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Relationship of risk assessment to placement characteristics in a statewide child welfare population

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Abstract

Risk assessments allow child and youth services to identify children who are at risk for maltreatment (e.g., abuse, neglect) and help determine the restrictiveness of placements or need for services among youth entering a child welfare system. Despite the use of instruments by many agencies within the U.S. to determine the appropriate placements for youth, research has shown that placement decisions are often influenced by factors such as gender, age, and severity of social–emotional and behavior problems. This study examined ratings of risk across multiple domains using a structured assessment tool used by caseworkers in the Rhode Island child welfare system. The relationship between ratings of risk and placement restrictiveness was also examined. Risk levels varied across placement settings. Multivariate analyses revealed that lower caseworker ratings of parent risk and higher ratings of youth risk were associated with more restrictive placements for youth. Implications for the child welfare system are discussed.

Keywords

Risk; Child welfare; Risk assessment; Placement restrictiveness

1. Introduction

Children and youth involved in the child welfare system have increased exposure to risk across multiple domains. These include parent and family related risks such as parent substance use, domestic violence, neglect, and poverty (Lau et al., 2005; Litrownik et al.,

2005; Lynch & Cicchetti, 1998), and child related risks such as depression, substance use, and delinquent behaviors (Grogan-Kaylor, Ruffolo, Ortega, & Clarke, 2008; Guibord, Bell, Romano, & Rouillard, 2011). These types of child and family risks are associated with negative outcomes related to placement instability and permanency (Connell, Katz, Saunders, & Tebes, 2006; Connell et al., 2006; Courtney & Wong, 1996; James, 2004). In addition, they place youth at an elevated likelihood of behavioral and mental health problems (Burns et al., 2004), and increase their need for services and new placements (Raviv, Taussig, Culhane, & Garrido, 2010).

Existing research suggests that youth risk levels are associated with child welfare placement characteristics (e.g., setting or restrictiveness). For instance, youth who are involved in the juvenile justice system display higher levels of community, family, and individual risk factors than other child welfare youth not involved in this system (Williams, Ayers, Van Dorn, & Arthur, 2004). Further, parental factors (e.g., substance use, mental health status), severe histories of maltreatment, or family violence exposure are often associated with out-of-home placements (Zuravin & DePanfilis, 1997).

Researchers continue to explore the relationship between youth risk and protective factors in placement decisions made by workers in child welfare systems. While placement decisions are ideally informed by service needs (e.g., behavioral/mental health difficulties), studies have found that youth are often placed in restrictive placements based on other factors such as child background characteristics (e.g., age, socio-economic status) and safety concerns (Barth, Wildfire, & Green, 2010; Breland-Noble, Farmer, Dubs, Potter, & Burns, 2005; Zuravin & DePanfilis, 1997). Data from a national sample of youth in child welfare revealed that a significant proportion of children entering more restrictive and intensive settings (e.g., treatment foster care, group homes, inpatient treatment facilities) did so as an initial placement following removal from their home (James et al., 2006). Specifically, older age, being male, and having an extensive placement or service use history placed youth at greatest risk for entering more restrictive placements (James et al., 2006). These patterns are problematic, as they suggest that placement decisions may be influenced by factors such as demographic characteristics. Since the goal in child welfare systems is shifting to place youth in the least restrictive setting as possible, placement decisions need to be driven by a complete assessment of youth and family needs rather than demographic characteristics and safety concerns.

Given the significant impact of child demographics, maltreatment, and previous child welfare involvement in determining placements, it is essential to better understand the role of each of these factors in placement decisions for youth in child welfare. In particular, caseworker ratings of these risks, and their relationship to placement type and restrictiveness, are especially critical since they are responsible for making placement decisions. The present study examined caseworker ratings of youth, family, and caregiver risk for youth involved in the Rhode Island child welfare system (including both in-home and out-of-home placements) in order to determine the relationship of these characteristics to placement type and overall placement restrictiveness. We hypothesized that placement setting and placement restrictiveness would be strongly associated with levels of risk across multiple contextual domains.

