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The punished self, the unknown self, and the harmed self - towards a more nuanced understanding of self-harm in adolescence
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Terror happens when you are alone in the dark with nothing for company except your imagination (Edgar Allan Poe)

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APPENDIX A: Declaration of content

I Acknowledgements

This PhD project was developed out of curiosity and frustration. After 15 years in public health service, I had extensive clinical practice working with girls and boys who harmed themselves. Even though they often did not want to end their self-harm, or struggled to find motivation for change, they came to the clinic, sent by their parents or a school nurse who were worried for them. How could I best help them? What did they need in order to end this apparently destructive behavior? I read research literature, theoretical perspectives and treatment models to learn about the most effective interventions. Still, I longed for a deeper understanding – from my patients' perspective, from within – which could help me to help them in the best way. I am indebted to the young girls and boys who agreed to be part of this research project. They gave me valuable, deeply human and meaningful descriptions of their inner life and relational context. I hope you have peace. Be kind to yourself.

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II Summary: The punished, the unknown self, and the harmed self – towards a more nuanced understanding of self-harm in adolescence

The object of this study is self-harm among adolescents – a phenomenon that has been documented in medical literature since the 19th century. In the clinic, clinicians meet young people, most often girls, who have cut, scratched or burned themselves repeatedly. However, there is a great diversity among them – some have intentions of suicide and others do not, some harm themselves for a limited period of time and others continue into adulthood. Self-harm can be difficult to understand for the young people themselves, their family and health workers. They often struggle to verbalize their problems, feel misunderstood or experience difficult encounters with the health care service. The aim of this study was twofold: Firstly, to enhance understanding of these vulnerable adolescents' subjective experience of their own self-harm. Secondly, to explore differences in how self-harm became important in their life.

Epidemiological and survey studies on self-harm have yielded knowledge on frequency, risk factors, associated mental illnesses, and some evidence-based models. Self-harm as a function of affect-regulation – reducing overwhelming and difficult feelings and bringing relief and control – is supported. However, theories and questionnaires of self-harm are mostly developed from adult patients. Although self-harm usually starts in adolescence, most reviews focus on adult samples and often exclude qualitative studies.

The first step was to systematically synthesize knowledge from 20 qualitative studies on adolescents' (12-18 years of age) first-person descriptions of self-harm in clinical and non-clinical samples. This meta-synthesis shows that self-harm is described as a way or attempt to: 1) obtain release, 2) control difficult feelings, 3) represent unaccepted feelings, and 4) connect with others. The findings nuance the theory of self-harm as affect-regulation by proposing that self-harm can be an attempt to *express* or *share* important emotional and relational information without words. Self-harm may be a destructive solution to *conflictual developmental tasks* during adolescence of balancing a need to regulate *and* express experiences to oneself and others *and* a relational need for care. By using one's body, difficult experiences are handled and – in a concrete way – kept private to not be a burden to others.

The second step was to collect personal data (Life-mode Interviews) from a clinical sample of 21 adolescents (13-18 years old) who self-harmed (with or without suicidal intentions). In the data analysis of the personal interviews, Interpretative Phenomenological Analysis was applied along the lines of exposed themes of descriptions *and* essential features of the participants' experience. To describe the sample, structured data were collected on frequency and form of self-harm (Linehan Parasuicide History, LPH), on mental illness

(International Neuropsychiatric Interview, MINI), on personality pathology (Structured Interview for DSM-IV Personality, SIDP-IV), and on experiences in close relationships (Transition to Adulthood Attachment Interview, TAAI), which can bring information on the capacity of reflective functioning (an operationalization of mentalization).

Results from the multiple case-study highlight differences in young girls' pathways into and out of self-harm. All participants began self-harming because of emotional and relational problems. They were ambivalent to treatment and to ending self-harm. Even if they valued exploring self-harm situations with the therapist, they did not relate ending self-harm to treatment and emphasized a discovery of their own way to quit self-harm. Further, they did not constitute a uniform group. They described initial problems differently – as self-criticism, diffuse stress, or earlier traumatic events. Variations in capacity for affect-integration and mentalization indicated different pathways out of self-harm – being understood and develop self-supporting monologues, sharing experiences and try coping-strategies, or being respected and receive practical support – which may inform treatment adjustments.

Furthermore, *three sub-types with different essential features* of self-states and ways of acting out during self-harm were identified: "I deserve it" (sub-type #1), "I don't want to feel anything" (sub-type #2), and "I'm harmed, and no one cares" (sub-type #3). These three sub-types indicate a diversity in affect-integration and capacity of mentalization among self-harming girls. Self-states during self-harm are discussed as emerging *self-representations* — "the punished self" (sub-type #1), "the unknown self" (sub-type #2), and "the harmed self" (sub-type #3). The self-states during self-harm may contain important experiences of self that need to be processed and integrated in different degrees. Three sub-types illustrate how self-harm can express conflictual, undeveloped or disturbed aspects of self-organization.

Self-harm is discussed as a transdiagnostic symptom. A multiple method study of self-harm and different theoretical perspectives are emphasized to enhance dissimilar aspects of this complex phenomenon. Self-harm is related to mental illness *and* developmental challenges of psychological separation, to establish boundaries and to represent self to oneself and others. In this way, self-harm is a way to regulate feelings *and* an attempt to build a self *and* a struggle to communicate in a relational context. Further research should study trajectories from adolescence into adulthood – towards a nuanced understanding of self-harm in regard to developmental disturbances, mental illness, and sociocultural involvement.

III List of papers

Article 1:

Stänicke, L. I., Haavind, H., & Gullestad, S. E. (2018). How do young people understand their own self-harm? A meta-synthesis of adolescents' subjective experience of their own self-harm. *Adolescent Research Review*, *3*(2), 173-191. doi:10.1007/s40894-018-0080-9

Article 2:

Stänicke, L. I., Haavind, H., Rø, F. G., & Gullestad, S. E. (2019). Discovering one's own way: Adolescents' different pathways *into* and *out* of self-harm. *Journal of Adolescent Research*. doi:10.1177/0743558419883360 (published 1.11.19)

Article 3:

Stänicke, L. I. (submitted). Sub-types in self-states during self-harm: A qualitative study of adolescent girls in a clinical sample.

1 Introduction: Self-harm in adolescence

In the clinic, therapists and health workers meet adolescents, mostly girls, who harm themselves. Although these youths want help, several struggle with the decision to end self-harming. This struggle often challenges the overall treatment process of reducing symptoms or destructive behavior and exploring new coping strategies (Hawton, Witt, et al., 2015). Another goal in therapy is to increase self-knowledge, which may in turn increase motivation for change. A challenge in clinical work with adolescents who self-harm, is that they often struggle to describe problems, intentions or experiences. As a clinician, even with several years of clinical experience, it is challenging to understand their behavior. A state of feeling helpless or overwhelmed is not uncommon (Saunder, Hawton, Fortune, & Farrell, 2012).

How can knowledge on self-harm help me as a clinician to understand girls' and boys' self-harm? In the following (Chapter 1), I will give a presentation of the status of knowledge on self-harm among adolescents on a group level, and I point to the need to understand *the variety* among these adolescents. Then, because self-harm begins in adolescence, I will emphasize a need to combine knowledge on self-harm as a symptom of mental illness with knowledge on developmental challenges. In the next section (Chapter 2), I will present several perspectives to understand this phenomenon and highlight how different perspectives are supported by, or derived from, different research methods. Thereafter (Chapter 3), I will turn to studies of lived experience on self-harm and argue that there is a need for a systematic study of adolescents' *experience* of self-harming and the *diversity* among them. After I have presented the research questions for my study (Chapter 4), and the findings and summary of the three papers in this project (Chapter 5), I discuss the choice of research design and chosen methodology (Chapter 6). In the end (Chapter 7), the results are discussed according to how this knowledge contributes towards a nuanced understanding of self-harm among adolescents and how it can be helpful to the clinician.

1.1 Self-harm – definition, frequency and risk factors

Defining self-harm. "Self-harm", also called "self-mutilation", "self-injury", "deliberate self-harm" or "self-inflicted self-injury", in the UK refers to the "intentional self-poisoning or self-injury, irrespective of type of motive or extent of suicidal intent" (Hawton, Saunders, & O'Connor, 2012, p. 2373). However, in the US, the term "non-suicidal self-injury" (NSSI) is more common and refers to "the deliberate destruction of one's own bodily tissue in the absence of suicidal intent and for reasons not socially sanctioned" (Benley, Nock & Barlow,

2014, p. 638). There is an ongoing discussion – primarily between researchers from the UK and US – about whether self-harm includes self-inflicted injurious behavior with suicide ideation. Hawton and colleagues (2012) argue that self-harm behavior like cutting and an attempted suicide may be two expressions of "suicidal ideation". The self-harming behavior of cutting is associated with a higher risk of suicide (Hawton, Bergen, et al., 2015). Still, many adolescents harm themselves without attempting suicide, and Nock (2014) argues that self-harm and a suicide attempt are different phenomena. The differences in definitions and terminology (see Muhlenkamp, Hoff, Licht, Azure, & Hasenzahl, 2008; Swannell, Martin, Page, Hasking, & St. John, 2014) are a problem when comparing findings from epidemiological studies. However, despite the debated definition of self-harm, epidemiological and survey studies have produced somewhat convergent information at a group-level in regard to form, frequency, risk factors and associated mental illnesses of self-harm (Miller, Massing-Schaffer, Owens, & Prinstein, 2019).

Form and frequency of self-harm. Self-harm usually begins in adolescence, with an onset of 12-13 years of age (Hawton, Bergen, et al., 2015; Swanell et al., 2014). Cutting is the most common method of self-harm among both genders, but most adolescents report using more than one method (Bentley et al., 2014; Whitlock & Selekman, 2014). Several studies show that self-harm has an estimated prevalence among adolescents of 13-17% in community samples (Swannell et al., 2014) and up to 40-60% (Klonsky, Victor, & Saffer, 2014) in clinical samples. The numbers reflect data on individuals without intellectual or neurodevelopmental disorders (Miller et al., 2019). Although some studies report that girls harm themselves up to five times more than boys (Bresin & Schoenleber, 2014), the variability might be related to divergence in the methods: girls report more direct forms of self-harm like cutting and boys report more hitting and burning and indirect forms of selfharm (e.g., involvement in fights or risky situations) (Klonsky et al., 2014; Möhl & Skandsen, 2012; Sutton, 2007). There is also greater prevalence of self-harm among girls in the clinic compared to community samples (Bresin & Schoenleber, 2014). There are inconsistent findings about the prevalence of self-harm across ethnicity or socio-economic status (SES), but rates cross-nationally are more consistent (Miller et al., 2019).

Severity of self-harm is often conceptualized as the degree of tissue damage caused by the injury and the extent of medical attention necessary to treat the injury (Miller et al., 2019). Favazza (1987) proposes the term "major" self-harm involving the removal of body parts (like an eye, leg or genitals, mostly associated with psychosis), "moderate" to superficial

tissue-damage (most commonly by cutting, associated with several mental illnesses), and "stereotypic" to repetitive and obsessional behavior (like pulling out hair or head-banging, associated with developmental disorder, compulsive acts or mental retardation).

Although, moderate self-harm is most common in adolescent clinical populations, there are differences among these adolescents in the *frequency* and *duration* of self-harm. Some adolescents cut, burn or hit themselves once a week or month, and others harm themselves repeatedly and extensively throughout the week or day. While many girls or boys cut themselves superficially and in moderate form, some cut deep and risk severe tissue and nerve damage. Further, some girls and boys quit after a few attempts, some after a few years, and others continue into adulthood with extensive mental problems.

Risk factors of self-harm and associated mental illnesses. Several studies have identified some general risk factors for self-harm: a) socio-demographic and educational factors (female gender, low socio-economic status, lesbian, gay, bisexual or transgender sexual orientation, and limited educational possibilities), b) individual negative life events and family adversity (parental divorce or death, adverse childhood experiences, physical or sexual abuse, parental mental disorder, family history of suicidal behavior, marital or family discord, bullying, interpersonal difficulties), and c) psychiatric and psychological factors (mental disorder, drug and alcohol misuse, impulsivity, low self-esteem, poor problem solving, self-criticism, perfectionism, and hopelessness) (Gratz, 2003; Larkin, DiBlasi & Arensman, 2014). Thus, the majority of research on self-harm has been cross-sectional rather than longitudinal, which means that knowledge on *co-occurring* factors related to self-harm is better than factors that precede self-harm (Fox et al., 2015; Miller et al., 2019). Further, these risk factors for self-harm are general and could be related to several mental illnesses. Many children and adolescents experience stressful life events without harming themselves. Importantly, as mentioned, selfharm is associated with increased suicide risk (Hawton, Bergen, et al., 2015). Some of these youths are vulnerable and in desperate need of help.

Self-harming is not a separate diagnosis in either ICD-10 (World Health Organization, 2004) or DSM-IV (American Psychiatric Association, 2013) but is suggested as a possible diagnosis in DSM-V (Klonsky et al., 2014). Self-harm is associated with a range of mental disorders and, in the worst case, risk of death (Hawton et al., 2012). This behavior is related to depressive disorders, anxiety disorders, drug addiction and eating disorders, post-traumatic stress disorder, bi-polar disorder, psychosis and especially personality disorder of borderline

type (BPD) (Miller et al., 2019). Self-harm is even associated with psychiatric morbidity in nonclinical populations (Klonsky, Oltmanns, Turkheimer, 2003).

In a cross-country study of self-harm in community samples of adolescents, which included data from Norway, some had never been in contact with a support system (48%), some obtained help through their social network (32.8%), and some received treatment in a mental health care setting (18.8%) (Madge et al., 2011; Ystgaard et al., 2009). Among those who obtained treatment, there were higher frequencies of mental disorders (depression, suicidal-thoughts, and substance abuse) and family risk factors (episodes of self-harm and suicide in their family), and more than 50% reported *repeated self-harm behavior*. Adolescents who harm themselves *repeatedly* may be especially vulnerable and be called "at-risk" adolescents. Still, are there differences between those who show severe mental illness or low function as adults and those who do not?

Self-harm and personality disorder. Importantly for this study on self-harm among adolescents, self-harm is one of the many possible criteria for personality disorder, and especially of emotional lability (ICD-10) or borderline type (BPD, DSM-IV). Personality disorder is characterized by deviant interpretation, thinking and behavior, which are associated with psychopathology, risk-behavior, suicide, and low quality of life (Fonagy et al., 2015). In community samples of adolescents, prevalence of personality disorders ranges from 6% to 17%, and in clinical samples from 41% to 64% (Kongerslev, Chanen & Simonsen, 2015). Essential features of BPD are "pervasive patterns of instability of interpersonal relationships, self-image, emotion regulation and marked impulsivity" (Fonagy et al., 2015, p. 1308). Prevalence of BPD in adolescents, ranges from 3% in community samples, to 11% among outpatients, and up to 50% among inpatient samples (Fonagy et al., 2015). In a Norwegian study (Korsgaard, Torgersen, Wentzel-Larsen, & Ulberg, 2016), 21.6% of adolescents in clinical outpatient samples satisfied criteria for one or more personality disorders, mostly avoidant type or BPD type.

Chanen and McCutcheon (2013) argue that self-harm must be regarded as an "early sign" of personality disorder, and that these adolescents are especially vulnerable for being involved in risk situations, experiencing negative life events, and having increased risk of psychopathology as adults, low capacity of self-care, low work ability and high mortality. In a study by Bo and Kongerslev (2017) of a clinical group of adolescents, those confirming BPD symptoms reported higher self-reported levels of psychopathology (including risk situations and self-harm), more problematic attachments to parents and peers, and poorer mentalizing

ability to understand their own and others' behavior in regard to mental concepts (using Reflective Functioning Scale Youth, RFQY; Ha, Sharp, Ensink, Fonagy, & Cirino, 2013).

A longitudinal study by Cohen, Crawford, Johnson and Kasen (2005), "the children in community study", found an association between confirmation of criteria for personality disorder as an adult and a higher rate of negative childhood experiences (such as physical and sexual abuse, inconsistency, overinvolvement or hostility from parents, conflicts between parents, and low socio-economic level). In another longitudinal study, 56 children were assessed in relation to parent-child interaction and attachment patterns at the age of 18 months and at 8 years of age and later, and at the age of 20 years, borderline symptoms, self-harm and suicidality were assessed (Lyons-Ruth et al., 2013). They found that maternal withdrawal at 18 months of age increased risk of borderline symptoms, self-harm and suicidality in adolescence.

Thus, despite knowledge gathered from epidemiological and survey studies, there remains a lack of knowledge; *how* are individual variables and risk factors related to self-harm, and how might self-harm be related to several mental illnesses (Favazza, 1987; Hawton et al., 2012; Miller et al., 2019; Nock, 2014; Soyemoto, 1998)? Although, it is important to evaluate criteria for personality disorders among adolescents who harm themselves repeatedly to secure adjusted support and treatment, many girls and boys end self-harming during adolescence and do not meet criteria for a personality disorder in adolescence *or* in adulthood.

1.2 Adolescence – psychological developmental challenges

Self-harm most often starts in the developmental period of puberty (Swannell et al., 2014). Adolescence, often specified from 12-18 years of age, is characterized by emotional, biological, cognitive, psychological and social changes (Landmark & Stänicke, 2016; Siegel, 2015; Stänicke, 2019). Could self-harming practices be related to psychological developmental challenges?

Overwhelming and fast changing feelings. The adolescent girl or boy may experience, or being described by others as having, overwhelming and fast changing feelings. Others may describe a lack of feelings, boredom, neutrality or that everything is "okay". Experienced feelings seem "polarized" – shame or shamelessness, anger or indifference, sadness or boredom. Friends and interests change and are often associated with idealization or opposition. In our culture, youth is associated with being open, innovative, creative and exciting. Still, parents, family and persons close to the adolescent may experience their changing emotions, thoughts and behavior as unpredictable and difficult to understand

(Spring, Rosen, & Matheson, 2002). Even for some adults, youths may be experienced as being impulsive, lacking boundaries or having little or no capacity for commitment.

Puberty and brain development. Puberty involves bodily changes – body growth, menarche, body hair growth, deeper voice, increased sensual and sexual awareness – which may evoke curiosity and pride, or anxiety, frustration, alienation or confusion. Brain development during adolescence is characterized by reorganization and maturation of the prefrontal cortex which in many ways may offer an understanding and explanation of the emotional turmoil (Casey, Jones, & Hare, 2008). Even though youths have a better developed capacity for abstract thinking and problem-solving than younger children, the brain development and changes during these years may challenge and cause an instability in the cognitive functions. From a biological perspective, the emotional areas of the brain dominate - maybe because the emotions are strong, but also because the cognitive capacity to handle and integrate experiences is not sufficiently stable and developed (Siegel, 2015). Further, they seem to have an increased sensitivity towards stimuli, to attend easily to what happens here and now, and have an increased learning potential (Casey, Jones, & Hare, 2008). This may be of importance to understanding how many adolescents seems to enjoy or are attracted to situations with strong stimulation, and how this learning potential may include both appropriate and non-appropriate behavior. Chanen and McCutheon (2013) even argues that youths have a neurobiological vulnerability because of changes in the body and brain, and therefore have an increased risk of emotional disturbances, impulsivity, drug addiction and self-harm. However, the brain and body are always part of, developing in, and influenced by a relational, social and cultural context. Adolescents issues cannot be reduced to neurobiology.

Psychological separation and individuation. An important developmental challenge during adolescence is the movement from dependency on the caregivers in childhood *towards independence and separation* (Erikson, 1968; A. Freud, 1958). During the child's early years, they practice walking, eating, sleeping or getting dressed in help and reminders from their caregivers. In adolescence, the main developmental steps are to be aware of one's personal needs, feelings and interests, and to practice self-care or ask for help if needed (Siegel, 2015). The outer boundaries represented by the caregivers are integrated and internalized, which increase "autonomy" – a capacity to express your own meaning, to say no, or to highlight important aspects of your opinion as different from others, even to an authority (Gullestad, 1993). Still, it is important to underline that separation and autonomy are not the same as

managing everything alone. It is more about developing a capacity for "relational reciprocity" and to see themselves' and others' strengths and weaknesses (Guldbrandsen, 2008). A child may exalt or idealize their parents as someone who knows everything. During adolescence, girls and boys begin to ask questions with their parent's sovereignty. Some explicitly express explicitly an oppositional attitude and devaluation. By developing a capacity for relational reciprocity, the adolescent may recognize that their parents are humans, that they want to help, but they are not responsible for or have the solution for everything that is difficult. Blos (1967), and later Wise (2000), even argues that adolescence may represent "a second chance" to process and integrate unfinished or conflicted early developmental issues – *reactivated* by strong emotions in puberty, and the need to separate and establish a mature identity.

Self-experience and mentalization. Increased independence and autonomy towards relational reciprocity are closely related to the development of self-experience and selfawareness – how is it to be me? During the first years of childhood, a child's understanding of the relationship between themselves' and others' inner experience, is characterized by taking – more or less – for granted that there is no difference between their inner and an outer world ("psychic equivalent mode"; Fonagy, Gergely, Jurist, & Target, 2002; Fonagy & Target, 1996, 2000; Target & Fonagy, 1996). In a way, a young child may believe that everyone has the same experiences the same and the same knowledge. In play, the child may explore roles or differences between themselves and other people (called "pretend mode") (Fonagy & Target, 1996, 2000; Target & Fonagy, 1996). Increasingly towards adolescence, the young person recognizes that no one knows everything about them, and that different people experiences a situation differently (called "integrated mode" or "mentalized stance") (Fonagy & Target, 1996, 2000; Target & Fonagy, 1996). The adolescent may develop a capacity for mentalization – to understand their own and others' behavior in terms of mental states, feelings, thoughts, needs and phantasies (Fonagy, Gergely, & Target, 2007). However, a person's capacity for mentalization will be further developed through a lifetime in regard to different states of self and experience of others.

The role of friends and peers in identity formation. During adolescence, the main references for choices, role exploration and identification are no longer the primary care givers but *friends and peers*, boy- or girlfriends, school and sport interests, and the society in general (Erikson, 1968; Slot, Akkerman, & Wobbels, 2019). In early adolescence, an important topic is to find out if they are same or different from friends and peers – "am I

inside or outside this group". In later adolescence, there may be more existential questions — "who am I" or "why do I live". The possibility of sharing ups and downs and exploring roles with friends and peers, is of importance for developing self-experience and identity formation.

During these years of adolescent turmoil, increased capacity for affect-regulation and affect-integration, problem solving, autonomy, relational reciprocity towards a mature identity and a more stable self-organization are important achievements. These changes may occur at different paces, and the areas may be developed to different degrees developed for each person (Casey et al., 2008; Siegel, 2015). Developmental tasks during adolescence may challenge the young person's emerging capacity for mentalization (Rossouw & Fonagy, 2012). Difficult and strong feelings, impulsivity and interpersonal challenges are often experienced as overwhelming. For some, handling feelings, testing of boundaries or role exploration may involve risk behaviors – such as self-harm, drug misuse or conflicts with authorities. Could self-harm be closely related to developing challenges, like finding a way to regulate affect, to separate and establish an identity, and can it even be a concrete attempt to represent and explore the self? May the use of the body be a way to meet these challenges without bothering others? I will return to these questions in the discussion of my study.

2 The function of self-harm – a historical view

Epidemiological studies have provided knowledge on frequency and forms, associated risk factors and mental illnesses for self-harm at a group level. Still, as a clinician, I need more knowledge on self-harm at an individual level to comprehend this phenomenon and possible differences among self-harmers. Thus, a selection of theoretical perspectives on the function of self-harm will be presented with the attempt to give a historical view on the current understanding of self-harm, and to explore how different perspectives offer a diversity in *motives, reasons and influences* for self-harm. Theories of suicide not specifically focusing on self-harming behavior will not be included (for an overview, see Stänicke, 2018a).

I will show that for years self-harm has mainly been understood as a sign of psychopathology and mental illness. There has been a shift in the understanding of self-harm from an intrapsychic perspective focusing on unconscious impulses to an affective, behavioral and neurobiological dysfunction. I will argue that quantitative research methods, which study self-harm at a group level, support affective, neurobiological, and behavioral perspectives at the expense of cultural, relational and existential conditions. Relational and interpersonal theories on the function of self-harm are developed from qualitative case-studies with small samples which are often excluded in reviews. Further, theories of the function of self-harm are mainly derived from adult patients. I will highlight the need for a systematic study of adolescents' experience of self-harm and the necessity of validating theory in observational data. Although, I mention in the end how different theories seem to inform treatment models for self-harm, these models are not presented in detail (for an overview, see Stänicke, 2018b).

2.1 The Bible – to be turned away from God

The act of harming oneself is described in some old biblical sources (Favazza, 1987). The first description is written by Herodotus in 490 BC about Cleomenes, a Spartan king, who was thrown in prison and harmed himself:

And as he was lying there, fast bound, he noticed that all the guards had left him except one. He asked this man, who was a serf, to lend him his knife. At first the fellow refused, but Cleomenes, by threats of what he would do to him when he recovered his liberty, so frightened him that he at last consented. As soon as the knife was in his hands, Cleomenes began to mutilate himself, beginning on his shins. He sliced his flesh into strips, working upwards to his thighs, hips, and sides until he reached his belly, which he chopped into mincemeat. (book 6)

In the Old Testament, the act was emphasized as something you should *not* do: "You shall not make any cuttings in your flesh for the dead, nor tattoo any marks on you: I am the LORD" (Leviticus 19:28). Further, men who worshipped a false god were described as "slashing themselves with swords and spears" (1 King 18:24-29). In the New Testament, there is described a man who cried and cut himself with stones: "And always, night and day, he was in the mountains, and in the tombs, crying, and cutting himself with stones" (Mark 5:2-5). The man's action was understood as a sign of being possessed by a demon or evil spirit and he became healed by Jesus. In these biblical sources, self-harm seems described as a sign of having lost contact with God. In recent theological literature, the death of Jesus on the cross has been discussed as representing an aspect of self-limitation, self-sacrifice and/or self-destruction (Hegstad, 2019).

2.2 The prison and the asylum – a symptom of hysteria

During the 19th century, the term "self-mutilation" appeared in descriptions of people's behavior in prisons and used by alienists (as psychologist were called at the time) in some case-studies of patients in mental institutions (Chaney, 2011). A popular opinion was that people harmed themselves because they *did not feel pain*. Still, some alienists suggested intentions and motivation behind the behavior. In one of the first known case-studies of self-mutilation, Bergmann (1846 as cited in Favazza, 1987) described a woman who was hospitalized after she had been walking in public places and asked different men to marry her. She was diagnosed with manic-depressive disorder. In the hospital, she removed both of her eyes (eye nucleation) and asked the doctor to amputate her arms and legs as well. Bergmann suggested that the act was related to her sorrow and *overwhelming guilt* after her husband's death. Some years later, Brown (1877 as cited in Favazza, 1987) reported a case on genital mutilation by a young delusional and suicidal man who removed one of his testicles. Further, Warrington (1882) reported a case of a 29-year-old farmer (Isaac Brooks) who accused his neighbors twice to cut open his scrotum and remove a testicle. Thou, he withdrew the accusation some years later and confirmed he had done the harm by himself.

During the 1800s, neurologists and alienists understood symptoms that did not have an obvious physical cause as part of a "neurotic" or "functional" disorder. Following this perspective, Brown and Warrington discussed self-mutilation as insanity and a consequence of hysteria – of being neurotic and *unable to cope with sexual desire*. Although most casestudies described removal of body-parts, Gould and Pyle (1896 as cited in Chaney, 2011) described in their book, *Anomalies and Curiosity in the Medicine*, cases of "self-torture"

among girls using sewing needles – called "the needle girls" – which they related to the strict and sexually repressive Victorian Era. In 1892, the term "self-mutilation" was included for the first time in a psychiatric text book, *A Dictionary of Psychological Medicine*, and referred to *a broad specter of behaviors*, such as hair-plucking, skin-picking, burning, head-banging, amputation, eye enucleation and castration (Tuke, 1892 as cited in Favazza, 1987).

2.3 Early psychoanalytic perspectives – self-destructivity and sexual conflicts

To understand symptoms that did not have an obvious or known physical cause, Freud (1900a, b) developed a theory of the basic motivation behind behavior, thoughts and feelings in general. He argued that unconscious life promoting and destructive drives (id) which influence our mind and actions. In the book *Psychopathology in Everyday Life*, Freud (1901) discussed self-mutilation as a hysterical symptom, a sign of a psychoneurotic disorder and an expression of an *imbalance between life promoting and destructive drives*. He also suggested that wrong actions that had a different result than intended ("bungled actions" or "parapraxis") and led to accidental injuries could be understood as a representation of a hidden and unconscious instinct for *self-destruction* and self-punishment.

Later, Freud (1914) proposed that impulsive actions could be a *substitute for remembering*. Early unprocessed and unconscious memories and feelings associated with traumatic childhood experiences, not symbolized in the mind as pictures or words, may be expressed in action – *acted out*. He argued that the compulsion to repeat the trauma again and again in actions may be an attempt to unconsciously take control and to overcome the trauma (Freud, 1920). Following this perspective, impulsive actions of self-harm may be understood as expressions of unconscious motivations, unfulfilled needs, feelings or unprocessed memories, which cannot be spoken of but have a potential for being transformed and shared.

In Freud's (1917) article *Mourning and melancholia*, he argued that suicide could more specifically be understood as an expression of *anger turned towards self*. In his view, a melancholic state of prolonged, complicated grief (different from typical mourning) may develop when a person loses a loved one. The anger of being left alone and abandoned can be impossible to express and is turned towards oneself as criticism and destructive attacks instead of the dead person. Later, Freud (1923) proposed that our mind develops from bodily sensations and perceptions through our senses, by identification with the mother's care and support, and in a cultural context. More specifically, the representations of the mother's care, satisfaction of unconscious life promoting drives and the quality of handling destructive

drives makes the fundament of the ego. From this perspective, self-harm can be an expression of complicated *mourning and frustration* related to the loss of care and love.

The case of Miss A. One of the first known psychoanalytic case-studies of self-mutilation is Emerson's (1913) *The case of Miss A*. Emerson described a young woman who cut the upper part of the body, especially her breasts. He argued that the act could be understood as *a transformation of mental pain to tolerable physical pain* and was *multiply motivated*. He underlined how important the surgical and sympathetic treatment of the wounds were for the patient – as a way to get comfort and support for the mental pain, which could not be talked about. The pain and blood, he suggested, represented and substituted for a sexual trauma of forced masturbation by a relative, reactivated in puberty, and aggression towards the abuser.

