Adolescent Nonsuicidal Self-Injury, Parental Support, and Family Resilience

A dissertation

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Dedication

This project is dedicated first to my family, who has kept me grounded and going.

It is dedicated secondly, and most importantly, to the many patients and families who have taught me the meaning of resilience, and who have bravely kept coming to the table with vulnerability and strength for each other.

Abstract

This mixed-methods study explored parental experiences of support and family strengths when a child had engaged in nonsuicidal self-injury. Twenty parents participated in a quantitative web survey, and 5 went on to complete follow-up qualitative interviews. Parents reported adequate levels of global social support as measured by the *Social Provision Scale* and the *Social Support Questionnaire*. Specifically, they reported high levels of perceived ability to guide and nurture in their significant relationships. However, affective and instrumental support from adult peers was more difficult for these parents to perceive and access. Qualitative interviews added depth and richness to these findings; parents reported challenges in accessing support due to difficulties in finding other parents who had also had a child with similar problems. At the same time, they described many strengths in their family systems, including role flexibility, healthy boundaries, connectedness, and positive meaning-making. Implications for future research and clinical work are discussed in conclusion.

Keywords: adolescence, family dynamics, nonsuicidal self-injury, parenting

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Approximately 10% of children and adolescents in the United States have engaged in nonsuicidal self-injury (Brausch & Gutierrez, 2010; Bureau, et al., 2010; DiPierro, Sarno, Perego, Gallucci, & Madeddu, 2010; Martin et al., 2011). The majority of these children and teens live with or in the context of family relationships that can exacerbate symptoms and/or assist in recovery. This paper explores nonsuicidal self-injury, parent-adolescent relationship quality, and family resilience.

Nonsuicidal Self-Injury

Nonsuicidal self-injury (NSSI) is defined as intentional destruction of skin or bodily tissue that occurs in non-socially sanctioned ways, such as cutting, bruising or burning skin (American Psychiatric Association, 2013). The average age of onset for this behavior is approximately 16 years of age (Klonsky, 2011). Among teens who have self-injured, frequency of the behavior appears to be generally bimodal: either adolescents engage in the behavior once and never do it again (akin to other risk taking experimentation like trying tobacco products), or it becomes habitual and they engage in multiple times over shorter periods (Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006). The latter pattern of symptoms is considerably more challenging to treat, as there are a number physiological, social, and communicative reinforcers for the behavior once it because habituated (Nock, 2009).

Who Engages in Nonsuicidal Self-Injury?

In addition to the prevalence numbers listed above, more descriptive data about who most commonly engages in the behavior assists in understanding it. While girls tend to engage in more cutting and scratching behaviors, boys tend to engage in more bruising and abrading behaviors (Lloyd-Richardson, Perrine, Dierker, & Kelley, 2008). (Examples

of abrading behaviors include rubbing the skin with sandpaper or burning it with a pencil eraser.) This may complicate diagnosis for boys who engage in the behavior because particularly for those who engage in bruising, an externalizing disorder such as Disruptive Mood Disorder (American Psychiatric Association, 2013), may seem more apparent than depression (this boy may punch walls, but from a primary etiology of sadness, as opposed to overall irritability). Nonsuicidal self-injury has emerged as a problem across racial and ethnic groups that have been studied. However, there are some people groups and nationalities in which this problem has not been examined. Unstudied groups include those residing in second and third worlds. There is no evidence that this is only a problem for the industrialized, but future research in that area is still needed (Muehlenkamp, Claes, Havertape, & Plener, 2012). An important aspect of that future research will be the requirement that nonsuicidal self-injury occur in **non-socially sanctioned** ways. Among people groups with ritualistic scarring or tattooing, nonsuicidal self-injury will need to be differentiated from those acts.

Nonsuicidal Self-Injury and Comorbidity

Nonsuicidal self-injury is frequently comorbid with other health concerns, particularly other mental health diagnoses. The most common diagnoses that are comorbid with NSSI among adults are:

- Depression (Approximately 42% of people who self-injure have depression; Nock et al., 2006).
- Posttraumatic Stress Disorder and/or Generalized Anxiety Disorder (39%; Nock et al., 2006)
- Eating Disorders (24-44%; Brausch & Boone, 2015)

- Substance Abuse disorders (56%; Brausch & Boone, 2015)
- Borderline Personality Disorder (52%; Nock et al., 2006)

Nonsuicidal self-injury fits with these diagnoses largely because of some of the regulatory functions of the behavior (Nock, 2008; Nock, 2009). The presence of NSSI alongside any of these diagnoses does somewhat complicate treatment, although for some of these disorders, such as Borderline Personality Disorder, the presence of NSSI is often considered somewhat of a given with diagnosis (American Psychiatric Association [APA], 2013).

Currently, NSSI is listed on the Diagnostic and Statistical Manual of Mental Disorders, 5th revision (DSM-5) as a condition for further study (APA, 2013). It is not a free standing diagnosis. This makes sense diagnostically: it almost never occurs on a regular basis without another mental health diagnosis alongside it. NSSI often "feeds off of" another existing diagnosis. The challenges of the existing diagnosis increase the need for other coping skills, of which self-injury frequently becomes a maladaptive part.

On the other hand, if NSSI were a free standing diagnosis, it may serve pragmatic utility in easing ability for individuals to get an adequately descriptive diagnosis for a single event of self-injury if it occurred in the context of an adjustment disorder. Currently, if an individual engages in self-injury once in the context of an adjustment disorder, s/he would be diagnosed with an adjustment disorder and the incident of self-injury would be documented in clinical notes and the diagnostic assessment (assuming it comes out in an initial appointment).