2. Method

2.1. Participants

Youth ages 5 to 21 years who were in an active child welfare episode and had a risk assessment completed by a caseworker during the study sample period (January to August 2011) were eligible for inclusion in the study sample. Active child welfare episodes were based on placement in one of the following child welfare placements at the time of the risk assessment: in-home child welfare, kinship foster care, nonrelative foster care, congregate care (i.e., group home), and institutional settings (e.g., psychiatric hospitalization). Youth who were opened to an adoption or guardianship subsidy placement were excluded because youth in these placements did not routinely have a caseworker assigned and were not likely to be referred to services within the state's system of care. These criteria resulted in a final statewide cohort of 1735 youth.

Table 1 provides a summary of youth demographic and case-related characteristics. This sample is 56% male and 51% Caucasian. The largest ethnic minority groups are Hispanic and African American. The mean age of this sample was 12.98 years. More than 40% of youth were in in-home child welfare placements, followed by youth in congregate care and non-kinship foster care. While the majority of youth in this sample had a history of maltreatment, approximately one-third of youth did not. Youth may be in contact with the child welfare system due to family/caregiver factors, such as parental substance use, or individual factors such as behavioral or mental health problems, and therefore would not have a substantiated case of maltreatment (usually defined by neglect, physical, or sexual abuse).

2.2. Measures

This study was conducted in collaboration with Rhode Island Department of Children, Youth, and Families (DCYF) using administrative data from the child welfare management information system (Rhode Island Children's Information System, or RICHIST). Study variables included demographic and case-related data (e.g., child age, gender, race/ethnicity, history of maltreatment) as well as indicators of risk exposure, and placement restrictiveness (described below).

2.2.1. Risk assessment—Risk was measured using a child and family risk assessment tool, which identified child, parent, and family risk levels across multiple domains. This assessment tool was used to inform the development of more effective service plans to address risks to child safety, permanency, and well-being, with higher scores indicating more risk. This measure consisted of 17 domains across three subscale areas: Parenting (e.g., Parent Mental Health Risk, Parent Substance Use Risk), Youth (e.g., Youth Mental Health Risk, Youth Education Risk), and Family (e.g., Family Violence Risk). Youth are classified as having no risk (0), low risk (1), moderate risk (2), and high risk (3) on each of the domains. Subscale scores were created by summing items within each domain. The Parenting subscale had a possible risk range of 0 to 24; the Youth subscale had a range of 0–18; and the Family subscale ranged from 0 to 9. Risk was assessed by caseworkers within 60 days of case opening and then re-assessed every six months while a child remains in care.

For the present study, the risk assessment data was extracted to represent the most recently completed assessment for the child during the study period. The average time from current placement start date to risk assessment was 5.19 months (S.D. = 12.29 months), though this rate was skewed as some children had been in their current placement for some time prior to the study window.

2.2.2. Placement restrictiveness—Placement restrictiveness scores were created based on the youth's current living arrangement or placement using an adaptation of the information on the Restrictiveness of Living Environments Scale (ROLES; Hawkins, Almeida, Fabry, & Reitz, 1992). A placement restrictiveness score was calculated for each youth based on their setting, with higher scores given to more restrictive settings. Settings are associated with a particular weight to reflect level of restrictiveness, with “jail” indicated as the most restrictive (weighted score of 10) and “independent living by self” as the least restrictive (weighted score of 0.5). The weighted scores were similar to those used by the ROLES, with the exception of kinship foster care, in which restrictiveness weighting scores were reduced for relative foster care placements (weighted score = 3.75) compared to a non-relative foster care placement (weighted score = 4.0) to reflect that relative foster placements, though still an out-of-home foster care placement, are potentially less restrictive than those with a non-related individual.

2.2.3. Maltreatment history—Maltreatment history was based on Child Protective Services records indicating whether the child had ever been the victim of a substantiated maltreatment incident involving neglect, physical, or sexual abuse. The majority of the youth in this study had a history of maltreatment (see Table 1). This variable was included in the analyses to control for its effects on placement restrictiveness.

2.2.4. Demographic characteristics—Youth age, gender, and race/ethnicity were included as control variables in all study analyses.

