



## Longitudinal assessment of self-harm statements of youth in foster care: Rates, reporters, and related factors

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### Abstract

Self-harm in youth is a risk factor related to mental health and future morbidity, yet, relatively little is known about the rates and course of self-harm in youth residing in foster care. This study examined self-harm talk in foster youth based on caregiver and child report for 135 children between the ages of 8- and 11-years old. Longitudinal data on course of self-harm talk from both youth and caregivers also are provided. Caregivers identified that 24% of youth participants had disclosed a desire to die or to hurt themselves. Youth self-report revealed that 21% of children indicated a desire for self-harm, and rates of self-harm from both reporters decreased over time. While overall rates were similar across reporters, findings show discrepancies between youth self-report and caregiver report within individuals. Also, caregivers for youth in residential facilities were more likely to report youth self-harm talk than caregivers from foster home settings.

### Keywords

child maltreatment; child abuse/neglect; rates of youth suicidality; child/youth self-report; foster care; multiple informants; concordance

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Studies show that youth residing in foster care demonstrate high rates of thoughts related to death and self-harm when compared to those found in the general population. For example, Hukkanen, Sourander, and Bergroth [1], using case-worker report, found that 32% of youth in foster care had endorsed either ideation or actual attempts (8%) of suicide in the previous six months. In a study assessing thoughts related to suicide across multiple sectors of care (i.e., foster care, juvenile justice systems), approximately 25% of the youth involved with child welfare services reported that they often thought about death or dying within the past year [2], and approximately 16% preadolescents in foster care have been found to have a history of suicide ideation [3]. In a study assessing psychiatric symptoms of youth with a history of foster care and those without, Pilowsky and Wu [4] noted that 26.8% of youth with a history of foster care reported suicidal ideation, compared to only 11.4% of those without a history of care. While this research indicates youth in foster care have high rates of suicidal ideation, little is known about the stability of these thoughts and if aspects unique to foster care, like placement type, may serve as risk factors for youth currently in foster care. The purpose of this study was to examine the rate and course of youth's thoughts and statements related to self-harm as reported by caregivers and youth in foster care, as well as

to identify possible risk factors for self-harm statements, such as age, gender, and placement type.

The rates of suicide completion, attempts, and behavior vary by age, with suicidal behavior increasing as youth age into young adulthood [5–6]. Thus, it is important to view suicidal and self-harm behavior and ideation from a developmental perspective. According to 2013 results of the Youth Risk Behavior Surveillance System (YRBSS), a national survey of risky behaviors of youth, 17.0% of high school-aged youth had “seriously considered attempting suicide” in the past year. The rate of suicidal thoughts was higher for females (22.4%) than males (11.6%) and higher for Hispanic (18.9%) than Caucasian and African American youth (16.2% and 14.5% youth, respectively) [7]. Middle school-aged youth (6<sup>th</sup> to 8<sup>th</sup> grades) from eighteen states also participated in the YRBSS. The average rate of suicide consideration for middle school youth ranged from 11.6% to 25.4% with females significantly more likely to endorse a serious consideration [8]. Lastly, in an urban community sample of 349 children (ages 6–9 years), 8.6% of the children endorsed having suicidal or self-harm thoughts [9]. In sum, rates of suicidal ideation appeared to decrease as the age of each sample decreased.

Research has examined the developmental differences between adults and adolescents that may explain differences in suicidal behavior; for example, greater impulsivity and less consideration of future consequences [6,10]. However, there has been less attention to the developmental differences in suicidal or self-harm behavior and ideation between children and adolescents. In a review of the developmental considerations of suicide interventions, Daniel and Goldston [6] posit that there are environmental or contextual reasons for the increase in youth suicidal behavior across ages. They note that suicidal behavior often occurs due to family or peer conflict, desire for autonomy, academic difficulties, and disciplinary issues which increase in importance as youth age. Developmental theorists also note that children lack cognitive understanding of the lethality and finality of death [11]; thus, recent research on suicidality in preadolescents includes assessing for thoughts of self-harm in addition to suicide. In a study of urban children 6–9 years old, Wyman and colleagues [9] found risk factors for self-harm (e.g., depressive symptoms, externalizing problems) similar to those found in older children and adolescents. They concluded that children with difficulty regulating emotions and thoughts about death may develop self-harm or suicidal thoughts if they experience significant stressors [9]. There is likely little doubt that youth in foster care have experienced serious stressors, however, thus far, very little research regarding self-harm in preadolescents in out of home care exists, making it difficult to understand the rates, stability, and related factors of self-harm in this important subset of youth.