A man against himself – self-castration. In his book, *Man Against Himself*, Menninger (1938) presented and categorized several forms of self-mutilative acts known from medicine and psychiatry, including studies of religion, history and social anthropology. He classified self-mutilation by organizing the behavior into six categories: 1) *neurotic* – biting and picking of nails or hair, 2) *religious* – self-flagellants, culturally sanctioned, 3) *puberty rites* – hymen removal, circumcision or clitoral alteration, 4) *psychotic* – removal or amputation of a body part, like an eye, ear or genitals, 5) *organic brain diseases* – which result in repetitive headbanging, hand-biting, or finger-fracturing, and 6) *conventional* – excessive clipping of nails, trimming of hair or shaving of beards. The categories embrace different forms of psychopathology, in addition to religious rituals and everyday behaviors.

Menninger, influenced by psychoanalytic theory and case-studies, defined self-mutilation as a non-fatal expression of a death wish, a "partial suicide", and an attempt of self-healing. In this way, Menninger argued that self-mutilation is different from suicide and should be understood as *an unconscious mechanism to avoid suicide*. Still, he presumed that the behavior came from the same motivational source – the death drive. Although Emerson (1913) related self-harm to a possible earlier sexual trauma, Menninger (1938) emphasized that self-harm could be understood as a way to punish the self because of forbidden sexual and aggressive fantasies and impulses. He discussed both self-cutting and extreme cases of genital amputation as *actual or symbolic self-castration*. Some authors have later linked self-cutting symbolically to a sexual conflict of desire for masturbation and punishment for self-stimulation (Daldin, 1988; Laufer, 1968; Rosenthal, Rinzler, Walsh, & Klausner, 1972).

Early psychoanalytic theory is based on case-studies. There is an assumption that theory and concepts to understand a phenomenon are developed in close relation to clinical data as observed in a case in the therapeutic situation (Solms & Turnbull, 2002). The understanding of impulses and unconscious motivation for self-harming could be validated in the dialogue with the patient. However, psychoanalytic theories are often criticized for often being untestable and because the author only selects data that supports her/his theory (confirmation bias). Many case-studies lack a presentation of quotations from the patient or the dialogue between the patient and therapist. The authors mainly describe the patient's experience through the author's words – which may be descriptive but may also be theory-driven. This makes it difficult to evaluate the theory development process and how meaningful the concepts are. In my opinion, the concepts and theory should be validated in observable data. Even if case-studies may bring, and they often do, attention to a phenomenon not earlier described, the data and the analysis process should still be as explicit as possible.

2.4 A syndrome with many names

During the 1960's, several authors attempted to classify self-harm (for an overview, see Grunebum & Klerman, 1967). Graff and Malin used the term "the syndrome of wrist-cutting" to characterize behavior among young woman who seldom died by suicide:

An attractive, intelligent, unmarried young woman, who is either promiscuous or overtly afraid of sex, easily addicted and unable to relate to others ... She slashes her wrists indiscriminately and repeatedly at the slightest provocation, but she does not commit suicide. She feels relief with the commission of her act. (p. 41)

The year after, in 1969, Pao did one of the first systematic studies of 32 patients who self-harmed and were hospitalized in a mental institution (Chestnut Lodge). He described "delicate self-cutting" which was most common among young girls, often with BPD, who showed multiple episodes of superficial cutting with low lethality (overlapping with "the syndrome of wrist-cutting"). In contrast, "coarse self-cutting" was associated with older patients, often psychotic, who mostly performed a single, deep and life-endangering incision close to vital parts of the body.

In 1972, Rosenthal and colleagues specified the term "the wrist-cutting syndrome" to refer to more than five cutting episodes that were experienced to terminate depersonalization, unreality and emptiness and to evoke satisfaction, relief and fascination with the blood. Ross and McKay (1979) attempted to categorize the methods of self-mutilation into nine subgroups: cutting, biting, abrading, severing, inserting, burning, ingesting or inhaling, hitting

and constricting. Although the syndrome of wrist-cutting was emphasized as excluding suicide intention behind self-harm, Morgan (1979) proposed that the term "nonfatal deliberate self-harm" could include drug overdoses.

In the first systematic review of 56 published case-reports on self-harm, Pattison and Kahan (1983) classified self-harm on the basis of lethality, directness of the method used, and number of episodes. They proposed the label of "deliberate self-harm syndrome" with an onset in adolescence, multiple recurrent episodes, harm deliberately inflicted upon the body (especially cutting and burning), sense of relief, low lethality and no conscious suicide intention. Walsh and Rosen (1988) distinguished between direct and indirect, time (short, long, or repeated) and awareness of intention to harm or not. Although "the deliberate self-harm syndrome" was suggested as a diagnostic syndrome in DSM-IV, the diagnosis is still on a waiting list for DSM-V because of the lack of consensus on the definition of self-harm as including suicide intention or not (Nock, 2014). The fact that the debate is still ongoing may reflect the complexity of this phenomenon. It should also be noted that several of the studies that aim to classify self-harm focus on *repeated moderate self-harm as part of a psychopathological syndrome mostly in females*. The act and gender seem intertwined (Ekman, 2019; Millard, 2013).

Culturally deviant and sanctioned self-harm – a morbid form of self-help. In the book *Bodies under Siege: Self-mutilation and Body Modification in Culture and Psychiatry*,

Favazza (1987) widened the scope and related self-mutilation (his term) to knowledge from social anthropology, religion, medicine, psychology and neurobiology like Menninger. In his view, self-mutilation could *be a universal category* without a universal understanding – the *meaning is dependent on the cultural context*: "Self-mutilation is not alien to the human condition; but rather it is culturally and psychologically embedded in the profound, elemental experiences of healing, religion, and social amity" (Favazza, 1987, p. xii). From his perspective, self-mutilation is different from suicide: "...an ancient and widespread, albeit morbid, form of self-help behavior" (Favazza 1987, p. xii).

Based on findings from a study of 240 women who answered questionnaires about reasons for self-harm, Favazza (1989) described "culturally deviant self-mutilation" as including major, moderate and stereotypic self-mutilation (described on p. 11) in contrast to "culturally sanctioned self-mutilation". The latter consisted of religious rituals (such as healing, salvation or circumcision) and cultural practices (like piercing, tattoo, body modifications, scarification or even performance art), which reflects "the society's traditions,

symbolism and the beliefs of a society" (p. 226). From Favazza's view, self-harming practices among adolescents are not only understood as mental illness but may also serve the purpose of correcting or preventing conditions that threaten the stability of a community – such as diseases, angry gods, and intergenerational or intergroup conflicts. Self-harming practices could be a way to use and manipulate the body to express social or cultural belonging, or the action can indicate *a rite de passage* to a group membership.

2.5 Psychodynamic and interpersonal perspectives – developmental failure

In Pao's (1969) study, he highlighted common aspects in the *developmental history* of the patients. Self-cutting often began when they were 12-14 years of age. The patients did not have a history of mental illness, but still, there were descriptions of "over-clinging" or "accident-prone" behavior, eating problems, often social isolation or a tendency for social imitation. He emphasized that their mothers played a central role while their fathers where distanced, there were repeating episodes with lack of maternal handling during infancy, and their mothers perceived their daughters as aggressive. In Pao's view, self-cutting was a consequence of *failure* in the early child-mother relationship. Pao was inspired by the specialist in child medicine and psycho-analyst Winnicott (1965) who emphasized the quality of the emotional, interpersonal and intersubjective relationship between the mother and child in development. The mother's physical and emotional presence (holding) to help the baby to not be overwhelmed by physical needs, pain, anxiety or difficult feelings was especially important for the development of self-care and health or mental illness and self-disturbance.

The emphasis on *the relational context* in the development of the mind represented a historical turn – a relational turn – which differed from Freud's intrapsychic perspective. Bion (1962, 1970), following Klein (1975, 1998), also emphasized the early emotional relationship with the mother ("container") and her capacity to process, differentiate, make sense of and represent ("contain") the child's inner emotional states in the development of the child's own capacity for thinking and tolerating impulses, feelings and needs as an opposite to acting out. In object relational theory, early emotional relational experiences are understood as internalized and memorized as mental representations of significant others *with* associated memories, feelings and fantasies from these earlier encounters (Greenberg & Mitchell, 1983). In this way, developmental failure may have consequences for the child's capacity to represent experience, understand themselves and others, and influence perception and integration of new interactions. Attachment theory (Bowlby, 1969, 1973, 1980) and studies on interactions between the child and mother (Ainsworth, 1979) have highlighted the importance

of attachment with significant caregivers to form "internal working models" of interactions with the caregiver as parts of building a secure self, self-care and trust – or not.

Based on systematic studies of multiple or single cases and treatment processes, several authors (Friedman, Glasser, Laufer, Laufer, & Mohl, 1972; Kafka, 1969; Pao, 1969; Podvoll, 1969) underlined the intersubjective and interpersonal developmental context in the understanding of the function of self-harm, and, still, accentuated self-harm as related to intrapersonal mental contents like unconscious feelings and unsatisfied needs. These studies have influenced psychodynamic intra- and interpersonal perspectives on the function of self-harm (Yakeley & Burbridge-James, 2018). I will focus on presenting how self-harm may be understood as related to psychological separation processes, establishing self-boundaries, nonverbal communication, and deficits in the capacity to mentalize.

Self-harm to handle aggression and to separate. Pao (1969) proposed that patients who self-harmed had not developed or internalized a sufficient capacity to handle overwhelming feelings in general and frustration and aggression especially. Following Freud's (1917) idea, self-harm was understood as *internalized anger* related to someone the person was ambivalent to – hated and loved. Angry feelings about being left alone, abandoned, or abused were impossible to express directly and were instead directed towards the self.

Further, Pao (1969) and Friedman and colleagues (1972) – all inspired by Anne Freud (1958), Mahler (1963), Winnicott (1965) and Blos (1967) – suggested that the patient who self-harms struggles with the challenge of *psychological separation*. Friedman and colleagues (1972) argued that self-harm must be related to mental changes during adolescence, which in their view were characterized by achieving a psychic maturity through mastery of the revived drives – sexual impulses and destructivity – and *detachment* of the libidinal tie from the original object (mother). In a study of 14 girls (14-19 years of age) who self-harmed, these youths are described as locked in a mental breakdown and melancholic state with low self-esteem, self-criticism, intense guilt and ambivalence towards their mother. From this perspective, cutting and the blood represent *unconscious conflicts* in regard to menstruation and sexuality, which may be overwhelming during puberty, especially if sexual abuse or trauma have occurred (see also Novotny, 1972; Rosenthal et al., 1972).

Later, following these lines, Gardner (2001) described how self-harm seems associated to patients' unconscious phantasies of being merged with an omnipotent and persecutory mother. The act of harming is a concrete attempt to "cut the tie". Hale (2008) also discusses patients' phantasies of self-harm as an idea of revenge, assassination of bad self-

parts, or merging with a representation of an omnipotent mother. Self-harm may be *an* attempt to separate in a concrete sense and take control over intruding traumatic experiences.

Self-harm to establish self-bounders and identity. Following Winnicott's (1953) concepts of transitional object and transitional phenomena, Kafka (1969) argued that the patient's own body with the blood, cuts and scars served as a "transitional object" used to *explore and establish the borders between internal and external reality* – the boundaries of the ego. Kafka's ideas were followed by Raine (1980) who hypothesized that the wounds and scars concretely differentiated self from others and *established a sense of feminine identity*. The skin may be the link to the contact with the mother during the first years (Bick, 1968). Kwawer (1980) emphasized how self-harm and blood rituals represented complex attitudes about womanhood and could be an attempt to build boundaries of an "authentic self".

Following an object relational perspective, Kernberg (1987) discusses self-harm as a primitive defense operation shown by persons with a borderline personality organization who have a diffuse identity, discontinuous or unrepresented self and unstable reality testing. Self-harm is an enactment of rage and resentment over not being able to control another person, which evokes a need for revenge that is turned towards the self. Later, Straker (2006) suggests that self-harm is an attempt to build *a sense of self*. Persons who self-harm are "signing with a scar" as a struggle to put in place elements involved in the building of a self, like mirroring and establishing boundaries. The blood and scars express a narrative and an autobiographical memory. Le Breton (2017) argues that the body becomes the battlefield of identity among adolescents who self-harm. The body is an object, different from self, which can be dealt with, punished or disciplined through physical attacks. In a way, the person must "sacrifice a part to save the whole". By self-harming, the body is used not only to separate, but to *build and explore self-boundaries and identity*.

Self-harm as nonverbal communication. Pao (1969) and Graff and Malin (1967) emphasized that self-cutting *expressed non-verbal, largely preverbal,* material, which overwhelmed the patient again and again. This idea follows Freud's (1914) thought that action may substitute for remembering, and Winnicott's (1965) emphasis on action as a first arena for "holding" yourself – to express inner states, pain, anxiety, and pathology. Bion (1962, 1970) also underlines how *action* may encompass mental content that had the potential to be contained and processed in an emotional relationship but instead is acted out. McLane (1996), and later Ashead (2016), highlights how the unprocessed nonverbal mental content,

internal dynamics and disturbances in the relationships with self and others, is "written on the body" with cuts and scars. In a way, the body is *talking* – self-harm is "the voice of the skin" (McLane, 1996). Lemma (2010) discusses body modification in general as possible unconscious communication – "the body as canvas". Apparently irrational and destructive behavior like self-harm may, from this view, contain personal unconscious information that cannot be expressed in words but is nonverbally expressed through action towards the body.

Kwawer (1980) discussed how self-harm is often misunderstood as emotional blackmailing or to "just get attention". He argued that even though some may think it is a good idea to not pay attention when a person harms him/herself – not to reinforce the action with attention – this may be fatal. Self-harm may be *a cry for help*, especially for patients who only have memories of comfort after physical injuries as a child. Self-harm as an adult may be experienced as the only possible way to get help. Motz (2010) also emphasizes self-harm as an attempt to stay alive and the act of aggression may be a sign of *hope* – the representation of pain to an outer world expresses a hope that care still exists. Brady (2014) underlines cutting as an effort to *cut silence* – breaking an insufficient emotional familial circumstance, which cannot be spoken about. The action of harm invites us to stop and wonder.

Self-harm and failure in the capacity of mentalization. Fonagy and Rossouw (2012; Fonagy et al., 2002; Fonagy & Target, 1997, 2006), inspired by psychoanalytic theory, attachment and neurocognitive studies of "theory of mind", underline how self-harm may express a nonsufficient development of a person's capacity for "mentalization". The concept of "mentalization" is closely related to the concept of "affect-consciousness" (Solbakken, Hansen, & Monsen, 2011), and influences a person's recognition, representation, toleration and integration of affect, but highlights a person's capacity to represent and *organize mental* states and self in general (Fonagy et al., 2007; Fonagy & Target, 1997, 2006). The capacity for mentalization and affect-integration develops as a result of an innate potential and the quality of verbal and procedural interactions in close emotional relationships – with parents, family and friends. Fonagy and colleagues (2002; Allan & Fonagy, 2006) propose the concept of "marked mirroring", somewhat overlapping Winnicott's (1965) concept of "holding" and Bion's (1962) concept of "containing", emphasizing the caregivers' acts of being safe and sufficiently calm, not exactly reflecting, but mirroring and validating the child's inner state (thoughts, feelings, wishes, needs) – not too close or too distant. In this way, mentalization refers to the person's capacity to represent emotional, cognitive, and relational (explicit and implicit) self-experiences (Choi-Kain & Gunderson, 2008; Stänicke, 2012).

Inspired by Marty (1968) and Bion's (1970) concept of "alpha-function" and his model of "container-contained", Bouchard and Lecours (2008; Lecours & Bouchard, 1997) use the term "mentalization" as encompassing the basic process of *transforming* somatic sensations and motor patterns (drive-affect experiences) to mental representation, symbolization and abstraction. They presume that mentalization consists of two independent dimensions: 1) different channel of drive-affect experiences (somatic and motor activity, imagery and verbalization), and 2) five different levels of affect tolerance and abstraction (disruptive impulsion or acting out, modulated impulsion with non-tolerated represented mental content, externalization, appropriation and acknowledgement of mental content as part of self, and abstract-reflexive meaning association).

Following the perspective of mentalization, acts of self-harm could be nonverbal expressions of unacknowledged parts of self – a *teleological form of experience* (Rossouw & Fonagy, 2012). Somatic and motoric activity, like self-harming, may express unrepresented, unprocessed or conflicted states or drive-affect experiences channeled into somatic and motoric activity (Bouchard & Lecours, 2008). Early relationships and/or the sociocultural context may have been nonsufficient, the caregiver may have become too preoccupied and distant from the child's need (not marked, mirroring), *or* too intrusive with their own perspectives on the child's inner states (marked, not mirroring). The child has lost support to regulate and understand their inner and others' worlds. From this perspective, self-harm may contain *meaningful expressions of self* (Gardener, 2001; Lemma, 2010; Turp, 2003). The act may be an unconscious effort to remedy the underlying damage, which can be processed and integrated in a therapeutic relationship.

Reviews of knowledge on self-harm today often exclude psychodynamic and interpersonal models of the function of self-harm (Miller et al., 2019; Nock, 2010, 2014; Klonsky, 2007). This could be understood as a consequence of an exclusion of case-studies as providing insufficient evidence. The fact that there is a lack of direct citations in clients' own words about self-harm in many of these articles may increase skepticism about the validity of the concepts. Theories of the function of self-harm are often based on the authors' descriptions of the patients' experiences (e.g., Bateman & Fonagy, 2008; Favazza, 1987, 1989; Kwawer, 1980; Menninger, 1938; Motz, 2010; Raine, 1982; Straker, 2006; Turp, 2003). This is also the case in studies with adolescents (e.g., Brady, 2014; Daldin, 1988; Frankel, 2001; Friedman et al., 1972; Gvion & Fachler, 2015). However, the lack of direct quotes is also an issue with other theoretical models (Klonsky, 2007; Linehan, 1993; Williams, 2014), but these theories have later been tested in quantitative studies.

Importantly, during the last years, research from developmental psychology and neurobiology has been more integrated into psychodynamic intrapersonal and interpersonal perspectives (Bateman & Fonagy, 2019; Siegel, 2015; Solms, 2018). Case studies have been supplied with other research methods (see Bateman & Fonagy, 2019; Gabbard, 2005; Fonagy et al., 2002). Several studies have emphasized how the child's early relationships are essential for the developing brain, stress and immune functions, and affect-regulation in general (Schore, 2003, 2002; Siegal, 2015). Epidemiological studies have reported higher risk of selfharm among adolescents with poor attachment patterns, poor emotion regulation, and early childhood abuse and assault (Tatnell, Hasking, Newman, Taffe, & Martin, 2017). The capacity for mentalization is operationalized in the Reflective Functioning Scale (RF; Fonagy, Steele, Steele, & Target, 1998), and several empirical studies have studied RF in relation to attachment and psychopathology (Katznelson, 2002). Still, there is debated whether and how subjectivity and theories to understand the mind is testable – both in the psychodynamic literature (Solms, 2018; Panksepp & Solms, 2012; Sandler, Sandler, & Davies, 2000) and from different methodological perspectives (Willig, 2013). I return to this topic during the section on research design and chosen methodology.

2.6 Behavioral perspectives – self-harm is learned behavior

Offer and Barglow (1960) proposed a somewhat different perspective by emphasizing the *behavioral* and *systemic conditions* in understanding the function of self-harm. They focused on the interaction between the person and the environment, how self-harm may serve both the person and the environment and how self-harm could be both initiated and maintained by environmental conditions. The secondary gain or vicarious reinforcement of the behavior may be to get control, attention or status among peers (Podovoll, 1969).

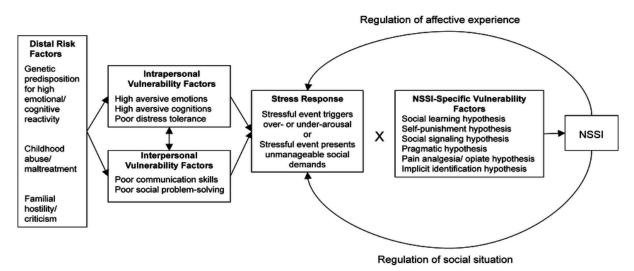
Simpson and Porter (1981) used the concepts from social learning theory (Bandura, 1973), like "modelling", "imitating" and "identification", to argue that *self-harm is learned behavior*, and that pain and care are associated – for example as a consequence of abuse. In their view, self-harm becomes a form of self-care. Further, the consequences of the behavior – like inner relief or the effect on the family, parents or friends – are of importance to analyze to find the reinforcement of self-harm (Linehan, 1993). For the system (familial, environmental, or societal), self-harm may bring homeostasis in a dysfunctional way – even if the person is not aware of how they interact with the system (Podovoll, 1969).

Four-function model. Later, Nock and Prinstein (2004, 2005) introduced an empirically based four-function model (FFM) to understand why people engage in non-suicidal self-injury (NSSI). In their view, self-harm is one form of self-injurious thoughts and behaviors, different form suicidal behavior, and distinct from culturally normative forms of body modification and behaviors that are only incidentally injurious (Miller et al., 2019). They propose a dual-axis framework for organizing NSSI according to the processes that lead to the initiation of the behaviors and the outcomes that reinforce them. Based on the principle of "operant conditioning", their model includes automatic affective and cognitive intrapersonal states, and social interpersonal dimensions, which are positively and negatively reinforced. In a study on young adults in an in-patient clinical sample, Nock and Prinstein (2004, 2005) found support for NSSI being reinforced automatically in a positive way (e.g., by making you feel something, evoking positive thoughts and feelings or generating energy) or in a negative way (e.g., by avoiding or escaping negative feelings or thoughts, like negative self-thoughts or rumination). They also found support for NSSI being reinforced socially in a positive way (e.g., by a desire to get attention or gaining a social status), and in a negative way (e.g., to avoid a difficult social situation).

Intrapersonal automatic reinforcement is well supported by self-report data indicating that individuals experience acute emotional distress before self-harm, and that self-harm reduces negative or difficult states (Anderson & Crowther, 2012; Selby, Franklin, Carson-Wong, & Rizvi, 2013) and bring something good (Klonsky, 2007; Miller et al., 2019). Interpersonal social reinforcement is supported by self-report studies showing how self-harm may be a way to express anger and to seek support (Andover, Pepper, & Gibb, 2007) and that those who self-harm show deficits in social problem-solving skills and in distress tolerance (Nock & Mendes, 2008). Nock and Prinstein (2004) also argue that it is likely that self-harm may serve multiple functions for a single individual. In a study of young adult inpatients, Nock and Prinstein (2005) found that they performed self-harm impulsively, in the absence of physical pain, and without the use of alcohol or drugs. Most of them engaged in self-harm for intrapersonal automatic reinforcement, but some endorsed a social reinforcement function.

Model of the risk of non-suicidal self-harm. Nock (2010) developed a model for *the risk of non-suicidal self-harm*. He argues that the risk is increased by general distal risk factors (e.g., genetic predisposition for high emotional/cognitive reactivity, childhood abuse/maltreatment, and familial hostility/criticism) that contribute to problems with affect-regulation or interpersonal communication, and may lead to vulnerability for a stress response (hyper- or

hypo-arousal), and experience of stressful events with unmanageable personal or social demands. The general distal risk factors and interpersonal correlates interact with specific vulnerability factors which influence the decision to use NSSI rather than some other behavior (e.g., social learning, self-punishment, social signaling, pragmatism, pain analgesia, or implicit identification) (see Figure 1; Nock, 2010). Even though Nock's model is inclusive, the model does not include conditions of self-harm underlined by interpersonal models, such as establishing boundaries, identity formation or a communication of personal content.



Nock MK. 2010. Annu. Rev. Clin. Psychol. 6:339–63

Figure 1. The risk of non-suicidal self-harm

Contagion and the Internet. In 1978, Kroll and colleagues studied the epidemics of self-mutilation – "contagion" – in a psychiatric unit and explored a relationship between the behavior, the rituals and ceremonies of the hospital unit, the meaning and coherence of the unit's social organization, and the unit's therapeutic effectiveness. Later, Taiminen, Kallio-Soukainen, Nokso-Koivisto, Kaljonen and Helenius (1998) studied contagion of self-harming behavior in an adolescent psychiatric unit and purposed that contagion was present several times during a 12-month period and could best be understood in terms of small-group "rites" for feeling of togetherness. According to a study by Muehlenkamp and colleagues (2008), students who knew someone engaged in self-harm were more likely to engage in self-harm. These studies could support a social learning perspective on self-harm. Further, adolescent inpatients' frequency of self-harm was higher if they had been exposed to self-harm in social

media and media in general (Zhu et al., 2016). Repeated online exposure to self-harm is also associated with self-harm among some adolescents in general (Liu et al., 2017).

Peers are an important information source during adolescence, and digital social media may become an extended sphere of peers. However, even if adolescents search online for information and become influenced on ways to handle problems (Swannell et al., 2010), going online is not, in itself, associated with increased self-harm. The Internet and digital social media may also represent crisis support, reduction of isolation, and exploration of identity (Marchant et al., 2017). However, for lonely youths, information on self-harm may normalize and trigger the action, and even be a way to compete, which can lower the threshold to self-harm. Self-harm seems intertwined with the sociocultural context. Still, it might be important to study variations among adolescents that makes some vulnerable or sensitive to information and influence and not others.

2.7 Affect-regulation theory – self-harm as regulation

Although affect-regulation theory is influenced by psychodynamic perspectives like ego psychology and self-psychology (Friedman et al., 1972; Raine, 1982; Soyemoto, 1998), and highlights research on attachment, this perspective has a particular focus on the capacity for affect-regulation of basic emotions and neurobiological development of the brain in the understanding of psychological wellbeing and illness (Hill, 2015). Regulation and dysregulation of basic affect and needs are seen as a consequence of the attachment patterns between the child and the caretaker (insecure and disorganized) and developmental trauma and its effect on brain functions (disturbances resulting from a repeated or long-term stress response) (Hill, 2015; Schore, 2003, 2002; Stern, 1985).

Early relational experiences influence how people perceive, integrate and tolerate experiences of themselves and others in the world (De Bellis & Zisk, 2014). Basic emotions, experienced as feelings, have an important function for humans to survive: as a *signal-system* by bringing information about a person's inner states and outer conditions, as a *motivational system* for action and communication, and as a *personality system* because of their central role in developing self-knowledge, our sense of agency, authenticity, and interpersonal relations (Panksepp, 2010). Panksepp (2010) argues that seeking, rage, fear, panic/loss, play, mating and care are the emotions all humans need to develop a capacity to acknowledge and regulate. From this perspective, psychiatric disorders – including self-harm – are understood as a reflection of an affective neurobiological imbalance and a deficit in the capacity for affect-regulation and nonsufficient responses to handle affects and needs.

Self-reported reasons for self-harm. In a literature review including adult patients, Gratz (2003) summarized different experiences of self-harm, which have been incorporated into theories and studies using questionnaires. She found that a key topic was to regulate feelings related to psychological pain but there were some important differences. Some people experienced self-harm as having a function of giving relief or to avoid difficult thoughts or unpleasant feelings like anxiety, anger, guilt, loneliness, alienation, self-hate or sadness. Others seems to find help in the concretization of physical pain, to establish feelings of safety and control, and to establish boundaries. Still others harm themselves as self-punishment or as a way to stop a flashback and de-personification related to trauma.

Klonsky (2007) systematically reviewed the empirical research (such as self-reports, descriptions of phenomenology, and laboratory studies) on the functions of self-injury among adults and adolescents in clinical and non-clinical samples. He found converging evidence for self-harm as an *affect-regulation function* – self-harm as a way of alleviating overwhelming negative emotions preceding self-harm, with following decreased negative affect and relief and calmness. The study indicated strong support for a *self-punishment function*, modest evidence for *anti-dissociation*, *interpersonal influence*, *anti-suicide*, *sensation-seeking*, and low evidence for the *interpersonal models* (boundaries or identity function) and *the sexual model*. The findings were consistent across different ages and samples. Klonsky (2007) proposed two superordinate categories of self-harm: intrapersonal/self-focused, and interpersonal/other-focused.

Klonsky's (2007) affect-regulation theory on the function of self-harm has been supported in later reviews (Anderson & Crowther, 2012; Andover & Morris, 2014; Selby, Franklin, Carson-Wong, & Rizvi, 2013). Still, these reviews mostly include adults only, or include just a few studies with young adults or adolescents (Crowe & Bunclark, 2000; Favazza, 1987; Gratz, 2003; Klonsky, 2007; Menninger, 1938; Pattison & Kahan, 1983). In one study which focus specifically on adolescents in a non-clinical sample, Laye-Gindhu and Schonert-Reichl (2005) also found support for the affect-regulation model, and that self-harm is associated with maladjustment, suicide, and other health related behaviors. In a review by Jacobsen and Gould (2007) on self-harm among adolescents in both clinical and non-clinical samples, the main reason was to *regulate negative emotion* (stop depression, tension, anxiety and/or fear, and to reduce anger).

In an ecological momentary assessment study of self-harm among youth (15-25 years of age) with borderline personality disorder, participants completed a randomly prompted

questionnaire about their affect, thoughts and behavior of self-harm six times per day for 6 days (Andrewes, Hulbert, Cotton, Betts, & Chanen, 2017). They showed increased negative and decreased positive feelings before self-harm, and a reduction in negative and an increase in positive feelings after self-harm. These participants struggled to identify their motives and environmental precipitants for self-harm. These changes in affect during the six days were not present for those who did not harm themselves. In another study, adolescents with substance abuse or addiction who engaged in self-harm showed higher levels of negative affect and lower levels of positive affect than adolescents with addiction without self-harm (Claes, Soenens, Vansteenkiste, & Vandereycken, 2012). It has also been reported that self-harm is associated with child maltreatment, such as emotional and sexual abuse, which seems mediated by self-criticism (Glassman, Weierich, Hooley, Deliberto, & Nock, 2007).

Klonsky and Glenn (2009) developed a measure designed to assess the interpersonal and intrapersonal function of non-suicidal self-harm – *Inventory of Statements about Self-injury* (ISAS). ISAS assess 13 functions of self-harm as well as the frequency of 12 non-suicidal self-harm behaviors. In this inventory, several functions are included: affect-regulation, anti-dissociation, anti-suicide, marking distress, self-punishment, autonomy, interpersonal boundaries, interpersonal influence, peer-bonding, revenge, self-care, sensation seeking, and toughness. An inventory may bring us closer to how different functions may be important for different people. Still, an inventory with pre-categorized answers could also increase distance and make it more difficult to understand the particular person's intentions – in their subjective experience. The private content behind the behavior may be of great importance to evoking the person's motivation to end self-harm.

