Prospective associations between trauma, placement disruption, and ethnic-racial identity among newly emancipated foster youth

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ABSTRACT

Introduction: Ethnic-racial identity (ERI) is an important developmental process for ethnic-racial minority youth. However, little is known about how adverse life experiences may be related to ERI development. Thus, the current study evaluated prospective associations of emancipated foster youth's histories of childhood maltreatment and foster placement disruption with ERI centrality and ERI private regard, as well as the adaptive implications of ERI.

Method: Participants were 144 emancipated foster youth (69.4% female) from ethnic-racial minority backgrounds (27.8% Black, 32.6% Latinx, 39.6% multiracial) who participated in a longitudinal study of youth's adaptation to aging out of the US child welfare system. Youth reported on their childhood maltreatment severity and child welfare placement history at wave 1 (M_{age_w1} = 19.62, SD = 1.11), and on their ERI centrality, ERI private regard, and socioemotional adjustment (i.e., social support, self-esteem, anxiety and depressive symptoms, and life satisfaction) five years later (M_{age_w2} = 24.15).

Results: Path analyses revealed that childhood maltreatment severity and placement disruption were associated with lower ERI private regard, but not ERI centrality. Moreover, private regard was associated with better socioemotional adjustment (i.e., higher levels of self-esteem and social support), whereas centrality was related to poorer adjustment (i.e., lower levels of self-esteem and life satisfaction, and higher rates of anxiety and depressive symptoms), and these relations varied by ethnicity-race.

Conclusions: The current findings suggest that efforts to promote positive feelings toward one's ethnic-racial group membership can support ethnic-racial minority foster youth's capacity to negotiate developmental challenges in and beyond the child welfare system.

1. Introduction

Ethnic-racial identity (ERI) is a central mechanism and outgrowth of development and adaptation among ethnic-racial minority youth (Rivas-Drake et al., 2014; Umaña-Taylor et al., 2014). As a multidimensional and dynamic psychological construct that embodies individuals' exploration, internalization, and meaning making about their ethnic and racial group membership, ERI entails both *content* and *process* components (Roberts et al., 1999; Schwartz et al., 2014; Syed & Azmitia, 2010; Umaña-Taylor et al., 2014). ERI content components encompass the characteristics, attitudes, and beliefs that comprise ethnic-racial centrality (i.e., the extent to

which ethnicity or race is important to an individual's identity) and ERI private regard/affirmation (i.e., positive feelings that individuals have about their ethnic-racial group membership; Sellers, Smith, Shelton, Rowley, & Chavous, 1998; Umaña-Taylor, Yazedjian, & Bámaca-Gomez, 2004). ERI process components include mechanisms by which ethnic and racial identities are formed and maintained, such as exploration (i.e., seeking information, knowledge, and understanding about one's ethnicity and race) and resolution/commitment (i.e., internalization and acceptance of one's ethnicity and race; Phinney, 1992; Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2004). Importantly, both ERI content and process components emerge across development as a function of cognitive maturation and social factors (Pahl & Way, 2006; Schwartz et al., 2014; Umaña-Taylor et al., 2014), and, in turn, influence the quality of adaptation among ethnic-racial minority youth (Cross, Hoffman, Constante, & Rivas-Drake, 2018; Lee & Yoo, 2004; Rivas-Drake et al., 2014; Syed & Azmitia, 2009; Umaña-Taylor et al., 2014). Indeed, mounting evidence indicates that ERI is associated with a range of adaptive outcomes, such as academic achievement (Fuligni, Witkow, & Garcia, 2005), health (Settles, Navarrete, Pagano, Abdou, & Sidanius, 2010; Zapolski, Beutlich, Fisher, & Barnes-Najor, 2018), and socioemotional functioning (Rivas-Drake et al., 2014), among other positive adjustment outcomes (Ajibade, Hook, Utsey, Davis, & Van Tongeren, 2016). Moreover, youth's sense of connection and affiliation with their ethnicity-race is a robust correlate of positive adaptation, even among groups that suffer the ill effects of structural disadvantage, stereotypes, and discrimination as a function of their ethnic-racial group membership (Umaña-Taylor, 2016).

Although a sizable body of research has evaluated factors that influence ERI components among typically developing youth (see Hughes et al., 2006 for review), less is known about if and how atypical developmental experiences, such as trauma or separation from kin through foster care, are associated with ERI development. This is particularly important because traumatic events may thwart or distort ERI development (White et al., 2008; Yancey, 1992), at the same time some evidence suggests that exposure to adverse events, such as discrimination, may heighten the protective salience of ERI (Bilge, 2018; Umaña-Taylor, 2016). Unfortunately, beyond studies of discrimination, little is known about the adaptive correlates or consequences of ERI among other adversity-exposed groups of ethnic-racial minority youth, such as those involved in the child-welfare system. Thus, the current investigation of newly emancipated foster youth sought to address these gaps by offering a novel examination of how adverse experiences (i.e., childhood maltreatment and foster care placement disruption) may be related to ERI development, and an evaluation of the adaptive correlates of foster youth's ERI centrality and ERI private regard with respect to their socioemotional health and well-being.

1.1. The development of ERI in typical and atypical contexts

ERI develops in the context of social experiences as individuals are exposed to different relationships, institutions, and settings (Umaña-Taylor, 2004; Umaña-Taylor et al., 2014). Thus far, most ERI research has examined this developmental process in the context of family ethnic-racial socialization, ethnic-racial discrimination, or other experiences based on ethnicity and race (e.g., acculturation), with minimal consideration of ethnic-racial minority youth's ERI development in contexts of adversity, such as foster care (for exceptions, see White et al., 2008; Schwartz, 2007).