Moreover, knowledge on the stability of thoughts related to self-harm in youth over time suggests that when ideation is assessed daily, it appears to fluctuate, and greater fluctuation seems to be a risk factor for actual attempts, particularly in adolescent males [12]. However, understanding of change in ideation related to self-harm over time may be due to external factors such as participation in treatment and exposure to new stress events, making the assessment of fluctuation more nuanced. In a study of adolescents receiving treatment

services, authors noted that suicidal ideation reduced from baseline to six months, although it also reappeared in some cases after nine months [13].

Dhossche and colleagues [14] examined youth suicidal ideation in a population-based, longitudinal study of adolescents between the ages of 11- to 18-years from Zuid-Holland. Their findings revealed that 41 youth had endorsed suicidal ideation at one time point, and at follow-up eight years later, only 19 youth reported any current suicidal ideation. Further, only 2 of those 19 youth at follow up had reported suicidality at the first time point assessed, which suggests that 17 youth were reporting new suicidality eight years later. Interestingly, no gender differences regarding suicidal ideation were observed at either time point. Another study assessing suicidal thoughts and behaviors in a sample of 593 community youth at three time points (1994, 1997, and 2001) found some variation in youth report across time as well. At time one, 7.6% reported having suicidal thoughts; at the second time point, 10.8% reported suicidal thoughts; and at time three, 7.9% reported suicidal thoughts [15]. In addition, females demonstrated higher rates of suicidal behavior during the first two time points and higher rates of risk during the second time point compared to males.

Thus, the evidence suggests that in samples of non-foster youth, ideation related to self-harm and death may vary over time and by gender. Although this same pattern may be true for youth in foster care, life for youth in foster care may also have more instability than the life of youth in community samples. For example, Barth and colleagues [16] found that 18% of their sample of 725 youth in foster care changed placements four or more times in three years. Moreover, Fawley-King and Snowden [17] found in their study of over 19,000 youth in foster care in California that placement change and use of psychiatric hospitalization were reciprocally related. Although the Fawley-King and Snowden study did not measure self-harm behavior specifically, youth in foster care experience many life disruptions, which may relate to varied reports of self-harm or suicidal ideation over time [15].

## Placement Type and Self-Harm

Placement type has been a factor of interest in research on foster care populations, and may relate to risk for self-harm ideation as well. It is theorized that youth residing in residential facilities, rather than foster home settings, may experience more problem and health risk behaviors. For example, psychosocial impairment and psychiatric disorders are predictors for placement in residential settings rather than foster home settings [18–19]. In fact, the reason for placement in residential care is typically identified as a need for more comprehensive services that cannot be provided by another, less-restrictive setting (e.g., foster home) due to relatively debilitating emotional and/or behavioral difficulties [18–19]. Hurley and colleagues [20] conducted an archival study on 1,047 youth admitted to residential foster care across two cohorts (1995 and 2004), and they reported respective rates of 35% and 39% of youth in each cohort with histories of self-harm behavior. In both of their samples, 13% of youth had indicated current suicidal ideation at time of admission to residential care. No gender differences, however, were observed.

## Reporters' Agreement of Youth Intent to Self-Harm

In research on child self-harm behavior, it is not always clear who would be the most accurate reporter. For example, a study by Klimes-Dougan [21] of youth aged 5–13 years and their mothers, who were categorized into youth who have received a diagnosis of a mood disorder and youth who have no previous psychiatric difficulties, revealed discrepancies across youth self-report and maternal report of youth intent to self-harm, with youth providing higher rates of endorsement of ideation related to self-harm than maternal-report. This researcher concluded that maternal report of youth self-harm ideation is likely an underestimation. Similarly, in a study on 912 Dutch adolescents between the ages of 11–18 years, 41 participants self-reported thoughts related to death, but only 3 of those 41 youth (7%) had corroborating parent reports, revealing a strong discrepancy between parent and child reporters on child ideation related to death [14]. Other studies have corroborated this finding suggesting that caregiver reports may be a less accurate indicator of youth intent to self-harm than youth self-report [22–24]; however, many times caregiver report may be all that is available. Indeed, a common approach to asking research questions that may invoke risk from participation by youth has been to subvert asking youth questions directly. An example of this can be found in the maltreatment literature, where a common methodological approach has been to use case file reports of abuse rather than asking youth directly about their abuse experiences [25–26].