2.8 Physiological and neurobiological aspects of self-harm

Several biological correlates and contributors have been examined to understand the function of self-harm from a neurobiological perspective – such as opioids, pain tolerance, interactions between emotional and physical pain, reactivity to stress and genetic factors – mainly through experimental, laboratory research methods on adults at a group level.

Self-harm and endogenous opioids. Studies show that people who are engaged in self-harm have altered levels of endogenous opioids (Franklin et al., 2013). Endogenous opioids have been suggested to mediate the relationship between self-harm and affect-regulation because people who engage in self-harm show *lower levels of endogenous opioids* in general (Bresin & Gordon, 2013; Haines, Williams, Braoin, & Wilson, 1995). The release of endogenous

endorphins during self-harm may serve as a reinforcement of the behavior, by regulating affect and blocking the experience of pain. Blasco-Fontecilla and Oquendo (2016) even argue that self-harm may be an *addiction* of the release of endogenous opioids, which make the psychological pain tolerable and provides relief.

Self-harm and pain-tolerance. In a review of studies of physical pain-tolerance among people who self-harm, Kirtley, O'Carroll and O'Connor (2016) found that people who self-harm report altered physical pain threshold and tolerance. However, it is not clear if altered pain tolerance among those who engage in self-harm is a cause or a consequence of the behavior. In other words, it is unclear if pain analgesia or numbness is a result of a habituation to elevated levels of endorphins in the body which may be related to earlier misuse and a possible disposition to self-harm, or that pain analgesia is a consequence of the release of endogenous opiates after repeated self-harm (Nock, 2009).

Hamza, Willoughby and Armento (2014) studied pain tolerance and motivations for self-harm and found that those who harmed themselves motivated by self-punishment showed higher pain tolerance than those who harmed themselves for other reasons. They suggest that the tolerance of pain is higher because of a higher level of self-criticism – they tolerate the pain because they feel they deserve the pain. Hooley and Germain (2014) found in another study that pain endurance was predicted by the presence of highly self-critical beliefs. They tested how a brief cognitive intervention designed to improve feelings of personal self-worth had an effect on the pain tolerance. Those who harmed themselves showed a larger decrease in pain endurance and a decreased willingness to endure pain after the intervention compared to those who did not harm themselves.

Hamza, Willoughby, and Heffer (2015) also reviewed evidence for the role of impulsivity among people who harmed themselves and found conflicting results. Studies using self-report revealed that individuals who self-harm *reported greater impulsivity* than those who did not harm themselves. However, they found little evidence for an association between lab-based measures of impulsivity and self-harm.

Neurobiological research on physical and emotional pain. Some neuroimaging studies, using fMRI on brain morphology and neuronal activity in adult persons who self-harmed with a confirmed borderline personality disorder, found *hyperarousal in limbic structures*, such as the amygdala and the anterior cingulate cortex (Groschwitz & Plener, 2012). Activation of these structures decrease both after induction of painful stimuli and after imagining an act of

self-harm. Another study with fMRI shows that patients who self-harm have lower activity in the orbitofrontal cortex and increased activity in the dorsolateral prefrontal cortex when exposed to self-harm situations (Kraus et al., 2010). Some neurobiological studies have found that the anterior cingulate cortex and anterior insula are both implicated in the neural mechanisms for physical and psychological experience of pain (Eisenberger, 2012). In this way, achieving relief from one type of pain may also lead to relief from the other (Franklin et al., 2013). In a study of adolescents and young adults, most participants reported significant and substantial pain during most self-harm episodes, but the experience of pain during self-harm registered by a smartphone app varied between people and episodes (Selby et al., 2018).

Physiological reactivity to stress. Laboratory studies have reported that self-injurers display higher physiological reactivity and arousal (skin conductance) during a distressing task, and they discontinue or escape from the task sooner than adolescents who did not harm themselves (Nock & Mendes, 2008). The findings have been suggested as a sign of a poorer ability to tolerate stress. Further, they report greater efforts to suppress aversive thoughts and feelings during their day and show deficits in several problem-solving abilities (Nock, 2009). Although a study shows that adolescents who harm themselves show higher cortisol awakening responses (Hypothalamic-Pituitary-Adrenal axis, HPA) compared to those who do not self-harm (Reichl et al., 2016), another study showed reduced cortisol response to stress in adolescents who self-harm (Kaess et al., 2012). According to Miller and colleagues (2019), there is limited evidence to implicate the HPA axis as a biological mechanism for differentiating risk for self-harm, but HPA dysregulation is suggested as a link between early childhood stress and later self-harm.

Genetics. One study analyzed the importance of genetic and environmental influences on the variation and covariation in non-suicidal self-injury (NSSI) and suicidal ideation in twin studies (Maciejewski et al., 2014). Maciejewski and colleagues (2014) report the variance in NSSI explained by genetic factors is 37% for males and 59% for females, and for suicidal ideation, it is 41% for males and 55% for females. Further, they report that nonshared environment and measurement error explain the rest of the variance (and not shared environment), and that there is a strong correlation between NSSI and suicide ideation. Althoff and colleagues (2012) found that heritability for self-harm was higher in women (0.74, 95% CI 0.65-0.81) than men (0.45, 95% CI 0.28-0.61) and that the remaining variance was accounted for by environmental influence unique to an individual. In another genetic

study, an interaction between those who had one or two copies of the short allele of the serotonin transporter gene 5-HTTLPR and symptoms of borderline personality disorder is discussed (Hankin, Barrocas, Young, Haberstick, & Smolen, 2015). In a recent study by Strawbridge and colleagues (2019), three novel genome-wide significant loci were found for suicidality (chromosomes 9, 11 & 13) and moderate to strong correlations between suicidality and mental illnesses, the strongest being depression.

Although, neurobiological findings in the study of self-harm are considered to be promising (Miller et al., 2019), the clinical implications of these findings are still unclear. For some, an explanation of biological vulnerability or lower stress tolerance as a reason for self-harming may be helpful to reduce the shame, stigma and taboo of self-harm. Still, it might increase a state of alienation for the girl and boy. The body and brain develop in a relational and cultural context. The body is always entangled by a person who experiences their behavior (Brodal, 2018). From a clinical perspective, the meaning making of intentions, conditions and consequences of a behavior can be of great importance to enhance agency and motivation for behavioral change. In my view, a neurobiological perspective may supply knowledge to clinical treatment models but cannot be the final answer.

2.9 Treatment models of self-harm

The symptom of self-harm challenges the person, their family and clinicians and, in a way, demands to be understood. However, as I have tried to present in this historical view of the function of self-harm, the understanding of its function has changed from imbalance in motivational drives, to disturbance or insufficient developmental and environmental conditions, and lately, as a deficit in affect-regulation or neurobiological conditions. The symptom has mostly been understood as a *deviation or as sign of pathology* – but also as *deeply human*. Persons who self-harm have been assumed to be in need of treatment.

Some treatment-models show evidence for reducing self-harm and suicide ideation (Ougrin, Tranah, Stahl, Moran, & Asarnow, 2015; Saunders & Smith, 2016; Turner, Austin & Chapman, 2014). Although the models are primarily developed for adult patients, often with borderline personality disorder, some of them are adjusted for adolescents by having a shorter treatment period or including family interventions, such as *Cognitive Behavior Therapy* (CBT; Hawton, Witt, et al., 2015), *Dialectic Behavior Therapy* (DBT; Mehlum et al., 2014; Linehan, 1993; Linehan et al., 2007), *Mentalization Based treatment* (MBT; Bateman & Fonagy, 2001, 2008, 2019; MBT-A; Roussow & Fonagy, 2012) and *Cognitive Analytic*

Therapy (CAT; Chanen et al., 2008). In all of these treatment models, self-harm is regarded as a consequence of neurobiological vulnerability and a lack of emotional validation in early relationships (Saunders & Smith, 2016). Consequently, the child is understood with a relational history of being repeatedly overwhelmed by emotional difficulties without sufficient support for affect-regulating or problem-solving strategies. Later, as an adolescent and adult, they may "act out" intolerable affect and psychic content through self-destructive behavior like self-harm, using drugs, or impulsive risk behavior. Self-harm may become a strategy to regulate feelings and reestablish a sense of self.

Different elements in treatment models. In CBT, cognitive restructuring of negative thoughts and expectations of self, others, and the future, is important to systematically reduce hopelessness and passive non- adaptive reactions to stress (Hawton, Witt, et al., 2015). Social isolation, poor stress tolerance and poor problem-solving ability increase risk of harm and suicide ("cry of pain"; Williams, 2014). In DBT, an important element is a behavioral analysis of the individual and environmental conditions before, during and after self-harm, to rehearse on more nuanced *coping strategies* or *problem-solving strategies*, and to increase acceptance for conflicting feelings and states of self and the world (Linehan, 1993; Mehlum et al., 2014). Better capacity for regulation of difficult cognitive or affective experiences or to cope with difficult social situations is a goal for treatment. In MBT, the focus is to enhance one's capacity for mentalization – representations and understanding of self and others' behavior – to establish a more stable and coherent self-experience, self-organization and affect-integration (Rossouw & Fonagy, 2012). Acting out is understood as a teleological mode of being in the world or as a consequence of an overactive interpretation of others' intentions (hyper-mentalization) (Sharp et al., 2013). The patient needs to be systematically guided towards a "mentalizing stance" and self-support. Self-harm as acting out of overwhelming states must be processed, understood and expressed in the therapeutic relationship. In this way, the tendency of avoiding support in crisis may be reduced.

Common elements in treatment models. Despite differences in the treatment models, there are some common elements, which also are recommended by *the NICE guidelines* (2019; Hawton, Witt, et al 2015). A treatment plan should be developed in cooperation with the patient/family and include a diagnostic evaluation, a risk plan, and rationale for the treatment of choice. The therapist should help and support the patient in an exploration of the concrete situations of self-harm, and look for patterns in thoughts, feelings and phantasies about self

and others. Further, the therapist should include concrete supervision in problem-solving with an exploring and supporting attitude – how to recognize difficult situations, and how to support themselves or get help form others. Still, no single treatment model helps all adolescents who harm themselves. They often struggle with motivation for and/or drops out of treatment, and they often do not experience self-harm as a problem. They may finally have found a way to overcome mental pain and suffering (Daley, 2015). More research for effective interventions for adolescent and children is clearly needed (Hawton, Witt., et al., 2015; Saunders & Smith, 2016).

A need for knowledge to help youths who self-harm to feel understood. Different treatment perspectives focus on somewhat different understanding of the function of self-harm, which may have consequences for the primary goal of treatment – reducing self-harm by restructuring thoughts and more nuanced problem-solving strategies, and/or emphasizing self-harm as expressing something conflicting and emotional, which may be processed and integrated as part of oneself. Although different treatment methods are based on evidence, as previously mentioned, reviews of the status of knowledge on self-harm do not refer to or find less support for psychodynamic and interpersonal models of the function of self-harm (Klonsky, 2007; Miller et al., 2019; Nock, 2010, 2014). Affect-regulation, behavioral and neurobiological perspectives may have replaced an understanding of self-harm as related to self-destruction or part of existential, relational and developmental challenges of being a human. In my view, several perspectives, research methods and treatment models are needed to understand such a complex phenomenon as self-harm. Different perspectives enhance dissimilar aspects of self-harm and how it varies among people and age groups.

When meeting an adolescent who self-harms, it is important to reduce risk behavior, but at the same time, the cuts, wounds and scars on their body challenge the person, their family and clinicians to stop and wonder – "what has happened"? How did self-harm become an option for action in this girl's or boy's life? How is self-harm related to their everyday life? A review by Saunders, Hawton, Fortune, and Farrell (2011) highlights negative attitudes and lack of knowledge among clinical staff regarding people who self-harm. Psychodynamic theories have brought several concepts and theories of, not only about the function of self-harm, but also about ways to understand a symptom in relation to underlying motives and self-structure. From this perspective, relational challenges, which often characterize these treatment processes, may even represent important information about unprocessed emotional and existential experiences (Catty, 2012; Frankel, 2001; Gabbard, 2005; Nathan, 2004). A

systematic exploration of the adolescents' personal experience of self-harm may enhance our knowledge on individual and contextual conditions for self-harm from their own perspective. Importantly, in my opinion, concepts should be explicitly related to data (e.g. quotes) from the participants. Knowledge on adolescents' personal perspectives is needed to increase clinicians' ability to *discover* and *understand* their world and the relational challenges in these treatment processes and may foster adolescents' *motivation* for and *engagement* in treatment by enabling them to feel understood and accepted.

2.10 Self-harm and individual differences

People who self-harm may differ in the frequency and duration of their self-harm and associated mental illness. Repeated self-harming is associated with BPD but can also be part of illnesses such as eating disorders and severe anxiety disorders. As a clinician, I have met some who want help to end self-harm while others would rather die than stop self-harming. Some are articulated about their problems and others struggle to represent their experiences of themselves and others. Some come with their parents to the clinic and asks for help, while others come alone. Still others are followed by child welfare and have no contact with their family. Some struggle with high expectations in regard to school performance, being social, clever and pretty, while others have given up dreams for an education or the future.

Several authors have highlighted that self-harm must be understood as an overdetermined behavior serving a variety of functions and needs (Muhlenkamp et al., 2008; Soyemoto, 1998; Swannell et al., 2014; Whitlock & Selekman, 2014). Soyemoto (1998) summarizes four different theoretical categories, which represent six different functional models for understanding self-harm: the drive models (the anti-suicidal and sexual function), the interpersonal models (the boundaries and identity function), the environmental model (reinforcement of individual or environmental conditions), and the affect-regulation models (the affect-regulation and anti-dissociation function). Self-harm may serve different functions for different persons, may distinguish sub-groups or age-groups, and may even serve different functions for one person and/or change during life (Hawton et al., 2012; Hawton, Bergen, et al., 2015; Klonsky, 2007; Nock, 2010, 2014).

Studies on sub-groups among people who self-harm. Some studies have focused on subgroups in the *function of self-harm* (Bracken-Minor, McDevitt-Murphy, & Parra, 2012; Nock & Prinstein, 2005) among people who self-harm. Nock and Prinstein (2005) discovered that adolescents who endorsed automatic functions (e.g., to stop bad feelings, to feel relaxed) were

more likely to have a recent suicide attempt, hopelessness, and post-traumatic stress disorder symptoms. In a study of 440 undergraduates from an Internet sample, Bracken-Minor and colleagues (2012) explored differences in methods and self-harm function (automatic or social), and found five groups — Experimental, Mild, Multiple function/Anxious, Automatic function/suicidal, and Multi-method. Those classified as Multiple function/Anxious had high rates of hazardous drinking, but the multi-method group had highest psychopathology in general. Still, most studies on sub-groups focus on differences in the *frequency of self-harm* (Klonsky & Olino, 2008; Somer et al., 2015; Whitlock, Muehlenkamp, & Eckenrode, 2008; Xin et al., 2016), *symptoms of mental illness* (Ross & Heath, 2003; Stanford, Jones, & Hudson, 2016), *psychosocial adjustment* (Hamza & Willoughby, 2013), *methods of self-harm* (Andover, Pepper, Ryabchenko, Oricco, & Gibb, 2005), and *suicidality* (Andrewes et al., 2017; Xin et al., 2016). All considered, studies on sub-groups focus mostly on non-clinical or clinical adult samples, using questionnaires or structured data on mental illness.

In a qualitative study with a nonclinical sample, Gregory and Mustata (2012) analyzed 100 narratives posted on the Internet by adolescents (13-18 years of age). One sub-group showed high social function and strong verbal skills and cut for pleasure and because others did so. Two additional sub-groups displayed an idiosyncratic use of language and "magical thinking", such as blood substituting for negative emotions, or pain substituting for psychic trauma/loss that then could be released from themselves through cutting. Tendencies toward magical thinking were related to low social function, less complex representations of people and of social causality, and low self-esteem. This study, as is often the case in studies of personal experience, lacked structured assessment of mental illness among the participants.

Self-harmers are not a uniform group. Following the described findings on self-harm from different theoretical perspectives and studies, one way to summarize is that self-harmers do not constitute a uniform group. Self-harm may even be a nonuniform phenomenon and, therefore, challenge attempts to find a unified definition. Although some theoretical models include several risk factors, neurobiological and environmental conditions, and different functions for self-harm, for example Nock's model (2010), an integration of the theories is lacking and studies often focus on intersections of theories or risk factors (Miller et al., 2019). There is a lack of knowledge of how one person in a specific moment chose to self-harm, how some end the behavior after some attempts, and others continue for years, often as part of a comprehensive mental illness. Increased understanding of the *heterogeneity* among self-harming adolescents from their perspective may lead to hypotheses about the paths into and

out of self-harming during the transition from adolescence to adulthood. Knowledge about different trajectories of self-harm may contribute to developing more effective and tailored treatment interventions suggesting *which* treatment interventions are most helpful for *whom*.

3 Systematic studies of lived experience

Evidence supports the theory of self-harm as having an affect-regulation function (including an intrapersonal and interpersonal dimension), that self-harm is associated with a lack of problem-solving strategies, and, not surprisingly, neurobiological studies report lower stress tolerance among self-harmers (Hawton et al., 2012; Klonsky, 2007; Miller et al., 2019; Nock, 2014). Thus, reviews on reasons for self-harm mostly focus on quantitative studies using self-report questionnaires with predetermined answer categories (Edmondson; Brennan, & House, 2016; Jacobsen & Gould, 2007; Klonsky, 2007). Qualitative studies are often excluded in reviews because of their small samples, or some studies with open questions are included as an exception (Klonsky, 2007; Swannell et al., 2014). Importantly, the questionnaires are mostly developed from theory and knowledge on adult patients (Brier & Gil, 1998; Broschmann, Hogg, Philips, & Moran, 2012; Favazza, 1987; Klonsky, 2007), or customized from a self-report questionnaire for adults from a clinical sample (Nock & Prinstein, 2004).

This is the case in Edmondson and co-workers' (2016) systematic review of the literature on first-hand accounts of the reasons for self-harm. The most endorsed reason for self-harm was to handle distress and exert interpersonal influence. They also highlight the way self-harm can give self-validation and a personal sense of mastery as important positive and adaptive functions of the act – especially in the understanding of repeated self-harm. As in many other reviews, only a few studies included in this review involved an adolescent sample or qualitative findings. In the following, I will present a selection of qualitative studies on the experience of self-harm among adults and adolescents. I will argue, that an exploration of personal experiences of self-harm can enhance and nuance our understanding of different aspects of self-harm and of the variety among self-harmers – adults as well as adolescents.

3.1 Qualitative studies on adults' experience of self-harm

There are some qualitative studies that collect information from adults on self-harm through open interviews. Some of these studies focus on how health-workers describe working with patients who self-harm (Karman, Kool, Poslawsky, & Meijel, 2014; Tallaksen, Bråten, & Tveiten, 2013; Tofthagen, Talseth, & Fagerström, 2014) or of being parents to adult patients who self-harm (Lindgren, Åström, & Graneheim, 2010). I will mention some studies that

highlight adult patients', mostly women with BPD and chronic, repetitive self-harming behavior, perspective of their treatment and recovery process of ending self-harm

Adult patients' experience of treatment. Adult patients value help to increase self-acceptance, to get better control of difficult feelings and problems, to improve relationships and increase work ability, and to reduce suicidality, self-harm and drug misuse (Katsakou et al., 2012). Some years after being in treatment, patients underline the importance of resolving adolescent challenges, accepting their misuse of alcohol, and understanding that self-harm was a symptom of untreated or unrecognized illness like misuse of alcohol, depression or trauma (Sinclair & Green, 2005).

Self-harm is described by adults as having an important role in life and could be like an addiction by bringing release, a feeling of control, or reducing emotions and stress, and is related to a need to be punished (Brown & Kimball, 2013). Before self-harming, adults describe an experience of "feeling too little" or "feeling too much" and how self-harm reduces psychosomatic suspension and increases a sense of self/reality (Horne & Csipke, 2009).

Adult patients underline how self-harm is often misunderstood (Brown & Kimball, 2013; Fjelldal-Soelberg, 2013), how they feel stigmatization because of this behavior (Straiton, Roen, Dieserud, & Hjelmeland, 2013), and how they have kept their self-harm secret (Storey, Hurry, Jowitt, Owens, & House, 2005). They describe experiencing poor communication and not being listened to (Storey et al., 2005; Taylor, Hawton, Fortune, & Kapur, 2009). The advice to health workers is to become educated about the issue, understand that self-harm is not suicide, not be judgmental, and acknowledge that help is often not helpful (Brown & Kimball, 2013). Adults highlight the importance of being believed in their psychic pain and the therapist expressing hope (Lindgren, Wilstrand, Gilje, & Olofson, 2004).

Even though self-harm is underlined as a sign of psychopathology, several authors emphasize that the personal history and social experience are of importance to understand how self-harm ensures wellbeing and facilitates coping with immense emotional pain (Straiton et al., 2013). Self-harming is understood as a consequence of being traumatized by sexual abuse or abandonment and rooted in traumatic family milieus (Brown & Kimball, 2013; Daley, 2015). Kokaliari and Berzoff (2008) even argue that self-harm may be a reaction to social control of unacceptable affect and reflects social pressure for productivity.

3.2 Qualitative studies on adolescents' experience of self-harm

Some qualitative studies that focus on parents' perspective on their adolescent's self-harm highlight how parents feel guilt and shame (Anderson, Standen, & Noon, 2003; McDonald, O'Brian & Jackson, 2007). A few studies explore therapists' experience of working with adolescents who self-harm and how painful, emotional and meaningful this relationship may become (Ramvi & Huvestad, 2019; Robstad, 2018). I will mention some qualitative studies that explore adolescents' perspectives of living with self-harm. These studies mostly attend to how adolescents can be helped to end their self-harm.

The role of family and friends. Adolescents associate the beginning of self-harm with interpersonal stressors in their family and in relation to friends (McAndrew & Warne, 2014), and relate self-harming episodes to an experience of psychological pain and anger in close relations (Abrahms & Gordon, 2003). In the youths' perspective, parents and peers are experienced to have a key role in both precipitating self-harm and in supporting young people to stop self-harm (Wadman et al., 2018). Even their descriptions of self-harm and suicide attempts could be understood in relational dimensions (relation to self, relation to others, to their body, and to death) (Grandclerc, Spiers, Spodenkiewicz, Moro, & Lachal, 2019).

How to seek help and to end self-harm. Some studies report that adolescents are ambivalent towards getting help and mainly seek support from family and friends (live or online) before and after episodes of self-harm (Berger, Hasking & Martin, 2014; Chandler, 2017; Fortune, Sinclair, & Hawton, 2008; Klineberg, Kelly, Stansfeld, & Bhui, 2013). They often lack knowledge of whom to ask for help and are afraid of not being believed or labelled as "attention seeker" (Berger et al., 2014). They suppose they should cope on their own and that telling others will make it worse for their family. Interestingly, in a study by Chandler (2017), adolescents describe negative judgments of persons who self-harm as "attention-seeking" and favored "private" self-harm. Although they underline the importance of talking to someone to get help, it was unclear how this could be possible without being an "attention-seeker". Adolescents who were in a hospital unit because of self-harm reported several examples of both helpful and unhelpful interventions that were experienced differently – such as increased observation, removal of objects and practical support (Johnson, Ferguson & Copley, 2017). They recommended mental health professionals to ask for feedback to increase helpful interventions. Adolescents also describe ending self-harm by managing and communicating difficult affect and distress to their family (Holliday, Brennan, & Cottrell, 2018).

Personal descriptions and theoretical perspectives. In qualitative studies, the themes and constructs are discussed in regard to different theoretical perspectives. Some authors discuss self-harm as a function of affect-regulation (Holley, 2016; Prive, 2007; Wadman et al., 2018) and a coping mechanism (McAndrew & Warnes, 2014; Moyer & Nelsons, 2007). These studies highlight the immediate relief and reduction of internal distress, guilt and shame by self-harm, but also suggest that shame may, in the turn, create anxiety and a need for selfpunishment. In other studies, self-harm is discussed as a response to distress or anger in relational conflicts – as an avoidance, self-preservation or a struggle for well-being (Crouch & Wright, 2004; Lesniak, 2010; Lewis & Mehrabkhani, 2017; Machoian, 2001; Nice, 2012). Self-harm is also seen as a primary response to an inner conflict, such as a resistance to strict expectations of self (Bedenko, 2001; Magagna, 2008; Yip, Ngan, & Lam, 2004), as a way to turn aggression against the self (Parfitt, 2005), or as a way to express complexities in the psychological development of separation towards autonomy (Grandclerc et al., 2019). In some studies, self-harm is understood as a way to cope with unbearable, unstable and unpredictable sociocultural circumstances (Ekman, 2019), difficulties in self-identity, managing homophobia and resisting pathologizing (Adams, Rodham & Gavin, 2005; McDermott, Roen, & Piela, 2015), or an attempt to establish psychosocial belonging (Abrahms & Gordons, 2003; Gulbas, Tyler, & Zayas, 2015; Marshall & Yasdani, 1999).

The diversities in perspectives in qualitative studies, both with adult and adolescent samples, is somewhat different to a tendency in studies of self-harm in general, which Favazza (1998) argued is far from a holistic bio-psycho-social perspective but a primary focus on self-harm as a mental illness. Following Favazza's perspective, Ekman (2019) argues that the domination of a medical and psychological perspective in the studies of self-harm have established a picture of the typical self-harmer as a young attractive emotionally unstable woman and reinforce a view of self-harming as only related to *intrapersonal* difficulties. Ekman proposes that medicalization of self-harm could have negative consequences for help-seeking – people may be afraid to seek help because of a fear of being perceived as mentally ill or stigmatized when they need help with an unbearable social and/or familial situation.

Self-harm may sometimes be part of BPD, but not always. Self-harm may be a consequence of trauma, but meta-analytic data show that child sexual abuse and self-harm has only a modest association (Klonsky & Moyer, 2008). Findings in quantitative studies are mostly a presentation of the mean tendencies in a group and individual differences are seldom highlighted. At the individual level little is known about *how* self-harming becomes a function

of affect-regulation, a coping or problem-solving strategy or a way to handle an unbearable social situation (Hawton et al., 2012; Klonsky et al., 2014; Nock, 2014, 2010).

Following some authors, (Soyemoto, 1998; Spandler & Warner, 2007; Whitlock & Selekman, 2014), I argue that findings about self-harm among adolescents must be understood in regard to intrapersonal, interpersonal and social, as well as behavioral and neurobiological conditions. In particular, findings should be related to psychological developmental challenges during adolescence, like separation/individuation or self-identity formation, but this is seldom the case in quantitative or qualitative studies on self-harm. Further, the authors seldom discuss the fact that most participants in quantitative and qualitative studies on self-harm are young woman or girls. Self-harm is often discussed in a medical and age-gender-culture neutral perspective. In addition, there is a lack of studies on self-harm among adolescents that include qualitative personal data and quantitative data on mental illness or follow participants over time. A study of the experience of self-harm across a sample and at an individual level can increase knowledge on the variety of relationships between: a) the meaning invested in this behavior, b) the mental problems related to selfharm, and c) what is perceived as helpful in coping with these difficulties (Hawton et al., 2012). This knowledge is of importance for the clinician to understand their patient from within, to increase the likelihood that the patient feels understood, and to be open to the private and social intentions for this apparently irrational and destructive behavior.

4 Research questions

This project consisted of two qualitative studies: firstly, a meta-synthesis of qualitative studies on adolescents' reasons for self-harm, and secondly, a multiple case-study of adolescents who harm themselves in a clinical sample.

4.1 The aim and research questions for a meta-synthesis

The aim of this meta-synthesis was to investigate self-harm by integrating existing qualitative studies of young peoples' (12-18 years of age) first-person descriptions of their own self-harm. The research questions were: What is the purpose of self-harm, as understood by the young person? Can adolescents' experience of self-harm be related to the developmental challenges of becoming a young woman or man? By including qualitative studies from mental health and other disciplines, with different methodologies and clinical and non-clinical populations, the intention was to nuance knowledge of self-harm among adolescents.

4.2 The aim and research questions for a multiple case-study

The aim of this multiple case-study was to explore adolescents' experience of self-harm as part of their life and development *and* to explore differences and possible sub-types of self-harm. This systematic study of a clinical sample primarily analyzed personal interviews, but still included structured data on self-harm, symptom disorders, personality disorders and capacity for reflective function to describe the sample.

Different paths into and out of self-harm. Since the sample consisted of mainly girls, the research questions were: 1) How do adolescent girls experience the beginning of self-harm and how it became a part of their life and development? 2) How do girls describe finding a way out of self-harm? Do they experience treatment as helpful for quitting self-harm or not (independent of treatment method)? By highlighting three girls' narratives about the ways into an out of self-harm, an exploration of the diversity of experiences in terms of level of coherence, integration and capacity of mentalization is conducted.

Different self-states and ways of acting out during self-harm. The research questions were:

1) How do adolescent girls in a clinical sample describe self-states and ways of acting out during self-harm? 2) Are there sub-types with essential features across the sample? Personal data on self-harm are explored as indications of diverse capacity for affect-integration and related to emerging representations and development of self.

5 Findings – summary of papers

5.1 How do young people understand their own self-harm? A meta-synthesis of adolescents' subjective experience of self-harm

What makes young people – most often young women – inflict damage on their own bodies? Epidemiological studies drawing on surveys have estimated incidence and identified risk factors, but studies that explore the individuals' experience and understanding of self-harm, which typically comprise a small series of persons, are omitted in many reviews. We conducted a systematic database search of studies on adolescents' (12-18 years of age) firstperson experience of self-harm in clinical and non-clinical populations and included 20 studies in a meta-synthesis. Four meta-themes were associated with the participants' subjective experiences of self-harm: (1) to obtain release, (2) to control difficult feelings, (3) to represent unaccepted feelings, and (4) to connect with others. The meta-themes support self-harm as a function of affect-regulation but highlight how the action of self-harm may contain important emotional and relational content and an intention or wish to connect and communicate with others. Our findings underline the importance of relating self-harm to developmental psychological challenges and conflictual needs in adolescence. Self-harm in adolescence may be a result of a conflict between a need to express and process experiences and a relational need for care and support. To express difficult affective experiences in close relationships openly with words may be impossible – others must be protected to obtain sufficient care. In this way, self-harm may be a way to regulate affect and an attempt to communicate in a relational context.