Empirical studies have shown that various ethnic-racial socialization practices promote ERI development in ethnic-racial minority youth (Hughes et al., 2006), with parents, extended kin, and community members being the most salient providers of ethnic-racial socialization (Brown, Tanner-Smith, Lesane-Brown, & Ezell, 2007; Knight et al., 2011). Dimensions of ethnic-racial socialization include *cultural socialization* (i.e., transmission of cultural values, traditions, history, native language, and food), *preparation for bias* (i.e., efforts to promote coping skills to deal with experiences of prejudice and discrimination), *promotion of mistrust* (i.e., practices that emphasize the need to be wary and distrustful of interactions with members from other ethnic-racial groups), and *egalitarianism* (i.e., encouraging ethnic-racial minority youth to focus on individual qualities, such as hard work, virtue, and acceptance, as opposed to their ethnic-racial characteristics; see Hughes et al., 2006 for review). Across multiple studies, research has shown that parents of ethnic-racial minority youth are more likely than parents of white youth to engage in practices that promote cultural socialization and egalitarianism (Else-Quest & Morse, 2015; Hughes & Chen, 1997). Thus, the deleterious impact of out-of-home placement is likely to extend to ERI development among ethnic-racial minority foster youth.

Despite ample evidence highlighting the importance of ethnic-racial socialization practices for promoting positive attitudes toward in-group membership and advanced stages of ERI development (Derlan & Umaña-Taylor, 2015; Sanchez, Whittaker, Hamilton, & Arango, 2017), as well as the crucial role of parents and family members in this process (Brown et al., 2007; Knight et al., 2011), little is known about how traumatic events, particularly those that center on the disruption of family bonds, may be related to ERI development. Empirical evidence from refugee samples suggests that some experiences of adversity, such as war, conflict, and forced relocation, may heighten ethnic awareness and commitment to one's ERI, especially when direct threats are made to those identities (Bilge, 2018). However, there is reason to expect that exposure to other types of trauma, such as childhood maltreatment or out-of-home placement, may undermine ERI formation and maintenance in ethnic-racial minority youth. Given that the gap in knowledge regarding trauma and identity development is especially pronounced with respect to ERI, there is a pressing need for the current investigation on trauma and ERI development among foster youth.

Given that opportunities for exploration and family ethnic-racial socialization support ERI development (Brown et al., 2007; Hughes et al., 2006; Knight et al., 2011), ethnic-racial minority youth in foster care who experience ruptures in these supportive connections as a result of abuse and placement disruption may face unique challenges that hinder ERI development. Indeed, Schmidt et al. (2015) found that, in contrast to the ERI stability typically seen among non-fostered youth (Doyle & Kao, 2007), nearly one in five foster youth changed their ethnic and racial identification within the span of a single year. This finding suggests that ERI development may be disrupted by out-of-home placement. Indeed, White et al. (2008) found that, although ethnic-racial minority

youth in foster care were more interested in learning about their ethnicity-race and endorsed higher scores on ERI search and affirmation in comparison to their white foster counterparts, a greater number of placement disruptions during care predicted less interest in learning about ethnic-racial values and traditions. Taken together, prior studies suggest that foster youth may face special challenges due to inconsistent or absent family support amidst concomitant threats to positive ERI development (Madigan, Quayle, Cossar, & Paton, 2013; White et al., 2008; Yancey, 1992). Building on this work, the first aim of this study was to evaluate the relations of childhood maltreatment and placement disruption with recently emancipated foster youth's ERI centrality and ERI private regard.

Although there is some empirical evidence to suggest that the development of ERI may vary by youth gender and ethnicity-race (Hughes et al., 2006; Pahl & Way, 2006), little is known about how the effects of adversity on ERI may differ across these subgroups. In general, parents convey different socialization messages to boys and girls, and this is particularly true for ethnic-racial minority youth. For example, because boys from ethnic-racial minority backgrounds are often perceived by others as threatening compared to girls (Hughes et al., 2006; Stevenson, Cameron, Herrero-Taylor, & Davis, 2002), daughters tend to receive positive messages related to ethnic-racial pride and achievement, whereas sons are more likely to acquire information regarding negative stereotypes, ethnic-racial barriers, preparation for bias, and coping strategies to combat anticipated discrimination experiences (Hughes, Hagelskamp, Way, & Foust, 2009; Thomas & Speight, 1999). Perhaps as a result, research also suggests that, relative to boys, girls report higher levels of connectedness and behavioral engagement with their ethnic-cultural backgrounds (Hughes et al., 2009). Similar studies examining ethnic-racial differences in ERI development have found that ethnic-racial minority youth endorse higher levels of ERI compared to their White counterparts (Martinez & Dukes, 1997; Spencer, Icard, Harachi, Catalano, & Oxford, 2000), and one study has replicated this pattern in a sample of foster youth (White et al., 2008). Likewise, monoracial youth typically report higher ERI scores when compared to their multiracial peers (Bracey, Bámaca, & Umaña-Taylor, 2004; Spencer et al., 2000).

Despite prior evidence of gender and ethnic-racial group differences in the development and adaptive significance of ERI, the extent to which these differences in ERI exist among emancipated foster youth remains unclear. As compared to the general foster youth population, youth who age out or emancipate from foster care have typically spent longer periods of time in out-of-home placement with more severe and complex histories of abuse and neglect and higher rates of foster placement disruption (Greeson et al., 2011; Oosterman, Schuengel, Wim Slot, Bullens, & Doreleijers, 2007). As such, this population offers a unique opportunity to examine if and how childhood maltreatment and foster placement disruption may be associated with ERI development generally, and distinctly as a function of youth gender and ethnicity-race.

