains occurs for some who are actually under skilled in the domain and subconsciously attempt to overcompensate for this by reaching erroneous conclusions about their actual skills.
Although it is important for youth to feel empowered, an elevated sense of youth empowerment during reintegration into the home, school, and community setting, and the role this may play in resilience, transition, academics, and behavior is problematic for several reasons and should be closely monitored. First, although much has been studied regarding the importance of empowerment in youth at-risk (Cooper et al., 2015; Scales et al., 2011; Ungar & Teram, 2000; Walker et al., 2008), if youth are unable to adequately or honestly assess their level of empowerment, this information may not be valuable for reintegration planning and may in fact add to the complexities of transition planning for reintegrating youth. For example, if discharging youth convey an inflated sense of empowerment navigating supports or systems within their school, it may insinuate to school staff that youth are equipped to return and successfully navigate the school. As a result, school staff may not closely monitor continued educational growth or provide additional supports to reintegrate youth into the school environment. Key stakeholders in youth reintegration (e.g., school personnel, service providers, caregivers) should be cautious of this when preparing youth for the reintegration period.

Second, given the poor long term outcomes (e.g., elevated rates of school dropout, homelessness, under and unemployment, placement instability) and high rates returning to care of reintegrating youth (up to 74%; Blader, 2004; Courtney & Barth, 1996; Foster & Gifford, 2005; James et al., 2010; Narendorf & McMillen, 2010; Wickizer et al., 1999), it is very likely empowerment levels do not hold up, even in the short term (Blader, 2004; Burns, Hoagwood, & Mrazek, 1999; Curry, 2004; Frensch & Cameron, 2002; James et al., 2010; Leichtman & Leichtman, 2001; Wickizer et al., 1999). These findings provide additional support that youth in therapeutic residential care likely overestimate their competence with respect to empowerment (Blader, 2004; James et al., 2010; Wickizer et al., 1999). Given the significant societal costs of reentry to care (Psychiatric Residential Treatment Network of Services, 2013), additional research is needed to examine the predictive validity of self-reports of empowerment for youth in this population.

Finally, when examining youth characteristic differences in empowerment, none of the predictors were significant. These findings are similar to research with adolescent populations in the general settings which indicate high levels of empowerment hold across targeted variables such as gender, race/ethnicity, and socioeconomic status (Scales et al., 2000, Scales et al., 2006). This finding was unexpected as prior research with youth in therapeutic residential care settings have found differences across several of these characteristics (e.g., gender, socioeconomic status, special education eligibility, caregiver status) in
other key areas at discharge including family, behavior, and academics (Duppong Hurley et al., 2009; Griffith et al., 2009; Trout et al., 2010). Replication is needed to determine if this finding would hold across similar populations and over time.

**Limitations**

Three study limitations should be mentioned. First, participants were recruited from two therapeutic residential care centers located in the Midwest. Therapeutic residential treatment providers vary in the number of services they provide, the manner in which services are provided, and the behavioral change approaches they use. Thus, the generalizability of these results is limited because the sample’s empowerment levels may not be representative of youth served in other therapeutic residential care facilities. Second, the sample was relatively small and drawn from a single geographic region. Replicating the findings in other settings would be beneficial and with a larger sample which would also allow for greater statistical power when examining possible differences across variables in academic, family, and demographic domains. Finally, youth in the current study had voluntarily consented to participate in an RCT study for a 12-month aftercare intervention. It is possible that volunteering for such a trial is influenced by youths’ level of empowerment.

**Conclusions**

Empowerment has been described as a critical underlying factor in risk and resilience. Having measures to evaluate this construct in highly vulnerable youth, such as those in therapeutic residential care is important. This study provides support for the use of YES-MH with youth departing therapeutic residential care and reintegrating into the home, school, and community settings. However, given what we know about the long-term outcomes of this population, more needs to be studied about the impact of self-reports of empowerment and the predictive validity of this construct on short and long term reintegration success and wellbeing. Furthermore, although closely aligned, empowerment is unique in that it is often the precursor or facilitator to similar constructs such as self-determination (i.e., choosing behavior in accordance with one’s inner needs, feelings, or thoughts; Deci, 1980, p. 112) and self-efficacy (i.e., the judgments that people make when identifying their abilities to reach certain levels of performance; Bandura, 1997; Sprague & Hayes, 2000; Wehmeyer, 1994). Therefore, evaluation of these other affective constructs may further our understanding of the affective state of youth at departure and better inform program planning.
Similar to previous studies across key domains that correlate with overall wellbeing, youth in care tend to be overly optimistic about their skills (Casey et al., 2010). While it is important that youth are confident and feel empowered, perceptions of empowerment may not be enough. For families, educators, and service providers working with youth during this transition period, it might be that more is needed to provide these youth with specific social emotional, behavioral, and education skills and supports needed to meet their educational goals and maintain long-term placement stability.

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