Typically, if paperwork follows a client or patient from provider to provider, the diagnosis is the most minimal piece of information that follows from provider to provider

(U.S. Department of Health, 2011). Including a diagnosis of nonsuicidal self-injury, single event, for instance, may serve clients more protectively and more descriptively, than current norms which would only include the diagnosis of adjustment disorder (which can really mean almost anything sub-clinical). For instance, a diagnosis of adjustment disorder might indicate that a client or patient soliciting counseling for a typical grief, a very common experience and diagnostically unremarkable, or it might indicate a single incident of cutting with minimal other affective or functional depressive symptoms. While useful, the adjustment disorder diagnosis is not always very descriptive which can be problematic with risk symptoms, such as self-injury.

Nonsuicidal Self-Injury and Suicide

A common concern among parents and loved ones of people who self-injure is whether NSSI is linked to suicide. The answer to that question is complicated. When people are engaging in nonsuicidal self-injury, their intention is generally not to attempt suicide. Some theorists have been posited that the act of NSSI is an act to avoid a suicide attempt, it is "a morbid attempt at self-help" (Favazza, 1998, pp. xix). Most narratives of people who describe the act of nonsuicidal self-injury do not associate it in the moment with suicide, or with a suicide attempt (Whitlock et al., 2012). Additionally, the most common types of nonsuicidal self-injury are generally superficial cutting or scratching, much of which does not require advanced medical attention and in which the most significant immediate risk is infection (Lloyd-Richardson et al., 2007). The in-the-moment picture of NSSI is generally not one of a suicide attempt.

At the same time, people who engage in nonsuicidal self-injury more than once or twice are at greater risk of eventually experiencing suicidal ideation, and even later (or

prior) suicide attempts. Comorbidity, or the combination of two more diseases at the same time, is one contributing factor for this. Comorbidity may contribute because people who self-injure frequently tend to have more than one mental health diagnosis at one time which contributes to overall suffering and is associated with more complicated, and often, poorer outcomes (Nock et al., 2006). Additionally, some theorists suggest that while the in-the-moment picture of nonsuicidal self-injury is typically not one of a suicide attempt, repeated actions of nonsuicidal self-injury inadvertently work to desensitize an individual to harm to self, and alongside that, suicide. Because nonsuicidal self-injury is an option, suicide becomes more available (Whitlock et al., 2012). Risk assessment for people who self-injure is a central aspect of clinical care.

Nonsuicidal Self-Injury Serves Intrapersonal and Interpersonal Functions

Most theories of nonsuicidal self-injury include some aspects of a functional hypothesis, or a functional explanation. These functional explanations describe why the behavior is continued, in spite of it being harmful and painful for the person who engages in it. These functional explanations are also important because they can help providers and caregivers remain empathically engaged with the people they love, in spite of these confusing and destructive behaviors (Bender, 2005; Linehan, 1993; Nock, 2008).

Intrapersonal Functions

Nonsuicidal self-injury serves intrapersonal functions including affect regulation, pain regulation, and (in some cases) stimulation. Because cutting and other self-harm activities (burning, scratching, and so forth) hurt skin tissue, these actions also serve to release serotonin and other chemicals in the brain that make individuals feel good (Nock, 2008). In this way, nonsuicidal self-injury can have a physiological effect that is not

dissimilar from addiction; the brain becomes habituated to this stimulation and cessation of it can be very challenging. This cycle can be a part of what works to relieve both physical and emotional pain.

Stimulation is also an important intrapersonal function of nonsuicidal self-injury. This function emerges more often among people with neurological or developmental issues. It is largely suspected that the functions that underlie this stimulation need are similar for those who are neurotypical. Nonsuicidal self-injury serves a regulatory function for these people too (Duerden et al., 2012; Iwata, Dorsey, Slifer, Baumen, & Richman, 1994). Treatment of self-injury that meets these functions requires other ways to meet these affective and stimulation related needs. Occupational therapy interventions, cognitive behavioral or dialectical behavioral interventions may be indicated.

Cessation of uncomfortable intrapersonal stimuli can also be a function of self-injury (Nock, 2008). For instance, many adolescents discuss experiencing distressing emotions or affective experiences, such as overwhelming anger or disassociation in PTSD, and utilizing self-injury as a grounding intervention (Auerback et al., 2014). Self-injury can serve to stop distressing emotional or affective experiences in their tracks and bring adolescents back into the moment and improved functioning.

Interpersonal Functions

Nonsuicidal self-injury also serves communicative, belongingness, and social identity functions for adolescents. For children and teens who are suffering and who have attempted to communicate this suffering with others again, and again, and again to inadequate outcomes, increasing the intensity of the communication can make sense. This function is most in line with Linehan's (1993) invalidating home environment construct.

The concept of the invalidation home environment has been well validated (Crowell et al., 2013; Lyons-Ruth, Bureau, Holmes, Easterbrooks, & Brooks, 2013; Yen et al., 2014). Treatment for teens who self-injure in a communicative function improves communication strategies between the teenager and parents / primary caregivers. Both the teen and the parents must shift how they give and receive information.