5.2 Discovering one's own way: Adolescents' different pathways *into* and *out* of self-harm

Epidemiological studies have shown that self-harm is most commonly reported by adolescent girls and is associated with mental illness and increased suicide risk. The present naturalistic multiple case-study aims to increase knowledge of adolescent girls' pathways into and out of self-harm. The sample consisted of 19 girls, 13-18 years of age, and strategically selected from a clinical population. Personal interviews were analyzed using *Interpretative Phenomenological Analysis*. To describe the sample, data were collected on frequency of self-harm, symptom and personality disorder, and capacity for mentalization (rated by the *Reflective Functioning Scale*). Analysis of the first main topic "beginning self-harm" resulted in two meta-themes: 1) beginning self-harm as a way to handle difficult feelings and

relational problems, and 2) becoming influenced by peers to experiment with self-harm. Analysis of the second main topic "quitting self-harm" resulted in three meta-themes: 1) ambivalence towards help, treatment and ending self-harm, 2) finding one's own way of quitting self-harm, and 3) exploring self-harm together with the therapist. The participants described emotional and relational problems differently – as self-criticism, diffuse stress, or earlier traumatic events. They emphasized discovering different ways out of self-harm – being understood and developing self-supporting monologues, sharing experiences and developing coping-strategies, or being respected and receiving practical support. Three case stories illustrate varieties in trajectories of change and capacity for mentalization. Self-harm is discussed as a way of handling developmental challenges in adolescence, like autonomy and identity formation. Variations in capacity for affect-integration and mentalization are discussed as information for adjustment of treatment.

5.3 Sub-types in self-states during self-harm: A qualitative study of adolescent girls in a clinical sample

This naturalistic multiple case-study aims to elucidate differences in girls' experience of selfharm. Nineteen girls (13-18 years of age) in a clinical population (strategic selection) participated in personal interviews and structured assessment of mental illness. Personal interviews were analyzed by Interpretative Phenomenological Analysis, and resulted in three sub-types with essential features of different self-states and ways of acting out during selfharm: "I deserve it" (sub-type #1), "I don't want to feel anything" (sub-type #2), and "I'm harmed, and no one cares" (sub-type #3). Further, these self-states may reflect different features in emerging self-representations – "the punished self" (sub-type #1), "the unknown self" (sub-type #2), and "the harmed self" (sub-type #3). Self-states during self-harm may indicate diversities in affect-integration and express conflictual, undeveloped or disturbed aspects of self. Although the sample is too small to generalize the results quantitatively, persons associated with sub-type #3 showed less frequent, more impulsive and extensive selfharm, and reported more severe mental illnesses and suicide attempts. Self-harm is discussed as a desperate attempt to regulate, explore and express self-identity and to awaken important others to be sufficiently involved. This knowledge may enhance self-understanding among vulnerable adolescents, their family and clinicians, which may increase treatment motivation and autonomy, and could have implications for adjusting interventions in treatment.

6 The present study: Research design and chosen methodology

Self-harm is not a new phenomenon, and especially in psychiatry and psychology several theories and models have been proposed to understand self-harm. Different research methods - case-studies, epidemiological studies, surveys and experimental studies – have been used to gather information and knowledge on self-harm. Much of our knowledge on self-harm – its frequency and its correlates – is gathered from quantitative studies, like survey and epidemiological studies. Self-harming behavior is assessed through external observation of different individual variables and through self-report questionnaires. These studies present knowledge on which states (such as different mental illnesses), intentions (such as anger, sadness or coping) and risk factors that correlates with self-harming behavior. The states, intentions, individual variables and answer categories are in these studies are predetermined by the researchers. The categories are developed in different ways: from clinical experience, factor analysis, or from qualitative studies. However, given that case-studies seldom include the patients' quotes and are often theory-driven, that most qualitative studies focus on adult patients with borderline personality disorder, and the limited number of qualitative studies on self-harm in adolescence, one possible problem is that the predetermined categories are *not* sufficiently relevant for self-harm among adolescents. The experiences of self-harm might not be the same for an adolescent as for an adult with borderline personality disorder. Especially among adolescents, there is a lack of knowledge about the experience of self-harming from the young people's perspective, and no systematic study of potential differences among them.

The aim in qualitative research is to understand the *subjects' experience* of a phenomenon, and different qualitative methods are developed to explore social life and inner experience (Willig, 2013). In the meta-synthesis for this research project, Noblit and Hare's (1988) *meta-ethnography method* was applied to relate, analyze and synthesize the primary findings (exemplified by quotes from adolescents) across qualitative studies with first-person descriptions from adolescents of their reasons for self-harm. Although the findings from the different studies may be nontransferable or context-dependent and are based on a small samples of participants, we assumed that developed concepts form each study could be relevant in a synthesized form to understand different aspects of the phenomenon (emphasized by Campbell et al., 2003; Levitt, Pomerville, & Surace, 2016).

In the present multiple case-study, it was significant to choose a qualitative method to explore and analyze perspectives, perceptions and meaning-making of adolescent's life-world through personal interviews, while also relating these descriptions to already established knowledge and theories on self-harm. The balancing act of studying a phenomenon

impartially while also relating to what is already known about it, is important if knowledge is to progress. *Interpretative phenomenological analysis* (IPA; Smith, 2011, 2015) was specifically chosen for data analysis because it is dedicated to detailed exploration of personal meaning and lived experience. Importantly, IPA explicitly describes procedures for a phenomenological study on ideographic material while interpreting the data material hermeneutically according to knowledge of mental processes.

Although, the sample and methods for data gathering and analysis for the metasynthesis and the multiple case-study are presented in the three articles, in the following section I will emphasize some *methodological choices* and *challenges* in regard to the multiple case-study: How do I know that the data is really the persons' experience of self-harm and not an expression of their feelings in the moment, saying more about their mental state of depression, or something they just happened to invent? How do I know the data reflects the participant's experience and not simply the investigator's personal reflections or theories? How do I know if their subjective experiences have something in common with other persons' experience of self-harm and are not just true for this particular person in this specific clinical context? Can this study contribute to understanding or explanation of self-harm as a phenomenon in general?

These questions lead to the scientific assumption of *objectivity*. Empirical, quantitative studies on self-harm behavior include large samples in order to find objective, representative, replicable and generalizable findings. These studies focus on general, context-independent knowledge and are characterized by a realistic methodological orientation. Further, many of these studies are related to a positivistic epistemological position with an assumption that there is a direct connection between a phenomenon, our perception and our representations, and therefore that it is possible to get objective and universal knowledge, or truth, about the world ("correspondence theory of truth") (Willig, 2013). According to the philosopher Dilthey (1833-1911), natural science attempts to reach an explanation of a phenomenon by laws in order to predict or explain behavior, which differs from the search for understanding (hermeneutic) in social science (Dilthey as cited in Benton & Craib, 2011). There are fundamental differences between human social life and the facts of nature, including the alleged unpredictability of human behavior, humans' free will, that humans are rule-governed and not law-governed, and the role of consciousness, values and meaning in human life and society. In different qualitative methods, a main assumption is that the researcher's perception and empirical data is selective and partial, and therefore knowledge of the world cannot be

objective. As a human or researcher, a view of reality is always related to a frame of reference. Therefore, findings must be related to the researcher's social and cultural context.

In the following, I will argue that context-dependent knowledge of multiple cases can be important in the understanding of a phenomenon in general because of the assumed relationship between data, results and a theory of the phenomenon. The concepts and theory developed from the results can be transferred and discussed in regard to knowledge from other studies. Stiles (1993, 1999, 2003) argues that in qualitative research the concept of "permeability" replaces objectivity, and that the most important methodological challenge is to reach "trustworthiness". Emphasizing Stiles' (1999) recommendations, Levitt, Motulsky, Morrow, and Pontorotto (2017) propose an overarching concept, "methodological integrity", as the methodological foundation to reach trustworthiness. Inspired by Stiles (1993, 1999, 2003) and Lewitt and colleagues (2017), I will discuss the challenges of reliability and validity in regard to how *fidelity to the subject matter* (consistency) and *utility in achieving goals* (appropriateness) were emphasized during data collection (procedural trustworthiness), data analysis (interpretative trustworthiness) and in generalization (transferability) of the results. In the end, I highlight some ethical challenges.

6.1 Fidelity to the subject matter

Adequate data collection methods – data and methodological triangulation. In this qualitative study, data were collected to clarify subjective differences and nuances in the phenomenon of self-harm. Firstly, participants were selected as informative exemplars rather than a representative sample, with the purpose of being good examples of adolescents in a clinic who confirmed self-harm (impulsive or repetitive, with or without suicide intention). Adolescents were recruited during the first six months of treatment (see 6.3 Ethics) in an outpatient clinic for children and adolescents in Norway, which offers treatment (free of charge) for mental problems to children 0-18 years of age. Of 33 patients invited between April 2015 to December 2016, 21 consented to participate (for descriptions of participants, see Appendix A; Stänicke et al., accepted). The selection of cases depended partly on the inclusion of earlier cases to secure sample-heterogeneity related to age, gender, frequency and form of self-harm, symptom disorder, personality disorder, socio-economic and cultural background and education. Although both girls and boys were invited, there were fewer boys in the clinic who confirmed self-harm to their clinicians, and of the five boys invited, only two consented to participate. Due to their small number, data from the two boys were not included in the findings (see also 7.3 Self-harm and gender).

Secondly, different methods were used to gather data on self-harm for each participant (see Figure 2). Methods for data collection were selected to develop results that were rich and encompassing of the subject's experience of self-harm and to describe the sample (methodological triangulation; Flick, 2002). Personal interviews, informed by the Life-mode Interview (Haavind, 2011), invited the participants to describe a particular day in their life, mostly the day before, in a concrete and detailed way. The Life-mode Interview was specifically selected to facilitate adolescents' cooperation with the interview, to evoke their personal experiences, and to study diversity in subjective experience. The interviewer used open interview questions that were loosely structured and connected to the research questions. If the topic of self-harm was actualized in the interview – for example related to a difficult situation the day before – the interviewer explored this experience with questions concerning their thoughts, feelings and actions. If the participants did not mention self-harm, the interviewer asked specifically about concrete experiences of self-harm, e.g. when thoughts or behavior of self-harm last occurred, when they started to harm themselves, patterns of change, and prospects for the future. In this way, the girls were invited to explore and reflect upon their thoughts, feelings and practices of self-harm in their every-day life context as openly as possibly together with a reflexive listener. This provided them with an opportunity to describe how they felt understood and cared for – or not – by important persons in their life, and what they tried to accomplish with their behavior. Further, a *structural assessment* of frequency and form of their self-harm behavior in the last year was included (Linehan Parasuicide History, LPH; Linehan & Comtois, 1996). In the personal interviews, they described mental problems, and in structured interviews, I assessed symptom disorders (International Neuropsychiatric Interview, MINI; Sheehan et al., 1998) and personality disorders (Structured Interview for DSM-IV Personality, SIDP-IV; Pfohl, Blum, & Zimmerman, 1997).

Furthermore, a semi-structured interview was included to collect data on the participants' capacity for mentalization – to understand their own and others' behavior according to mental states (*Transition to Adulthood Attachment Interview*, TAAI; Crittenden, 2005; a modified version of the *Adult Attachment Interview*; George, Kaplan, & Main, 1984). In the TAAI, the adolescent was asked to describe and reflect upon important relationships, separation, trauma, rejection and loss based on autobiographical memories. The TAAI was used primarily to rate Reflective functioning (RF), an operationalization of the capacity to mentalize and understand behavior as related to mental concepts (Fonagy et al., 1998). Professor Siri E. Gullestad (SEG) conducted the TAAI. Data from the TAAI was not used to rate attachment patterns. Still, the TAAI provided data on the participants' experience of their

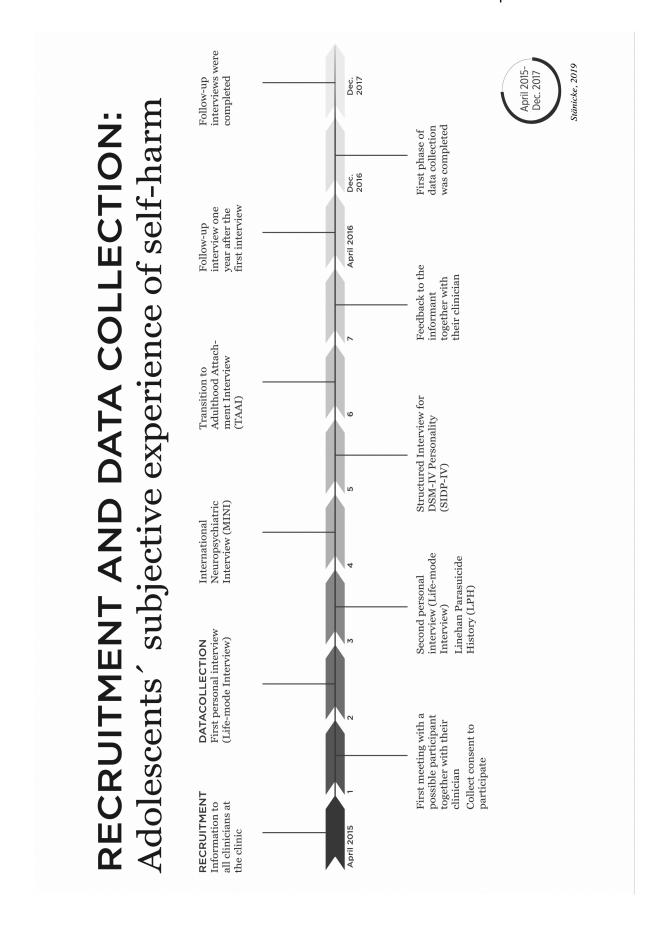


Figure 2. Recruitment and data collection

relational context. In this way, I could discuss data and my interpretations from the personal interviews on their relational context in regard to data and impressions of the participants from the TAAI. This methodological triangulation provided an opportunity to evaluate *data consistency* for each participant (Flick, 2002).

Thirdly, the procedure of this study included *several encounters* (approximately 7-8) of personal contact and data collection with every participant over a time period of 1-2 months, and an extensive reading of the transcribed texts, which ensured familiarity with the participants and the data material. I met the participants one time to inform them about the study, two times for personal interviews, and two times to conduct the MINI, SIDP-IV and LPH during approximately a one-month period. For some participants, data were collected over a longer period due to a school holiday, because they had a hard time at school, at home or with themselves and did not meet for appointments at the clinic, or because they struggled to find motivation for treatment. During this period, or shortly thereafter, SEG did the TAAI. Thereafter, I met each participant together with their therapist to give feedback about preliminary findings. After one year (regardless of whether they were still in treatment at the clinic), I met the participants for a follow-up qualitative interview informed by the Life-mode Interview with questions of change and how they lived their life, in addition to the LPH.

Perspective management in data collection – transparency and reflexivity. The personal interviews involved detailed examination of the participant's perception of lived experience as opposed to an objective statement of an object or event. The attempt was to describe the web of meaning surrounding self-harm for the participants. This attempt represented an overall phenomenological philosophical orientation for this study. Husserl declared that phenomenology is an "attempt to return to things themselves as experienced" and "what appears is the starting point" (Husserl as cited in Smith, 2015, p.11). Phenomenological tradition, inspired by Husserl, underlines the importance for the researcher to "hold back" preconceptions, such as personal ideas and values, before interviewing so as not to influence data collection and analysis ("bracketing"; Giorgi, 2011). Husserl rejected the notion that there was something behind or more fundamental than experience. Later, Heidegger (1927) proposed in his existential phenomenological perspective that an understanding of the world without interpretations is impossible. He also developed a set of phenomenologically-based concepts, existential affordances such as relational vulnerability, mortality, and dependency, which he thought influenced interpretations (Vetlesen & Stänicke, 1999). Following Heidegger's thoughts, Gadamer (1990) emphasizes the importance of recognizing the

"preconceptions" that influence interpretations even though it is impossible to be totally free. Further, Giddens (1987) accentuated that researchers make interpretations of the participants' interpretations of their world – which makes research a "double hermeneutic" process.

Following this perspective, Stiles (1998) argues that a researcher cannot be free from preconceptions, but he or she can try to reach for transparency by being reflexive. In the beginning of the project, during the interviews and data analysis, I tried to recognize my "preconceptions" and "forestructure" on the topic of the project (Levitt et al., 2016; Stiles, 1998) – adolescents who self-harm – from my knowledge on developmental psychology, clinical experience, training in psychodynamic therapy and psychoanalysis which could influence my theoretical perspectives. I tried to be reflexive about my life-experiences as a woman of western culture that could influence data collection or limit my exploration of the participants' representations of self-harm. Willig's (2013) distinguishes between "epistemological reflexivity" – how my epistemological position influences my research questions – and "personal reflexivity" – how my preconceptions from my personal history may have consequences for the findings. My research questions are informed by my phenomenological orientation and I wanted to highlight differences in subjective experience of self-harm among adolescents. As a clinician, I had experienced adolescents who harmed themselves as a heterogeneous phenomenon. Some were clever, silent girls and boys, others had a tough attitude or were more expressive, and some were from broken homes. My expectation was to find differences in experience of self-harm, but I did not have explicit expectations of what kind of differences. I thought there might be difference in the degree to which they could provide coherent descriptions of their problems and their experiences of self and self-harm. I had noticed that some girls described self-harm as something that "just came out of the blue" and that they did not seem to understand their behavior. I had also noticed that some said that when they harm themselves, they felt "real" and alive. I was curious about their descriptions of themselves during the act of self-harm.

By explicitly aiming to explore the participant's perspective, experience and constructions of their world, IPA is rooted in a phenomenological and hermeneutic philosophical tradition (Smith, 2015). Importantly, during the data gathering process and data analysis, I searched for the participants' *descriptions* of their experience. I chose to include personal interviews with *open, non-leading questions*, and asked the participants to consider what important questions had not been asked. It was an attempt to meet the adolescents as openly as possible and to be close to their descriptions of their problems. I tried to make my understanding transparent to the participants during the interview, to check if I had

understood their experience from their perspective. Furthermore, at the completion of each interview and after every encounter (telephone, SMS, or interviews), I made *a field note* about non-verbal communication, feelings, impressions and thoughts. The notes helped to identify personal experiences in the relationship with the participants to increase reflexivity (reflexive journaling; Levitt et al., 2017). The attempt was not to eliminate early assumptions and interpretations but to be aware of thoughts that could influence a selective reading of the data.

Still, I was also inspired to look for latent meaning in the participant's narrative – both during the interviews and in the data analysis. Habermas' (1968) thoughts on investigating "double meaning" in language and symbols, and Ricœur's (1970) concepts of "empathic and questioning hermeneutics" are important in IPA (Smith, 2015). Ricœur (1970) made a distinction between the disclosure of information on the nature of others' experience, which he called "the hermeneutics of meaning-recollection", *and* to look for hidden motivation behind the topic being analyzed – a deeper or more radical interpretation that may challenge the initial surface interpretation – which he called "the hermeneutics of suspicion". Both Habermas and Ricœur discussed the contribution of Freud's psychoanalytic theory to social science and especially the assumption that to know oneself or to become conscious of a latent meaning or structure may be a revelation for the individual. From Ricœur's (1970) view, disclosure of unconscious meaning, needs and basic forces may increase existential freedom.

During the interviews, my theoretical interpretations, personal thoughts and affective experiences could provide relevant data in order to better understand each individual case (Finley, 2009; Haavind, 2007a; Holoway & Jefferson, 2012; Stänicke, Strømme, Killingmo, & Gullestad, 2013). During the interview, I noticed my associations to their descriptions and could ask for elaborations or ask whether or not my impressions of an intention behind their action gave meaning to them. For example, Anna described different states associated with self-harm – negative self-thoughts and sorrow for her difficulties and loneliness. I commented: "It seems conflicting", and she elaborated: "I didn't like my body and I wanted to give myself pain because I was how I was ... I don't deserve to live, I'm worthless, I'm a bad person and - ... have no future. That's the reason why I harm myself." While Anna described self-harm in this way, I also had an impression of some kind of happiness in the tone of her voice. I asked her if self-harm made her satisfied, and she confirmed that it did. Even more importantly, she elaborated how she became calm and relaxed after the act of selfharm. In this way, it became more explicit that self-harm was related to conflicting self-states, and that self-harm seemed motivated by aggression towards self (self-punishment) and to get satisfaction. In Anna's case, aggression was also directed towards a state of being lonely and

vulnerable. My interpretation is influenced by an assumption that self-harm *can be understood* as a part of a whole – Anna's lifeworld, and that it is possible to detect the motivation – conscious or unconscious – behind her act. I tried to be explicit during the interviews to give the participants the opportunity to react, correct, nuance and validate preliminary interpretations (Stänicke et al., 2013).

Perspective management in data analysis – double hermeneutic. During the data analysis, I tried to empathically adhere to the participant's descriptions of self-harm. I also struggled to questioning and make sense of (interpret) of how they understood self-harm (double hermeneutic). IPA presumes there is a connection between people's talk and their thinking and emotional state – people are cognitive, linguistic, affective and physical beings (Smith, 2015). My investigation was inspired by a perspective of humans as intentional *and* motivated beings – unrepresented or unacknowledged needs and affect influence mind and behavior.

Following Ricœur's (1970) distinctions between an *empathic* and a *suspicious* interpretation of the data, Watts (2014) differentiates between a first-person perspective of data (participant perspective) and a third-person perspective. This differentiation can describe aspects of the analysis process – as a researcher my perspective moved from being close and empathic to the participants' perspective to achieving a distance (third-person perspective). This explicit *movement* makes interpretations of latent and new understanding as transparent as possible. Descriptions (semantic and explicit) from the empathic hermeneutic were combined with an interpretative (latent and implicit) phenomenological analysis of how meanings of self-harm are represented and constructed by the participants. The interpretations are not facts, but ways of making meaning of the material. Smith (2015) is inspired by Gadamer (1960), who argues that observation and interpretation are always inter-related in "a hermeneutic circle" – interpretation of data involves a dynamic move between looking at the part and the whole and back again. The analysis process cycled between observation and interpretation, repeatedly reformulating and examining revised interpretations in regard to further observation and examining of evidence. In this way, the data is not strictly descriptive but also interpreted by me as a researcher in a social culture.

Theory and knowledge on self-harm and adolescence was applied to understand and discuss data. For example, self-punishment as the function of self-harm is emphasized in early psychoanalytic studies (turning aggression towards self; Freud, 1917; Parfitt, 2005; Pao, 1969), affect-regulation theories (self-punishment; Klonsky, 2007), and may be related to neurobehavioral studies on self-criticism (Glassman et al., 2007; Hamza et al., 2014; Hooley

& Germain, 2014). Importantly, my interpretation is grounded and validated in the participants' descriptions. The findings in every case were systematically compared and nuanced in the analysis of essential features across all participants. In the case of Anna, I conceptualized "the punished self" with essential features after a thorough analysis of data across participants (see Table 1; Stänicke, submitted). The concept is grounded in data, related to theories of self-harm, and challenges in adolescence to find ways to explore and represent self. Although Anna described a wish to harm herself, I interpreted her conscious intention as influenced by an unconscious conflict between a wish for pain *and* self-concern, and that aggression seemed to motivate her behavior – directed towards self instead of others.

Several strategies to manage and to be conscious of the researcher's perspectives during the data analysis were included, such as previously mentioned self-reflective journaling and dialogue during the interview. Further, after the initial project period, the interviewer met each participant together with their therapist to give feedback about the descriptions and interpretations of their experience. Three participants did not receive such feedback because they had ended treatment. Those who received feedback could confirm, correct, nuance or add information to my descriptions and interpretations of their experiences of self-harm. In the follow-up interview, I repeated my initial understanding and they could make additional comments.

Further, I collaborated with two senior researchers (SEG and Professor Emeriti Hanne Haavind, HH) with different methodological and theoretical perspectives who became familiar with and analyzed the material with the aim of minimizing bias (investigator triangulation; Flick, 2002). They read ten of the personal interviews and the TAAI and were especially attentive to the descriptions and semantics of the participant's experience and self-understanding and made individual notes before they met the principal investigator in a research team meeting to analyze the data case by case. The group worked with the guiding principle of capturing the complexity of the data before working toward the aim of reaching agreement on themes, concepts and understanding of each case, which helped me to become self-reflective and aware of different ways of reading the data (Levitt et al., 2017). In this way, my sub-questions, preliminary codes, repeating ideas, and preliminary interpretations of the participants' experiences of self-harm were reflected upon and checked to determine whether they were plausible, understandable, overlapping or different from the team members' interpretations of the text.

Flick (2002) suggests that the validity of interviews can be judged by whether: a) the content of what is said is correct, b) what is said is socially appropriate in its relational aspect,

and c) what is said is sincere in terms of the self-presentation of the speaker. Importantly, one of the senior researchers (SEG) met nineteen of the participants for the TAAI. Her personal knowledge of the participants was of significance in evaluating the *consistency* of the interpretations of the material, such as our impressions of the participants, their descriptions of their life and their self-presentation (researcher triangulation; Flick, 2002).

During the data analysis, the fieldnotes from my personal relational experience of being with the participants were a possible source for relevant data to obtain a better understanding of each individual case (Finley, 2009; Haavind, 2007a; Holoway & Jefferson, 2012; Stänicke et al., 2013;). When I analyzed patterns of sub-types between the participants, I noticed some differences in my affective responses and feelings. For the participants representing the first sub-type, I had mainly described the participants as easy to understand and how they evoked empathy and curiosity. For the participants of the second sub-type, I often noted feeling being stupid and insecure, how I tried to make the project sound interesting and relevant, and struggled to find a feeling of connection during the interviews, which made me frustrated. For the participants representing the last sub-type, my impressions were dominated by anxiety and concern for their well-being and care. I felt a need to confirm with the clinician, and on three occasions I informed them about suicide risk. These subjective experiences led to hypotheses on sub-types and how self-harm is related to conflicted, undeveloped and disturbed self-aspects, which were explored in the interview data.

Groundedness – rich exemplars and consensus meetings. The interviews and analysis highlighted *what* and *how* the participants described their experience. During the data analysis there were systematic procedures for linking interpretations with concrete observations or data to ensure that the results were rooted and grounded in rich exemplars of data (Levitt et al., 2017). The data analysis procedure is described in detail in Article 2 and 3, followed the IPA quality evaluation guide (Smith, 2011), and was primarily conducted by me, yet discussed with and nuanced by the research team (SEG and HH). The analysis had several phases, starting with reading the transcripts (transcribed by a professional transcriber) several times while attending to preliminary nodes and repeating ideas. Thereafter, we formulated sub-questions, which helped us to work systematically, such as "how did they get the idea to harm themselves?", "what did they relate self-harm to in their life?", "how did they get into treatment", "what helped them to end self-harming", "how did they experience self-harm, themselves and others during self-harm?", and "what did they accomplish with self-harming"? While reading and discussing the interviews, we became aware of some surprising

tendencies – that the patients were referred to the clinic but not because they wanted to end self-harm, and that their way of ending self-harm was not explicitly related to treatment. In addition, their descriptions of problems, affect, thoughts, self-experiences and self-harm differed. These questions and tendencies led to a selection of topics for thorough analysis: influences to begin self-harm, starting treatment, ending self-harm, experience of self-harm, experience of self and others during self-harm, and consequences of self-harm. I collected extracts from all interviews (from the beginning of treatment and follow-up) on the chosen topics. The extracts were copied into a data file for each selected topic, together with the participants' number, line and page of the interview, and labelled with nodes. Although all interviews supplied the analysis with unique data, the interpretations of the first ten cases encompassed more or less the next eleven cases.

The selection of extracts involves some degree of interpretation from me as a researcher (Haavind, 2007b). I chose extracts where I thought I could find something of importance due to the chosen topics and research questions. Some extracts were answers to questions in the interview guide. Other extracts were part of the interview where the participants said something of relevance for the chosen topic. Sometimes there were specific parts of the interview where the relation to sub-questions and topic was vague and nonspecific, but still seemed important to the research project. I made specific notes on these parts of the interview and reread them later to see if I could understand more of the relationship to the research questions. It is not possible to be free from one's own theoretical and clinical knowledge. Still, it is important to highlight that it was the participants' descriptions of their experience, their way of *talking* and *understanding* of the world, and not my own theoretical perspective and interpretation of the excerpts, which was the focus of the analysis at this level. My theoretical background and practical knowledge guided me to important parts of the interview and helped me to see differences in how they expressed and communicated meaning (talk as action).

Thereafter, I sorted and categorized the nodes into a preliminary hierarchy of subthemes, themes and meta-themes, which were presented to the research team. Quotes from the interviews were presented as examples for each node (see Table 1). In several *consensus meetings*, we continued to discuss the organization of the data and the descriptive labels, which ended in agreement (all three agreed) or became integrated into nuances of the material (one or two disagreed), such as renaming, rearranging, adding or merging themes or subthemes (Levitt et al., 2017). The labels of sub-themes, themes and meta-themes were kept close to the participants' descriptions. Good exemplars of extracts and quotes and the

interpretation were evaluated, and links across data, analysis and results were made transparent in the presentation of results in the manuscript, which allows the reader to judge the fidelity of the analysis. The participants sometimes told me their theories of the cause of self-harm, but these descriptions did not substitute for the researcher's interpretations.

FIRST TOPIC: BEGINNING SELF-HARM			
First meta-theme: Beginning self-harm as a way to handle difficult feelings and relational problems			
Theme	Sub-theme	Node	Quote
Difficult feelings and negative thoughts about self – self-criticism	Excessive negative thoughts about themselves	Dissatisfaction with the body	"I didn't like my body and I wanted to give myself pain because I was how I was".

Table 1. Example of topic, meta-theme, theme, sub-theme, node and quote

6.2 Utility in achieving goals

Contextualization of data – reflexive validity. The setting and sample are described with sufficient information so that features that might influence the findings are explicit (reflexivity validity; Stiles, 2003). Structured assessments from several data sources were included to describe the sample of adolescent girls referred to a clinic for mental problems (see Appendix A; Stänicke et al., accepted). Data from the structured assessments could be compared to normative samples. The participants lived in different parts of Norway's capital and represented a range of different socio-economic statuses. Both the participants and the research team are influenced by values in Western culture. Some of the participants (n=3) had one parent who had grown up in a non-Western country. To increase reflexivity, I tried to make my understanding permeable and transparent during data collection and data analysis (see 6.1 Perspective management).

The data was gathered at the child and adolescent outpatient clinic at a Norwegian hospital, which may affect the participants' opinion of the project's credibility (see 6.3 Ethics). Importantly, the participants knew I was a clinician, and this may have influenced the way in which they talked about their problems. When they were each asked in the end of the interviews how it was to participate in the project, several of the participants underlined how nice it was to talk to someone about their treatment process and how it made them self-reflective in a good way. Still, some may not have talked openly about difficulties in their relationship with their therapist out of fear that their comments might be disclosed by the investigator. I always stressed the confidentiality of our interviews when they talked about

difficulties at the clinic, except risk behavior, which was disclosed to their clinicians if necessary. All participants received a gift card (worth approximately 200 kr.).