In prior studies examining ideation related to self-harm in youth residing in foster care, research methods have traditionally included only one type of reporter (either child or case worker), so comparison of endorsement of youth thoughts related to self-harm across reporters has not been possible [1,2,4]. Given discrepancies in reports based on the type of reporter in community samples, the question of child versus caregiver report of self-harm ideation is an important consideration in how the field identifies youths' needs for services, such as those residing in foster care. Further, foster caregivers may provide different information than biological caregivers because foster caregivers receive training on parenting and identification and management of problematic behaviors in youth. As reporters, they may provide further insight into a child's difficulty with self-harm ideation given their training on identification of risk as part of the process of licensure to become a foster caregiver.

### Current Study

To address the gaps in the literature regarding the rate of self-harm ideation or talk in youth in foster care and concordance between youth and caregiver report, the present study examined the rates of endorsement of thoughts related to death or self-harm in a sample of foster caregivers and youth in foster care over time. Responses to questions about self-harm ideation were examined for their relation to placement type, age, gender, and child and caregiver agreement. The first research goal involved the examination of caregiver and youth report of youth behavior (e.g., self-harm talk/ideation) and the assessment for differences across residential versus foster home placement, age, and gender. The second research goal involved the examination of caregiver reports on child self-harm talk compared with child self-report of desire for self-harm. It was hypothesized that a greater

number of youth residing in residential care and older youth would endorse desire for self-harm when compared to youth residing in foster homes and those who were younger. Given prior research suggesting that maternal reports of child self-harm may be underestimates or lower in general than child self-report of self-harm, it was expected that youth reports of self-harm ideation would be higher than caregiver reports of youth suicidality. It was also hypothesized that at times, caregivers would report self-harm behaviors when youth did not, and that at other times, youth would report self-harm ideation when caregivers did not report knowledge of youths' self-harm behaviors.

## Methods

### Participants

The total sample included 135 foster youth between the ages of 8 and 11 years old and their adult caregivers. The youth had a mean age of 9.84 years ( $SD=1.10$ ). The majority of the youth were African American (54%), followed by Caucasian (33%), Multiracial (11%), and Other (2%). Of the youth participants, approximately 79% lived in home-based settings, and the remaining 21% resided in residential facilities. The gender distribution of youth approached equality (54% female). Caregiver reporters were foster mothers (44%), foster fathers (13%), staff at residential facilities (16%), or other reporters (e.g., therapist at residential facility or kinship provider; 27%). Finally, at baseline assessment, based on caregiver report, roughly 54% of the children had received a mental health diagnosis and 54% had been treated for an emotional or psychological problem. Also based on caregiver report, 40% of the sample had an internalizing disorder, with 24% identified as having Post-traumatic Stress Disorder, 10% identified as having a mood disorder, and 6% identified as having some other form of internalizing problem. Caregivers identified 28% of youth as having externalizing disorders with most noting problems such as Attention-Deficit/Hyperactivity Disorder (24%) and a small proportion with problems related to Disruptive Behavior Disorders (4%). Refer to Table 1 for specific information on the T-scores across child and caregiver report on the BASC-2.

Within this baseline sample, 83 youth had both child and caregiver report across all three time points, and this subsample was used for comparisons of reports longitudinally. T-test and chi square analyses revealed no significant differences between participants assessed longitudinally (i.e., the 83 reports across Time 1, Time 2, and Time 3) versus the 52 participants assessed only at Time 1 on youth age, gender, ethnicity, history of psychological treatment, or on youth or caregiver report of suicidality at baseline. There were differences identified by placement type ( $\chi^2 = 6.302, p = .017$ ), with more youth residing in residential placements than foster placements having been lost to attrition, and by mental health diagnosis ( $\chi^2 = 6.302, p = .017$ ), with more youth without a mental health diagnosis than youth who had a diagnosis having been lost to attrition. Of those participants who completed the project at baseline, 38% were not reachable at Time 2 or Time 3 for reasons including placement moves out of state or return to biological caregivers.

## Measures

Caregivers completed demographic questions on each of the youth in the study. Questions included the youths' age, ethnicity, gender, and mental health status.

**Self-Harm Ideation**—Both caregiver and youth reporters answered questions on the youths' behavioral and emotional functioning through completion of the Behavioral Assessment Screen for Children, 2<sup>nd</sup> edition [27]. The BASC-2 provides information for youth across a variety of emotional domains including depression, anxiety, and conduct problems. For the current study, analyses examined caregiver and youth report on questions assessing desire for or thoughts of self-harm or death. All questions are answered on a Likert scale of occurring “never”, “sometimes”, “often”, or “almost always”. On the BASC-2, caregivers reported on how often the youth had said: “I want to kill myself” and “I want to die,” and children responded to the item of “Sometimes I want to hurt myself” as an indicator of self-harm ideation for the analyses.