Self-injury can also serve other social functions, including social identity and belongingness. For some children and teens who self-injure, their own identities as "cutters" can become central to ways that they conceptualize themselves. Erik Erikson's theory of psychosocial development (1980) suggests that the primary task of adolescence is identity versus role confusion. In line with this theoretical standpoint, providing effective treatment to teenagers who identify as "cutters" is complex. In fact, most effective treatments among those who identify as "cutters" respond to and relate to other aspects of the teen's identity. By amplifying other important aspects of who these teens are, the hope is that the functional need for the identity as "cutter" will diminish over time (Klonsky, 2007; Whitlock, Powers, & Eckenrode, 2006).

Family Functioning and Nonsuicidal Self-Injury

While Linehan's (1993) concept of the invalidating home environment is the most explicit in associating family functioning with self-injury, a number of other studies associate family functioning and parenting processes with functional problems that self-injury maladaptively helps address. Specifically, parental criticism (Yates, Tracy, & Luthar, 2008), problems with expressed emotion (Wedig & Nick, 2007), adolescent alienation from parents (Martin et al., 2011), poor communication (Tulloch, Blizzard, & Pinkus, 1997), a disengaged emotional climate (Bureau et al., 2010; Tulloch, Blizzard, &

Pinkus, 1997), poor parent-adolescent bonding (Bureau et al., 2010), poor parent-adolescent relationship quality (Brausch & Gutierrez, 2010; DePierro et al., 2012; Hawton et al., 2002; Wong et al., 2007), and insecure attachment style (Bureau et al., 2010; Hawton et al., 2002; Hilt et al., 2008) have all been associated with the etiology and maintenance of adolescent self-injury. Many of these problems are associated with interpersonal functions of self-injury. At the same time, problems in these areas are associated with other mental health problems for adolescents, which likely increase problems in the intrapersonal domains as well. Families affected by non-experimental self-injury will likely have problems in one or more of these domains.

Families can Assist in Understanding Recovery

Family functioning can assist in understanding recovery from self-injury. Certainly, changes in family functioning can address the problems outlined above that are associated with the etiology and maintenance of self-injury. For instance, parents who are able to decrease frequency and severity of overall criticism and modify their communication to be more specific, constructive, and emotional available may find that the interpersonal functions of adolescent self-injury are somewhat decreased, and similarly, the behavior itself decreased (Nock, Teper, & Hollander, 2007). Alongside this, family factors over and above the problems outlined above may be associated with recovery from adolescent self-injury (Muehlenkamp, 2006).

Theory of Family Resilience

Some of the family factors that may be associated with changes in the way parents think about and relate to self-injury are outlined by Froma Walsh's theory of family resilience (2003). Family resilience posits that family beliefs, coping schemas, and

relational processes can contribute to health and connectedness within the presence of adversity for both families and the individuals within them. In brief, family resilience is defined as the degree to which families stay connected and functional in the presence of adversity. This theory examines how family belief systems, organizational patterns, and communication about and around problem solving positively impact family resilience. Many of the findings of the current study fit well with this theory; parents frequently discussed how their beliefs about adversity and coping enabled them to both be present and flexible with their child as they were going through treatment for adolescent self-injury, and frequently enabled them to solicit care for their child at all in the first place. This paper will explore the connection between parental experiences of adolescent self-injury and family resilience.

Methods

The current study utilized a mixed methods approach to understand 1) how parents conceptualize support and validation in the context of adolescent self-injury and 2) how family resilience functions within families affected by adolescent nonsuicidal self-injury. Research questions included:

- How do parents affected by adolescent self-injury perceive giving and receiving support and validation?
- Do families affected by adolescent self-injury demonstrate resilience or other strengths? If so, how do they describe these qualities in their own families?

Sample

Initial recruitment efforts focused on residential treatment centers in the Minneapolis metropolitan area. When no participants were engaged from those centers,

recruitment efforts expanded to web-based recruiting. All participants were ultimately recruited from web-based settings, specifically public postings on Craigslist, Facebook, Reddit, Twitter, and Instagram. Participants also reported finding information about the study on problem-specific social media groups, such as a Facebook support group for parents of children with fetal alcohol syndrome. This suggests that some participants shared information about the study within their personal networks. For example, after publicly posting on Facebook, someone asked if they could share information about the study within a personal group. Later on, a participant reported finding the study in a closed group.

Twenty parents completed the web-based survey. The majority of participants were female (n = 17), with one identifying as male and one identifying as nonbinary. Similarly, the majority of participants were White (n = 16), and one identified as White and African American, and one responded as “Other.” Only two participants reported living with a spouse or partner. Eight participants reported living with some extended family, grandparents (n = 2) or their own siblings (n = 6). The most common age range was 25-34 years (n = 6). The majority of participants had their children in at least therapy as a past service (n = 16) and over half had children who were currently receiving therapy (n = 16). Similarly over half had children who had tried medication in the past or were currently on medication (n = 11 for both responses). Seven parents had children who had been hospitalized in the past, and one had a child who was hospitalized at the time of the survey. Regarding parental mental health, eight parents endorsed engaging in self-injury themselves at some point in the past, and one reported engaging in the behaviors during the previous week.

Five participants went on to complete qualitative interviews. Four were from the United States and one was from Australia. All of the qualitative participants were white women. Three of their children's main method of self-injury was cutting or scratching, one was head banging and one was self-choking. Length of care for the qualitative sample ranged from nine months to 12 years. Child ages at time of self-injury ranged from 14-16 years. More details on family characteristics can be found in Table 1.

Quantitative Measures

Quantitative measures were used to understand frequency and types of the support that parents of adolescents affected by nonsuicidal self-injury perceived.