Catalyst for insight – catalytic validity. The choice of sample, way of interviewing, selected extracts and method of data analysis were chosen to enhance the potential for insight and to enhance understanding of nuances in the phenomenon of self-harm among adolescents. My clinical knowledge was of importance because of my experiences treating adolescents in general, and those who harm themselves in particular. My experience with the clinic made me an insider, and my role as a psychologist may have made it easier to obtain consent from the participants (see also 6.3 Ethics). My relational interviewing skills may have enhanced their commitment and made it easier to gain access to their private experiences. Importantly, several of the informants valued being part of the project, even though some complained about the number of meetings. Some emphasized that being part of the project increased their self-understanding and empathy with themselves and some even decided to end self-harm. However, my role as a psychologist may also have had an effect on the content of the interviews, which might have been different if I was from another profession.

Meaningful contribution – external validity, generalization and transferability. If qualitative data is always contextual, how can data from personal experience in one sample in a given social and cultural context be of relevance for increasing knowledge of self-harm in general? In qualitative research, as in all research, there is an assumed relationship between observation, data and results, and theoretical development (McLeod, 2010; Stiles, 1999). A study of multiple cases can provide examples of events at the individual level that have not previously been identified (observation), and that require *new theoretical concepts* to explain.

IPA is rooted in an *ideographic* approach to psychological research – the individual is a unique case – as opposed to a nomothetic approach which restricts attention to general dimensions on which individuals may vary (Smith, 2015). In an ideographic approach, the attention is directed to the unique individual pattern of lived experience. I was attuned to the related mental processes (emotional, cognitive, linguistic and physical) of the participants' meaning-making. When I analyzed the participants' descriptions of experiences with self-harm to find possible sub-types, their descriptions could still be understood as regulation of difficult affect, problem solving or a coping strategy, within a broader category. Still, *different* descriptions with essential features of the experience of self-harm were present.

Anna described self-harm as a way of to get rid of "a negative feeling of being herself", but also as a way of "punishing herself", or even as a way of "getting satisfaction". Self-harm seems to her to be important as a way to regulate feelings and as an actualized selfstate – being worthless and deserving to be hurt. I also obtained some information about Anna's negative self-experience in the way she related to me as an interviewer. She said several times that she had "nothing important to say". In addition, in her relationship with her clinician, she told me of a negative self-feeling: "how can he understand me, I am such a mess." However, she described how important it was to see the blood and to be wounded: "when I self-harm – ... the more blood there is, the more wounded you are." Anna related her self-state to difficult relational experiences: "thoughts that I deserve pain and will never be loved would never have been there if I hadn't heard it every day." For Anna, self-harm could be a way to get to know herself – feeling wounded, wanting to be loved and getting help. The analysis led to a hypothesis about how self-harm could simultaneously be affect-regulation, problem solving and related to experience and representation of self. For Anna, self-harm seemed related to a *conflicted* self-experience – self-hate and satisfaction with being hurt, and, at the same time, a longing to be loved.

In this multiple case-study, different approaches were used to collect data – personal interviews, diagnostic interviews and semi-structured interviews. A challenge was to bridge data from different sources for each participant and across cases. One way to present data from different sources is to use *a case formulation*. A case formulation typically consists of an analysis of the nature and severity of the client's problems, the factors that have caused these problems, what currently maintains them, and the strengths and limitations of the client and his/her life situation in relation to addressing the problems (McLeod, 2010). McLeod (2010) argues that qualitative case-studies with case formulation offer a form of *narrative knowing* and analyze *complexity* to generate *knowledge in-context*. In this study, I made a case formulation for each participant, presenting their way into an out of self-harm, their way into and out of treatment, and their experience of self-harm, self and others. The case formulation included data on the form and frequency of self-harm (symptom), mental illness and personality disorder. The case formulations were of importance during data analysis, not as findings, but to develop hypotheses about patterns and differences in and across cases.

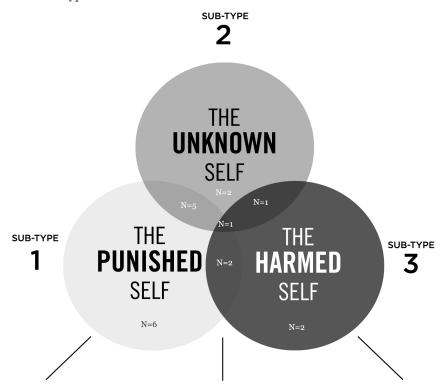
In IPA there is a search for patterns *in* and *across* the cases (Smith, 2011). I and the rest of the research team looked for convergences, divergences and patterns across the participants as a group. Hypotheses about important aspects of self-harm for one individual could be tested as a hypothesis of *essential* features of self-harm across several cases. Besides

analyzing participants' descriptions of self-harm, I explored the way other participants described their experience of self and others as hypothesized in the case of Anna (for descriptions of data analysis; Stänicke, submitted). The analysis detected three different subtypes (see Figure 3). Although the results in this multiple case-study are context-related knowledge, the concepts are transferable and may relate to concepts from other studies, to existing theories of self-harm or to develop new theories. In this way, making meaning of data in a particular context can explore and nuance knowledge and prevailing theories to understand the phenomenon of self-harm.

In different phases of the research process, I have sought feedback from the participants, the research team, a national and international research network on self-harm, and a resource group consisting of young adults with experience of self-harm and treatment (who are not informants in the study). Feedback was important to see whether the results and the generated concepts were meaningful in addressing the analytic goals and shedding light on different aspects of the phenomenon of self-harm to yield a more nuanced understanding (communicative validation; Flick, 2002). The resource group read the interview guide and commented on the manuscripts. They expressed that the results and developed concepts were meaningful and understandable, and emphasized the utility for patients and their families, clinicians and the general public. Further, by representing people with experience of self-harm, they could recognize essential features in the suggested sub-types.

The findings from this study were in one way surprising and uncovered hidden and unknown patterns of differences among adolescents who self-harm that were not known to the investigator before the project. Although the function of self-punishment is well-known, the three sub-types with essential features represent a diversity among adolescents in descriptions of self-harm, which indicate different ways into and out of self-harm, different capacity for affect-integration and different ways to represent self. Self-harm can express conflicted, undeveloped and disturbed aspects of self. Further, interpersonal models of the function of self-harm are often excluded in reviews, and my results show the relevance of different theoretical perspectives to understanding these findings (discussed further in Chapter 7). Still, while working with the data and interpretations, the patterns are easily adjusted to knowledge on self-harm in general and is somewhat self-evident. The findings bring nuances and an integration of differences in understanding self-harm. This knowledge is of importance to clinicians for understanding differences in their patients' experiences of self-harm and for exploring these differences in therapy, which may enhance the patients' self-understanding and motivation to explore other ways to regulate and express affective experiences.

Figure 3. Three sub-types



1: "I deserve it"

Self-state: Unaccepted or conflicting feelings and thoughts towards self and others – I feel guilty
Acting out: Self-harm to hide conflicting and noncommunicable feelings – can't be a burden
Self: Excessive self-criticism – deserve pain and punishment for being a bad person

Role of others: Want to hide and want to be heard - ambivalence and anger directed towards self

Conflicted

2: "I don't want to feel anything"

Self-state: Overwhelming and uncontrollable anxiety, diffuse feelings or stressful thoughts – I can't manage. Acting out: Self-harm brings an experience of balance and equilibrium – to feel control.

Self: Stressful thoughts and feelings are alien and difficult to understand and tolerate – something is wrong.

Role of others: Important to fulfill expectations — self-harm may represent being vulnerable.

Undeveloped

3: I'm harmed and no one cares"

Self-state: Self-harm situations are difficult to remember – it just happens, and no one cares.

Acting out: Self-harm is a distraction which makes bad feelings go away and release something good – something to rely on.

Self: Being offended or abused and involved in risk situations – a lack of self-concern.

Role of others: Self-harm transform inner psychic pain to a physical legitimate pain – a way to show I'm hurt.

Disturbed

Figure 3. Three sub-types

Coherence – a multiple case-study can communicate complexity. The large number of participants allowed the possibility to look for patterns of coherence and internal consistency and to consider divergence across several cases. The presentation of three cases to illustrate three ways into and out of self-harm, and the model of three sub-types with different self-states and acting out during self-harming, is an attempt to build some coherence around the discovered nuances in youths' experiences of self-harm (see Figure 4).

If I, as a researcher, renounce the claim of objectivity, and focus on the particular, contextual, individual and subjective, can the results from this study say anything about reality? Even if the concepts developed from the results of this study may be generalizable, can I gain access to an unequivocal reality through a scientific study of subjectivity? Different methodological orientations – such as realism, phenomenology and social construction – represent diverse perspectives on how to gather knowledge about a phenomenon in the world (Willig, 2013). IPA, as a method for data analysis, is rooted in a phenomenological methodological approach. In philosophy, there has been disagreement between the fathers of phenomenology, Edmund Husserl and Martin Heidegger, on "the question of whether phenomenology is truly a disciplined description of experience or whether interpretation is inevitable" (Smith, 2011, p. 19). When adolescents are asked to tell me about their experience of self-harm, I can choose to take the information at "face value" – as direct expressions of their private perceptions. This viewpoint assumes that the participants are witnesses, which expresses a realistic methodological orientation. Another option is to see their descriptions as ways of making meaning – as users of discursive and cultural resources. The participants are then more understood as *social actors* who embody and operationalize sociocultural practices, a viewpoint that expresses a *social constructionist* methodological perspective.

In my project, I understand the data more in line with what Willig (2013) calls "surface level manifestation of an underlying deeper structure (e.g. of a social, psychological or discursive nature) which will only become apparent as a result of a full analysis of the data" (p. 37). By including empathic and suspicious interpretations of data, the participants are seen as witnesses, yet their statements about subjective experiences will be related to social and psychological knowledge in general, and on self-harm, in particular. The aim is to find *latent meaning* in the participants narrative – an aim to understand and to build theory to understand their motivations for behavior beyond what they are willing or able to say frankly.

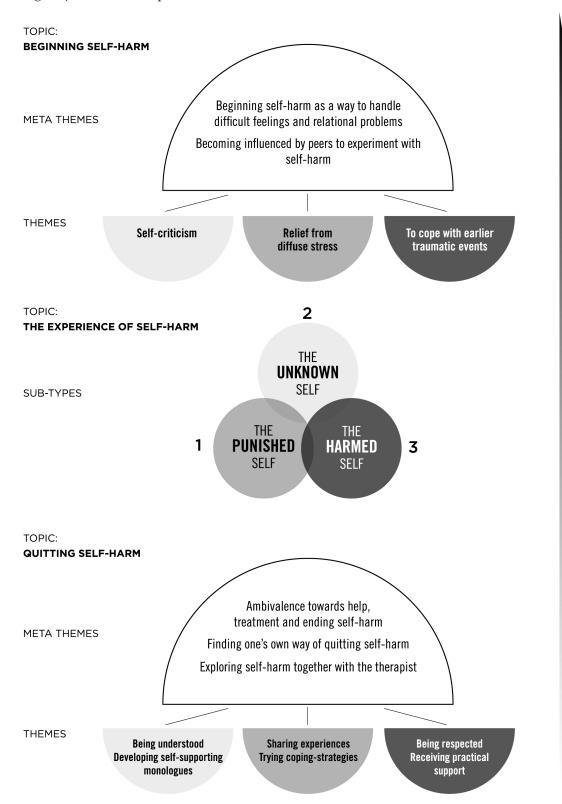


Figure 4. Adolescents' experience of self-harm

Figure 4. Adolescents' experience of self-harm

Braun and Clarke (2006) argue that IPA is focusing on *latent* and *implicit* themes, and describes patterns across qualitative data, as opposed to *semantic* and *explicit* themes. They contend that IPA is theoretically bounded to a phenomenological epistemology that prioritizes experience while at the same time emphasizes theory-driven interpretations, as a top-down deductive reasoning. As mentioned, there are different phenomenological traditions. Giorgi (2011) is inspired from Husserl's rejection of underlining meaning and structures. However, Smith (2015) is inspired by Heidegger's (1927) valuation of the subjects' different experiences of the world, while still including knowledge derived from established theory for understanding a phenomenon – for example basic assumptions like vulnerability.

In my understanding, by using both empathic and suspicious interpretation, IPA can be a method related to a *critical realistic epistemology*. This differentiates IPA from phenomenological orientations inspired by Husserl which, Giorgi (2011) argues, is a phenomenology belonging to a realistic epistemology. Willig (2013) describe a range of epistemological orientations from "from naïve realism, which is a kind of positivism, to extreme relativism, which reject concepts such as "truth" or "knowledge" all together" (p. 4). *Critical realism* is an epistemological position which integrates realism and relativism. It has an assumption about an independent real world, and in extension of that, it assumes that it is possible to gain knowledge about reality (Benton & Craib, 2011). Still, in this orientation, knowledge is only grasped through representations, and therefore knowledge cannot ever be a direct reflection of reality. Critical realism differs from empiricism in theorizing knowledge as a social and cultural process that involves variable "means of representations".

Following this perspective, the phenomenon of self-harm actually exists in a real independent world and its behavior can be observed, yet access to experience and behavior is *still* only available through the informants' *representations* and the researcher's *interpretation* and theories of them. In this way, the study of subjective experiences is a study of reality that we do not have a direct access to. Different methods provide access to *different aspects of reality*. Relating the participants' descriptions to existing theories on self-harm has been a productive process and led to development of concepts and nuanced theoretical perspectives to understand and explain self-harm. In this way, a multiple case study that includes different methods can complement quantitative studies that focus on general, context-independent knowledge and can provide a more nuanced picture of this complex phenomenon.

6.3 Ethics approval and consent to participate

The Norwegian Regional Committees for Medical and Health Research Ethics approved the study (2014/832). There are several ethical issues that emerge in qualitative research by applied psychologists. Haverkamp (2005) argues that the psychologist's social role carries obligations that are somewhat different from other social sciences in which qualitative research is conducted. As mentioned earlier, expectations of the psychologist's role and clinical experience may influence the participant to talk about their private experiences — maybe easier than with other researchers. Still, the psychologist's role might also cause the participants to be skeptical and to hold back important information. Following Haverkamp's (2005) suggestions, I attempted to establish a relationship with the research participants within an ethical stance of "trustworthiness". In the following, I will discuss ethical dilemmas in regard to competence, multiple relationships, confidentiality, and informed consent.

Competence. As a trained clinician who has worked at the clinic for ten years, I was able to provide support if suicide risk were detected in an interview. Adults with experience of self-harm read the interview-guide and the manuscript for quality assurance. This was of importance, to check both the form and content of the language used in the interviews – not being too general or too evocative in the concreteness of the questions. I was aware of the possibility that the subject of the interviews could evoke difficult feelings and asked the participants at the end of every session how they felt and used some time to summarize the topics of the interview. At the beginning of every interview, I asked how they had been after the last session. In this way, evoked feelings could be processed and shared to some degree. One person ended their participation because she experienced a trauma and talking about her problems became too difficult.

Multiple relationships. The participants received treatment (individual and family therapy) at the clinic from one of six therapists with different theoretical and methodological orientations (for details, see Stänicke et al., accepted). Apart from informing the therapists about suicidal thoughts in order to ensure sufficient intervention and to provide feedback on the findings in the initial research period, I did not have any role in the treatment process. Still, the fact that I am a psychologist doing the interviews may be signaling dual roles (Allmark et al., 2009). I explicitly talked to the participants about the difference between their therapist's and my role.

Confidentiality. The interviews were tape-recorded and transferred to a secured research datafile on the hospital's data server. The files were transcribed and anonymized. Participants have been offered the opportunity to read the manuscripts and approved the selected quotes.

Informed consent. The adolescents and their parents (when they were under 16 years of age) received oral and written information from their therapist and the interviewer and written consent was provided prior to participation in the research study (see Appendix A). All received treatment regardless of study participation. If participants did not keep an appointment, I asked on the next encounter if they had second thoughts about participating. The fact that the project was conducted at the clinic, could make it difficult for the informants to decline participation. Still, I underlined this option at the beginning and again if they expressed any second thoughts during the project period.

Two participants dropped out during the initial project period because they moved. Later, one person did not want to participate in the follow-up interview because she had moved. Some participants (n= 4) struggled to attend appointments and I had to contact them to reschedule. It is possible that their commitment to the clinic influenced them to not completely drop out of the project. Later, they emphasized how content they were by fulfilling their obligation.

Effects on treatment. Another important ethical issue is how participating in the research project may have influenced the participants' treatment process. As mentioned earlier, participants were asked how they experienced the study. Most of them appreciated being involved and emphasized how the researcher's questions in the personal interview had made them think about their self-harming and why they harmed themselves. Some said they became more interested in research and psychology in general or started to plan an education in health studies. Some commented that the interviews made them think of negative aspects of self-harm, that they felt sad for themselves, and some even decided to end self-harm. Two persons said the interviews were time-consuming. The opportunity to reflect upon their life situation and problems may have affected their treatment process by increasing self-reflections. The opportunity to talk to a third person during the treatment process was valued by several of the adolescents and may have led to further evaluation or meta-reflective stance.

7 Contributions and conclusions – towards a nuanced understanding of self-harm
In the following, I will discuss how the findings of my study could enhance knowledge of self-harm as a complex transdiagnostic phenomenon closely related to mental illness, developmental disturbances *and* sociocultural involvement. My attempt in this section is not to provide answers, but rather, to raise questions that can be subjects for further research.

7.1 Self-harm – a transdiagnostic symptom or a sign of an underlying mechanism?

Self-harm is not a diagnostic disorder in itself but is included as a possible symptom of BPD in DSM-IV and of emotional lability in ICD-10 and is associated with a range of mental illnesses (Hawton et al., 2012; Miller et al., 2019; Nock, 2014). One interesting question is whether self-harm may be best understood as a "transdiagnostic" symptom rather than as a specific symptom of one disorder? Another question is whether there are transdiagnostic, higher-order dimensions or mechanisms that reflect a core vulnerability, which may be expressed in self-harm, but could also have other expressions?

These two questions reflect how the term "transdiagnostic" is used differently (Sauer-Zavala et al., 2017). The term transdiagnostic is used to describe constructs that are "descriptive diagnostic" and related to processes or symptoms that are present in a range of diagnoses with no theory of how co-occurrence appears (Sauer-Zavala et al., 2017). In addition, the term is used for constructs that are "mechanistically transdiagnostic" and to processes that reflect a casual mechanism for co-occurrence and includes a theory of development and maintenance, which places a person at risk for more than one illness (Sauer-Zavala et al., 2017).

Affect-regulation as a transdiagnostic function. In my historical presentation of theoretical perspectives on the function of self-harm, I emphasized how a basic *function* of affect-regulation has been supported by evidence from a range of studies. The evidence may indicate transdiagnostic, higher-order dimensions of temperament and affect-regulation problems for persons who self-harm. However, the specific *mechanism*, which explain *how* self-harm regulates affect, are not identified (Bentley et al., 2014). More specifically, self-harm is suggested as having an affect-regulation function because the person has an autonomous disorder or neuro-cognitive problem (Bentley et al., 2014), or even an impulse control disorder (Favazza, 1998). In this way, it has been suggested that similar mechanisms and underlying processes (genotype/-s) influence different symptoms (phenotype). However, in my study, individual differences among adolescents who self-harm are highlighted, which

means that there is another important transdiagnostic question in regard to self-harm: are there different mechanisms or conditions (genotypes) that can lead to self-harm as a symptom (phenotype)? A related question is how a person ends up self-harming when there are "a myriad of other behaviors, both functional and dysfunctional, that can serve to fulfil any single intrapsychic or interpersonal need" (Soyemoto, 1998, p. 537)? Although self-harm seems to have a function of affect-regulation, a study of the capacity of affect-integration or mentalization in regard of self-harm highlight aspects and differences in a person's way of representing and organizing mental content which may add important knowledge on the diversity among self-harmers.

The need for a multimethod study of self-harm. Some authors have emphasized that the complexity of the symptom of self-harm requires studies with multimethod assessment (Favazza, 1998; Muehlenkamp, 2014; Soyemoto, 1998). Bentley and colleagues (2014) even argue that future research on self-harm should not only use multimethod assessment, but also study interrelated risk factors or vulnerability factors to identify who is at high risk for future engagement in self-harm. Certain factors may render some individuals who are more likely to engage in self-harm for intrapersonal reinforcement and others for social reasons. Bentley and colleagues (2014) contend that further studies of self-harm would benefit from initial use of ideographic approaches such as single-case experimental design methodology. Muehlenkamp (2014) also argues that we have to move from basic descriptive characteristics of self-harm to "symptom-based profiles, interactive models, and longitudinal and developmental trajectories of these behaviours so their nuanced relationship and differences can be better understood" (p. 36). As mentioned earlier, self-criticism (Hamza et al., 2014) and impulsivity (Hamza et al., 2015) are studied as traits that increase one's risk for self-harm. Still, in my study, the three sub-types may represent self-criticism (especially in sub-type #1) and impulsivity (especially sub-type #3) to different degree, and essential features may be influenced by the capacity for affect-integration or representing self. The findings of my study are consistent with Whitlock and Selekman's (2014) statement that there is not one "self-injurer profile". Importantly, the symptom of self-harm needs to be related to personality disorder, and impairment in self and relatedness is highlighted as a dimensional core feature in DSM-V (Fonagy et al., 2015).

The Research Domain Criteria (RDoC) project, launched by the National Institute of Mental Health in 2008 (Cuthbert & Insel, 2013; Insel et al., 2010), presents a new dimensional classification system for mental disorders with a focus on the fundamental mechanisms underlying a broad range of phenomena. Bentley and colleagues (2014) argue

that a functional approach to self-harm is consistent with the RDoC framework, with a focus on functional processes that produce and maintain self-harm rather than topographical characteristics (symptoms). Self-harm occurs across many mental disorders and can be interesting to see as *a dimensional phenomenon* – from mild, to moderate to severe. Following the RDoC's goal to identify the factors associated with perturbations in normal development and the etiology of psychopathology, there is a need for research on how departures from normal neurobiological system development contribute to engagement in self-injury and related forms of psychopathology, as well as research on critical stages for targeted prevention.

Importantly, if RDoC's goal of a transdiagnostic understanding of the mechanisms and functions behind self-harm is to be reached, I will argue that qualitative methods for exploring the phenomenon of self-harm should be emphasized as one of the multiple methods for gathering data and knowledge about self-harm. In RDoC's framework, self-report questionnaires are included, and self-other perceptions are emphasized as a possible influence on mental illness in general. However, self-report questionnaires are not sufficiently capturing adolescents' perspective on self-harm. I have shown the limited usefulness of questionnaires developed from adult patients in understanding the function of self-harm among adolescents. Further, there might be important differences in underlying mechanisms or functions of selfharm in adolescence in regard to their developmental age, which may not be present among adult patients. Qualitative methods bring attention to aspects of a phenomena or hypotheses about functions. The concepts based on the experience of self-harm among adolescents from the meta-synthesis, the differences in ways into and out of self-harm and the three sub-types, may later be tested in epidemiological or experimental studies. An inclusion of qualitative results is of importance to ensure the validity of the RDoC project. Hypotheses about subtypes, or the importance of the capacity for affect-integration and self-representation, provides an opportunity to explore differences among those who harm themselves sometimes or for a period during adolescence, and those who harm themselves severely and repetitively. In this way, it is possible to study different trajectories into adulthood.

However, an inclusion of studies on subjective experience is related to an epistemological perspective of how knowledge about reality can be reached – concerning an observable phenomenon and its underlying functions and mechanisms. In natural science, objectivity and representability of results are highlighted, and results must be measurable and replicable. This leaves a neurobiological and behavioral perspectives, and evidence concerning the function of affect-regulation, as acceptable to explain a phenomenon such as

self-harm. In this way, theoretical perspectives and concepts developed from subjective experience or clinical cases to understand the mind, which lack measurable evidence, or cannot currently be tested with measurable methods, are excluded from reviews on self-harm.

As long as the phenomenon of self-harm does raise questions, I will argue that there is a demand for theoretical perspectives and models to understand data and develop hypotheses for further research. Concepts developed from qualitative studies and clinical cases may lead to hypotheses about common functions, structures, mechanisms or motivational forces related to self-harm. If quantitative research is the only method to gather data about self-harm, the phenomenon will be reduced to aspects of the symptoms and underlying mechanisms that can be observed and counted. Experienced features of self-harm, such as establishing boundaries between self and others, relating self-harm to self-experience, handling difficulties with gender, identity and social belonging, and even self-destructivity, may be overlooked.

As a clinician, a systematic study of youths' experiences of self-harm, which highlight an inner perspective of reality may help me to understand, to be empathic, to be open about differences in experience, and to be curious about deeply human motivations behind their behavior. In my view, if the study of self-harm overlooks the patient's experience, important aspects of reality and possible keys to developing agency and change are lost.

Theoretical perspectives grasp different aspects of a phenomenon. According to a critical realistic epistemological perspective, different methods – quantitative and qualitative – may gather data that represent different aspects of the phenomenon of self-harm. All data is understood as non-neutral, as representations and interpreted in a cultural context. Derived data from a subjective and a group's perspective represent essential features of the phenomenon of study. In this way, neurobiological, cognitive, affective or psychodynamic theories on self-harm could bring us closer to basic mechanisms, motives or assumptions for self-harm as an apparently irrational and destructive behavior. Self-harm may be perceived with essential neurobiological and cognitive features, as a function of affect-regulation and as social learned behavior. Self-harm may also be understood as an attempt to handle and process relational and existential conditions of being both alive *and* mortal, related to the process of building a self, and experiences of being a vulnerable and lonely person.

Importantly, psychodynamic theories emphasize the need to understand the motives underlying self-harm in a relational context. The behavior is often understood as an expression of an underlying structure or character for the individual, an organization of predispositions, conscious attitudes and modes of functioning that shape and provide

subjective experience (see for example Fonagy & Target, 2006; Piers, 1999). The concepts of structure or character emphasize how the mind is biased and poised in a state of readiness to organize, interpret, and respond to experience in a distinctive manner and in different contexts as a continuity of a person's way of speaking, thinking, experiencing affect, interacting and remembering. Self-harm can express more pervasive, ongoing, restrictive, and self-regulating dynamics of a character or self-organization, and may be one of many different efforts to counteract underlying and intolerable affect states and feelings of vulnerability, shame, or humiliation. Self-harm, drug misuse or starvation can all be destructive acts. Maybe self-destructivity is a more general phenomenon than self-harm, which includes a range of apparently irrational behaviors, which may serve deeper motivational drives or need?

7.2 Self-harm to handle developmental challenges – **separation and self-representation**Self-harm begins in adolescence. In the following, I will emphasize how the results support the theory of self-harm as affect-regulation, and, still, underline the importance of relating self-harm to *different* other functions and *developmental challenges* during this life transition period. I will argue that the results of my study also support interpersonal models (Soyemoto, 1998) to understand the functions self-harm as an attempt to establish psychological separation, boundaries and identity. Still, the results nuance different ways self-harm may be part of self-representation and self-development. Although all participants in my study shared self-harming, the three sub-types illustrate how self-harm may be motivated by needs and affect, which are, to different degrees, represented and integrated as part of self.

Self-harm – to handle affect and represent self-states through the body. Strong and fast changing emotions characterize adolescence and finding a way to handle, and to process feelings and self-states is an important developmental task. Not surprisingly, all participants in my study emphasized the difficulties with *handling overwhelming feelings*. Still, this study highlights qualitative differences in how adolescents experience and represent these feelings or states – conflictual differentiated feelings and thoughts which evoked guilt (sub-type #1), an uncontrollable state of diffuse feelings and stressful thoughts which evoked helplessness (sub-type #2), or a chaotic feeling and state of being abandoned (sub-type #3).

Following the theoretical perspective of mentalization (Fonagy & Target, 1997, 2006), self-harm can express a struggle to represent and understand intentions, needs and affect underlying their own and others' actions. The concrete motoric action of harm towards the body may be understood as *a first step towards a mental representation of basic needs and*

affect. These states are not yet recognized, symbolized in images or words, or personally integrated, and, therefore, must be discharged through acting out (Bouchard & Lecours, 2008). In a way, self-harm may be understood as a concrete attempt to get to know yourself through the body. The physical pain and the physical cut may be a first step towards establishing a mental representation of difficult emotions that have been integrated to different degrees – differentiated and conflicted (sub-type #1), unknown or diffuse (sub-type #2), or an unprocessed chaotic state related to traumatic experiences (sub-type #3).

Self-harm – an attempt to separate, establish boundaries and stabilize self. Increased separation towards self-support, independence, autonomy and relational reciprocity, which are all possible to achieve during adolescence, requires that a person have the opportunity to experience and explore their own *and* others' feelings and needs. Importantly, the participants in my study described loneliness and relational problems with their parents, family and friends. Several of the informants emphasized how they could not bother their parents or friends with difficulties. In this way, they seemed to lack the possibility of sharing difficulties with a safe other person who could label, guide or validate their experience, feelings and thoughts. They even lacked a friend or peers to share ups and downs with. Lacking both a family and peer support can deprive these youths of the possibility of exploring important self-experiences or learning from others how they express and cope with difficulties and thereby arrest the psychological separation-individuation process. The cut may be *a concrete act of separation* directed towards the body and away from parents and peers. Self-harm may be an attempt to achieve autonomy.

An exploration of the *boundaries* between self and others, between myself and the outer world, and between social roles, is an important part of experiencing and establishing *a* stable sense of self and identity formation (Erikson, 1968). The experience of loneliness and lack of sharing problems with close ones may deprive the youths of the opportunity to test boundaries, explore roles and ways of being with others. They may lose the experience of being tolerated: If you tolerate me, maybe I will tolerate myself. Self-harm may be *a direct testing of limits* through the physical body. The body is cut, and pain is directed towards the body instead of testing or criticizing social boundaries, parents or authorities. In a way, the task of exploring mental experiences and testing boundaries is *directed only towards self* – being self-sufficient and not a burden. By self-harming they may explore the concrete boundaries between an inner and outer world, a step towards *establishing a self*.