Prior research has used these caregiver report items as indicators of youth suicidality or intent to self-harm [e.g., 28]. Also, the self-harm item on the child report of the BASC about self-harm is regularly identified as a “critical item” that indicates risk for self-harm or suicidality. Identification of child intent to self-harm can be difficult, and this item is not intended to be a suicide screening measure. In a seminal paper on suicide nomenclature, O'Carroll and colleagues [29] suggest that suicidality is “any self-reported thoughts of engaging in suicide-related behavior”, and they gave particular emphasis to the role of intent in identifying behavior or thoughts that were, indeed, related to suicidality. Silverman and colleagues further delineated the varied features of suicidal ideation, intent, and self-harm behavior, suggesting that clear identification of behavior related to self-harm and suicide is needed [30]. While these questions from the BASC do not offer details about intent, they are traditionally used as indicators of possible risk.

## Procedure

The SPARK (Studying Pathways to Adjustment and Resilience in Kids) project is a federally funded, longitudinal study assessing the process of resiliency and adaptation of youth eight years and older in foster care [31]. Youth were excluded from the SPARK project if they had a previous diagnosis of Mental Retardation or Autism via caregiver report and/or had not resided in their current placement for at least 30 days. Caregivers and children who meet criteria for the study provided consent and assent regarding the purposes, gains, risks and voluntary nature of the study. This project received approval from the Institutional Review Board at the University of Kansas as well as the district judges and foster care administration responsible for guardianship of the youth invited to participate in the project.

To control for various reading levels, all questions were read aloud by a laptop computer over headphones via an audio computer-assisted self-interview (ACASI) program. Children and caregivers completed the study three times at intervals of three months. The timeframe reported on for baseline was the past year, and the timeframe reported on for Time 2 and Time 3 follow ups were the past three months, for both caregiver and child reporters.

## Management of Risk

In the SPARK Project, all research staff were graduate-level clinicians who were trained in evaluating the level of risk associated with suicidal thoughts and behaviors. When assent and consent were collected, caregivers and children were told that all information was confidential unless answers to certain questions indicated that the child was currently thinking about hurting himself/herself, hurting others, or if someone was hurting him/her. The ACASI program provided a flagged-items page, which alerts the researchers that the child and/or caregiver answered specific questions (e.g., “Sometimes I want to hurt myself” or “This child says ‘I want to kill myself’”) that warrant follow-up during the study’s debriefing sessions. All participants underwent a three-part debriefing process upon completion of the child and caregiver survey, regardless of flagged-item endorsement. Specifically, debriefing occurred with the caregiver alone, the child alone, and the child and caregiver together. When the caregiver or the child endorsed flagged items of self-harm, the researchers conducted a risk assessment, alerted the appropriate individuals to ensure the child’s safety (e.g., Child Protective Services), consulted with the project’s principal investigator (a licensed, PhD-level clinical child psychologist), and referred families to mental health services.

## Results

All responses to questions about suicidality were recoded to dichotomous yes/no responses, with BASC-2 responses of “never” being coded as “no” and all other responses coded as “yes”. Because there was less than 2% missing data, analyses utilized listwise deletion for analyses with missing data [32]. Analyses included examination of concordance between the child and caregiver report on items related to desire to self-harm. Of the total sample at baseline ( $n = 135$ ), 29 (22%) caregiver reporters indicated that the youth participant had said, “I want to kill myself” and 28 (21%) indicated that the youth participant had said, “I want to die.” A combination of these two variables revealed that 32 (24%) of caregivers endorsed at least one of these two items. Also, of this baseline sample, 28 (21%) children endorsed the item “Sometimes I want to hurt myself.”

When examining the role of placement type on reports of self-harm for research question one, a chi-square test of differences revealed a statistically significant difference between youth self-report in response to the item “Sometimes I want to hurt myself” based on placement in a residential facility versus a foster home ( $\chi^2(1) = 4.03, p < .05$ ). A significant difference was also identified in caregivers reporting on youth in residential facilities versus youth residing in home-based settings ( $\chi^2(1) = 13.28, p < .001$ ). As hypothesized, youth and their caregivers in residential settings endorsed more youth self-harm behaviors when compared to youth in home-based settings. To determine if this relation may have been affected by age, examination of the correlation between age and placement type and caregiver report of suicidality revealed that age was not significantly correlated with caregiver report on youth desire to self-harm ( $r_s(134) = -.075, p = .390$ ), youth self-report of desire to self-harm ( $r_s(134) = -.046, p = .595$ ), or placement type ( $r_s(134) = .106, p = .223$ ). To account for the potential confounding effect of diagnosis or treatment status, a stepwise logistic regression was used to determine the impact of age, gender, and placement type.