Demographic items. All participants completed eight items on their age, gender, race / ethnicity, family composition, types of treatment received, and time in treatment. Gender and race / ethnicity were open response items. Age was a multiple choice item with ages broken out by four year increments ("30-34," "34-39," and so forth). Family composition was measured with the question: "Who lives in the home with you most of the time? Check all that apply." with response items as follows: one parent/guardian, two parents/guardians, biological parent(s), step parent(s), adoptive parent(s), sibling(s), grandparent(s), aunt(s)/uncle(s), other children, other adults. Types of treatment received was measured with the question: "Please check all of the types of treatment you or your teen have received in the past for emotional or behavioral disorders." Responses included: therapy, medication, in-home therapy/skills work, intensive outpatient program (IOP), partial hospitalization program (PHP), inpatient hospitalization, residential treatment, court-ordered interventions (like anger management or probation), alternative treatments (like acupuncture or religious services), and other types of treatment not

mentioned (please specify what other kinds of treatment your child has received). Time in treatment was determined with one slider item. This item read "Please choose what time point most accurately represents you or your child's current stage in treatment for self-injury?" In order the understand whether any patterns emerged between current emotional state and participants' perceptions of support, participants' current affective state were measured with three slider items indicating how depressed, angry, and anxious they were feeling at the time of taking the survey. Finally, a "yes or no" item on whether the participant had ever self-injured themselves was included.

Nonsuicidal self-injury. If the participant indicated that s/he had engaged in self-injury in the past or currently, s/he was prompted to complete a more detailed questionnaire on self-injury. The Deliberate Self Harm Inventory – Short Version (DSHI; Gratz, 2001) was used to indicate overall lifelong severity of self-injury. An example item is: "Have you ever cut your wrists, arms, or other areas of your body?" with responses related to frequency ("never," "once," "more than once," or "many times") and concurrence ("When was the last time this occurred?" Responses included: "never," "more than one week ago," "during the past week.")

Social support. Affective support was measured with the Social Provision Scale (SPS; Russell & Cutrona, 1987). This 24 item scale included the following constructs: guidance, reliable alliance, reassurance of worth, attachment, social integration, and opportunity for nurturance. This measure has demonstrated high reliability in previous studies with alpha coefficients ranging from .66-.76 (Russell, Altmairer, & Van Velzen, 1987).

Satisfaction with relationships and number of perceived social supports was measured with the Social Support Questionnaire (SSQ; Sarason, Sarason, Herin, & Pierce, 1987). This 27 item scale evaluated the number of supportive contacts in different categories and the degree of satisfaction that participants perceive in those relationships. It has demonstrated high internal reliability as well with alphas ranging from .95-.97 (Sarason et al., 1983; Zielinski & Veileux, 2014).

Qualitative Methods

Participants who opted in to take part in the qualitative interview portion were contacted to schedule telephone interviews. The goal of these interviews was to understand the lived experience of support among parents of teens affected by self-injury. Informed by a phenomenological approach (Cresswell, 2013; Moustakas, 1994), qualitative questions were designed to elicit parents' understandings, beliefs, attitudes, and experiences of giving and receiving support and validation when they had a child who self-injured. Specific questions that were asked in these semi-structured interviews included:

- Tell me about how your relationships have impacted your experience of nonsuicidal self-injury.
- Have your relationships helped you to manage mental health symptoms? How so?
- Tell me about a time when you felt understood by someone you love.
- What advice do you have for other children who are going through some of the same things that you/your child has?
- What advice do you have for other parents who have children who are going through the same things that you/your child are?

Finally, background questions about how parents found out about their child's self-injury and their path through care to date were frequently included, depending on the degree to which they discussed those items in the questions above.

Six parents communicated interest in qualitative interviews, and five ultimately completed those interviews. To improve validity, one participant volunteered as a member checker and one peer de-briefer was used. Data were organized and analyzed as follows:

1. Interviews were scheduled and completed by me, the primary author on this study. Each interview was audio-recorded. During the interviews, field notes were also taken. Field notes here are defined as those notes that were taken during the act of interviewing. They differ from memos, which were taken later through the process to process my impressions of the topic with more chronological distance from the actual interviews.
2. After the interview, each participant who agreed to release an email address was sent the field notes and transcripts from their interview. They were asked to send any clarifications, corrections, and/or additional thoughts based on the notes or other recollections from the interview. A little over half of the participants released email addresses (n = 3), and none of them sent additional notes.
3. Memoing occurred outside of actual interviews, but throughout the interviewing process in a separate research journal. Memos focused on potential patterns, themes, and relationships within the whole of the interviews that emerged after the initial interviews.

4. Each interview was listened to once, during which time more memoing was completed, and then transcribed verbatim by me.
5. After the third interview, each transcript was skimmed by me and another round of memoing occurred using comments in the documents to begin to look at themes.
6. After the fifth interview, all transcripts were read over again, alongside more memoing, to assess themes.
7. Informed by my field notes and memos, open coding commenced; this resulted in 92 initial themes. The goal of these initial themes was to stay as close to participants' language as possible. Examples of initial codes included: "Awful things have happened," "His adult system fell apart," and "Bad parenting hurt my kid."
8. After reading over codes and transcripts again, I began to group codes into major, minor, and miscellaneous themes. Major themes were ones that at least 80% (n = 4) of participants reported, minor themes were ones that 40% (n = 2) of participants engaged with, and miscellaneous themes were ones that only one participant reported on.
9. Major and minor themes were abstracted to result in axial codes. Abstracting was directed by Walsh's theory of family resilience (Walsh, 2006). I chose that theory because it was most reflective of my initial research questions about family experiences of support. Axial codes emphasized relationships between codes and relationships between the codes and the theory.