2.3. Data analysis

Analysis of Variance (ANOVA) tests were conducted to compare ratings for children across placement populations and by gender; Tukey's Honestly Significant Difference post hoc tests were used to determine which groups were significantly different from each other. Hierarchical multiple regression analyses were utilized to determine the relationship between risk and placement restrictiveness for youth, controlling for youth age, gender, and race/ethnicity, and history of maltreatment. Finally, interaction analyses were conducted to determine the potential interactions of age by risk and gender by risk separately. In total, four models were conducted: 1) youth demographics regressed on placement restrictiveness, 2) youth demographics and risk regressed on placement restrictiveness, 3) youth demographics, risk, and age by risk interaction regressed on placement restrictiveness, and 4) youth demographics, risk, and gender by risk interaction regressed on placement restrictiveness. All analyses were conducted using SPSS Version 19.0 (Allen & Bennett, 2010).

3. Results

Correlations among the study variables were examined and the majority of variables were found to be in the moderate (i.e., $r = .30-.49$) to high range ($r > .50$; see Table 2). Total, Parenting, Youth, and Family risk scores are presented in Fig. 1. The average number of overall risk domains identified for youth was 6.22 ($SD = 5.87$), with a range of 0 to 35. This suggests that caseworkers were identifying either fewer risk domains in the “moderate” to “high” range of risk, or identifying several domains of risk but in the “low” range. The mean parenting risk score of 3.00 ($SD = 3.85$) ranged from 0 to 20 and indicated that workers rated youth as having low risk across the eight domains of parenting factors, or moderate to high risk on 1–2 of these factors. The Youth subscale mean score yielded similar results with a score of 2.67 ($SD = 2.85$) and ranged from 0 to 13. The mean family risk score was low (0.55, $SD = 1.17$) and had little variability (range 0 to 6), indicating that workers rated youth as having less than one of the three domains on this subscale. The percentages of overall risk by domain for each item on the youth and family risk assessment can be found in Table 3.

ANOVA analyses revealed statistically significant group differences in ratings of Parenting Risk Score by caseworkers based upon placement setting for youth (see Fig. 1b). Youth placed in in-home child welfare had significantly higher risk ratings than those in congregate care placements. Youth in kinship and non-relative foster care had significantly higher risk scores in the parenting domain compared to youth in congregate care and institution placements. Conversely, youth in congregate care had significantly higher risk scores in the youth domain compared to those placed in in-home child welfare, kinship foster care, and non-relative foster care (see Fig. 1c). Differences in family risk were relatively small, given the low rates of family risk identified by caseworkers, though youth in non-relative foster care were rated as experiencing greater family risk than other settings (see Fig. 1d).

Multiple regression analyses were conducted to determine the association between risk and the restrictiveness of youth's current placements. Demographic information and youth maltreatment history were entered first in the regression model and accounted for a significant amount of variance ($R^2 = .06$, $p < .001$). Next, parenting, youth, and family risk were entered into the regression model (Model 2; $R^2 = .02$). The third model included age by risk interactions ($R^2 = .00$), and the fourth model included gender by risk interactions ($R^2 = .00$). Given that Models 3 and 4 did not demonstrate a change in the amount of variance accounted for when compared to Model 2, in addition to the lack of significant interactions, results from Model 2 are interpreted.

As indicated in Table 4, older age, being male, and a history of maltreatment was associated with more restrictive placements ($\beta s = .11, -.12, .17$, $ps < .001$, respectively). In addition, lower parenting risk ($\beta = -.12$, $p > .001$) and higher youth risk ($\beta = .12$, $p > .001$) were associated with more restrictive placements. The Family subscale was not associated with restrictiveness of current placements ($\beta = .01$, $p = ns$). These findings suggest that caseworker ratings of parent-level and youth-level risks were associated with placement restrictiveness, but family-level risks were not associated with placement restrictiveness. Specifically, youth with higher parent-level risks are more likely to be in less restrictive

placements, while youth with higher youth-level risks are more likely to be in more restrictive placements.

4. Discussion

This study examined the association between risk and placement restrictiveness for youth in a statewide child welfare population. The findings provide some support for our hypotheses that caseworker ratings of risk were associated with placement restrictiveness. Consistent with previous research (Breland-Noble et al., 2005; James et al., 2006), higher ratings of youth risk were associated with more restrictive placements, even after controlling for youth characteristics and maltreatment history. This finding highlights the significant role that youth risks (e.g., mental health, behavioral difficulties) play on placement decisions. Findings also indicated that parental risks were associated with lower placement restrictiveness. Taken together, these relationships suggest that youth with greater individual-level (i.e., youth) risks are more likely to be served in restrictive settings (e.g., congregate care facilities) that are able to provide necessary supports to address these concerns, whereas youth with greater parental risks do not require this restrictiveness and can be served in more home-like settings (e.g., in home care or foster home placement). This finding further highlights the role of youth functioning as a critical consideration for placement decisions.