Multivariate analysis of these relations further confirmed that placement type ( $\beta = -1.420$ ;  $p = .006$ ; See Table 2) was the only significant predictor of caregiver report on youth desire to self-harm above and beyond contributions from age, gender, diagnosis, and treatment status. In the child report model, placement type was the largest contributor to the model ( $\beta = -.727$ ;  $p = .162$ ; See Table 3), but neither the overall model nor the placement type variable reached statistical significance.

Discrepancies were found between caregiver reports and child self-reports in support of research question two. Child report of a desire to hurt themselves and caregiver report of any youth intent to self-harm were similar in overall rates (21% versus 24% respectively), and when using the Related Samples McNemar Change Test, this relation was not significant ( $\chi^2(1) = .225$ ;  $p = .635$ ). However, these overall rates do not indicate reporter agreement within specific cases. When looking at the agreement of children and caregivers across any endorsement of self-harm ideation, disagreement occurred 30% of the time, with the mismatch occurring more frequently with the caregiver endorsing child disclosures of desire to die or self-harm for children who did not endorse desire for self-harm (17%) than the reverse (14%). Cohen's kappa for agreement across child and caregiver reporters was .117 ( $p = .176$ ), suggesting there was only slight agreement across the two reporter types above what would be expected based on chance alone [33]. See Table 4 for more details on agreement across caregiver and youth reporters.

To further explore how caregiver and child agreement may be understood, evaluation of sensitivity (i.e., the probability of identification of a given disease when the diagnosis is truly present) and specificity (i.e., the probability of identification of the absence of a disease when the disease is truly absent) was conducted. However, in these data there is no "true" standard of when desire for self-harm is present or absent, so the type of reporter was selected as a standard for comparison. The sensitivity and specificity of the caregiver's report with the child's report as the standard were .333 and .790, respectively. Alternatively, the sensitivity and specificity of the child's report using the caregiver's report as the standard were .290 and .821, respectively.

Assessment of caregiver report of youth communication of suicide ideation over time revealed a similar general pattern across the three time points, with the lowest percentage at Time 3 for both reporter types. Of the 82 caregiver reports in the longitudinal subsample, at baseline, 17 caregivers endorsed youth suicidal ideation communication. At Time 2 (three months after the baseline assessment), 11 caregivers who had noted suicidal ideation in youth at baseline still reported similar problems, whereas 7 additional caregivers who had not endorsed any youth suicidality at baseline reported youth suicidality at Time 2. At Time 3, 6 caregivers who reported youth suicidality at Time 1 and Time 2 also indicated youth suicidality at Time 3; therefore, only 7% of caregivers reported suicidal ideation in youth across all three time points. At any particular time point, however, at least 15% of caregivers noted problems with suicidal ideation in the youth participants (Baseline: 21%; Time 2: 22%; Time 3: 15%), with overall rates declining from Time 1 to Time 3 (see Figure 1).

Examination of child self-report on items over time identified a similar pattern to that of the caregiver report (see Figure 1). Findings revealed that, of the 81 child self-reports (two

youth had missing data) from the longitudinal subsample, 14 children (17%) endorsed desire to self-harm at baseline. At Time 2, 9 children who endorsed self-harm at Time 1 still endorsed at Time 2 (64% of Time 1 who endorsed), with five additional youth endorsing self-harm who had not at baseline. Only five youth endorsed self-harm across all three time points, and five youth who had not endorsed the item at Time 1 or Time 2 noted desire to self-harm at Time 3. At any particular time point, at least 15% of youth noted a desire to hurt themselves (Baseline: 17%; Time 2: 17%; Time 3: 15%).

## Discussion

Self-harm in foster youth is an extremely important area of study, and the purpose of the present study was to examine how youth in foster care and their caretakers respond to questions about self-harm. Prior research reveals that youth in foster care experience a number of risk factors for problems with self-harm [34–35]. This study's findings from both self-report and caregiver report reveal endorsement of desire for self-harm at rates commensurate with other studies on youth in the child welfare system [2] but higher than those found in the general population [36]. Based on caregiver report, approximately one in four youth participants (24%) had disclosed a desire to die or to hurt themselves. From the youth-report data, roughly one in five children (21%) aged 8 to 11 years old indicated a desire to hurt themselves.