10. I met with my peer de-briefer to discuss initial axial codes. We discussed potential alternative explanations for the patterns I identified. We ultimately landed on the themes described in step #11 and Table 2.
11. After axial coding and meeting with my peer debriefer, I arrived on 4 major themes, 12 sub-themes (minor codes), and 11 miscellaneous themes. A description of these themes is presented in Table 2.
12. I emailed my member checker to check validity of family resilience codes. Specific content included descriptions of major codes and sub-codes, with illustrative quotes for each sub-code. Quotes were chosen by the degree that the represented the sub-code, and were not from that particular interviewee's transcript (I felt that including quotes from her own interview would inappropriately increase the likelihood that she would agree with my thoughts on it). I also met with my peer de-briefer again at this point to discuss continued axial coding and the codes and quotes I chose to send to my member checker.
13. My member checker emailed back confirming codes and detailing additional thoughts. More detail on those additional thoughts is included below.

Using this method, I ultimately did not reach data saturation; this is likely due to low sample size. Each theme reflected in this final write up was reported by at least 80% of the reporting sample (n = 4), but there were new themes that emerged in the fifth and final interview. Similarly, the member checker reported an additional theme that she thought was very important, but she was the only one who reported it. I chose not to emphasize that additional theme, even though the member checker emphasized it, to both protect her confidentiality and because it was not reflected in other

interviews. It may be that additional interviews would have yielded more reporters who emphasized that additional theme.

Quantitative Findings

Exploratory analyses were completed on quantitative scales to understand how participants experienced support. Due to small sample size, no findings were statistically powerful enough to demonstrate significance. Likewise, the sample demonstrated a substantial amount of homogeneity. While no significant difference in gender, race, or family composition were associated with changes in perceived support, these findings should not be read to say that demographic differences are not associated with changes in perceived support. This study sample did not demonstrate enough difference to come to any reasonable conclusions in that area.

The Social Provision Scale (Russell & Cutrona, 1987) was used to understand how participants perceived support in different domains, including: attachment, social integration, reassurance of worth, reliable alliance, guidance, and opportunity for nurturance. Lower scores on this scale indicated less perceived support. The Cronbach alpha score on the global scale was high ($\alpha = .86$). The mean score on the global scale was 2.92, with a standard deviation of .41. This average score reflects that participants overall agree that they have an acceptable level of social support.

Internal reliabilities within the subscales varied significantly, suggesting that different components of support might be more complicated for the parents in this sample. Reliable alliance ($\alpha = .55$, M=3, SD =.42) and reassurance of worth ($\alpha = .52$, M = 2.82, SD =.52) had the lowest internal reliability scores of in this sample. Guidance ($\alpha = .83$, M = 2.83, SD =.53) and opportunity for nurturance ($\alpha = .83$, M = 3.32, SD = .72) had

the highest alpha scores of the subscales in this sample. Attachment (α = .68, M = 2.86, SD = .68) and social integration (α = .78, M = 2.86, SD = .68) demonstrated more moderate alphas.

The Social Support Questionnaire (Sarason et al., 1987) was used to understand the number of supportive contacts that parents reported perceiving and utilizing. The lowest number of supportive contacts that a participant reported was zero and the highest number of contacts that a participant reported for an item was nine. On average, parents reported a total of three supportive people in their lives (M = 2.86, SD = 1.32) and satisfaction with the degree of support that those people offered (M = 6.06, SD = .56). The fewest number of supportive contacts were reported in the categories of unconditional care and support for sadness (85% of participants reported having one or two supportive contacts in both categories, n = 13).

Qualitative Findings

To help understand qualitative findings, basic demographic information about participants is included. Pseudonyms have been used to protect confidentiality. Jan was an Australian mother of a 14 year old female who had been engaging in scratching for about a year. Angela was an American mother of another 14 year old male who had been engaging in choking himself for about a year and a half. Angela's son was in a residential treatment center at the time of the interview. Pam was another American mother of a 15 year old male who had been engaged in head-banging behaviors for about 12 years. Pam's son also currently resided outside of the home in a group home setting. Meredith was an American mother of a 20 year old adult child who began cutting with a razor four years prior. Kelly was an American mother of a 15 year old male who had been cutting

for about a year. More specific demographic information on each participant is included in Table 1.

The Meaning of Adversity: Why did my Child begin to Hurt His or Her Self?

When asked about their children's self-injury, all parents described their beliefs about why their child had began self-injuring (n = 5). Many parents described parenting actions or inactions as important causes. Angela described her own challenges with drinking as a factor that made it difficult for her to parent her son prior to him starting engaging in self-injurious behavior. She said

> I didn't realize that I, myself, was um, drinking excessively. I was drinking, but I started drinking even more when he was hospitalized, with all of that time on my hands… I wasn't being the parent I should have been.

Specifically, Angela reported that alcoholism made it difficult for her to respond effectively to her son's requests for help.

> Funny thing is he would say to me, 'Mom, I need to get back to my medication, I need to go see a doctor," and I would kind of shrug and, just, in one ear out the other… He said to me that he couldn't really wait for additional support and just, I wasn't really paying attention, I just thought, whatever.

Angela described these details with great remorse, at times becoming tearful during our interview.

Traumatic experiences within the family were sometimes also included as a cause. Meredith described her daughter experiencing sexual assault from a foster sibling as a cause:

> We had a foster child at that time too… and he had inappropriately touched her.