As predicted, differences in risk varied across child placement settings. Youth in kinship and non-relative foster care had the highest parental risk, which is consistent with existing literature on foster care children—children are often placed in foster care due to concerns associated with parental risk rather than their own behaviors (Zuravin & DePanfilis, 1997). Conversely, youth in congregate care and institution placements had the highest youth risk but low parent and family risk, further demonstrating that youth are placed in this setting due to their behaviors rather than those of their caregivers.

Findings also indicated that youth demographic characteristics (i.e., age and gender) and maltreatment history, a child welfare factor, was associated with placement restrictiveness. Specifically, youth who were older, male, and those with substantiated maltreatment were more likely to be in more restrictive placements. These findings support previous findings (James et al., 2006). Nevertheless, no significant interactions of age and risk, and gender and risk, were found, suggesting that the effects of risk do not vary by these demographic characteristics. Thus, while the impact of demographic characteristics and maltreatment history may play a role in the decision-making processes for youth placements, the lack of significant interactions imply that parent- and youth-related risks are still critical in determining the restrictiveness of placements for youth in the child welfare system.

The findings in this study also shed light on the relation of standard risk assessment tools to inform placement decisions in the child welfare system. Consistent with expectations, caseworker ratings of youth- and parent-related risks were associated with placement setting and restrictiveness. Contrary to expectations, however, family domains did not vary systematically across placements and did not correlate with placement restrictiveness in the same manner. The lack of association between family domains and placement characteristics

suggests that these factors may not be assessed in a manner that informs placement decision-making, or not used appropriately to determine placements for youth. A more ecological approach to placement and service decisions that encompasses risks and mitigating protective factors across multiple contexts (e.g., parent, family, and community) is critical in order to make the decision-making processes more effective and sensitive in the child welfare system.

A limitation of the present study is its exclusive reliance on ratings of risk by caseworkers. Though the state child welfare agency provides training on use of a standard risk assessment tool, it may be that some types of risks are more salient to caseworkers in particular settings or to those who engage in particular youth or family activities. For example, caseworkers in congregate care settings may have more regular interaction with youth and attend to youth-level risk factors to a greater extent than caseworkers who are involved in care with youth in family based settings, where parent or family risks may be more salient. In fact, Britner and Mossler (2002) found that factors used to inform decisions to remove youth from home and into out-of-home placements differed by professionals based on their backgrounds (e.g., social workers/mental health workers versus judges). Future studies that include independent ratings of risk (e.g., parent and youth report) would provide additional insight into the relationship among risk, placement, and placement restrictiveness. The inclusion of multiple assessment tools of risk can also ensure more accurate information that, in turn, can guide placement decisions, as multiple factors need to be taken into consideration when making these critical decisions.

Another potential limitation is the variability in timing of risk assessment relative to placement start. On average, risk assessments were completed approximately 5 months after placement start, though this varied across the statewide sample. It is also possible that the particular assessment represents a re-assessment of current risk, rather than an initial assessment. Follow-up analyses revealed no significant change in regression findings when controlling for this variation, minimizing concern. In our view, these results suggest that placement restrictiveness and risk are related, though we are not suggesting that risk (in the present study) was used to inform placement decisions. Future research should examine these relationships in a prospective cohort.

5. Conclusions

Based on caseworker ratings, differences on risk domains appear to exist for youth in child welfare systems based on placement. Additionally, lower risks on the parent domain but elevated risk on the youth domain is associated with more restrictive placements. These findings continue to highlight the importance of assessing risk in multiple domains when determining placement decisions for youth in the child welfare system.

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Notes: Columns within sub-figures that share superscripts are significantly different from one another.

Fig. 1.

Total risk scores and specific risk scores on parenting, youth, and family domains. Note: Columns within subfigures that share superscripts are significantly different from one another.