1.2. The adaptive implications of ERI in typical and atypical developmental contexts

Amidst varied conceptualizations of ERI (e.g., Hughes et al., 2006; Pahl & Way, 2006; Umaña-Taylor et al., 2014; Yip, Seaton, & Sellers, 2006), multiple studies have found a direct link between ERI and positive youth development in typically developing samples (Phinney, 1992; Umaña-Taylor, 2004). For example, Benish-Weisman (2016) found that ERI predicted decreased aggression among Israeli adolescents. Likewise, Ajibade et al. (2016) found that ERI was associated with greater satisfaction with life among African American college students. Efforts to tease apart distinct relations of specific ERI components with different developmental outcomes demonstrate that ERI components may influence development in unique ways. For example, among Asian American college students, Lee and Yoo (2004) found that ERI affective pride (i.e., positive affect toward one's ethnic-racial group membership) was positively associated with students' self-esteem and social connectedness, whereas ERI cognitive clarity (i.e., sense of clarity, self-understanding, and belonging) was only related to social connectedness, and ERI behavioral engagement (i.e., active interest and participation in one's ethnic group) was not significantly related to either adjustment indicator. Overall, research has been most consistent in demonstrating positive relations between ERI content components measuring positive affect toward one's ethnic-racial group membership and better adjustment (see Rivas-Drake et al., 2014 for review).

As compared to research on typically developing populations, very few studies have examined relations between ERI and adaptation in individuals from atypical contexts (for exceptions, see Beiser & Hou, 2006; Gamst et al., 2006). Moreover, the few studies that have studied individuals from atypical contexts yielded null findings or findings that are inconsistent with the broader literature. For example, research with a sample of homeless adults indicated that ERI was not significantly correlated with various dimensions of adaptation (i.e., positive relation to self and others, depression, impulsive-addictive behaviors, and psychosis); however, within the subsample of homeless Latinx adults, individuals who reported a high Anglo orientation and low ERI experienced higher levels of psychosis than did individuals who endorsed a low Anglo orientation and low ERI (Gamst et al., 2006). Research with refugee samples has produced similarly inconsistent findings. For example, among Southeast Asian refugees in Canada, perceived discrimination, unemployment, and language difficulties were positively associated with depressive symptoms, and the harmful effects of these resettlement stressors were exacerbated among individuals who expressed a strong commitment to their ERI (Beiser & Hou, 2006). Thus, although we expected that ERI would be related to positive adaptation among foster youth, mixed evidence from studies of other adversity-exposed populations left us open to the possibility that the extreme developmental deviations that typify life for emancipated foster youth may result in unique relations between ERI components and adjustment indicators.

Collectively, previous studies have documented significant relations between ERI components and a range of socioemotional outcomes, such as psychological well-being and satisfaction with life. Moreover, a smaller number of studies have yielded evidence to suggest that these relations are consistent across gender and ethnic-racial minority groups, even though the magnitude of these relations may vary by gender (for a review, see Smith & Silva, 2011) and across ethnic-racial groups (Bracey et al., 2004; Rivas-Drake et al., 2014). For example, Rivas-Drake et al. (2014) observed that ERI components, such as affirmation and positive regard, were strongly related to adjustment among African American and Latinx youth, but these associations were less robust among Asian and

Native American youth.

Given the clear significance of ERI for positive youth development, investigating the development and adaptive implication of ERI in atypically developing populations is essential for understanding and promoting development in adverse contexts. Indeed, several studies have found that ERI may buffer youth from the negative effects of adversity (Choi, Harachi, Gillmore, & Catalano, 2006; Sellers & Shelton, 2003). For example, Torres and Taknint (2015) found that ERI served to protect Latinx youth against the negative effects of microaggression. Similarly, Tummala-Narra, Li, Liu, and Wang (2014) found that ERI protected youth from the negative mental health effects of exposure to violence across multiple contexts (e.g., school, home, and community). Although the current investigation was not well-suited to test the moderating influence of ERI in this uniformly adversity-exposed sample of foster youth, we nevertheless sought to evaluate if and how traumatic events are associated with ERI development, and to document relations between ERI and select indicators of socioemotional adjustment that have garnered the most attention in extant research studies of ERI and adaptation (i.e., self-esteem, social support, depression, anxiety, and life satisfaction).

1.3. Study overview

Despite a growing literature on the development and adaptive significance of ERI, research aimed at understanding the association between adverse life events and either ERI development, or its adaptive significance has been limited. A handful of studies have illustrated that culturally-related trauma and adversity, such as experiences of racism, microaggression, acculturative stress, and stereotype threat, can shape ERI (see Umaña-Taylor, 2016 for discussion), but few investigations have evaluated if and how traumatic events, such as abuse, neglect, and out-of-home placement, contribute to the development of ERI; and even fewer studies have explored if and how these relations may vary as a function of gender and ethnic-racial group membership.

The first goal of the current study was to evaluate prospective associations of emancipated foster youth's histories of childhood maltreatment and placement disruption with their ERI centrality and ERI private regard. We hypothesized that experiences of childhood maltreatment and foster placement disruption would be related to lower ERI centrality and ERI private regard in ethnic-racial minority youth who recently emancipated from foster care. Importantly, given the dearth of knowledge about how ERI develops among foster youth, we also explored if and how these relations varied as a function of youth's gender and ethnicity-race. To that end, we expected that relations between placement disruption and ERI, but not necessarily child maltreatment and ERI, would be stronger for females than males based on studies showing that girls experience more ethnic socialization and receive more positive messages about their ethnicity-race in their families when compared to boys (Hughes et al., 2006; Pahl & Way, 2006). With regard to ethnicity-race, we expected that experiences of trauma would be more strongly related to ERI among Black and Latinx youth because multiracial youth tend to report lower levels of ERI overall as compared to their monoracial peers (Bracey et al., 2004).