The results of my study illustrate how overwhelming and alien states can be closely related to self-experience, and how self-harm seems involved in *establishing and stabilizing self-experience in different ways*. Self-harm can be related to self-criticism and self-punishment – *I deserve it* (sub-type #1). Self-harm could be a way to get away from all feelings – *I don't want to feel anything* (sub-type #2). Self-harm may even be related to impulsive risk behavior to prevent a psychic breakdown – *I'm harmed, and no one cares* (sub-type #3). The three sub-types illustrate conflicting needs, unrepresented affect or reminders of trauma, which are felt as the truth and must be *hidden, controlled or cut away from self*.

Self-harm – **to represent the self to oneself and others.** In a concrete way, self-harm breaks or invades the physical skin – the boundary or protective shield of the inner body from an outer world. The blood coming out of an open wound may represent the difficulties, the "bad" parts of me. The action of harming demands energy and determination and the cut can be a channel for expressing power, destructivity and anger. The scars can even be a sign and identification of inner problems, showing a narrative of their history, a dialogue without words between themselves and their wounds. The motoric action of self-harm is a possible link between the private and public domain – an attempt to express and communicate unconscious or nonverbal private content through bodily actions to oneself or others (Lemma, 2010; McLane, 1996). I argue that essential features of self-states and ways of acting out during self-harm can express differences in emerging self-representations. For some, selfharm may be related to anger and frustration that is impossible to express freely and must be directed towards self – the *punished* self (sub-type #1). For others, feelings are difficult to express in general, and self-harm controls and may make them curious of their personal needs - the *unknown* self (sub-type #2). Still, for others, self-harm may be a way to prevent a psychic breakdown related to an earlier unprocessed trauma of being invaded, forgotten or assaulted – the harmed self (sub-type #3). Lacking someone to support, reflect or comfort, the body is used to survive psychologically and in developing a self.

The destructive action of self-harm could be an attempt to be independent *and*, still, a struggle to represent and share inner psychological pain and a call for help from someone who can respond adequately (Brady, 2014; Motz, 2010), a way of social signaling (Nock, 2014), or influencing others to get sufficient support (Klonsky, 2007). The result of my study underlines the *private and individual content* that the cut, scars, blood and wounds invite the person to reflect upon – the need to punish themselves for being angry or bad (sub-type #1), the difficulties expressing and tolerating feelings or vulnerability (sub-type #2), or a need for

support and care and to process rejection (sub-type #3). These sub-types can help the clinician to understand and explore developmental issues and trauma with the patient.

Self-harm – conflicted, undeveloped or disturbed aspects of self-organization.

Mentalization is one of the mental functions underpinning perception, representation and interpretations of experiences and the person's organization of self (Fonagy & Target, 2006, 1997; Gullestad & Killingmo, 2013). Qualitative differences in the self-representations in my study illustrate differences in the capacity for affect-integration, mentalization *and* self-organization. Although they shared a symptom, the three sub-types highlight how self-harm in different ways can express a self-organization: *conflicted* (being bad and vulnerable; sub-type #1), *undeveloped* (being difficult to understand; sub-type #2) or *disturbed* (unprocessed trauma; sub-type #3) to different degrees. Variations in capacity for mentalization and self-organization seem to indicate *different ways out of self-harm* and inform treatment adjustments – being understood and developing self-supporting monologues and tolerating self (sub-type #1), sharing experiences and trying coping-strategies and finding self (sub-type #2), or being respected and receiving practical support and processing trauma (sub-type #3).

The results from this study raise some interesting questions: How do these adolescents live their life and manage difficulties as young adults? Is self-harm or mental illness still part of their life? Is it still possible to describe differences and sub-types among the participants as adults in regard to self-experience, how they handle difficulties, mental illness, and capacity for affect-integrity and mentalization? Although the sample is too small to generalize the results, persons of sub-type #3 showed less frequent, but more impulsive and extensive self-harm, and reported more severe mental illnesses and suicide attempts. It would be interesting to follow this clinical sample as young adults with a history of self-harm, to enhance and nuance knowledge of *different trajectories of self-harm* – in regard to developmental challenges, mental illness and sociocultural involvement.

7.3 Self-harm and sociocultural involvement

In one of Favazza's (1998) articles, *the becoming age of self-mutilation*, he asks the question of whether self-mutilation has become more normal and accepted in recent years, and therefore cannot be reduced to an individual medical perspective or as a symptom of mental illness. Adler and Adler (2003) underline that self-harm must be related to the cultural context, as part of identity formation, communication praxis and dominant discourses in the society – especially for adolescents. They underline how the digital age of the Internet has

changed self-harm from being primarily an action a person accidently or impulsively *invented* in a private chamber to becoming *an easily accessible option to handle difficulties* through exposure on the Internet. Following these thoughts, Whitlock and Selekman (2014) argue that adolescents may start self-harming for other reasons than previously thought. Maybe self-harm is becoming a more "cultural acceptable way" to handle maturational issues faced by all adolescents? In the following, I will argue that even though self-harm should be regarded as a sign of possible mental illness, there is a need for more knowledge on how self-harm is related to sociocultural involvement, such as gender identity formation, digital media use and creative art, in this transformative period of life.

Self-harm and gender. In this multiple case-study, the sample consisted of mostly girls, which is not surprising. Although cutting is the most common method used by both genders, as mentioned earlier, girls report more direct self-harm and boys report more indirect self-harm. There were fewer boys to ask to participate at the clinic. Maybe this reflects the frequency known from survey studies or there are boys who do not confirm even if they practice self-harming. One recent study even showed that the frequency of self-harm has increased more among girls than among boys in recent years (Morgan et al., 2018). Further, studies show that self-harm is more common among gender-diverse children and young people, and especially among these girls (Mann, Taylor, Wren, & Graaf, 2018). The gender differences have been reported to be smaller among older adolescents, which has been understood as related to an increase in self-harm among older boys and reduced frequency among older girls (Hawton et al., 2012; Whitlock & Selekman, 2014).

The results of my study highlight how the girls cut and inflict their body with physical pain during *a transitional phase of becoming a woman*. All the girls in my study began self-harm because of emotional and relational problems, and several of the participants described how they did not want to be a burden to others. They especially did not want to hurt their mothers and hurt themselves instead. In a way, they are taking responsibility for their inner pain. One question could be whether self-harm represents a cultural option to handle not only the developmental issues of becoming an adult but of becoming a woman? Is the action of harm a culturally accepted way to express a lack of support *and* an insufficient capacity for self-comfort? A related question may be whether self-harm represents an ambivalence towards developing an identity as a mature woman because developmental relational issues are still unsolved?

A person's familial, social and cultural context can offer different channels to explore and express gender and identity. The girls seem to use their body to find reflexivity and a concrete "room" to explore their inner states — what is inside of me? The concrete body can be the primary place for self-identity during adolescence (Le Breton, 2017). Still, why is this act more often the case among girls than boys? Or is it possible that young boys use their body in other ways, also as a function of affect-regulation, identity formation and self-development — such as being involved in risk situations or building a strong body? Interestingly, the preliminary analysis of the interviews from the two boys in this study showed that their themes and sub-themes could be included in the overall results from the girls. Still, it would be of great interest to explore more thoroughly the possible similarities and differences between girls' and boys' experiences and trajectories of self-harm. An analysis of the boys from this study could contribute toward hypotheses about intentions *and* motivations for self-harm among vulnerable boys and increase knowledge of the high prevalence among girls. Maybe confirming self-harm is a greater taboo among boys, which makes them even more lonely.

Self-harm and the role of the Internet and creative art. Many of the girls were influenced to begin self-harm by peers and/or by the Internet. Online exposure to self-harm is not uncommon among girls and boys (34%) and is especially so among girls (53%) (Staksrud & Ólafsson, 2019). The Internet may be a source not only for inspiration in the process of exploring social roles but also for social modelling of non-adaptive problem-solving. For some adolescents, social media channels and the Internet become a way to establish a peer community and the only arena for exploration with peers. Digital exploration may be a rescue. For others, loneliness and mental problems can increase their vulnerability. Blogs, pictures and stories of self-harm can be a comfort and establish group identity but the consequences of self-harm – psychological, neurobiological, behavioral and communicational – can reinforce the action and make it difficult to stop. The participants in my study did not initially want to end their self-harm but appreciated exploring the action in therapy. This can express a need for relational support to understand themselves. For some, the digital communication is the only accessible option to share and an important step towards emotional contact with others.

In my study, some participants described ending self-harm by using music in difficult situations: listening to melodies/lyrics, playing an instrument, or singing or writing a song. This finding highlight how self-harm may be a destructive coping mechanism that may be changed through *creative arts*. Music, writing, reading, painting, dancing or other activities

may replace self-harm. To explore and find a personal channel to express and process existential and affective experiences may be a turning point for some. Following the results of my study, it seems to be important to give room for youths to discover their own way to express and process by themselves. A further study of how sociocultural involvement through digital media and creative arts are part of their life and involved in handling problems, could provide knowledge about diverse trajectories into adulthood and, hopefully, out of self-harm.

Self-harm – illness, destructivity and vulnerability. When reading the studies on self-harm, there seems to have been a change in how this phenomenon has been understood in psychology. The first articles and studies presented self-harm as a symptom of suffering and self-destruction, self-hate and aggression toward self. In the last decades, self-harm is more understood more as a way of coping, to get relief, and in accordance with the findings in my study, as a somewhat distorted way to get to know oneself. Although the cases of castration of limbs mostly included men and dominated the early literature of self-harm, the last years research in recent years has paid attention to repeated self-harm methods (Millard, 2013). Might the focus on repeated moderate self-harm (mostly by cutting) narrow the phenomenon and thus select mostly women for a study? Might a broader definition of self-harm, including direct and indirect forms, serious and moderate repeated self-harm, with or without suicide thoughts, comprise more men? These questions are not answered by this study but may show how complex the phenomenon of self-harm is – and, therefore, how difficult it is to define. Self-harm is a sign of intrapersonal mental problems and interpersonal challenges in a sociocultural context. By harming the self and being wounded – directly or indirectly – a person represents an existential experience of vulnerability. Still, the harm also leads to deeply human self-destructive tendencies.

7.4 When you meet someone, who have harmed themselves. If you meet a girl or boy who has engaged in self-harm – try to meet them with respect and warmth. Show them that you care. Do not panic and do not overlook their harming. This is an opportunity for them to share. Be patient.

Adolescents may experience self-harm in different ways and harm themselves for different reasons. Try to be interested in their understanding of the behavior and their problems in life. Let them describe their experiences, thoughts and feelings. Do not think you know how they feel or why they harm themselves. If they struggle to find words – just be with them. You can show them how you care in many ways.

Most possibly, in their view, self-harming is not their main problem. The action of self-harm can be something to hold on to in a troubled inner and outer world. Do not tell them to end self-harming right away. Tell them that you are worried and that you wonder if they are not doing well. You may ask if they think of death or are having thoughts of suicide, but do not assume that self-harm is a suicide attempt. Seek advice from a child health unit and tell the person who is self-harm that this is your plan. It might be easy to think the problems will soon disappear, so remember to ask again how they are doing.

As a clinician, remember that some girls and boys may need concrete advices to develop coping strategies other than self-harm, and that others may need an opportunity to tell their story and discover their own way to end self-harm. By exploring how self-harm is part of their daily routines, and by attending to how self-harm may express needs, affect or traumatic experiences which they cannot share with words, you may gain access to their difficulties *and* motivation for this apparently destructive behavior. Although, self-harm is a behavior which may evoke negative attention and overwhelm the person's family, friends and therapist, the act may contain a deeply human motivation to express and process conflicting needs, feelings and an emerging self – with oneself and others.

References

Abrams, L.S., & Gordon, A.L. (2003). Self-harm narratives of urban and suburban young women. *Affilia – Journal of Women and Social Work, 18*(4), 429-444. doi: 10.1177/0886109903257668

Adams, J., Rodham, K., & Gavin, J. (2005). Investigating the 'self' in deliberate self-harm. *Qualitative Health Research*, 15(10), 1293-1309. doi: 10.1177/1049732305281761

Adler, P.A., & Adler, P. (2011). *The tender cut. Inside the hidden world of self-injury*. New York: New York University Press.

Ainsworth, M.D.S. (1979). Infant-mother attachment. *American Psychologist*, *34*, 932-937. doi: 10.1037/0003-066X.34.10.932

Allen, J. & Fonagy, P. (2006). *Handbook of Mentalization-Based Treatment*. Chichester: John Wiley.

Allmark, P., Boote, J., Chambers, E., Clarke, A., McDonnell, A., Thompson, A. & Tod, A.M. (2009). Ethical issues in the use of in-depth interviews: Literature review and discussion. *Research Ethics Review*, *5*(2), 48-54. doi: 10.1177/174701610900500203

Althoff, R.R., Hudziak, J. J., Willemsen, G., Hudziak, V., Bartels, M., & Boomsma, D.I. (2012). Genetic and environmental contributions self-reported thoughts of self-Harm and suicide. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, 159B(1), 120-127. doi: 10.1002/ajmg.b.32010

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. American Psychiatric Association: Washington, DC.

Anderson, M., Standen, P., & Noon, J. (2003). Nurses' and doctors' perceptions of young people who engage in suicidal behaviour: A contemporary grounded theory analysis. *International Journal of Nurse Studies*, 40(6), 587-97. PMID: 12834924

Anderson, N.L. & Crowther, J.H. (2012). Using the experiential avoidance model of non-suicidal self-injury: Understanding who stops and who continues. *Archives of Suicide Research*, *16*(2), 124-134. doi: 10.1080/13811118.2012.667329

Andover, M.S. & Morris, B.W. (2014). Expanding and clarifying the role of emotion regulation in nonsuicidal self-injury. *The Canadian Journal of Psychiatry*, *59*(11), 569-575. doi:10.1177/070674371405901102

Andover, M.S., Pepper, C.M., & Gibb, B.E. (2007). Self-mutilation and coping strategies in a college sample. *Suicide and Life-Threatening Behavior*, *37*(2), 238-243. doi:10.1521/suli.2007.37.2.238

Andover, M.S., Pepper, C.M., Ryabchenko, K.A., Orrico, E.G., Gibb, B.E. (2005). Self-mutilation and symptoms of depression, anxiety, and borderline personality disorder. *Suicide and Life-Threatening Behavior*, *35*, 581-591. doi: 10.1521/suli.2005.35.5.581

Andrewes, H.E., Hulbert, C., Cotton, S.M., Betts, J., Chanen, A.M. (2017). Relationships between the frequency and severity of non-suicidal self-injury and suicide attempts in youth with borderline personality disorder. *Early Intervention and Psychiatry*, 13(2), 194-201. doi: 10.1111/eip.12461

Ashead, G. (2016). Written in the body: Deliberate self-harm and violence. In E. Weldon & C. Van Velsen (Eds.), *A Practical Guide to Forensic Psychotherapy*. London: Jessica Kingsley Publishers.

Ashworth, P. (2015). Conceptual foundations of qualitative psychology. In J.A. Smith (Ed.) *Qualitative psychology. A practical guide to research methods, 3th edition*. London: SAGE Publications Inc.

Ayerst, S. (2005). *The autobiographical construction of self-harm: A discourse-analytic study of adolescent narratives*. (Doctoral dissertation). Available from ProQuest Dissertations and Thesis database. (UMI No. MR01787)

Bandura, A. (1976). Social learning theory. Englewood Cliffs, N.J.: Prentice-Hall.

Bateman, A. & Fonagy, P. (2001). Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalization. An 18-month follow-up. *American Journal of Psychiatry*, *158*, 36-42. doi: 10.1176/appi.ajp.158.1.36

Bateman, A. & Fonagy, P. (2008). 8-year follow-up of patients treated for borderline personality disorder: mentalization-based treatment versus treatment as usual. *American Journal of Psychiatry*, *165*, 631-638. doi: 10.1176/appi.ajp.2007.07040636.

Bateman, A., & Fonagy, P. (2019). *Handbook of mentalizing in mental health practice*. Washington DC, USA: American Psychiatric Publishing

Bedenko, W.E. (2001). A qualitative analysis of the function and intent of self-mutilative behavior in an adolescent female (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing, (UMI No. 2001. 3024540)

Bentley, K.H., Nock, M.K., & Barlow, D.H. (2014). The four-function model of nonsuicidal self-injury: Key directions for future research. *Clinical Psychological Science*, *2*(5), 638-656. doi: 10.1177/2167702613514563

Benton, T. & Craib, I. (2011). *Philosophy of science. The philosophical foundations of social thought.* New York: Palgrave McMillan.

Berger, E., Hasking, P., & Martin, G. (2014). Adolescents' perspectives of youth non-suicidal self-injury prevention. *Youth & Society*, 49(1), 3-22. doi: 10.1177/0044118X13520561

Bick, E. (1968). The experience of the skin in early object relations. *International Journal of Psychoanalysis*, 49, 558-66.

Bion, W.R. (1962). Learning from Experience. London: Karnac books.

Bion, W.R. (1970). Attention and interpretation. London: Karnac Books.

Blasco-Fontecilla, H., & Oquendo, M.A. (2016). Biomarkers of suicide: Predicting the predictable? In P. Courtet (Ed.), *Understanding suicide: From diagnosis to personalized treatment*. Montpellier: Springer International Publishing. doi. 10.1007/978-3-319-26282-6

Blos, P. (1967). The second individuation process of adolescence. *Psychoanalytic Study of the Child*, *5*(22), 162-186.

Bo, S. & Kongerslev, M.T. (2017). Self-reported patterns of impairments in mentalization, attachment, and psychopathology among clinically referred adolescents with and without borderline personality pathology. *Borderline Personality Disorder and Emotion Dysregulation*, *4*(4), 1-10. doi: 10.1186/s40479-017-0055-7

Borschmann, R.J., Hogg, R., Phillips, P., & Moran, P. (2012). Measuring self-harm in adults: A systematic review. *European Psychiatry*, *27*, 176-180. doi: 10.1016/j.eurpsy.2011.04.005

Bouchard, M.A., & Lecours, S. (2008). Contemporary approaches to mentalization in the light of Freud's project. In F. Busch (Ed.), *Mentalization: Theoretical considerations*, *research findings, and clinical implications*. New York: Taylor and Francis.

Bowlby, J. (1969). Attachment. *Attachment and Loss* (Vol. 1). London: Hogarth Press. Bowlby, J. (1973). Separation: Anxiety and anger. *Attachment and loss* (Vol. 2).

London: Hogarth Press.

Bowlby, J. (1980). Loss: sadness and depression. *Attachment and loss* (Vol. 3). London: Hogarth Press.

Bracken-Minor, K.L., McDevitt-Murphy, M.E., Parra, G.R. (2012). Profiles of non-suicidal self-injurers and associated patterns of alcohol use. *Journal of Psychology and Behavior Assessment*, *34*, 552-563. doi: 10.1007/s10862-012-9306-5

Brady, M.T. (2014). Cutting the silence: Initial, impulsive self-cutting in adolescence. *Journal of Child Psychotherapy*, 40(3), 287-301. doi: 10.1080/0075417X.2014.965430

Braun, R.C. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. doi: 10.1191/1478988706qp063oa

Bresin, K. & Gordon, K.H. (2013). Endogenous opioids and nonsuicidal self-injury: A mechanism of affect regulation. *Neuroscience & Biobehavioral Reviews*, *37*(3), 374-383. doi: 10.1016/j.neubiorev.2013.01.020

Bresin, K. & Schoenleber, M. (2014). Gender differences in the prevalence of nonsuicidal self-injury: A meta-analysis. *Clinical Psychology Review*, *38*, 55-64. doi: 10.1016/j.cpr.2015.02.009.

Brier, J. & Gil, E. (1998). Self-mutilation in clinical and general population samples: Prevalence, correlates, and functions. *American Journal of Orthopsychiatry*, 68(4), 609-620. PMID: 9809120

Brodal, P. (2018). Nevrokulturell imperialisme. Tidsskrift for den norske legeforeningen, *12*. doi: 10.4045/tidskr.18.07.07

Brown, T. B., & Kimball, T. (2012). Cutting to live: A phenomenology of self-harm. Journal of Marital and Family Therapy, 39, 195-208. doi: 10.1111/j.1752-0606.2011.00270.x

Brown, W. J. (1877). Notes of a case of monomania with self-mutilation and a suicidal tendency-recovery. *Journal of Mental Science*, *23*(102), 242-248. doi: 10.1192/bjp.23.102.242

Campbell, D. & Hale, R. (2017). *Working in the dark. Understanding the pre-suicide state of mind.* London: Routledge.

Campbell, R., Pund, P., Pope, C., Britten, N., Pill, R., Morgan, M., & Donovan, J. (2003). Evaluating meta-ethnography: A synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Social Science & Medicine*, *56*, 671-684. doi: 10.1016/S0277-9536(02)00064-3

Casey, B.J., Jones, R.M., & Hare, T.A. (2008). The adolescent brain. *Annals of the New York Academy of Sciences*, 1124, 111-126. doi: 10.1196/annals.1440.010

Catty, J. (2012). 'Maybe you don't actually exist': Containing shame and self-harm in a school counselling service. *British Journal of Psychotherapy*, 28(1), 81-97. doi: 10.1111/j.1752-0118.2011.01262.x

Chandler, A. (2017). Seeking secrecy: A qualitative study of younger adolescents' account of self-harm. *Young*, 26(4), 1-19. doi: 10.1177/1103308817717367

Chanen, A.M., Jackson, H.J., McCutcheon, L.K., Jovev, M., Dudgeon, P., Yuen H.P., ... McGorry, P.D. (2008). Early intervention for adolescents with borderline personality disorder using cognitive analytic therapy: Randomized controlled trial. *British Journal of Psychiatry*, 193, 477–84. doi: 10.1192/bjp.bp.107.048934

Chanen, A.M. & McCutheon, L. (2013). Prevention and early intervention for borderline personality disorder: current status and recent evidence. *The British Journal of Psychiatry*, 202, 24-29. doi: 10.1192/bjp.bp.112.119180

Chaney, S. (2011). "A hideous torture on himself": Madness and self-mutilation in victorian literature. *Journal of Medical Humanities*, 32(4), 279-289. doi: 10.1007/s10912-011-9152-6

Choi-Kain, L.W. & Gunderson, J.G. (2008). Mentalization: Ontology, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry*, *165*, 1127-1135. doi: 10.1176/appi.ajp.2008.07081360

Claes, L., Soenens, B., Vansteenkiste, M. & Vandereycken, W. (2012). The scars of the inner critic: Perfectionism and nonsuicidal self-injury in eating disorders. *Eating Disorder Review*, 20(3), 196-202. doi: 10.1002/erv.1158.

Cohen, P., Crawford, T. N., Johnson, J. G., & Kasen, S. (2005). The children in the community study of developmental course of personality disorder. *Journal of Personality Disorders*, 19, 466-486. doi: 10.1521/pedi.2005.19.5.466

Crittenden, P.M. (2005). *The Transition to Adulthood Attachment Interview (TAAI)*. Unpublished manuscript, Miami, FL, USA.

https://www.patcrittenden.com/include/attachment_papers.htm

Crouch, W., & Wright, J. (2004). Deliberate self-harm at an adolescent unit: A qualitative investigation. *Clinical Child Psychology and Psychiatry*, *9*(2), 185-204. doi: 10.1177/1359104504041918

Cuthbert, B.N. & Insel, T.R. (2013). Toward the future of psychiatric diagnosis: The seven pillars of RDoC. *BMC Med*, *11*(126). doi: 10.1186/1741-7015-11-126

Daldin, H.J. (1988). A contribution to the understanding of self-mutilating behavior in adolescence. *Journal of Child Psychology*, *14*, 61-66. doi: 10.1080/00754178808254819

Daley, K. (2015). "I'd just cut myself to kill pain": Seeing sense in young woman's self-injury". In K.Wright & J. McLeod (Eds.), *Rethinking youth wellbeing. Critical perspectives*. Australia: Springer.

De Bellis, M.D. & Zisk, A.B. (2014). The biological effects of childhood trauma. *Child and Adolescent Psychiatric Clinics of Northern America*, *23*(2), 185-222. doi: 10.1016/j.chc.2014.01.002

Edmondson, A.J., Brennan, C.A., & House, A. (2016). Non-suicidal reasons for self-harm: A systematic review of self-reported accounts. *Journal of Affective Disorders*, 191, 109-117. doi: 10.1016/j.jad.2015.11.043

Eisenberger, N.I. (2012). The pain of social disconnection: Examining the shared neural underpinnings of physical and social pain. *Nature Reviews Neuroscience*, *13*(6), 421-434. doi: 10.1038/nrn3231

Ekman, I. (2019). Självskadande handlingar. Ungdomars berättelser.

Kontextualisering av et medikaliserat socialt problem. Institusjonen for socialt arbete. Umeå sentrum for genusstudier. Avhandling for filosifie doctorexamen.

Emerson, L.E. (1913). The case of Miss A: A preliminary report of a psychoanalytic study and treatment of a case of self-mutilation. *Psychoanalytic Review*, *1*(1), 41-54.

Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: Norton.

Farber, S.K. (2002). When the body is the target. Self-harm, pain, and traumatic attachment. London: Jason Aronson.

Favazza, A.R. (1987). Bodies under siege. Self-mutilation, nonsuicidal self-injury, and body modification in culture and psychiatry (3rd ed). Baltimore: The Johns Hopkins University Press.

Favazza, A.R. (1989). Female habitual self-mutilators. *Acta Psychiatric Scandinavica*, 79, 283-289. PMID: 2711856

Favazza, A.R. (1998). The coming of age of self-mutilation. *The Journal of Nervous & Mental Disease*, 186(5), 259-268. ISSN: 0022-3018

Finley, L. (2009). Ambiguous encounters: A relational approach to phenomenological research. *Indo-Pacific Journal of Phenomenology*, *9*(1), 1-17. doi:

10.1080/20797222.2009.11433983

Fjelldal-Soelberg, C. (2013). *Kroppsskadingens meningsmangfold. En sosiologisk studie av personer som skader egen kropp.* Ph.D. Thesis in Sociology. Bodø: Universitetet i Nordland.

Flick, U. (2002). *An introduction to qualitative research*. Thousand Oaks, California: SAGE Publications Ltd.

Fonagy, P., Gergerly, G., Jurist, E.L., & Target, M. (2002). *Affect regulation, mentalization and the development of the self*. New York: Other Press.

Fonagy, P., Gergely, G. & Target, M. (2007). The parent-infant dyad and the construction of the subjective self. *Journal of Child Psychology and Psychiatry*, 48(3-4), 288-328. doi: 10.1111/j.1469-7610.2007.01727.x

Fonagy, P., Speranza, M., Luyten, P., Kaess, M., Hessels, C., & Bohus, M. (2015). ESCAP Expert Article: Borderline personality disorder in adolescence: An expert research

review with implications for clinical practice. *European Child and Adolescent Psychiatry*, 24, 1307-1320. doi: 10.1007/s00787-015-0751-z

Fonagy, P., Steele, M., Steele, H., & Target, M. (1998). *Reflective-Functioning manual. Version 4.1.* London: University College London.

https://www.mentalizacion.com.ar/images/notas/Reflective%20Functioning%20Manual.pdf

Fonagy, P. & Target, M. (1996). Playing with reality: I. Theory of mind and the normal development of psychic reality. *International Journal of Psycho-Analysis*, 77, 217–233. PMID: 8771375

Fonagy, P. & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, *9*, 679-700. PMID: 9449001

Fonagy, P. & Target, M. (2000). Playing with reality: III. The persistence of dual psychic reality in borderline patients. *International Journal of Psycho-Analysis*, 81, 853–873. PMID: 11109573

Fonagy, P. & Target, M. (2006). The mentalization-focused approach to self-pathology. *Journal of Personality Disorders*, 20, 544–576. doi: 10.1521/pedi.2006.20.6.544

Fortune, S., Sinclair, J., & Hawton, K. (2008). Help-seeking before and after episodes of self-harm: A descriptive study in school pupils in England. *BMC Public Health*, 8, 369-382. doi: 10.1186/1471-2458-8-369

Frankel, J. (2001). A witness breaks his silence: The meaning of a therapist's response to an adolescent's self-destruction. *American Journal of Psychoanalysis*, 61(1), 85-99. doi: 10.1023/A:1002709526548

Franklin, J.C., Puzia, M.E., Lee, K.M., Lee G.E., Hanna, E.K., Spring, V.L., Prinstein, M.J. (2013). The nature of pain offset relief in non-suicidal self-injury: A laboratory study. *Clinical Psychological Science*, *1*(2), 110-11. doi: 10.1177/2167702612474440

Freud, A. (1958). Adolescence. *Psychoanalytic Study of the Child*, *13*, 255-278. doi: 10.1080/00797308.1958.11823182

Freud, S. (1900a). The interpretation of dreams (First part), *Standard edition of the complete psychological works of Sigmund Freud* (Vol. 4), ix-627. Translated by J. Strachey. London: Vintage & Hogarth Press

Freud, S. (1900b). The interpretation of dreams (Second part). *Standard edition of the complete psychological works of Sigmund Freud* (Vol. 5), 339-630. Translated by J. Strachey. London: Vintage & Hogarth Press

Freud, S. (1901). The psychopathology of everyday life. *Standard edition of the complete psychological works of Sigmund Freud* (Vol. 6), 1-239. Translated by J. Strachey. London: Vintage & Hogarth Press

Freud, S. (1914). Remembering, repeating and working-through (Further recommendations on the technique of psycho-analysis II). *Standard edition of the complete psychological works of Sigmund Freud* (Vol. 12), 146-156. Translated by J. Strachey. London: Vintage & Hogarth Press

Freud, S. (1917). Mourning and melancholia. *Standard edition of the complete psychological works of Sigmund Freud* (Vol. 14), 239-259. Translated by J. Strachey. London: Vintage & Hogarth Press

Freud, S. (1920). Beyond the pleasure principle. *Standard edition of the complete psychological works of Sigmund Freud* (Vol. 18), 271-338. Translated by J. Strachey. London: Vintage & Hogarth Press.

Freud, S. (1923). The ego and the id. *Standard edition of the complete psychological* works of Sigmund Freud (Vol. 19), 3-68. Translated by J. Strachey. London: Vintage & Hogarth Press

Friedman, M., Glasser, M., Laufer, E., Laufer, M., & Mohl, M. (1972). Attempted suicide and self-mutilation in adolescence: some observations from a psychoanalytic research project. *The International Journal of Psychoanalysis*, *53*, 179-183. PMID: 5057061

Fox, K.R., Franklin, J.C., Ribeiro, J.D., Kleiman, E.M., Bentley, K.H., & Nock, M.K. (2015). Meta-analysis of risk factors for nonsuicidal self-injury. *Clinical Psychology Review*, 42, 156-167. doi: 10.1016/j.cpr.2015.09.002

Gabbard, G.O. (2005). *Psychodynamic Psychiatry in Clinical Practice: Fourth Edition*. American Psychiatric Publishing.