There appeared to be disagreement across reporters (child versus caregiver) when examining endorsement of suicidality. While overall sample rates of endorsement were similar, within individual differences emerged based on the reporter. What remains unclear is which form of report is the *more accurate* assessment of risk for suicide attempts or other self-harm behaviors. Research on this issue remains mixed: some research suggests that youth are more common endorsers of suicidal or self-harm ideation than caregivers and that caregiver and youth report do not consistently agree [14,22,37]. However, discrepancies in reports are not entirely due to caregiver underreporting as adults may note these behaviors when youth do not [14]. Indeed, in this sample, there were cases of caregiver report of self-harm talk for youth who had not reported it. Other researchers have noted the importance of methodological considerations related to reporter type, question type, and assessment procedure (e.g., interview versus questionnaire format) when examining prevalence rates and reporter discrepancies [e.g., 23]. Based on current and past findings, future research should consider multiple reporters for identification of suicidality to continue to inform how best to assess these behaviors in youth.

Youth in state custody often may live in a variety of home settings. Given that those placed in residential facilities frequently have a history of failed previous foster placements or moderate to severe mental health problems that prevent them from successfully maintaining relationships within a family-oriented setting [38], finding higher rates of self-harm talk and ideation for youth residing in residential settings versus youth residing in foster home settings is perhaps not surprising. It is possible that youth in residential care are more comfortable expressing their past experiences with self-harm thoughts or behaviors than other youth due to greater exposure to mental health services. It also may be that youth in residential care have more psychopathology in general compared to youth in family foster

care [39]. Given the finding that placement type persisted as a significant predictor above and beyond influences provided by mental health diagnosis and treatment, however, these explanations do not fully account for the influence of placement type on outcomes. Perhaps with more caregivers involved (particularly in residential settings) or more attention given to the mental health needs of this population, there is more attention given to possible indicators of self-harm ideation. For example, in residential facility placements, youth interact with a multitude of different caregivers and staff throughout the course of a day who may track and discuss the youths' behavior and emotional functioning.

Finally, examination of child and caregiver report across time points revealed a slight overall reduction in endorsement of self-harm ideation over time and variation in youth and caregivers' reports of suicidality over time. While it is unclear why the endorsement changed, it is possible that the youth in fact stopped self-harm talk in the three month time point between assessments. Prior research has indicated some variability in youth and caregiver reports of suicidality over time [21], suggesting the importance of longitudinal assessment of these behaviors. It appears as though a cross-sectional glance at youth's intent or communication about self-harm may not provide a clear enough picture of how this behavior functions in youth, or the behavior's mental health implications or implications for risk of self-harm. As noted, Dhossche and colleagues [14] found that youth report of suicide ideation in adolescence was not predictive of ideation eight years later; in their study, only two of the original 34 endorsers of suicide ideation at baseline noted ideation at follow up. Alternatively, Fergusson, Woodward, and Horwood [40] noted an increase in self-report of suicide ideation over time, which contradicts our finding of reduced rates over time. Both of these studies used a longer time window across assessments and older aged samples than the present study, suggesting that the variability in ideation related to self-harm may also relate to the length of time across assessments and the age of youth responders.

It is well established that suicide and suicidal behavior increase with age in childhood and adolescence [5]. From a developmental perspective, changes in suicidal behavior may be due to factors that increase in importance as youth age which are often the context to youth suicidal behavior (e.g., peer relationships, academics) [6], as well as due to the cognitive understanding of the lethality of suicide and self-harm and experience of life stressors [9,11]. Further investigation of why this decrease over time occurred in youth in foster care may reveal important factors for reduction of risk in this population, as well as provide information on which factors predict stable versus unstable patterns of self-harm ideation.

Although the use and availability of mental health services during the course of the study were fairly consistent, it is possible that for the 54% of the sample that was currently receiving treatment, the interventions were effective, at least according to the limited metrics of change presented here. Given their high risk for maladjustment, additional research is needed to explore the stability of mental health in general, but perhaps self-harm in particular for youth in foster care. The variation in caregiver and youth report of self-harm talk over time reveals the changes that can occur in youth functioning and gives rise to the importance of ongoing assessment of self-harm ideation in high-risk youth participating in longitudinal research. Given that 11% of youth were *newly* identified by caregivers and *newly* self-identified as demonstrating talk or ideation related to self-harm at Time 2 and

Time 3, debriefing and risk assessment methods remained essential for all three time points of the research study. This finding is also supported by prior research on the emergence of self-harm ideation as youth age, suggesting that this is a behavior that may develop or change during adolescence [40].