> And this was what brought everything forth after he touched her and she reported it to her preschool, and then we had a [child protection] case opened up on us.

Similarly, Angela reported that prior to her daughter's first hospitalization, they were living with her son who was physically and verbally abusive towards herself, her younger son, and her older son's girlfriend. Angela reported that after experiencing that, her son began "to feel worthless, shame, and self-blame, and he started to be overwhelmed, and then he started isolating herself."

Problems with their children's coping skills or coping styles were also described as reasons why children engaged in self-injury. Jan described her own experience of her daughter's self-injury in language that could have been verbatim from a therapist or research article on the topic: "My take is that the behavior is just a symptom of the anger and the frustration that she's feeling emotionally… the behavior is just a symptom of where she's at." Kelly also felt as though her child experienced affective relief after self-injuring: "He does experience the same sort of emotional release associated with it [self-injuring]."

Finally, parents described an element of bad luck involved in why their child had begun engaging in self-injurious behaviors. Jan described how her daughter's scratching was, in some ways, random: "In a way, she didn't choose this… it's her way of coping in the moment." Pam's son began engaging in head-banging behaviors secondary to his developmental disorder diagnosis. She passionately described the importance of not getting stuck in figuring out why, but moving forward to action:

> No, we don't know what causes autism. No, we don't know what causes Asperger's. So let's stop, let's move on from that… there are proven

> interventions, there is ABA [applied behavioral analysis] and other things that we know work, so let's get them on board.

Connectedness

All parents talked about connectedness, both with their child and with people outside of their family. Parents described ways that they connected their child as including both staying accessible and giving support to the child, while also allowing the child distance and privacy. For instance, Jan described building connection in this way:

> The best thing for me, I think a bit of a sideways approach. So she spends most of the evening in her bedroom, and you know, just she's an artist, so a lot of the time she's drawing or looking at YouTube or whatever, so I'll just go and lie down on her bed and talk about incidental stuff. So probably eight times out of ten that I do that, she will suddenly start talking about her day, and we get some dialogue going.

Connection was also described in terms of the ways that parents appreciated their child. Kelly talked about how she and her son had been learning about the therapeutic concept of validation and how her son had been helping her learn about and notice it. She described appreciating his efforts:

> I just so appreciate my son, because if there's anything where I get a little slack, it's in validation. There have been so many times when he says 'wow, it was super invalidating when that person said that to you.' So he's taken it upon himself to teach me validation, because I just suck at it so bad.

Pam also described feeling connected with her child in day-to-day family interactions, even though her child lived outside of her home. She reported:

> We have a good routine of daily phone calls and I get a lot of his school stuff, all of his sports stuff, he comes over and swims three or four times a week. He and his sister are very close, they love to watch Netflix and go to the movies together. He loves computers and networks and games, so his sister helps him a lot with that, and I just sometimes, I just don't know as much about it. Just hanging out. Hanging out with his dog, he has a dog named Jack, so when he spends time with me, he spends a lot of time with Jack.

Cost of Connectedness. The ways that parents talked about feeling connected with their child were described as both personally meaningful and at the very same time, sometimes lonesome and burdensome. Three mothers talked about a period of time when they were the only ones who knew that their children were engaged in self-injury. Jan described that time as a "privilege." She said: "[I] recognize the behavior, the covering the arms and things like that… I'm privileged. There must be some other things I don't know about." Meredith described herself as her daughter's only support person: "She's alone, she's got nobody but me… she's got nobody besides me. She's got to keep going. She's told me a million times that if she didn't have me, she couldn't keep going."

Maintaining Flexibility and Boundaries in Family Roles

Flexibility and boundaries were discussed. Many parents talked about deciding to solicit support from others and include others in their family system because they felt meaningfully supported by some specific others (n = 4). For instance, many talked about feeling supported by others who had been through similar situations. Kelly talked about having friends with children with mental health issues: "There are other people in my social circle who have raised kids with mental health issues, or have kids with current

mental health issues and I find that those people are the ones who get it." Meredith described getting a great deal of her social support through web-based social media tools, and finding that those tools allowed her to more readily access parents in similar situations: "So these total strangers who I never, ever see are the people who I trust. Which is weird, but we're all going through the same thing and we all struggle with the same issues."

In addition to feeling known, parents also described not having to monitor others' emotional responses to their child's symptoms was described as an advantage to disclosing and help-seeking with parents of children with similar challenges. Jan described the advantage of disclosing to her sister whose child had also engaged in self-injury "She doesn't really kind of freak out… She just doesn't make it into a catastrophe."

Boundaries: Deciding Who is In and Who is Out. Parents often described shifting their thinking about who gets to know what is going on with their child, being more protective or intentional about sharing or not sharing information, and understanding that a good way to stay connected with their child who self-injures is sometimes to give them space. Along the same lines, since the mothers interviewed were often the first to find out about their child's self-injury, they were also often the ones who made decisions about whether and when to tell their child's fathers. Jan described caution before telling her spouse about their daughter's self-injury: "I didn't want [her dad] to judge her in a disciplinary way and that's more to protect her." She also described ultimately feeling relief when she told her spouse and he responded gently:

> I just noticed that he was a little more conscious of his interactions with [our daughter]. He sort of went into her bedroom and made a joke and you know, just sort of incidental chat, I suppose. Nothing heavy or anything like that, just sort of acknowledging and making a conscious connection with her.