Gadamer, H.-G. (1960/2012). Sannhet og metode. Grunntrekk i en filosofisk hermeneutikk. Oslo: Pax forlag.

Gardner, F. (2001). *Self-harm: A psychotherapeutic approach*. New York: Taylor & Francis Inc.

Gelinas, B.L. & Wright, K.D. (2013). The cessation of deliberate self-harm in a university sample: the reasons, barriers, and strategies involved. *Archives of Suicide Research*, *17*, 373-386. doi: 10.1080/13811118.2013.777003

George, C., Kaplan, N., & Main, M. (1984). *The Adult Attachment Interview*. Unpublished manuscript. University of California, Berkeley.

http://www.psychology.sunysb.edu/attachment/measures/content/aai interview.pdf

Giddens, A. (1987). Social theory and modern sociology. Cambridge: Polity Press.

Giorgi, A. (2011). IPA and science: A response to Jonathan Smith. Journal of

Phenomenological Psychology, 42(2), 195-216. doi: 10.1163/156916211X599762

Glassman, L.H., Weierich, M.R., Hooley, J.M., Deliberto, T.L., Nock, M.K. (2007).

Child maltreatment, non-suicidal self-injury, and the mediating role of self-criticism.

Behaviour Research and Therapy, 45, 2483-2490. doi: 10.1016/j.brat.2007.04.002

Graff, H. & Malin, R. (1967). The syndrome of the wrist cutter. *American Journal of Psychiatry*, 124, 36-42. doi: 10.1176/ajp.124.1.36

Grandclerk, S., Spiers, S., Spodenkiewicz, M., Moro, M.R., & Lachal., J. (2019). The quest for meaning around self-injurious and suicidal acts: A qualitative study among adolescent girls. *Frontiers in Psychiatry*, *10*(190). doi:10.3389/fpsyt.2019.00190

Gratz, K.L. (2003). Risk factors for and functions of deliberate self-harm: an empirical and conceptual review. *Clinical Psychology: Science and Practice*, 10(2), 192-205. doi: 10.1093/clipsy/bpg022

Greenberg, J. & Mitchell, S. (1983). *Object-relations in psychoanalytic theory*. Cambridge MA: Harvard University Press.

Gregory, R.J. & Mustata, G.T. (2012). Magical thinking in narratives of adolescent cutters. *Journal of Adolescence*, *35*, 1045–1051. doi: 10.1016/j.adolescence.2012.02.012
Groschwitz, R.C. & Plener, P.L. (2012). The neurobiology of non-suicidal self-injury (NSSI): A review. *Suicidology*, *3*, 24-32. ISSN 2078-5488

Grunebaum, H.V. & Klerman, G.L (1967). Wrist slashing. *American Journal of Psychiatry*, 124, 527-34. doi: 10.1176/ajp.124.4.527

Gulbas, L.E., Tyler, T.R., & Zayas, L.H. (2015). An exploratory study of nonsuicidal self-injury and suicidal behaviors in adolescent Latinas. *American Journal of Orthopsychiatry*, 85(4), 302–314. doi: 10.1037/ort0000073

Guldbrandsen, L.M. (2008). Utforskende samtaler med unge mennesker og foreldrene deres. I B. Puntervold Bø & B.C.R. Olsen (Red.) *Utfordrende foreldreskap – under ulike livsbetingelser og tradisjoner*. Oslo: Gyldendal Akademisk.

Gullestad, S.E. (1993). A contribution to the psychoanalytic concept of autonomy. *The Scandinavian Psychoanalytic Review*, 16, 22-34. doi: 10.1080/01062301.1993.10592286

Gullestad, S.E. & Killingmo, B. (2013). *Underteksten. Psykoanalytisk terapi i praksis*.

Oslo: Universitetsforlaget.

Gvion, Y., & Fachler, A. (2015). Traumatic experiences and their relationship to self-destructive behavior in adolescence. *Journal of Infant, Child, and Adolescent Psychotherapy*, 14(4), 406–422. doi: 10.1080/15289168.2015.1090863

Ha, C., Sharp, C., Ensink, K., Fonagy, P., & Cirino, P. (2013). The measurement of reflective function in adolescents with and without borderline traits. *Journal of Adolescence*, *36*(6), 1215-1223. 10.1016/j.adolescence.2013.09.008

Haavind, H. (2007a) Accountability in persons: What is in the telling others about yourself? In J. Kofoed & D. Staunæs (Eds.), *Magtballader – 15 fortællinger om magt, modstand og menneskers tilblivelse* (pp.159-78). København: Danmarks Pædagogiske Universitetsforlag.

Haavind, H. (2007b). *Kjønn og fortolkende metode. Metodiske muligheter i kvalitativ forskning*. Oslo: Gyldendal Akademiske.

Haavind, H. (2011). Utvikling og deltagelse. Livsformsintervjuet som klinisk instrument med barn og unge. In A.V.D. Lippe & M.H. Rønnestad (Eds.) *Det kliniske intervjuet. Bind II. Praksis med ulike klientgrupper*. Oslo: Gyldendal Akademisk.

Haines, J., Williams, C.L., Braoin, K.L., & Wilson, G.V. (1995). The psychophysiology of self-mutilation. *Journal of Abnormal Psychology*, *104*(3), 471-489. doi: 10.1037/0021-843X.104.3.471

Hale, R. (2008). Psychoanalysis and suicide: process and typology. In Briggs, S., Lemma, A., & Crouch, W., (Eds.), *In relating to self-harm and suicide*. London: Routledge.

Hamza, C.A. & Willoughby, T. (2013) Nonsuicidal Self-Injury and Suicidal Behavior: A latent class analysis among young adults. *PLoS One*, 8: e59955. doi: 10.1371/journal.pone.0059955

Hamza, C.A., Willoughby, T., Armento, J. (2014). A laboratory examination of pain threshold and tolerance among nonsuicidal self-injurers with and without self-punishing motivations. *Archives of Scientific Psychology*, *2*, 33-42. doi: 10.1037/arc0000008

Hamza, C.A., Willoughby, T., & Heffer, T. (2015). Impulsivity and nonsuicidal self-injury: A review and meta-analysis. *Clinical Psychology Review*, *38*, 13-24. doi: 10.1016/j.cpr.2015.02.010

Hankin, B.L., Barrocas, A.L., Young, J.F., Haberstick, B., & Smolen, A. (2015). 5-HTTIPR x interpersonal stress interaction and nonsuicidal self-injury in general community sample of youth. *Psychiatry Research*, 225(3), 609-612. doi: 10.1016/j.psychres.2014.11.037

Haverkamp, B.E. (2005). Ethical perspective on qualitative research in applied psychology. *Journal of Counseling Psychology*, *52*(2),146-155. doi:10.1037/0022-0167.52.2.146

Hawton, K., Bergen, H., Cooper, J., Turnbull, P, Waters, K., Ness, J. & Kapur, N. (2015). Suicide following self-harm: findings from the Multicentre Study of self-harm in England, 2000-2012. *Journal of Affective Disorders*. *175*, 147-151. doi: 10.1016/j.jad.2014.12.062

Hawton, K., Saunders, K.E.A., & O'Connor, R.C. (2012). Self-harm and suicide in adolescents. *Lancet*, *379*, 2373–2382. doi: 1.1016/S0140-6736(12)60322-5

Hawton, K., Witt, K.G., Taylor Salisbury, T.L., Arensman, E., Gunnell, D., Townsend, E., van Heeringen, K., & Hazell, P. (2015). Interventions for self-harm in children and adolescents. *Cochrane Database of Systematic Reviews*. 2015(12), CD012013. doi: 10.1002/14651858.CD012013.

Hegstad, H. (2019). Var korset nødvendig? En vurdering av Asle Eikrems bok om Jesu død som offer. *Teologisk tidsskrift*, 8, 41-54. 10.18261/issn.1893-0271-2019-01-04 Heidegger, M. (1927/1962). *Being and time*. Oxford: Blackwell Publishers.

Hill, D. (2015). *Affect-regulation theory: A clinical model*. London: W.W. Norton & Company.

Holley, E.E. (2016). *The lived experience of adolescents who engage in nonsuicidal self-injury* (Doctoral dissertation). Retrieved from Open Access Thesis and Dissertations. (Record No. oai:etd.ohiolink.edu:antioch1434043151)

Holliday, R., Brennan, C., & Cottrell, D. (2018). Understanding adolescents' experiences of self-harm: Secondary analysis of family therapy sessions from the SHIFT Trial. *Archieves of Suicide Research*. doi: 10.1080/13811118.2018.1501448

Holoway, W. & Jefferson, T. (2012). *Doing qualitative research differently: A psychosocial approach*. London: SAGE Publication Inc.

Hooley, J.M., & St. Germain, S.A. (2014). Nonsuicidal self-injury, pain, and self-criticism: Does changing self-worth change pain endurance in people who engage in self-injury? *Clinical Psychological Science*, 2(3), 297-305. doi: 10.1177/2167702613509372

Horne, O., & Csipke, E. (2009). From feeling too little and too much, to feeling more and less? A nonparadoxical theory of the functions of self-harm. *Qualitative Health Research*, 19(5), 655-667. doi: 10.1177/1049732309334249

Insel, T., Cuthbert, B., Garvey, M., Heinssen, R., Pine, D.S., Quinn, K., ... Wang, P. (2010). Research domain criteria (RDoC): Toward a new classification framework for

research on mental disorders. *American Journal of Psychiatry*, 167(7), 748-751. doi: 10.1176/appi.ajp.2010.09091379.

Jacobson, C.M., & Gould, M. (2007). The epidemiology and phenomenology of non-suicidal self-injurious behavior among adolescents: A critical review of the literature. *Archives of Suicide Research*, 11(2), 129-147. doi: 10.1080/13811110701247602

Johnson, D.R., Ferguson, K., & Copley, J. (2017). Residential staff responses to adolescents' self-harm: The helpful and unhelpful. *Clinical Child Psychology and Psychiatry*, 22, 443-454. doi: 10.1177/1359104516689378

Kaess, M., Hille, M., Parzer, P., Maser-Gluth, C., Resch, F., & Brunner, R. (2012). Alterations in the neuroendocrinological stress response to acute psychosocial stress in adolescents engaging in nonsuicidal self-injury. *Psychoneuroendocrinology*, *37*(1), 157-161. doi: 10.1016/j.psyneuen.2011.05.009

Kafka, J.S. (1969). The body as transitional object: a psychoanalytic study of a self-mutilating patient. *British Journal of Medical Psychology*, *42*, 207-212. doi: 10.1111/j.2044-8341.1969.tb02072.x

Karman, P., Kool, N., Poslawsky, I.E., & Meijel, B. (2014). Nurses' attitudes towards self-harm: A literature review. *Journal of Psychiatric and Mental Health Nursing*, *22*(1). doi: 10.1111/jpm.12171

Katsakou, C., Marougka, S., Barnicot, K., Savill, M., White, H., Lockwood, K. & Priebe, S. (2012). Recovery in borderline personality disorder (BPD): A qualitative study of service users' perspectives. *PLoS ONE*, *7*(5), 1. doi: 10.1371/journal.pone.0036517

Katznelson, H. (2014). Reflective functioning: A review. *Clinical Psychology Review*, 34, 107-117. doi: 10.1016/j.cpr.2013. 12.003

Kernberg, O. (1987). A psychodynamic approach. *Journal of Personality Disorders*, 1, 344-346. doi: 10.1521/pedi.1987.1.4.344

Klein, M. (1975). *Envy and gratitude and other works* 1946-1963. London: Hogarth Press.

Klein, M. (1998). Love, guilt and reparation. London: Vintage.

Kirtley, O.J., O'Carroll, R.E., & O'Connor, R.C. (2016). Pain and self-harm: A systematic review. *Journal of Affective Disorders*, 203, 347-363. doi: 10.1016/j.jad.2016.05.068

Klineberg, E., Kelly, M.J., Stansfeld, S.A & Bhui, K.S. (2013). How do adolescents talk about self-harm? A qualitative study of disclosure in an ethnical diverse urban population in England. *BMJ Public Health*, *13*, 572. doi: 10.1186/1471-2458-13-572

Klonsky, E.D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical Psychology Review*, *27*, 226-239. doi: 10.1016/j.cpr.2006.08.002

Klonsky, E.D. & Glenn, C.R. (2009). Assessing the functions of non-suicidal self-injury: psychometric properties of the Inventory of Statements About Self-Injury (ISAS). *Journal of Psychopathology and Behavioral Assessment*, *31*(3), 2015-2019. doi: 10.1007/s10862-008-9107-z

Klonsky, E.D. & Moyer, A. (2008). Childhood sexual abuse and nonsuicidal self-injury: Meta-analysis. *British Journal of Psychiatry*, *192*, 166-170. doi: 10.1192/bjp.bp.106.030650

Klonsky, E.D. & Olino, T.M. (2008). Identifying clinically distinct subgroups of self-injurers among young adults: A latent class analysis. *Journal of Counseling Clinical Psychology*, 76, 22-27. doi: 10.1037/0022-006X.76.1.22

Klonsky, E.D., Oltmanns, T.F., & Turkheimer, E. (2003). Deliberate self-harm in a nonclinical population: Prevalence and psychological correlates. *American Journal of Psychiatry*, *160*, 1501-1508. doi: 10.1176/appi.ajp.160.8.1501

Klonsky, E.D., Victor, S.E., & Saffer, B.V. (2014). Nonsuicidal self-injury: What we know, and what we need to know. *The Canadian Journal of Psychiatry*, *59*(11), 565-568. doi: 10.1177/070674371405901101

Kokaliari, E.D. & Berzoff, J. (2008). Nonsuicidal self-injury among nonclinical college women. Lessons from Foucault. *Affilia*, 23(3), 259-269. doi: 10.1177/0886109908319120

Kongerslev, M.T. (2015). Personality disorder in childhood and adolescence comes of age: a review of the current evidence and prospects for future research. *Scandinavian Journal of Child and Adolescent Psychiatry and Psychology*, *3*(1), 31-48. doi: 10.21307/sjcapp-2015-004

Korsgaard, H.O., Torgersen, S., Wentzel-Larsen, T., & Ulberg, R. (2016). Personality disorders and Axis I comorbidity in adolescent outpatients with ADHD. *BMC Psychiatry*, *16*, 175. doi: 10.1186/s12888-016-0871-0

Kraus, A., Valerius, G., Seifritz, E., Ruf, M., Bremner, J.D., Bohus, M., & Schmahl, C. (2010). Script-driven imagery of self-injurious behavior in patients with borderline personality disorder: a pilot FMRI study. *Acta Psychiatrica Scandinavica*, *121*(1), 41-51. doi: 10.1111/j.1600-0447.2009.01417.x]

Kroll, J.L. (1978). Self-destructive behavior on an inpatient ward. *Journal of Nervous Mental Disease*, *166*, 429-34. PMID: 660176

Kwawer, J.S. (1980). Some interpersonal aspects of self-mutilation in a borderline patient. *Journal of American Academy of Psychoanalysis*, 8(2), 203-216. PMID: 7358536

Landmark, A.F. & Stänicke, L.I. (2016). *Det uforståelige barnet. Om å skape sammenheng mellom indre og ytre verden.* Stavanger: Hertervig forlag.

Larkin, C., DiBlasi, Z., & Arensman, E. (2014). Risk factors for repetition of self-harm: A systematic review of prospective hospital-based studies. *PLoS One*, *9*, e84282. doi: 10.1371/annotation/b3dfd1b3-ada1-4f7e-89d4-a25ddf5d204a

Laufer, M. (1968). The body image, the function of masturbation, and adolescence: problems of ownership of the body. *The Psychoanalytic Study of the Child*, 23, 114-137. PMID: 4099026

Laye-Gindhu, A., & Schonert-Reichl, K.A. (2005). Nonsuicidal self-harm among community adolescents: Understanding the "whats" and "whys" of self-harm. *Journal of Youth and Adolescence*, *34*(5), 447-457. doi: 10.1007/s10964-005-7262-z

LeBreton, D. (2017). Understanding skin-cutting in adolescence: Sacrificing a part to save the whole. *Body and Society*, *24*, 33-54. doi: 10.1177/1357034X18760175

Lecours, S. & Bouchards, M.A. (1997). Dimensions of mentalisation: Outlining levels of psychic transformation. *International Journal of Psychoanalysis*, 78, 855-875. PMID: 9459091

Lemma, A. (2010). *Under the skin. A psychoanalytic study of body modification*. London: Routledge.

Lesniak, R.G. (2010). The lived experience of adolescent females who self-injure by cutting. *Advanced Emergency Nursing Journal*, *32*(2), 137-147. doi: 10.1097/TME.0b013e3181da3f2f

Levitt, H., Motulsky, S., Morrow, S., & Pontorotto, J.G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology*, 4(1), 2-22. doi: 10.1037/qup0000082

Levitt, H., Pomerville, A., & Surace, F.I. (2016). A qualitative meta-analysis examining clients' experiences of psychotherapy: A new agenda. *Psychological Bulletin*, *142*, 801-830. doi: 10.1037/bul0000057

Lewis, S.P., & Mehrabkhani, S. (2017). Every scar tells a story: Insight into people's self-injury scar experiences. *Counselling Psychology Quarterly*, 29(3), 296-310. doi: 10.1080/09515070.2015.1088431

Lindgren, B.-M., Wilstrand, C., Gilje, F. & Olofsson, B. (2004). Struggling for hopefulness: A qualitative study of Swedish women who self-harm. *Journal of Psychiatric and Mental Health Nursing*, *11*, 284-291. doi: 10.1111/j.1365-2850.2004.00712.x

Lindgren, B.-M., Åström, S., Graneheim, U.H. (2010). Held to ransom: Parents of self-harming adults describe their lived experience of professional care and caregivers. *International Journal of Qualitative Studies of Health Well-being*, *5*(3). doi: 10.3402/qhw.v5i3.5482

Linehan, M.M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: The Guildford Press.

Linehan, M.M. & Comtois, K. (1996). *Lifetime parasuicide history*. University of Washington, Seattle, WA, Unpublished work. http://depts.washington.edu/uwbrtc/wpcontent/uploads/L-SASI-Count.pdf

Linehan, M.M., Comtois, K.A., Murray, A.M., Brown, M.Z., Gallop, R.J., Heard, H.L., ... Lindenboim, N. (2007). Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archive of General Psychiatry*, *63*, 757-766. doi: 10.1001/archpsyc.63.7.757

Liu, H.-C., Liu, S.-I., Tjung, J.-J., Sun, F.-J., Huang, H.-C., & Fang, C.-K. (2017). Self-harm and its association with internet addiction and internet exposure to suicidal thought in adolescents. *Journal of the Formosan Medical Association*, *116*, 153-160. doi: 10.1016/j.jfma.2016.03.010

Lyons-Ruth, K., Bureau, J.-F., Holmes, B., Easterbrooks, A. & Brooks, N.H. (2013). Borderline symptoms and suicidality/self-injury in late adolescence: Prospectively observed relationship correlates in infancy and childhood. *Psychiatry Research*, 206, 273-281. doi: 10.1016/j.psychres.2012.09.030

Machoian, L. (2001). Cutting voices. *Journal of Psychosocial Nursing & Mental Health Services*, 39(11), 22-29. ISSN: 02793695

Maciejewski, D.F., Creemers, H., Lynskey, M.T., Madden, P.A.F., Heath, A.C., Statham, D.J., ... Verweij, K.J.H. (2014). Different outcomes, same etiology? Shared genetic and environmental influences on non-suicidal self-injury and suicidal ideation, *JAMA Psychiatry*, 71(6), 699-705. doi: 10.1001/jamapsychiatry.2014.89

Madge, N., Hawton, K., McMahon, E.M., Corcoran, P., DeLeo, D., Wilde, E.J., ... Arensman, E. (2011). Psychological characteristics, stressful life events and deliberate self-

harm: findings from Child & Adolescent Self-harm in Europe (CASE) study. *European Child & Adolescent Psychiatry*, 20(10), 499–508. doi: 10.1007/s00787-011-0210-4

Magagna, J. (2008). Attacks on life: Suicidality and self-harm in young people. In S. Briggs, S., Lemma, A. & Crouch, W. (Eds.), *Relating to self-harm and suicide:*Psychoanalytic perspectives on practice, theory and prevention (pp. 109-127). New York, NY: Routledge/ Taylor & Francis Inc.

Mahler, M.S. (1963). Thoughts about development and individuation. *Psychoanalytic Study of the Child*, *18*, 307-324. PMID: 14147283

Mann, G.E., Taylor, A., Wren, B., & de Graaf, N. (2019). Review of the literature on self-injurious thoughts and behaviours in gender-diverse children and young people in the United Kingdom. *Clinical Child Psychology and Psychiatry*, 24(2), 304-321. doi: 10.1177/1359104518812724

Marchant, A., Hawton, K., Stewart, A., Montgomery, P., Singaravelu, V., Lloyd, K., ...John, A. (2017). A systematic review of the relationship between internet use, self-harm and suicidal behaviour in young people: The good, the bad and the unknown. *PLoS One*, *12*, e0181722. doi: 10.1371/journal.pone.0181722

Marshall, H., & Yazdani, A. (1999). Locating culture in accounting for self-harm amongst Asian young women. *Journal of Community & Applied Social Psychology*, *9*(6), 413-433. doi: 10.1002/(SICI)1099-1298(199911/12)9:6<413::AID-CASP543>3.0.CO;2-U

Marty, P. (1968). A major process of somatization: The progressive disorganization. *International Journal of Psychoanalysis*, *49*, 246-249.

McAndrew, S., & Warne, T. (2014). Hearing the voices of young people who self-harm: Implications for service providers. *International Journal of Mental Health Nursing*, 23(6), 570-579. doi: 10.1111/inm.12093

McDermott, E., Roen, K., & Piela, A. (2015). Explaining self-harm: Youth cyberstalk and marginalized sexualities and genders. *Youth and Society*, 47(6), 873-889. doi: 10.1177/0044118X13489142

McDonald, G., O'Brien, L., & Jackson, D. (2007). Guilt and shame: experiences of parents of self-harming adolescents. *Journal of Child Health Care*, 11(4), 298-310. doi: 10.1177/1367493507082759

McLane, J. (1996). The voice on the skin: Self-mutilation and Merleau-Ponty's theory of language. *Hypatia*, 11, 107-118. doi: 10.1111/j.1527-2001.1996.tb01038.x

McLeod, J. (2010). *Case study research in counselling and psychotherapy*. London: Sage.

Mehlum, L., Tørmoen, A.J., Ramberg, M., Haga, E., Diep, L.M., Laberg, S., ... Grøholt, B. (2014). Dialectical behavior therapy for adolescents with repeated suicidal and self-harming behavior: A randomized trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 53(10), 1082-1091. doi: 10.1016/j.jaac.2014.07.003

Menninger, K. (1938/1966). Man against himself. New York: Brace World Inc.

Millard, C. (2013). Making the cut: The production of 'self-harm' in post-1945 Anglo-Saxon psychiatry. *History of Human Sciences*, 26(2), 126-150.

doi:10.1177/0952695112473619

Miller, A.B., Massing-Schaffer, M., Owens, S., & Prinstein, M.J. (2019). Nonsuicidal self-injury among youth. In T.H. Ollendick, S.W. White, & B.A. White (Eds.), *The Oxford Handbook of Clinical Child and Adolescent Psychology*. Oxford: Oxford University Press. doi: 10.1093/oxfordhb/9780190634841.013.34

Morgan, C., Webb, R. T., Carr, W. J., Kontopantelis, E., Green, J., Chew-Graham, C. A., ... Ashcroft, D. M. (2018). Incidence, clinical management, and mortality risk following self-harm among children and adolescents: Cohort study. *BMJ*, *359*, j4351. doi: 10.1136/bmj.j4351

Morgan, H.G. (1979). Death wishes? The understanding and management of deliberate self-harm. New York: Wiley.

Motz, A. (2010). Self-harm as a sign of hope. *Psychoanalytic Psychotherapy*, 24(2), 81-92. doi: 10.1080/02668731003707527

Moyer, M., & Nelson, K.W. (2007). Investigating and understanding self-mutilation: The student voice. *Professional School Counseling*, 11(1), 42-48. ISSN: 1096-2409

Möhl, B., & Skandsen, A. (2012). The prevalence and distribution of self-harm among Danish high school students. *Personality and Mental Health*, *6*, 147-155. doi: 10.1002/pmh.191

Muehlenkamp, J.J. (2014). Distinguishing between suicidal and nonsuicidal self-injury. In M.K. Nock (Ed.), *The Oxford handbook of suicide and self-injury*. New York: Oxford University Press.

Muehlenkamp, J.J., Hoff, E.R., Licht, J.-G., Azure, J.A., & Hasenzahl, S.J. (2008). Rates of non-suicidal self-injury: A cross-sectional analysis of exposure. *Current Psychology*, 27(4), 234-241. doi:10.1007/s12144-008-9036-8

Nathan, J. 2004). In depth work with patients who self-harm: Doing the impossible? *Psychoanalytic psychotherapy*, *18*(2). 167-181. doi: 10.1080/14749730410001700750

National Institute for Health and Care Excellence (2019). *Self-harm. Pathways*. https://pathways.nice.org.uk/pathways/self-harm

Nice, T. (2012). Troubled minds and scarred bodies: A grounded theory study of adolescent self-harm (Unpublished doctoral dissertation). The University of Kent.

Noblit, G.W., & Hare, R.D. (1988). *Meta-ethnography. Synthesizing qualitative studies*. London: SAGE Publications, Inc.

Nock, M.K. (2010). Self-injury. *Annual Review of Clinical Psychology*, *6*, 339-63. doi: 10.1146/annurev.clinpsy.121208.131258

Nock, M.K. (2014). *The Oxford handbook of suicide and self-injury*. New York: Oxford University Press.

Nock, M.K. & Mendes, W.B. (2008). Psychological arousal, distress tolerance, and social problem-solving deficits among adolescent self-injurers. *Journal of Consulting and Clinical Psychology*, 76(1), 28-38. doi: 10.1037/0022-006X.76.1.28

Nock, M.K., & Prinstein, M.J. (2004). A functional approach to the assessment of self-mutilative behavior. *Journal of Consulting and Clinical Psychology*, 72(5), 885-890. doi: 10.1037/0022-006X.72.5.885

Nock, M.K., & Prinstein, M.J. (2005). Contextual features and behavioral functions of self-mutilation among adolescents. *Journal of Abnormal Psychology*, *114*(1), 140-146. doi: 10.1037/0021-843X.114.1.140

Novotny, P. (1972). Self-cutting. Bulletin Menninger Clinic, 36, 505-514.

Offer, D. & Barglow, P. (1960). Adolescent and young adult self-mutilation incidents in a general psychiatric hospital. *Archives of General Psychiatry*, *3*, 194-204. PMID: 14428361

Ougrin, D., Tranah, T., Stahl, D., Moran, P., & Asarnow, J.R. (2015). Therapeutic interventions for suicide attempts and self-harm in adolescents: Systematic review and meta-analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*, *54*(2), 97-107. doi: 10.1016/j.jaac.2014.10.009.

Panksepp, J. (2010). Affective neuroscience of the emotional BrainMind: Evolutionary perspectives and implications for understanding depression. *Dialogues in Clinical Neuroscience*, 12(4), 533-545. ISSN: 1294-8322 PMID: 21319497

Panksepp, J. & Solms, M. (2012). What is neuropsychoanalysis? Clinically relevant studies of the minded brain. *Trends in Cognitive Science*, *16*(1), 6-8. doi: 10.1016/j.tics.2011.11.005

Pao, P.-N. (1969). The syndrome of delicate self-cutting. *British Journal of Medical Psychology*, 42, 195-206. doi: 10.1111/j.2044-8341.1969.tb02071.x

Parfitt, A. (2005). On aggression turned against the self. *Psychoanalytic Psychotherapy*, 19, 160-173. doi: 10.1080/02668730500115127

Pattison, E.M. & Kahan, J. (1983). The deliberate self-harm syndrome. *American Journal of Psychiatry*, 140(7), 867-872. doi: 10.1176/ajp.140.7.867

Pfohl, B., Blum, N., & Zimmerman, M. (1997). *Structured interview for DSM-IV personality (SIDP-IV)*. Washington DC: American Psychiatric Press.

Piers, C. (1999). Self-mutilation, masochism, and rigid character. *Psychoanalytic Review*, 86, 691-699. PMID: 10672619

Podvoll, E.M. (1969). Self-mutilation within a hospital setting. *British Journal of Medical Psychology*, 42, 213-221. PMID: 5808712

Privé, A.A. (2007). *An existential-phenomenological investigation of self-cutting among adolescent girls* (Doctoral *Dissertation*). Available from ProQuest Dissertations Publishing (UMI No. 3292573)

Raine, W.J.B. (1980). Self-mutilation. *Journal of Adolescence*, 5, 1-13.

Ramvi, M.D. & Huvestad, A.M. (2019). «Ja visst gör det ondt». Psykoterapeuters følelsesmessige erfaringer i relasjoner til ungdommer som skader seg selv. Hovedoppgave, Psykologisk Institutt, Universitetet i Oslo.

Reichl, C., Heyer, A., Brunner, R., Parzer, P., Völker, J.M., Resch, F., & Kaess, M. (2016). Hypothalamic-pituitary-adrenal axis, childhood adversity and adolescent nonsuicidal self-injury. *Psychoneuroendocrinology*, 74, 203-211. doi: 10.1016/j.psyneuen.2016.09.011.

Ricœur, P. (1970). Freud and philosophy: An essay on interpretation. New Haven, CT: Yale University.

Rissanen, M.-L., Kylmä, J., & Laukkanen, E. (2008). Descriptions of self-mutilation among Finnish adolescents: A qualitative descriptive inquiry. *Issues in Mental Health Nursing*, *29*(2), 145-163. doi: 10.1080/01612840701792597

Robstad, S.E. (2018). "De lever med meg". Terapeuters erfaringer fra arbeide med ungdommer som skader seg selv. Hovedoppgave, Psykologisk institutt, Universitetet i Oslo. http://urn.nb.no/URN:NBN:no-69477

Rosenthal, R.J., Rinzler, C., Walsh, R., & Klausner, E. (1972). Wrist-cutting syndrome: The meaning of a gesture. *American Journal of Psychiatry*, *128*, 1363-1368. doi: 10.1176/ajp.128.11.1363

Ross, R.R. & McKay, H.B. (1979). Self-mutilation. Lexington, MA: Lexington Books.