Based on these results, it is recommended that researchers utilizing a longitudinal research methodology assess self-harm ideation at every time point given the variation in reporting over time. Differing information provided by caregiver versus child reporters also highlights the need for multiple informants when assessing this behavior. If interest is in identifying thoughts or feelings related to self-harm, self-report may be most appropriate, whereas if assessment of voicing intent to self-harm or related behaviors is more important, caregiver report may be more useful. Indication of overall risk for self-harm, however, may require information from several reporters, as multiple informants may provide the most comprehensive information.

While the present study offers important information on the rates and course of self-harm ideation in youth enrolled in foster care, several limitations exist. The measures of ideation were not comprehensive, but rather assessed items related to self-harm talk and thoughts from a commonly used measure of youth behavioral and emotional functioning. More in-depth information on indicators of self-harm would inform the current understanding of these behaviors in this sample. Additionally, the questions asked of youth participants did not correspond directly with questions asked of caregiver reporters; thus, direct comparisons of self-harm ideation across reporters was complicated by the type of question examined. It should be noted, however, that caregiver items and child items assessing constructs related to child behavior rarely contain exact wording due to the fact that caregivers are asked to report on what they can witness directly (i.e., self-harm talk by the child) and youth able to report on their own thoughts and emotions. Despite these limitations, the present study contributes important information regarding how self-harm ideation and behavior may vary across reporter type and over time for youth enrolled in foster care.

## Summary

Youth residing in foster care placements represent a group at unique risk for self-harm given their adverse life experiences, transient home placements, and disruptions in social support networks. Results from this study indicate that youth placed in residential facilities demonstrate more endorsement of self-harm than youth in family foster care settings; however, age and gender were not significant predictors of self-harm talk. While overall rates of self-harm endorsed were similar across caregiver and child report, significant discrepancies were identified across reporters as indicated by a very low agreement rate. Further, rates of overall endorsement of self-harm talk were fairly stable across time points, but individual cases of endorsement across time points were varied. Results indicate that utilization of both youth and caregiver report as well as multiple assessments across time to identify youth intention for self-harm may be necessary for youth residing in foster care.

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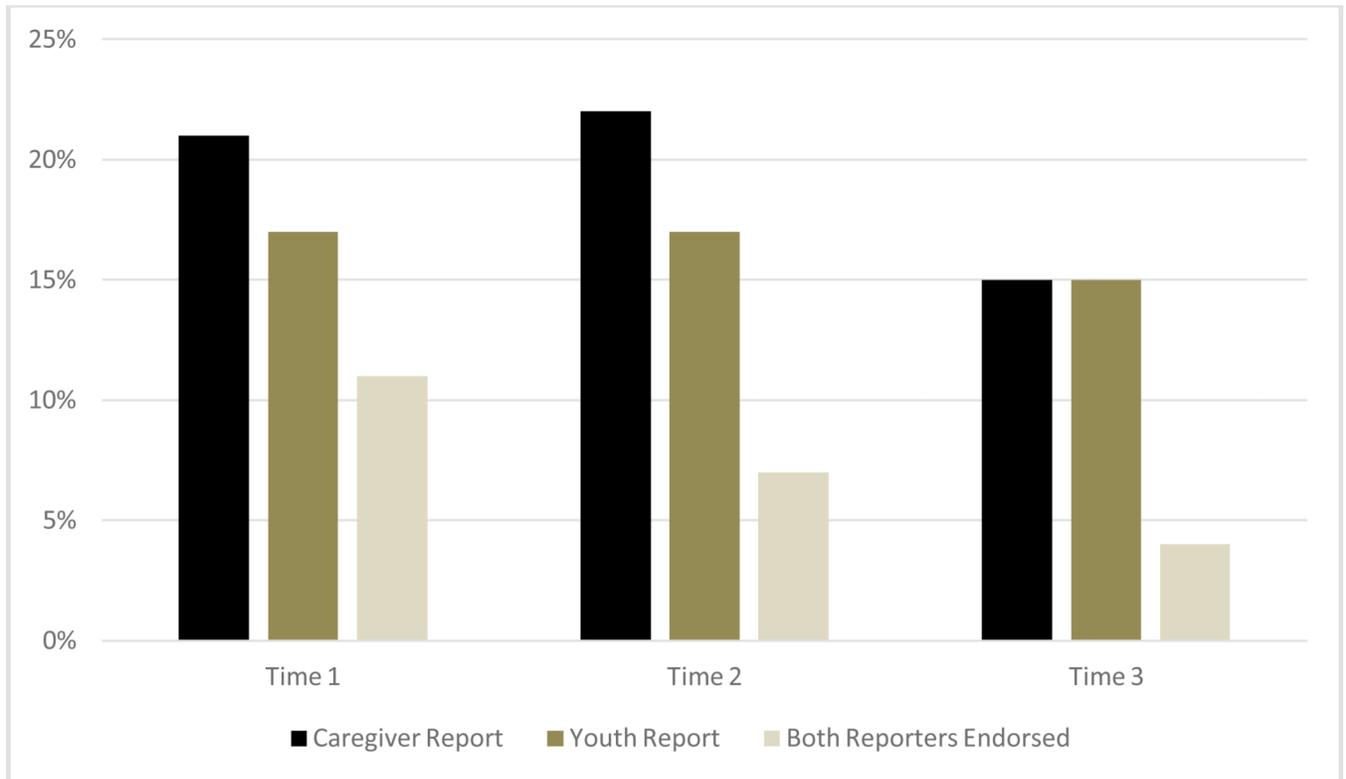
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**Figure 1.**  
Percent Endorsement of Self-Harm by Reporter Type Across Time Points.