The second goal of this study was to evaluate relations of ERI centrality and ERI private regard with well-studied adjustment indicators drawn from the ERI literature, including youth's self-esteem, social support, depression, anxiety, and life satisfaction. We hypothesized that both ERI centrality and ERI private regard would be associated with higher levels of self-esteem, social support, and life satisfaction, as well as with lower rates of anxiety and depressive symptoms. However, given the overwhelming amount of empirical evidence showing that specific ERI content components, such as private regard and affirmation, which assess an individual's positive feelings toward their ethnic-racial group, are consistently related to positive adjustment (Rivas-Drake et al., 2014; Umaña-Taylor et al., 2014), we expected that these associations would be stronger for ERI private regard than ERI centrality. Finally, we explored these relations by youth gender and ethnicity-race, given some evidence that the developmental significance of ERI components may vary across groups (Bracey et al., 2004; Pahl & Way, 2006). Although we did not expect to find significant gender differences in the adaptive correlates of ERI centrality or private regard, we hypothesized that the associations of ERI centrality and ERI private regard with socioemotional adjustment outcomes would be stronger for Black and Latinx youth in comparison to multiracial youth.

2. Method

2.1. Participants & procedures

Participants were drawn from a longitudinal study of 172 youth (66% female; 84.3% non-white) who emancipated from the child welfare system in Southern California. The current study included the 144 emancipated foster youth (69.4% female) who identified with one or more ethnic-racial minority groups (27.8% Black, 32.6% Latinx, 39.6% multiracial) at the time of the wave 1 interview (M_{age_w1} = 19.62, SD = 1.11). Approximately five years following the initial interview, 107 ethnic-racial minority youth (74.31%) completed a second semi-structured interview (M_{age_w2} = 24.15). There were no significant differences between youth who completed both interviews and youth who did not with regard to age, gender, ethnicity-race, childhood maltreatment severity, placement disruption, and socioemotional adjustment at wave 1.

Youth were invited to participate in a study of *Adapting to Aging Out* between 2009 and 2011 via flyers distributed to social service providers, independent living programs, and agencies serving emancipated foster youth (e.g., resource centers, health clinics). Youth completed a brief intake screening by phone to determine if they met the eligibility criteria for the study before scheduling a face-to-face interview. Youth were excluded from the study if they entered care after the age of 16 (n = 6), entered care due to juvenile delinquency in the absence of maltreatment (n = 14), and/or were outside the target age range at the time of initial contact (n = 9). Interviews were conducted in English at our university laboratory or at a convenient location for the participant (e.g., agency offices, libraries) and were audio recorded for later transcription. Youth were not excluded based on their English proficiency, but all youth

who participated in the study opted to complete the interviews in English. Written consent was obtained from each participant after reviewing the study aims, the voluntary nature of their participation, and the confidentiality of their information, including constraints pertaining to mandated reporting. Participants were compensated with $75 and all procedures were approved by the Institutional Review Board of the participating university.

2.2. Measures

2.2.1. Childhood maltreatment severity

Childhood maltreatment severity was assessed based on a verbal administration of the Early Trauma Inventory (ETI; Bremner, Vermetten, & Mazure, 2000) during the wave 1 interview. Youth responded to a series of behaviorally specific questions regarding their experiences of childhood physical abuse (e.g., being punched or kicked by adult caregivers), childhood emotional abuse (e.g., having one's feelings of worth and sense of security dismissed or attacked by caregivers), childhood sexual abuse (e.g., experiencing sexual contact with someone at least five years older than the participant), childhood neglect (e.g., being left alone at home at too young an age or for extended periods of time in the absence of adequate material or nutritional resources), and exposure to domestic violence (e.g., seeing or hearing caregivers physically fighting) prior to age 17. For each type of maltreatment, participants were asked to specify ages of onset and offset, perpetrator identity, behavioral specifics of each incident, resulting injuries or interventions (e.g., legal, medical), and frequency of maltreatment.

Two independent raters evaluated the severity of each form of maltreatment across four levels based on intensity and frequency (0 = *none*, 1 = *low frequency and low intensity*, 2 = *high frequency/low intensity or high intensity/low frequency*, 3 = *high frequency and high intensity*; McGee, Wolfe, Yuen, & Wilson, 1995). Interrater reliabilities for the maltreatment subtypes ranged from 0.76 for neglect to 0.88 for sexual abuse. Severity scores were summed to create a composite across all five subtypes of childhood maltreatment, with higher scores representing more severe experiences of childhood maltreatment ($M_{severity}$ = 8.32; SD = 3.54; range = 0–15).

2.2.2. Placement disruption

At the initial interview, youth reported on their child welfare history, including their age at the time of each placement, the placement type (e.g., foster family, group home), and the duration of each placement from the time of their entry into foster care (M = 8.69 years, SD = 5.66) through their emancipation (M = 18.19 years, SD = 0.50). On average, youth experienced more than seven out-of-home placements (M = 7.28, SD = 5.12) while in the foster care system. Out-of-home placement data were coded as missing for seven youth (4.9%) in this sample due to lack of memory (i.e., uncertainty about 20% or more of their placements). These participants did not differ from the rest of the sample on relevant study variables.

2.2.3. Ethnic-racial identity (ERI)

ERI centrality and ERI private regard were assessed using 14 items adapted from the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). Although the MIBI was developed to assess ERI in African American samples, the measure has been adapted for use with other ethnic-racial groups (Cross et al., 2018; Schwartz et al., 2014). ERI centrality was assessed using eight items (e.g., I have a strong attachment to other people from my ethnic-racial group(s)) and ERI private regard was assessed using six items (e.g., I am proud to be a member of my ethnic-racial group(s)). Items were rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliabilities for ERI centrality (α = 0.67) and ERI private regard (α = 0.81) were acceptable, and consistent with prior studies (Kiang, Perreira, & Fuligni, 2011; Neblett, Smalls, Ford, Nguyên, & Sellers, 2009). Confirmatory factor analyses evaluated the factor structure of the items assessing ERI centrality and ERI private regard. The model for ERI centrality produced a modest fit to the data, χ^2 (18) = 35.25, p = .01, RMSEA = 0.09 [0.05, 0.14], CFI = 0.94, TLI = 0.91, SRMR = 0.05, whereas the model for ERI private regard fit the data well, χ^2 (8) = 7.38, p = .50, RMSEA = 0.00 [0.00, 0.11], CFI = 1.00, TLI = 1.0, SRMR = 0.02. Despite the relatively poor reliability and fit of the ERI Centrality scale, we opted to include it in these analyses given that it is a well-established measure in the literature, and the only measure available in this study.