Table 1

Participant demographics (N = 1735).

Characteristic	N	%
Age($M = 12.98$, $SD = 4.08$)		
Gender		
Male	968	55.79
Female	767	44.21
Race/ethnicity		
African American	236	13.60
Caucasian	878	50.60
Hispanic	324	18.70
Other	198	11.41
Unknown/missing	99	5.70
Child placement		
In-home/child welfare	733	42.25
Kinship foster care	207	11.93
Non-relative foster care	322	18.56
Congregate care	446	25.70
Institution	27	1.56
ROLES score ($M = 3.93$, $SD = 1.83$)		
History of child maltreatment	1090	62.82

Table 2

Correlations.

	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Gender	-.058*									
3. African American	.030	.001								
4. Hispanic	-.061*	-.024	-.204**							
5. Other race	-.079**	.012	-.152**	-.184**						
6. Maltreatment history	-.134**	.060*	-.009	.011	.050*					
7. Restrictiveness	.149**	-.154**	.054*	-.047	-.010	.101**				
8. Parent risk	-.258**	.095**	-.069**	-.010	.014	.200**	-.101**			
9. Youth risk	.101**	-.023	-.024	-.016	.026	.005	.100**	.238**		
10. Family risk	-.154**	.043	-.008	-.009	-.001	.157**	-.038	.457**	.113**	

**
 $p < 0.01$ level.*
 $p < .05$ level.

Table 3

Risk by domain on the risk assessment.

Risk domain	Risk categories			
	No risk %	Low risk %	Moderate risk %	High risk %
Parent risk ($M = 3.00$, $SD = 3.82$)				
Parent bonding risk	73.49	5.30	7.72	13.49
Parent financial stability risk	86.22	4.15	3.69	5.94
Parent support system risk	91.12	3.75	2.13	3.00
Parent mental health risk	73.43	12.97	7.15	6.46
Parent substance use risk	76.60	8.88	6.92	7.61
History of violence/criminal behavior	79.25	6.97	5.30	8.47
Parent history as child risk	87.67	3.40	3.17	5.76
Parent family violence risk	84.61	5.59	4.73	5.07
Youth risk ($M = 2.67$, $SD = 2.85$)				
Youth substance use risk	87.84	5.94	4.03	2.19
Youth mental health/developmental risk	65.07	9.63	16.20	9.11
Youth education risk	71.70	11.41	10.95	5.94
Youth vulnerability risk	78.67	9.39	4.09	7.84
Youth permanency	61.15	13.08	16.77	8.99
Youth medical/dental risk	93.78	3.52	0.81	1.90
Family risk ($M = 0.55$, $SD = 1.17$)				
Kinship	90.09	5.88	1.79	2.25
Family violence risk	90.14	4.09	2.59	3.17
Family financial stability risk	89.28	4.32	3.52	2.88

Table 4

Multiple regression model results of placement restrictiveness based on child characteristics, risk, and child by risk interactions.

Predictor	Model 1		Model 2		Model 3		Model 4	
	β	SE	β	SE	β	SE	β	SE
Age	.15***	.01	.11***	.01	.17***	.02	.11***	.02
Gender ^a	.13***	.09	-.12***	.09	.11***	.09	-.14***	.14
Race/ethnicity ^b								
African American	.05	.14	.04	.14	.04	.14	.04	.14
Hispanic	-.04	.12	-.04	.12	-.04	.12	-.04	.12
Other	.01	.15	.00	.15	-.00	.15	-.00	.15
Maltreatment history		.10	.17***	.10	.17***	.10	.17***	.10
Risk								
Parenting risk			-.12***	.01	.03	.04	.03	.04
Youth risk			.12***	.02	.25*	.06	.25*	.06
Family risk			.01	.04	-.03	.13	-.03	.13
Age x risk interaction								
Age x parenting risk					-.15	.00		
Age x youth risk					-.13	.00		
Age x family risk					.04	.01		
Gender x risk interaction								
Gender x parenting risk							.14	.03
Gender x youth risk							-.09	.03
Gender x family risk							.05	.09
R ²	.06***		.08***		.08***		.08***	

** $p < .01$.

^aReference = male.

^bReference = Caucasian.

* $p < .05$.

*** $p < .001$.