**Table 1**

Mean T-scores and Standard Deviations of BASC-2 Subscales across Child and Caregiver Report.

<i>Subscale</i>	<i>Caregiver Report</i>	<i>Child Report</i>
	<i>Mean T-Score (SD)</i>	<i>Mean T-Score (SD)</i>
Hyperactivity	61.72 (10.06)	56.17 (10.84)
Aggression	67.10 (15.37)	--
Conduct Problems	70.63 (15.55)	--
Anxiety	56.88 (10.76)	54.88 (9.77)
Depression	62.07 (13.43)	54.44 (9.82)
Somatization	56.41 (13.28)	--
Atypicality	71.87 (16.27)	--
Withdrawal	62.40 (9.64)	--
Attention Problems	57.43 (8.45)	56.50 (10.55)
Adaptability	45.13 (8.82)	--
Social Skills	48.09 (8.65)	--
Leadership	47.94 (7.45)	--
Activities of Daily Living	43.23 (9.17)	--
Functional Communication	41.21 (9.55)	--
Attitudes toward School	--	49.21 (10.12)
Attitudes toward Teachers	--	51.91 (11.32)
Locus of Control	--	56.36 (10.41)
Social Stress	--	53.70 (10.28)
Inadequacy	--	54.63 (9.72)
Relations with Parents	--	48.75 (9.18)
Interpersonal Relations	--	46.13 (11.67)
Self Esteem	--	48.83 (10.65)
Self Reliance	--	49.66 (8.27)
Externalizing Composite	68.35 (14.25)	--
Internalizing Composite	60.51 (12.76)	55.20 (9.86)
Behavioral Symptoms/Emotional Symptoms Index	67.57 (12.56)	54.05 (9.81)
Adaptive Skills/Adjustment Composite	44.33 (8.42)	47.84 (9.53)
School Problems Composite	--	50.60 (11.23)

The child report and caregiver report forms of the BASC-2 do not have the same subscales or composites.

**Table 2**  
 Stepwise Logistic Regression of Caregiver Report on Predictors of Youth Expression of Desire to Self-Harm.

	$\beta$	S.E.	Wald	Sig.	Exp( $\beta$ )
Psychological Diagnosis	-.1091	.668	2.668	.102	.336
Psychological Treatment	.161	.655	.060	.806	1.174
Age	-.225	.200	1.274	.259	.798
Gender	.121	.479	.064	.800	1.129
Placement Type	-1.420	.519	7.493	.006	.242
Constant	2.345	2.247	1.090	.297	10.435

**Table 3**  
Stepwise Logistic Regression of Youth Report on Predictors of Youth Desire to Self-Harm.

	$\beta$	S.E.	Wald	Sig.	Exp( $\beta$ )
Psychological Diagnosis	-.128	.644	.039	.843	.880
Psychological Treatment	.708	.652	1.178	.278	2.030
Age	-.100	.200	.249	.618	.905
Gender	.070	.468	.022	.881	1.073
Placement Type	-.727	.520	1.957	.162	.483
Constant	-.211	2.215	.009	.924	.810

**Table 4**

Proportion of Reporter Agreement on Items Assessing Youth Desire to Self-Harm.

	Caregiver Reporter	
	No Self-Harm	Self-Harm
Child Report		
No Self-Harm	83	22
Self-Harm	18	9

Values represent the number of participants who did or did not endorse self-harm. Cell proportions were used to calculate values for specificity and sensitivity across reporter types.

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