2.2.4. Perceived social support

The Berlin Social Support Scale (BSSS; Schulz & Schwarzer, 2003) was used to assess youth's perceived social support from significant others. Items tapping both perceived emotional support (n = 4 items; e.g., whenever I am sad, there are people who cheer me up) and perceived instrumental support (n = 4 items; e.g., there are people who offer me help when I need it) were rated on 4-point scale ranging from 1 (*not at all true*) to 4 (*exactly true*) and summed to yield a total index of perceived social support (α = 0.94).

2.2.5. Self-esteem

Global self-esteem was measured using the 10 items (e.g., I feel that I have a number of good qualities) from the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1989). Respondents indicated their level of agreement with each item on a 4-point Likert scale,

ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). Items were reverse-scored to create a composite measure of global self-esteem, such that higher scores indicated higher levels of self-esteem ($\alpha = 0.89$).

2.2.6. Anxiety and depressive symptoms

Anxiety and depressive symptoms were assessed using 12 items (6 items for each subscale) from the Brief Symptom Inventory (BSI; Derogatis, 1993). Participants rated items measuring symptoms of anxiety (e.g., feeling fearful) and depression (e.g., feeling hopeless about the future) experienced in the past seven days on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). The reliabilities for both anxiety ($\alpha = 0.80$) and depressive ($\alpha = 0.89$) symptoms were acceptable.

2.2.7. Life satisfaction

Life satisfaction was evaluated using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Participants rated five items (e.g., I am satisfied with my life) on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*; $\alpha = 0.92$).

2.3. Data analytic strategy

Two Multivariate Analysis of Variance tests (MANOVA) were computed in SPSS Version 25 to provide descriptive information about the study variables as a function of youth's gender and ethnicity-race. All subsequent analyses were computed in Mplus 6.12 (Muthén & Muthén, 1998-2011) with full information maximum likelihood estimation to account for missing data. First, path analyses evaluated the unique contribution of childhood maltreatment severity and placement disruption to ERI centrality and ERI private regard. Model fit was evaluated using the root mean square error of approximation (RMSEA; MacCallum, Browne, & Sugawara, 1996), Tucker Lewis Index (TLI; Tucker & Lewis, 1973), comparative fit index (CFI; Bentler, 1990), and standardized root mean square residual (SRMR; Hu & Bentler. 1999). RMSEA and SRMR values below 0.08 and CFI and TLI values greater than 0.95 are indicators of good model fit (Hu & Bentler, 1999; MacCallum et al., 1996; Tucker & Lewis, 1973). Multigroup analyses were estimated to determine whether the obtained associations varied across females and males, and across Black, Latinx, and multiracial youth groups. The chi-square likelihood ratio difference test evaluated comparative fit across pairs of nested models (Satorra, 2000). Unconstrained models that allow the associations to differ across groups were compared to constrained models that fixed the associations to be equal across comparison groups. A significant chi square difference test suggests differences between the unconstrained and constrained model and supports the selection of the unconstrained model where the associations differ across comparison groups. In contrast, a nonsignificant chi square difference test indicates that the associations are similar across groups and the constrained model should be retained. Finally, zero-order correlations evaluated associations of ERI centrality and ERI private regard with multiple indicators of socioemotional adjustment. Multigroup analyses compared these relations between males and females and between pairs of ethnic-racial groups. Specifically, unconstrained models were compared to constrained models that fixed the correlations of interest to be equal across comparison groups. In addition, the Fisher Z-transformation test was used to evaluate the difference between pairs of correlation coefficients (Meng, Rosenthal, & Rubin, 1992).

3. Results

Table 1 depicts the means, standard deviations, and bivariate relations among the study variables. A MANOVA evaluating the effects of gender on all study variables was not significant, Pillai's Trace = 0.03, $F (9, 86) = 0.32$, $p = .97$. A second MANOVA that compared study variables across ethnicity-racial groups was significant, Pillai's Trace = 0.36, $F (18, 172) = 2.08$, $p = .01$. Univariate tests revealed significant ethnic-racial differences for childhood maltreatment severity, $F (2, 93) = 3.75$, $p = .03$, placement disruption, $F (2, 93) = 4.10$, $p = .02$ ERI centrality, $F (2, 93) = 3.52$, $p = .03$, perceived social support, $F (2, 93) = 3.83$, $p = .02$, and

Table 1
Descriptive Statistics and Bivariate Relations between ERI and Socioemotional Adjustment among Emancipated Foster Youth.

Variables	1	2	3	4	5	6	7	8	9
1. Child Maltreatment	–								
2. Placement Disruption	.34**	–							
3. ERI Centrality	-.07	.02	–						
4. ERI Private Regard	-.32**	-.32**	.10	–					
5. Self-esteem	-.11	-.04	-.44**	.18†	–				
6. Social Support	.05	-.05	-.22*	.21*	.46**	–			
7. Depression	.09	-.11	.35**	-.10	-.55**	-.41**	–		
8. Anxiety	.10	.09	.31**	-.10	-.41**	-.40**	.70**	–	
9. Satisfaction with Life	.02	-.02	-.24**	.14	.61**	.42**	-.48**	-.20*	–
Mean	8.37	7.30	3.33	4.55	31.59	26.76	.72	.53	20.19
SD	3.54	5.10	1.08	1.46	6.36	5.39	.87	.76	8.78

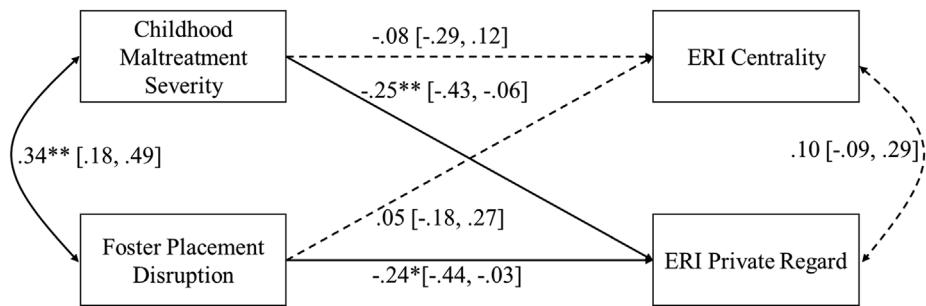†$p < .10$; *$p < .05$; **$p < .01$.