Angela also described moving out of her older son's house as a decision about boundaries. After describing how he was physically and verbally abusive to herself and her younger son, she said:

> I'm not in that situation anymore. I have, I cannot be in that situation as an adult. I Need to focus on being a mom to my daughter and provide a safe home for me and her. And, um, I ultimately moved away from them. I moved away, you know. I left. I can't have that in my life.

Hopefulness

Hope undergirded many of these interviews (n = 4). Hope was described both in terms of hope for their own child's symptoms, and hope that things can be better for other families in similar situations. Jan described remembering her own adolescence as a tumultuous time and having faith that because she made it through, her daughter would as well:

> I can just relate to those frustrations and that emotional turmoil and that frustration that I was feeling. In a way, though, it gives me confidence that she can get through it…You just have to have faith that you'll get through it. Celebrate each birthday, there's another year, hopefully a little more hormonal stability, and another year of being free from chemicals or drugs or other ways to manage that anxiety. There's a lot of things along the way, and appreciate those

golden moments when there are real connectedness.

Kelly described feeling hopeful that other parents would be able to solicit support from each other:

> We tend to isolate ourselves, and at the same time, when you sort of peek around a little bit you realize that you're not the only one. And until you connect with the right groups or the right people, you really do feel like an isolated island.

Angela became tearful when discussing how thankful she was that her son survived not only self-injury, but also multiple suicide attempts:

> I'm just thankful that my son was given another chance. You know where he stays at there's a cemetery across the street…One day, when I looked up, there was a funeral going on across the street, and it was a little kid. You know, there was the little box, and teddy bears and stuff? Anyways, I looked at that, and I looked back at the building where my son resided, and I thought I would rather, you know, because he could have died when he overdosed. Um, but, I'm just very thankful that he is residential. And across the street is that cemetery, and I just think that God gave him another chance and gave me another to chance to get myself together, to get my stuff together, to become a new person.

Discussion

This study explored parental experiences of support with their adolescent children who had engaged in nonsuicidal self-injury. A range of experiences and strengths was evident, as well as some common challenges.

This study had notable strengths in design and theory. First, use of a mixed methods approach made it possible to find out substantially more details that would not

have been as possible with an exclusively qualitative or quantitative approach. Second, measures for this study demonstrated high internal reliability. Finally, this study was able to access a difficult to reach population and the interviews, in particular, demonstrated considerable depth and richness. Strengths were also related to the theory of family resilience, and parents generally perceived support in their parenting relationships with their child. Adult-peer support was more difficult to access for parents in this sample due to stigma, loneliness, and perceived access to others with similar experiences.

Low sample size is both the most substantial limitation and a substantial finding of this study. Limitations of this low sample size were significant. It was not possible to determine statistical significance on any quantitative measures. Likewise, due to homogeneity within the sample, it was not possible to track any significant differences between demographic factors and perceptions of support. These are important limitations because the true presence or absence of statistical significance in any of these domains would have important research and clinical implications. For instance, if there were truly no statistically significant differences between gender and degree of perceived social support, clinicians could shift thinking and perform more cursory assessments of parental support systems by gender. More rapid assessments of those kinds of background factors would mean that more time could be appropriately allocated to other parts of family and mental health assessments. Similarly, while no differences emerged between racial background and perceived support, if differences are, in fact, present, they may be due to differences in kinship support, perceived stigma, spirituality, or other important factors (Garland et al., 2014; Samaan, 2000). More research is needed to determine where to most efficaciously aim interventions.

Research Implications

Low sample size was also a substantial finding in this study. Although NSSI is a common health problem in both clinical and community samples of adolescents, the vast majority of whom have parents in their lives, recruiting parents was a serious challenge to this study. After multiple recruitment strategies yielded limited results, secondary data were accessed. Compellingly, this secondary dataset from a major research institution with a fully funded program in self-injury also demonstrated a very small sample size (no more than 20 parent-child dyads). It would appear that there is something about this population that is very difficult to access.

The initial sampling strategy for this study involved recruiting from two residential treatment centers in a major metropolitan area using fliers and staff education. When those approaches were not effective, leadership within the treatment centers invited me to come and speak to residents about the study. This invitation was denied by the University Institutional Review Board (IRB). Feedback from residential treatment centers focused on how their systems are fairly closed, and face time with those systems was going to be one of the only ways I would obtain access. At the same time, the IRB had concerns that by increasing face time, it would become substantially more difficult for adolescents or their parents to decline to participate. Unfortunately, it was not possible in this study to develop a plan to increase engagement that adequately protected against patient coercion, and met the needs of both the residential treatment facilities and the University IRB. At that point, web-based recruiting was approved and began, and all participants for this study were ultimately recruited using public social media campaigns.

While parents of adolescents who self-injure are frequently difficult to access for research studies, parents of adolescents in very high levels of care like residential treatment centers are substantially more so. Understanding and communicating the family stories, risks, and resiliencies of this population is important, not only for the clinicians who work with these high risk families, but also for researchers to further understand and validate family resilience theories. If family resilience emerges, even in families with a great deal of apparent risk, the theory becomes that much more validated. That matters because too often families and parents are viewed as etiologic to their child's illness, and their unique and essential contributions to their child's recovery are minimized.

Feasibility issues in this study speak to the potential utility of using a more purposeful community-based participatory research (CBPR) approach to future research in this area. Joining with families affected by nonsuicidal self-injury and involving them in all aspects of research design, implementation, and interpretation would likely slow the research down somewhat, but more importantly, increase the likelihood of institutional support at multiple levels and lend more credibility to overall findings. For example, this research could begin by recruiting parent leaders from residential treatment centers that have established parent and family support programs. Research development and design would be informed by group work with those parents as decision-making partners and guides into practical approaches that would better increase the likelihood of research engagement.