Fig. 1. Standardized path coefficients from childhood maltreatment severity and foster placement disruption to ERI centrality and ERI private regard. 95% confidence intervals are provided in the brackets. *$p < .05$; **$p < .01$.

life satisfaction, $F_{(2, 93)} = 7.22$, $p < .01$. Effects for self-esteem, $F_{(2, 93)} = 2.67$, $p = .08$, depressive, $F_{(2, 93)} = 2.90$, $p = .06$, and anxiety symptoms, $F_{(2, 93)} = 2.55$, $p = .08$, were marginal and there was no significant difference for ERI private regard, $F_{(2, 93)} = 1.62$, $p = .20$.

Multiracial youth reported higher childhood maltreatment severity ($M_{multi} = 9.46$, $SD = 3.22$ versus $M_{black} = 7.20$, $SD = 3.52$) and placement disruption ($M_{multi} = 8.54$, $SD = 4.97$ versus $M_{black} = 5.57$, $SD = 3.31$) when compared to Black youth, but there were no significant differences found with Latinx youth. Black youth reported higher levels of ERI centrality ($M_{black} = 3.72$, $SD = 0.91$ versus $M_{latinx} = 3.00$, $SD = 1.00$), higher rates of depressive symptoms, ($M_{black} = 0.97$, $SD = 0.97$ versus $M_{latinx} = 0.44$, $SD = 0.70$), and lower levels of perceived social support ($M_{black} = 25.62$, $SD = 6.26$ versus $M_{latinx} = 29.05$, $SD = 3.24$) when compared to Latinx youth, but no significant differences were found with multiracial youth. Finally, Black youth ($M = 16.19$, $SD = 7.28$) reported lower levels of life satisfaction when compared to Latinx ($M = 24.23$, $SD = 9.06$), and Multiracial youth ($M = 21.49$, $SD = 8.44$).

Pertinent to the first aim of the study, bivariate correlations revealed a significant association between childhood maltreatment severity and placement disruption. Childhood maltreatment severity and placement disruption were associated significantly with ERI private regard but not ERI centrality. Neither childhood maltreatment nor placement disruption were associated significantly with the socioemotional adjustment outcomes.

As shown in Fig. 1, a path analysis evaluated prospective associations from childhood maltreatment severity and placement disruption frequency to youth's ERI centrality and ERI private regard. An unsaturated model that fixed the nonsignificant paths in the model to zero (RMSEA = 0.00 [0.00, 0.11], CFI = 1.00, TLI = 1.17, SRMR = 0.03) did not differ significantly from the saturated model, $\chi^2 (3) = 1.70$, $p = .64$. Childhood maltreatment severity and placement disruption were positively associated with each other, and each was associated with lower ERI private regard. However, neither facet of childhood adversity was significantly related to ERI centrality. Interestingly, ERI centrality and ERI private regard were not significantly correlated with one another. The chi-square difference test examining differences between a model that constrained these relations to equality for males and females and a model that allowed the relations to vary freely (i.e., an unconstrained model) was not significant, $\Delta\chi^2(6) = 7.99$, $p = .24$. Likewise, a series of multigroup analyses testing differences between Black versus non-Black youth, $\Delta\chi^2(6) = 7.85$, $p = .25$, Latinx versus non-Latinx youth, $\Delta\chi^2(6) = 11.29$, $p = .08$, and multiracial versus monoracial youth, $\Delta\chi^2(6) = 3.20$, $p = .78$, did not reveal any significant differences across ethnic-racial groups.

As shown in Table 1, ERI centrality was associated with lower levels of self-esteem and satisfaction with life, as well as with higher rates of anxiety and depressive symptoms. In contrast, ERI private regard was associated with higher levels of self-esteem and social support. Comparisons between constrained models that fixed the correlations to be equal across comparison groups and unconstrained models that allowed them to vary revealed that these relations did not differ significantly by gender, $\Delta\chi^2(10) = 7.66$, $p = .66$, nor when comparing Latinx versus non-Latinx youth, $\Delta\chi^2(10) = 7.68$, $p = .66$. However, associations between ERI and adjustment outcomes differed between Black and non-Black youth, $\Delta\chi^2(10) = 31.71$, $p < .001$, and between multiracial and monoracial youth, $\Delta\chi^2(10) = 19.22$, $p = .04$.

As shown in Table 2, although ERI centrality was significantly related to multiple indicators of poor adjustment among non-Black foster youth, such as lower levels of self-esteem and perceived social support, ERI private regard was not significantly related to any

Table 2
Correlations between ERI and socioemotional adjustment for black and non-black youth.

Variables	ERI Centrality			ERI Private Regard		
	Black	Non-Black	Z	Black	Non-Black	Z
Self-esteem	-.21	-.50**	1.75†	.32*	.15	.94
Social Support	.15	-.37**	2.81**	.70**	-.03	4.67**
Depression	.15	.41**	1.48	-.34*	-.03	1.69†
Anxiety	.25	.30**	.28	-.39**	-.01	2.09*
Satisfaction with Life	-.10	-.21†	.56	.23	.18	.27

Z = Fisher Z Transformation; †$p < .10$; *$p < .05$; **$p < .01$.

Table 3

Correlations between ERI and Socioemotional Adjustment for Multiracial and Monoracial Youth.

Variables	ERI Centrality			ERI Private Regard		
	Multiracial	Monoracial	Z	Multiracial	Monoracial	Z
Self-esteem	-.53**	-.39**	1.02	-.06	.30**	2.12*
Social Support	-.37**	-.12	1.54	-.21	.40**	3.65**
Depression	.48**	.27*	1.41	.22	-.27*	2.87**
Anxiety	.31*	.32**	.06	.13	-.24*	2.15*
Satisfaction with Life	-.25†	-.24*	.06	.07	.19	.70

Z = Fisher Z Transformation; †p < .10; *p < .05; **p < .01.

adjustment outcomes for non-Black youth. In contrast, ERI centrality was not significantly related to adjustment among Black youth, but ERI private regard was significantly related to multiple indicators of positive adjustment among Black youth, including higher levels of perceived social support and lower rates of anxiety and depressive symptoms. ERI centrality was significantly related to poor adjustment for both multiracial and monoracial youth (see Table 3). In contrast, relations between ERI private regard and adjustment indicators were not significant for multiracial youth, but ERI private regard was significantly related to multiple indicators of positive adaptation among monoracial youth as indicated by higher levels of self-esteem and social support and lower rates of anxiety and depressive symptoms.

4. Discussion

Drawing on a longitudinal study of newly emancipated foster youth, the current study evaluated prospective relations between adverse experiences of childhood maltreatment and foster placement disruption and ERI development in a sample of ethnic-racial minority foster youth. Although a few studies have examined ERI socialization and development among youth *in* foster care (Schwartz, 2007; White et al., 2008), this investigation identified experiences that may undermine specific components of ERI, namely centrality and private regard, among transition-aged foster youth in the wake of their emancipation from the child welfare system. Further, we evaluated group differences in these relations as a function of youth's gender and ethnicity-race, as well as the adaptive implications of ERI centrality and ERI private regard for youth's socioemotional health and well-being.

Overall, findings from this study suggest that trauma-related factors, including childhood maltreatment severity and foster placement disruption, may hinder ERI development among emancipated foster youth. Youth who experienced higher levels of childhood maltreatment severity and foster placement disruption were less likely to endorse positive feelings about their ethnic-racial group membership (i.e., ERI private regard), whereas, these adverse experiences were not significantly related to the importance of their ethnicity or race to their identity (i.e., ERI centrality). Moreover, these associations did not differ significantly by youth gender or ethnicity-race. These findings counter previous empirical evidence suggesting that ethnicity- or race-based trauma (e.g., discrimination, racism, religious persecution) may heighten one's interest and motivation to develop one's ERI (Bilge, 2018; Umaña-Taylor, 2016), but are consistent with other works indicating that foster youth evidence disrupted ERI development (White et al., 2008).

Importantly, these findings also suggest that delayed or disrupted ERI development may have negative socioemotional consequences. ERI centrality was related to poorer adjustment outcomes as indicated by elevated rates of anxiety and depressive symptoms and lower levels of self-esteem and life satisfaction. In contrast, ERI private regard was related to positive adjustment as indicated by higher levels of self-esteem and perceived social support. These findings are consistent with prior studies of typically developing populations, which demonstrate positive associations between individuals' positive feelings about their ethnic-racial group membership and varied adjustment measures (Rivas-Drake et al., 2014). Interestingly, the obtained relations between ERI centrality and youth adjustment were not consistent with prior studies (Cross et al., 2018; Yip et al., 2006), but instead mirrored empirical evidence suggesting that certain ERI processes may lead to negative adjustment outcomes in adversity-exposed populations (Beiser & Hou, 2006).

Across groups, associations between ERI and adjustment varied by ethnicity-race, but not by youth gender. Specifically, ERI centrality was related to poorer adaptation, particularly for non-Black (versus Black) foster youth, whereas ERI private regard was related to positive adjustment outcomes, particularly for Black (versus non-Black) and monoracial (versus multiracial) youth. The absence of a significant association between ERI centrality and adjustment among Black youth as compared to the significant negative relations among non-Black youth is particularly noteworthy given the disproportionate levels of negative stereotypes and discrimination that Black youth experience relative to non-Black youth (Fisher, Wallace, & Fenton, 2000). Indeed, this finding suggests that believing that one's Black identity is important does not hinder positive adaptation (Chavous et al., 2003), even though being black is associated with numerous social inequities. With regard to the comparisons between monoracial and multiracial youth, the current findings are consistent with prior research suggesting that ERI may be less salient for multiracial youth when compared to their monoracial peers (Bracey et al., 2004). Despite these suggestive findings, the obtained patterns warrant further consideration and replication in future studies. In particular, mixed method approaches will be important to further understand the meaning and adaptive significance of specific ERI components for youth within and across ethnic-racial minority groups. As detailed later in the discussion, although not systematically evaluated as part of this study, narrative excerpts from youth's reflections about their

experiences of ethnic-racial identification may help illustrate some of the key findings in this study, as well as guide future investigations.

The specific relation of trauma with ERI private regard, but not with ERI centrality, coupled with the positive relations between ERI private regard, but not ERI centrality, and youth adjustment heighten our concern for the well-being of newly emancipated foster youth. Indeed, these youth endorsed low levels of ERI centrality and ERI private regard as compared to their non-fostered peers (Sellers & Shelton, 2003; Yip et al., 2006). Most emancipated foster youth reported that their ethnicity-race was not important to their identity and endorsed neutral to slightly positive feelings toward their ethnicity-race. These scores, particularly ERI positive regard, were further depressed among youth with relatively severe histories of maltreatment and/or high rates of foster placement disruption. Taken together, these findings are alarming considering the known protective effects and importance of ERI for ethnic-racial minority youth development (Rivas-Drake et al., 2014), which were also evident in this sample.