Given broad challenges in recruiting parents to studies on this topic, it may be that a qualitative study about barriers to participation in research would also be a logical next step. Using a web-based survey to understand attitudes towards research and researchers,

barriers to participation in research studies, and potential compensation strategies with very minimal reference to self-injury may be a more useful way to understand novel ways to recruit parents, and especially recruit parent-child dyads. This would hopefully circumvent caution due to stigma and increase participation.

Selection bias is another likely complicating factor in understanding parenting and self-injury. Given the small sample size in this and other datasets on parenting and self-injury, it is likely that the participants who self-select do so due to unique characteristics. For instance, it may be that these participants experience less shame or stigma than others, they may be more optimistic than others, or they may be more trusting of research or institutional supports than others. Even demographic characteristics spoke to some element of self-selection. This study consisted almost entirely of mothers, and a great deal of the literature about parenting a child with mental illness or self-injury is based on mothers' perceptions; very little is known about the experiences of fathers. It is difficult to make informed guesses about what the whole population of parents of teens who self-injure are like based on these self-selected samples. One way to better understand this may be to increase triangulation of the data by recruiting samples that include parents (both mothers and fathers), adolescents, adult friends, therapists, and case workers, or other professionals, to talk about how they all understand parenting a child who self-injures. Triangulation should include a mix of professional and informal informants to balance likelihood of participating in a study (where professionals may be more likely to participate), with the likelihood of negative pre-existing attributions about parenting a child who self-injures (where professionals may also be more likely to have more immediate negative attributions due to the prevalence of concepts like the invalidating

home environment). If there are any imbalances in the make-up of triangulated samples, the imbalance should favor informal informants to increase the validity of the data.

Regardless of approach, future researchers are guided to be aware of the significant challenges to recruitment and sampling in this population and develop plans to account for those challenges. Increasing diversity of samples in terms of gender, race, role within the family or professional system, and experience with mental health is an ambitious and vital goal for improving validity of this research.

Clinical Implications

Although the findings of this study are not generalizable to the population, the presence of family strengths as described by the theory of family resilience speaks to the importance of assessing these areas in families affected by nonsuicidal self-injury. Importantly, family resilience theory does not advocate for the use of cut-off to deal with challenging interpersonal or intra-familial experiences. The theory instead supports family use of flexibility and boundaries to ensure emotional connectedness, while also allowing for shifts in family roles and responsibilities. The families present in this sample fit with that supposition. They described feeling more hopeful and more actively engaged in therapy when they described perceiving more meaningful connections with their family and others. Exploring intentionality in these areas may be a fruitful conversation for families affected by nonsuicidal self-injury. Families affected by adolescent nonsuicidal self-injury are able to stay connected to each other and deserve care that supports those connections and strengthens them.

Extra-familial supports were also described as important for family functioning and connectedness in this sample. Parents reported feeling a great deal of pride in their

role as support people to their child, but often limited ability to solicit support for themselves. Assisting adolescents and families in making purposeful decisions about disclosure and help seeking in informal and formal relationships may be an important goal for care.

Meaning-making through beliefs about etiology and hope were evident in both the theory and this research as well. Exploring family explanations for why an adolescent is engaged in nonsuicidal self-injury, while also likely prioritizing the child's explanation for their behaviors will likely be an important aspect of developing a shared family story about this challenge. Similarly, helping families explore hopefulness in the context of this challenge will likely also be an important goal for family-informed care.

Conclusion

Families affected by adolescent nonsuicidal self-injury have a number of relational challenges and, at the same time, demonstrate enormous capacity for relational strength in the midst of crisis. Families seeking care for adolescent self-injury will be well served by clinicians who identify, support, and amplify these existing family strengths. Further research is needed to understand more about the quantity and quality of those strengths, how those strengths may best serve recovery from nonsuicidal self-injury, and how to most effectively guide and target clinical interventions.

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Table 1: Participant Characteristics, Qualitative Sample

Pseudonym	Marital Status	Child Gender	Child's Mental Health Diagnosis(es)	Care Level at Interview
Jan	Married	Female	None	Therapy
Angela	Single	Male	Posttraumatic Stress Disorder; Generalized Anxiety Disorder; Attention Deficit Disorder, Depression	Residential Treatment
Pam	Single	Male	Fetal Alcohol Syndrome; Pervasive Development Disorder; Dysthymia	Therapeutic Group Home
Meredith	Divorced	Female	Generalized Anxiety Disorder	None
Kelly	Single	Male	Major Depression; Autism Spectrum Disorder	Intensive Outpatient Treatment

Table 2: Qualitative Codes

Major Codes	Sub-Codes (Minor Codes)	Miscellaneous Codes
Advice	Advice to other children; Advice to parents	
Family Resilience	Flexibility in boundaries/roles; Clarity/open emotional expression; Connectedness; Meaning of adversity; Transcendence/spirituality	
Family relationships	Other family members' perceptions; Parent relationship with child; Parent's relationship with themselves	
Other outside relationships	Relationships with treatment providers; Other macrosystem relationships; Stigma	
		Adopted child; Be Careful- eggshells; Developmental Disorder; Family strengths; Just knowing it; Medications help my kid; Self-injury for a long time; Suicide; What helps; When he comes back to himself