Although further research is needed to identify mechanisms underlying these effects, a post-hoc exploration of youth's narrative reflections on their foster care experiences and their sense of their ethnicity-race from this study point to the likely involvement of socialization factors. For example, it is notable that most youth reported that they did not receive any information or guidance about their ethnicity or race while growing up in foster care. Even more problematic, of the youth who did receive messages about their ethnicity or race, the valence of these messages was typically negative. For example, a multiracial youth stated that her ethnic/racial group(s) were perceived as "ignorant, ghetto, [and] uneducated." Another multiracial youth shared similar sentiments, but took solace in the fact that her appearance set her apart from these negative perceptions; she noted that the messages she received in foster care were "mostly negative, which made me happy that I didn't look it. They are low class, don't amount to anything." These kinds of experiences are especially concerning given evidence that positive feelings toward one's ethnic-racial group are important for positive development, especially among Black versus non-Black youth, despite the fact that these youth also experience the greatest level of structural disadvantage and stereotype threat (Fisher et al., 2000). Other mechanisms, such has delayed cognitive abilities, cognitive biases, negative affect, and/or negative self-representations, may explain apparent relations between experiences of adversity and disrupted ERI development among foster youth and warrant careful examination in future research (Kools, 1997).

Given consistent evidence that parents and family members are among the most salient sources of ethnic-racial socialization (Brown et al., 2007; Hughes et al., 2006; Knight et al., 2011), it is very concerning that youth in foster care are deprived of these influences due to inconsistent (and often transethnic-racial) placements. For example, a Latinx male participant noted that foster care had a "very strong impact; it suppress [sic] my background and people's history. Afterwards I want [sic] to learn more." Similarly, following his time in care across 10 different placements, a multiracial male stated, "I just realized that I couldn't relate to any culture or heritage." Finally, reflecting on her experience in foster care, an African American female reported, "I think it affected me negatively. [I was] placed with people not of my ethnicity. I got a lot of backlash from it." Interestingly, a post-hoc exploration of youth's global estimate of the proportion of time in care spent with caregiver(s) outside one's ethnic-racial group" indicated no significant relations with youth's ERI development, even though there was considerable variation in this sample ($M_{percent}$ = 43.50, SD = 40.39).

Although this study offers a novel examination of processes that may distort or undermine specific components of ERI in emancipated foster youth over time, the current findings should be interpreted in the context of several limitations. First, this study only examined ERI content components. Given that these findings suggest that ERI centrality and positive regard are associated with experiences of adversity and socioemotional adjustment in different ways, it is important for future studies to look at these associations with ERI process components, such as exploration and commitment (Syed & Azmitia, 2010). Second, we were not able to draw causal inferences in the absence of prior measures of ERI centrality and ERI private regard in our analyses. Future research should incorporate previous assessments of ERI, as well as multiple waves of data to provide a more comprehensive understanding of ERI development in adversity-exposed populations. In addition, research using multiple measures of ERI and adjustment over time, should evaluate if and how ERI components may influence shifting relations between childhood adversity and socioemotional adjustment. Third, the reliability coefficient for the ERI centrality subscale was relatively low, and the CFA fit was similarly modest. Although previous studies have reported similarly low reliability coefficients for items assessing ERI centrality (Kiang et al., 2011; Neblett et al., 2009), ongoing research is needed to refine ERI measures, particularly of ERI centrality, and evaluate their reliability in populations with atypical developmental histories. Fourth, future research with foster youth should consider additional elements of the child welfare experience that may be related to youth's ERI development, such as placement type, particularly the role of transracial/ethnic/cultural placements, as well as the potential influence of placements with kin versus in family foster homes or group homes. For example, a qualitative study by Schwartz (2007) revealed that, as compared to foster youth in non-kinship placement, African American foster youth who were placed with kin had more opportunities to learn about their ethnic-racial background through natural socialization experiences, which, in turn, were associated with higher levels of ERI exploration and affirmation. As noted previously, youth's estimated time spent with caregivers outside their ethnic-racial group was not significantly related to the variables in this study. However, a more nuanced investigation of how specific placement features beyond disruption frequency may shape ERI remains a profitable direction for future research.

This novel examination of ERI development among newly emancipated foster youth illustrates the enduring link between traumatic childhood experiences and later identity development, including ERI, as well as the salience of youth's positive feelings about their ethnic-racial group(s) for youth's socioemotional adjustment. The current findings highlight the need for prevention and intervention efforts to support positive ERI development among vulnerable populations, such as ethnic-racial minority youth in the child welfare system. Given the likely influence of disrupted family ethnic-racial socialization processes as a result of abuse and out-of-home placement, interventions must provide opportunities for foster youth to develop and maintain positive connections with people from their own ethnic-racial groups. These efforts should protect safe and supportive relationship with select members of the

child's family of origin, as well as promote new relationships with providers, teachers, and mentors who may offer compensatory opportunities for ethnic-racial socialization (Brown et al., 2007; Hughes et al., 2006; Knight et al., 2011).

At the system level, foster parents and service providers should be provided with training to encourage their appreciation for the value of fostering healthy ERI development among ethnic-racial minority youth, as well as their knowledge of specific strategies to do so. Finally, placing foster youth in homes with caregivers from similar ethnic-racial backgrounds might be an important first step given that cultural matching in foster placement has been shown to support foster youth's efforts to learn about their ERI (Anderson & Linares, 2012; Brown, George, Sintzel, & St. Arnault, 2009), even though this pattern was not evident in preliminary post-hoc analyses with the current sample. Cumulatively, efforts to promote positive ERI among foster youth may be a powerful tool to help youth negotiate their adverse experiences and promote positive development in and beyond the child welfare system.

Acknowledgements

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