Ross, S. & Heath, N. (2003). Two models of adolescent self-mutilation. *Suicide and Life-Threatening Behavior*, *33*, 277-287. doi: 10.1521/suli.33.3.277.23218

Rossouw, T. I., & Fonagy, P. (2012). Mentalization-based treatment for self-harm in adolescents: A randomized controlled trial. *Journal of the American Academy of Child Adolescent Psychiatry*, *51*, 1304-1313. doi: 10.1016/j.jaac.2012.09.018

Sandler, J., Sandler, A.M., & Davies, R. (2000). *Clinical and observational psychoanalytic research: Roots of a controversy*. London: Karnac Books.

Sauer-Zavala, S., Gutner, C.A., Farchione, T. J., Boettcher, H.T., Bullis, J.R., & Barlow, D.H. (2017). Current definitions of "transdiagnostic" in treatment development: A search for consensus. *Behavior Therapy*, 48, 128-138. doi: 10.1177/0145445518774914

Saunders, K.E., Hawton, K., Fortune, S., & Farrell, S. (2012). Attitudes and knowledge of clinical staff regarding people who self-harm: A systematic review. *Journal of Affective Disorders*, *139*, 205-216. doi: 10.1016/j.jad.2011.08.024

Saunders, K. E., & Smith, K. A. (2016). Interventions to prevent self-harm: What does the evidence say? *Evidence-Based Mental Health*, *19*, 69-72. doi: 10.1136/eb-2016-102420

Schore, A.N. (2002). Advances in neuropsychoanalysis, attachment theory, and trauma research: Implications for self-psychology. *Psychoanalytic Inquiry*, *22*, 433–484. doi: 10.1080/07351692209348996

Schore, A.N. (2003). *Affect regulation and the repair of the self.* New York: Norton.

Selby, E.A., Franklin, J., Carson-Wong, A., & Rizvi, S.L. (2013). Emotional cascades and self-injury: investigating instability of rumination and negative emotion. *Journal of Clinical Psychology*, 69(12), 1213-1227. doi: 10.1002/jclp.21966

Selby, E.A., Kranzler, A., Lindqvist, J., Fehling, K.B., Brillante, J., Fengpeng, Y., ... Miller, A.L. (2018). The dynamics of pain during nonsuicidal self-injury. *Clinical Psychology Science*, 7(2). doi: 10.1177/2167702618807147

Sharp, C., Ha, C., Carbone, C., Kim, S., Perry, K, Williams, L., & Fonagy, P. (2013). Hypermentalizing in adolescent inpatients: Treatment effects and association with borderline traits. *Journal of Personality Disorders*, *27*, 3-18. doi:10.1521/pedi.2013.27.1.3.

Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., ...Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (MINI): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, *59*, 22–33. PMID: 9881538

Siegel, D.J. (2015). *Brainstorm: The power and purpose of the teenage brain*. New York: Jeremy P. Tarcher/ Penguin.

Simpson, C.A. & Porter, G.L. (1981). Self-mutilation in children and adolescents. *Bulletin Menninger Clinic*, *45*, 428-438.

Sinclair, J. & Green, J. (2015). Understanding resolution of deliberate self-harm: qualitative interview study of patients' experiences. *BMJ*, *330*(7500), 1112. doi: 10.1136/bmj.38441.503333.8F

Slot, E., Akkerman, S., & Wobbels, T. (2019). Adolescents' interest experience in daily life in and across family and peer contexts. *European Journal of Psychology of Education*, 34(1), 25-43. doi: 10.1007/s10212-018-0372-2

Smith, J.A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, *5*, 9-27. doi: 10.1080/17437199.2010.510659

Smith, J.A. (2015). *Qualitative psychology. A practical guide to research methods* (3rd ed.). London: Sage Publications Ltd.

Solbakken, O.A., Hansen, R., & Monsen, J.T. (2011). Affect integration and reflective function: clarification of central conceptual issues. *Psychotherapy Research*, *21*(4), 482-496. doi: 10.1080/10503307.2011.583696.

Solms, M.L. (2018). The neurobiological underpinnings of psychoanalytic theory and therapy. Frontiers in Behavioral Neuroscience, *12* (294). doi: 10.3389/fnbeh.2018.00294

Solms, M. & Turnbull, O. (2002). *Brain and the inner world: An introduction to the neuroscience of the subjective experience*. New York: Other Press.

Somer, O., Bildik, T., Kabukcu-Basay, B., Güngör, D., Basay, Ö., & Farmer, R.F. (2015). Prevalence of non-suicidal self-injury and distinct groups of self-injurers in a community sample of adolescents. *Society of Psychiatry and Psychiatric Epidemiology*, *50*, 1163-1171. doi: 10.1007/s00127-015-1060-z

Soyemoto, K.L. (1998). The functions of self-mutilation. *Clinical Psychology Review*, *18*, 531-554. doi: 10.1016/S0272-7358(97)00105-0

Spandler, H. & Warner, S. (2007). *Beyond fear and control. Working with young people who self-harm.* Herefordshire: PCCS BOOKS Ltd.

Spring, B., Rosen, K.H., & Matheson, J.L. (2002). How parents experience a transition to adolescence: A qualitative study. *Journal of Child and Family Studies*, 11(4), 411-425. doi: 10.1023/A:1020979207588

Staksrud, E. & Ólafsson, K. (2019). *Tilgang, bruk, risiko og muligheter. Norske barn på Internett. Resultater fra EU Kids Online-undersøkelsen i Norge 2018.* EU kids Online og Institutt for medier og kommunikasjon, Universitetet i Oslo.

https://www.hf.uio.no/imk/forskning/prosjekter/eu-kids-iv/rapporter/

Stanford, S., Jones, M.P., & Hudson, J.L. (2016). Rethinking pathology in adolescent self-harm: Towards a more complex understanding of risk factors. *Journal of Adolescence*, *54*, 32-41. doi: 10.1016/j.adolescence.2016.11.004

Stänicke, E., Strømme, H., Killingmo, & Gullestad, S.E. (2013). Analytic change: Assessing ways of being in a psychoanalytic follow-up interview. *International Journal of Psychoanalysis*, *98*(7), 797-815. doi: 10.1111/1745-8315.12145

Stänicke, L.I. (2012). Mentalisering i arbeide med barn og unge. *Mellanrummet*, 27, 19-31.

Stänicke, L.I. (2018a). Selvmord og vurdering av selvmordsrisiko. In F. Skårderud, S. Haugsgjerd & E. Stänicke (Eds.), *Psykiatriboka* (2nd ed., p. 380-394). Oslo: Cappelen Akademisk.

Stänicke, L.I. (2018b). Selvskade – når noen utsetter seg for det vonde. In F. Skårderud, S. Haugsgjerd & E. Stänicke (Eds.), *Psykiatriboka* (2nd ed., p. 416-430). Oslo: Cappelen Akademisk.

Stänicke, L.I. (2019). Selvskading og ungdomstidens utfordringer – om å unngå og uttrykke det vanskelige. *Barn i Norge 2019: Identitet. Rapport. Voksne for Barn*.

Stänicke, L.I. (submitted). Sub-types in self-states during self-harm: A qualitative study of adolescent girls in a clinical sample.

Stänicke, L.I., Haavind, H., Gullestad, S.E. (2018). How do young people understand their own self-harm? A meta-synthesis of adolescents' subjective experience of self-harm. *Adolescent Research Review*, *3*(2), 173-191. doi: 10.1007/s40894-018-0080-9

Stänicke, L.I., Haavind, H., Rø, F.G., & Gullestad, S.E. (accepted). Discovering one's own way: Adolescent girls' different pathways *into* and *out* of self-harm. *Journal of Research* on Adolescence.

Stern, D. (1985). The interpersonal world of the infant: A View from Psychoanalysis and Developmental Psychology. New York: Basic Books.

Stiles, W.B. (1993). Quality control in qualitative research. *Clinical Psychology Review*, 13, 593-618. doi: 10.1016/0272-7358(93)90048-Q

Stiles, W.B. (1999). Evaluating qualitative research. *Evidence Based Mental Health*, 2(4), 99-101. doi:10.1036/ebmh.2.4.99

Stiles, W.B (2003). Qualitative research: Evaluating the process and the product. In *Handbook of clinical health psychology*. In S. Llewelyn & P. Kennedy (Eds.). Sussex: Wiley.

Storey, P., Hurry, J., Jowitt, S., Owens, D., & House, A. (2005). Supporting young people who repeatedly self-harm. *The Journal of The Royal Society for the Promotion of Health*, *125*(2), 71-75. PMID: 15819181

Straiton, M.L., Roen, K., Dieserud, G. & Hjelmeland, H. (2013). Pushing the boundaries: Understanding self-harm in a non-clinical population. *Archives of Psychiatric Nursing*, *27*(2), 78-83. doi: 10.1016/j.apnu.2012.10.008

Straker, G. (2006). Signing with a scar: Understanding self-harm. *Psychoanalytic Dialogues*, *16*(1), 93-112. doi: 10.2513/s10481885pd1601 6

Strawbridge, J., Ward, J., Ferguson, A., Graham, N., Shaw, R.J., Cullen, B., ... Smith, D.J. (2019). Identification of novel genome-wide associations for suicidality in UK Biobank, genetic correlation with psychiatric disorders and polygenic association with completed suicide. *EBio Medicine the Lancet*, 41, 517-525. doi: 10.1016/j.ebiom.2019.02.005

Sutton, J. (2007). *Healing the hurt within. Understand self-injury and self-harm and heal the emotional wounds.* Oxford: How-to books.

Swannell, S., Martin, G., Krysinska, K., Kay, T., Olson, K., & Win, A. (2010). Cutting on-line: Self-injury and the internet. *Advances in Mental Health*, *9*(2). doi:10.5172/jamh.9.2.177

Swannell, S. V., Martin, G. E., Page, A., Hasking, P., & St. John, N. J. (2014). Prevalence of nonsuicidal self-injury in noncinical samples: Systematic review, meta-analysis and meta-regression. *Suicide and Life-Threatening Behavior*, 44, 273-303. doi: 10.1111/sltb.1207

Taiminen, T.J., Kallio-Soukainen, K., Nokso-Koivisto, H., Kaljonen, A., & Helenius, H. (1998). Contagion of delibarate self-harm among adolescent inpatients. *Journal of American Academy Child and Adolescent Psychiatry*, *37*(2), 211-217. doi: 10.1097/00004583-199802000-00014

Tallaksen, D.W., Bråten, K. & Tveiten, S. (2013). "You are not particularly helpful as a helper when you are helpless". A qualitative study of Public Health Nurses and their professional competence related to suicidal adolescents. *Vård i Norden*, *33*(1), 46-50. doi: 10.1177/010740831303300110

Target, M. & Fonagy, P. (1996). Playing with reality: II. The development of psychic reality from a theoretical perspective. *International Journal of Psycho-Analysis*. 77, 459-479.

Tatnell, R., Hasking, P., Newman, L., Taffe, J., & Martin, G. (2017). Attachment, emotion regulation, childhood abuse and assault: Examining predictors of NSSI among

adolescents. *Archives of Suicide Research*, *21*(4), 610-620. doi: 10.1080/13811118.2016.1246267

Taylor, T. L., Hawton, K., Fortuna, S., & Kapur, N. (2009). Attitudes towards clinical services among people who self-harm: Systematic review. *British Journal of Psychiatry*, *194*, 104-110. doi: 10.1192/bjp.bp.107.046425

Tofthagen, R., Talseth, A.-G., Fagerström, L. (2014). Mental health nurses' experiences of caring for patients suffering from self-harm. *Nursing Research and Practice*. *2014*, 905741. doi: 10.1155/2014/905741

Turner, B.J., Austin, S.B., & Chapman, A.L. (2014). Treating nonsuicidal self-injury: A systematic review of psychological and pharmacological interventions. *Canadian Journal of Psychiatry*, *59*(11), 576-585. doi: 10.1177/070674371405901103

Turp, M. (2003). *Hidden self-harm. Narratives from psychotherapy*. London: Jessica Kingsley Publishers.

Vetlesen, A.J. & Stänicke, E. (1999). Fra hermeneutikk til psykoanalyse. Oslo: Gyldendal akademiske.

Wadman, R., Vostanis, P., Sayal., K., Majumder, P., Harroe, C., Clarke, D., ...Townsend, E. (2018). An interpretative phenomenological analysis of young people's self-harm in the context of interpersonal stressors and supports: Parents, peers, and clinical services. *Social Science and Medicine*, *212*, 120-128. doi: 10.1016/j.socscimed.2018.07.021

Walsh, B. & Rosen, P. (1988). *Self-mutilation: Theory, research, and treatment*. New York: Guilford.

Warrington (1882). The case of Isaac Brooks. *Journal of Mental Science*, 33, 69-74.

Watts, S. (2013). User skills for qualitative analysis: Perspective, interpretation and the delivery of impact. *Qualitative Research in Psychology, 11*(1), 1-14. doi: 10.1080/14780887.2013.776156

Whitlock, J.L., Muehlenkamp, M., & Eckenrode, J. (2008). Variation in nonsuicidal self-injury: Identification and features of latent classes in a college population of emerging adults. *Journal of Clinical Child and Adolescence Psychology*, *37*, 725-735. doi: 10.1080/15374410802359734

Whitlock, J.L., & Selekman, M. (2014). Non-suicidal self-injury (NSSI) across the lifespan. In M. Nock (Ed.), *Oxford handbook of suicide and self-injury*. Oxford: Oxford University Press.

Williams, M. (2014). *Cry of pain. Understanding suicide and the suicidal mind.* London: Little, Brown Book Group.

Willig, C. (2013). *Introducing qualitative research in psychology*. New York: Open University Press.

Winnicott, D.W. (1953). Transitional objects and transitional phenomena – A study of the first not-me possession. *International Journal of Psycho-Analysis*, *34*, 89-97.

Winnicott, D.W. (1965). *The maturational processes and the facilitating environment:* Studies in the theory of emotional development. London: Hogarth Press/Institute of Psychoanalysis.

Wise, I. (2000). Adolescence. London: Karnac Books.

World Health Organization (2004). *The ICD-10 classification of mental and behavioral disorders. Diagnostic criteria for research* (10th ed.). Geneva: World Health Organization.

Yakeley, J. & Burbridge-James, W. (2018). Psychodynamic approaches to suicide and self-harm. *The British Journal of Psychiatry Advances*, 24, 37-45. doi: 10.1192/bja.2017.6

Yip., K.-S., Ngan, M.-Y., & Lam, I. (2004). Adolescent self-cutters in Hong Kong. Asia Pacific Journal of Social Work and Development, 14(2), 33-51. doi: 10.1080/21650993.2004.9755953

Ystgaard, M., Arensman, E., Hawton, K., van Heeringen, K., Hewitt, A., de Wilde, E.J., ... Fekete, S. (2009). Deliberate self-harm in adolescents: Comparison between those who receive help following self-harm and those who do not. *Journal of Adolescence*, 32(4), 875-891.

Xin, X., Ming, Q., Zhang, J., Wang, Y., Liu, M., & Yao, S. (2016). Four distinct subgroups of self-injurious behavior among chinese adolescents: Findings from a latent class analysis. *PLoS ONE*, *11*, e0158609. doi: 10.1371/journal.pone.0158609

Zhu, L., Westers, N.J., Horton, S.E., King, J.D., Diederich, A., Steward, S.M., & Kennard, B.D. (2016). Frequency of exposure to and engagement in nonsuicidal self-injury among inpatient adolescents. *Archives of Suicide Research*, 20(4), 580-590. doi: 10.1080/13811118.2016.1162240

Forespørsel om deltakelse i forskningsprosjektet - ungdom

Ungdommers subjektive opplevelse av selvskading – en kvalitativ eksplorerende studie av kliniske eksempler

Bakgrunn og hensikt

Dette er et spørsmål til deg om å delta i en forskningsstudie om selvskading blant ungdom. Selvskading er ikke så uvanlig blant ungdom, men kan bli et stort problem for noen. Selvskading er et økende helseproblem, ofte forbundet med psykisk lidelse, som depresjon, men også relatert til andre psykiske vansker. Selvskading starter ofte i ungdomsalderen, og vi ønsker derfor spesielt å intervju ungdom i alderen 14-18 år.

Vi ønsker å høre hva du selv mener om selvskading, og hvordan du opplever å ha det slik du har det i din hverdag. Vi vet at ungdom skader seg av ulike grunner, og at de har mange ulike meninger om det. Dette er viktig for oss å vite om for å forstå mer og for å kunne hjelpe de som ønsker og trenger hjelp. Vi vil også se nærmere på om du opplever psykiske vansker og hva du erfarer er god hjelp for å få det bedre når du har det vanskelig.

Vi henvender oss til ungdom som er henvist Nic Waals Institutt, og hvor det i starten av behandlingskontakten er informasjon om selvskading (innen første tre måneder). Deltagelse i studien får ikke konkrete følger for behandlingen ved Nic Waals Institutt. Ved å delta kan du bidra med ny kunnskap om ungdom og selvskading.

Hva innebærer studien?

I denne studien vil vi utforske individuelle forskjeller blant ungdommene. Det vil si ulike måter selvskading kan ha sammenheng med psykiske vansker, relasjonelle vansker og livshistorie.

Studien innebærer:

- 1. En fellessamtale med deg og din behandler for å gi informasjon om studien: Etablere samtykke. Informasjon til dine foreldre.
- 2. Et intervju om hvordan du opplever en episode med selvskading i din hverdag.
- 3. Et intervju om relasjonen du opplever til nære personer i ditt liv. Dette kalles tilknytningsintervju (Adult attachment interview, AAI).
- 4. I tillegg vil vi gjøre en diagnostisk undersøkelse. Med det mener vi å undersøke hvilke psykiske vansker du kan oppleve. Alle som er i behandling gjennomgår en slik undersøkelse. I tillegg vil vi høre hvordan du opplever å være sammen med andre mennesker. Disse to undersøkelsene heter MINI (International Neuropsychiatric Interview) og SIDP-IV (Structured interview for DSM-IV personality).
- 5. Utfylle et spørreskjema om «Opplevelser i nære forhold".
- 6. Et år etter at du startet i behandling ved Nic Waals Institutt vil vi intervjue deg om hva du har opplevd nyttig, eller ikke, i behandlingen. Vi er opptatte av å høre hva som eventuelt har hjulpet deg for å slutte å skade seg.

Intervjuene tas opp på bånd. All innhentet informasjon anonymiseres og lagres forskriftsmessig.

Du og behandleren din ved Nic Waals Institutt vil få en kort tilbakemelding på den diagnostiske undersøkelsen. Det kan komme frem opplysninger i intervjuene som er viktig for din behandler å vite. Da vil vi ta det opp med deg først, og så bli enige i hvordan vi går frem slik at du får best mulig hjelp på Nic Waals Institutt

Deltagelse i studien må være noe du bestemmer sammen med dine foreldre.

- Hvis du er <u>under 16 år</u> er det dine foreldre som formelt samtykker til om du kan delta i studien. Dine foreldre får eget informasjonsskriv. Vi er likevel opptatte av at du selv får bestemme om du vil delta.
- Hvis du er <u>over 16 år</u> så kan du selv bestemme formelt om du vil delta i studien, men vi ønsker at dine foreldre er informert og har samtykket til deltagelse i prosjektet.

Mulige fordeler og ulemper

En fordel med å delta i studien er at det tidlig i behandlingen gjennomgås en grundig diagnostisk vurdering av hvilke plager du har. En annen fordel er at du gis en mulighet til å finne mer ut av dine egne meninger om selvskadingen, hva du selv knytter det til i din hverdag og din livshistorie. Det er ikke sikkert du direkte opplever det å delta i studien som nyttig, men du kan bidra med viktig kunnskap om selvskading blant ungdom som er økende i vår kultur og som kan bli et stort problem for noen.

En ulempe ved studien er at det kan være krevende å snakke om private opplevelser med en man ikke kjenner, og det kan vekke vanskelige tanker og følelser. For noen kan det også være lettere å snakke med noen de ikke kjenner så godt, og de temaene vi vil snakke med deg om er relevante for behandlingen her. Vi er opptatte av at du får oppfølging av behandleren din på Nic Waals Institutt slik at du kan jobbe videre med temaene som er vanskelige, men også viktige.

Hva skjer med informasjonen om deg?

Informasjonen som innhentes og registreres om deg skal kun brukes slik som beskrevet i hensikten med studien. Resultatet på de diagnostiske undersøkelsene vil vi gjerne referere i et notat i din journal.

Alle opplysninger vil ellers bli behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger gjennom en navneliste. Dette betyr at opplysningene er avidentifisert. Opplysningene om ditt nummer og navn oppbevares et annet sted enn opplysningene fra intervjuene og undersøkelsene.

Det er kun autorisert personell knyttet til prosjektet som har adgang til navnelisten og som kan finne tilbake til deg. Vi kan ha behov for å lese noen opplysninger i din journal for å få økt forståelse av dine vansker og behandlingsprosessen. Opplysningen vil slettes når prosjektperioden er over.

Før det publiseres resultater fra undersøkelsen vil data anonymiseres og omskrives slik at identiteten til deltagerne ikke er mulig å gjenkjenne.

Frivillig deltakelse

Det er frivillig å delta i studien. Du kan når som helst, og uten å oppgi noen grunn, trekke ditt samtykke til å delta i studien. Dette vil ikke få konsekvenser for din videre behandling ved Nic Waals Institutt.

Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Opplysninger som da er lagret vil slettes. Dersom du senere ønsker å trekke deg eller har spørsmål til studien, kan du kontakte Line Indrevoll Stänicke, telefon 90074874.

Kapittel B – Personvern og forsikring

Personvern

Opplysninger som registreres om deg er diagnostisk vurdering og utskrift/ transkripsjon av intervjuer. Det kan være behov for innhenting av bakgrunnsinformasjon fra journal.

Opplysningene er tilgjengelige for medarbeidere i prosjektet som er autorisert helsepersonell. Lovisenberg diakonale sykehus ved administrerende direktør og Nic Waals Institutt ved avdelingsleder er databehandlingsansvarlig. Studien har gjennomgått vurdering av Regional Etisk Komite (REK). Utlevering av materiale og opplysninger til andre. Det vil ikke utgis opplysninger om deg til andre institusjoner.

Rett til innsyn og sletting av opplysninger om deg og sletting av prøver Hvis du sier ja til å delta i studien, har du rett til å få innsyn i hvilke opplysninger som er registrert om deg. Du har videre rett til å få korrigert eventuelle feil i de opplysningene vi har registrert. Dersom du trekker deg fra studien, kan du kreve å få slettet innsamlede prøver og opplysninger, med mindre opplysningene allerede er inngått i analyser eller brukt i vitenskapelige publikasjoner.

Forsikring

Pasientskadeerstatningsordningen.

Informasjon om utfallet av studien

Samtykke til deltakelse i studien

Du vil få en tilbakemelding om diagnostisk vurdering. Generelle funn i studien vil publiseres i faglige tidsskrifter og er offentlig tilgjengelig om du er interessert.

Jeg er villig til å delta i studien (Signert av prosjektdeltaker, dato) Stedfortredende samtykke når berettiget, enten i tillegg til personen selv eller istedenfor (Signert av nærstående, dato) Jeg bekrefter å ha gitt informasjon om studien (Signert, rolle i studien, dato)

PAPER 1

Stänicke, L. I., Haavind, H., & Gullestad, S. E. (2018). How do young people understand their own self-harm? A meta-synthesis of adolescents' subjective experience of their own self-harm. *Adolescent Research Review*, *3*(2), 173-191. doi:10.1007/s40894-018-0080-9

OUALITATIVE REVIEW



How Do Young People Understand Their Own Self-Harm? A Metasynthesis of Adolescents' Subjective Experience of Self-Harm

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Abstract

What makes young people—most often young women—inflict damage on their own bodies? Epidemiological studies drawing on surveys have estimated incidence and identified risk factors, but studies that explore the individuals' experience and understanding of self-harm, which typically comprise a small series of persons, are omitted in many reviews. We conducted a systematic database search of studies on adolescents' (12–18 years of age) first-person experience of self-harm in clinical and non-clinical populations, and included 20 studies in a meta-synthesis. Four meta-themes were associated with the participants' subjective experiences of self-harm: (1) to obtain release, (2) to control difficult feelings, (3) to represent unaccepted feelings, and (4) to connect with others. The meta-themes support self-harm as a function of affect-regulation, but also highlight how the action of self-harm may contain important emotional and relational content and an intention or wish to connect and communicate with others. Our findings underline the importance of relating self-harm to developmental psychological needs and challenges in adolescence, such as separation, autonomy and identity formation. Self-harm in adolescence may be a result of a conflict between a need to express affective experiences and a relational need for care.

Keywords Adolescence · Meta-synthesis · Self-harm · Subjective experience · Qualitative research

Introduction

Self-harm is increasing across several countries, and especially among young girls (Morgan et al. 2017). We know that self-harm is related to different mental disorders and increased suicide risk (Hawton et al. 2012; Nock 2014). The question of *what* makes young people—most often women—inflict damage on their own bodies is perplexing. The increase of self-harm during adolescence raises the question if such behavior may be related to developmental challenges during adolescence, such as separation, autonomy and identity formation. Existing research has tended to ignore ordinary developmental tasks in their analysis of adolescent's self-harm. One reason may be that reviews on self-harm have mostly focused on studies with adult participants (Edmondson et al. 2016; Klonsky 2007; Soyemoto

1998). Another reason may be that questionnaires used in epidemiological studies are mostly developed from knowledge about adult patients (Borschmann et al. 2011). Further, current theories on the function of self-harm are primarily based on the author's descriptions of adult clients' experience of self-harm, not on the self-harmers' own descriptions (e.g. Favazza 2011/1987). Knowledge from qualitative studies are often excluded from reviews (Klonsky 2007). There is a need for studies enabling us to hear the adolescents' own voice. Qualitative studies on adolescents who harm themselves aim at capturing the young persons' own statements and descriptions of their experience, thus contributing to a deeper understanding of their inner world and the purpose of self-harm. A meta-synthesis of existing qualitative studies of young people's experience of self-harm is a critical step to synthesize knowledge on self-harm from adolescents own perspective.

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Self-Harm—Definition, Prevalence, Methods, and Risk Factors

Definitions of self-harm generally stipulate that the selfinjury must be intentional, but differ on whether suicidal



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intent is included. In the UK, the concept of "deliberate self-harm" (DSH) refers to "intentional self-poisoning or self-injury, irrespective of type of motive or extent of suicidal intent" (Hawton et al. 2012, p. 2373). However, in the US, the concept of "non-suicidal self-injury" (NSSI) refers to "the deliberate destruction of one's own bodily tissue in the absence of suicidal intent and for reasons not socially sanctioned" (Benley et al. 2014, p. 638). Although the central psychological qualities and method of self-harm may vary, there seems to be agreement in the research literature that self-harming behavior usually starts during adolescence, around 12–13 years of age (Swannell et al. 2014; Whitlock and Selekman 2014). Thus, adolescence may represent a critical period for understanding the development of self-harming behaviors.

Depending on the definition used, estimates of the prevalence of self-harm range from 13 to 17% in nonclinical adolescent samples (Swannell et al. 2014; Evans and Hurrell 2016), and 40–60% among adolescent psychiatric inpatients (Klonsky et al. 2014). Self-harm is more common among girls than among boys from 12 to 15 years of age. Furthermore, self-harm is becoming increasingly widespread among clients in clinical settings as well as among young people in general (Morgan et al. 2017; Whitlock and Selekman 2014). In epidemiological surveys, the frequency of self-harm varies across participants, be it once in a lifetime, once in the last year, or on a more regular basis. Most likely, the frequency with which a person engages in self-harm influences their experience and their psychological interpretation of what is at stake in the personal as well as in the cultural sense.

Self-harm includes a wide range of different behaviors; include cutting, burning, scratching, banging, hitting, and self-positioning. Cutting is the most common method for self-harm by both genders, while young men are more likely to use hitting and burning more than girls and women (Klonsky et al. 2014). Self-poisoning is more common among psychiatric inpatients compared to outpatients (Hawton et al. 2012; Swannell et al. 2014). Favazza (2011/1987) categorized cutting, burning, scratching, banging and hitting as "superficial/moderate self-mutilation", which may be obsessive, episodic or repetitive behavior. He distinguished superficial self-mutilation from "major" (e.g., cutting one's leg) or "stereotypic" forms (e.g., pulling out one's hair). Self-harm may also be related to cultural, creative, religious or sexual acts, which are often excluded from health studies (Favazza 2011/1987).

The considerable number of epidemiological studies, drawing on surveys and quantitative analyses in studies of self-harm, has yielded valuable information about important risk factors for self-harm at the group level (for overview see: Hawton et al. 2012; Nock 2014). Risk factors for self-harm include female gender, low socio-economic status,

sexual orientation, adverse childhood experience, abuse, family history of suicide, bullying, mental disorder, impulsivity, poor problem solving and low self-esteem, many of which are not very specific (Nock 2014). Although self-harming is not a separate diagnosis in either the ICD-10 (World Health Organization 2004) or the DSM-V (American Psychiatric Association 2013), it is often related to mental illness as well as increased risk of death. Specifically, self-harm is associated with mental disorders such as depressive disorder, anxiety disorders, drug addiction, eating disorders, post-traumatic stress disorder, autism, bipolar disorder, psychosis, borderline personality disorder (BPD) (Hawton et al. 2012). Klonsky and colleagues (2003) found that NSSI occurs and is associated with psychiatric morbidity even in non-clinical populations.

From laboratory studies, we know that people who self-harm display elevated physiological arousal in response to stressors, discontinue or escape stressful tasks sooner, and report greater efforts to suppress aversive thoughts and feelings during their day (Nock 2009). Research on physiological and neurobiological factors, such as pain endurance (Hooley and St. Germain 2014; Kirtley et al. 2016) and impulse-control (Hamza et al. 2015), and on genetic influence (Althoff et al. 2012; Maciejewski et al. 2014), is of importance to gain further knowledge of the phenomenon of self-harm at a group level.

Function of Self-Harm

Since the initial articles on self-harm (Emerson 1913; Menninger 1938), authors have proposed different functions self-harm may serve for the individual. However, in these articles, the reports on functions were based on the authors' descriptions of mostly adult clients' experience of self-harm, not on the self-harmers' own account (e.g., Motz 2010; Straker 2006), and relatively few focused on adolescent clients (e.g., Brady 2014; Gvion and Fachler 2015). Soyemoto (1998) reviewed theoretical and empirical studies, and proposed "a functional model". She argued that self-harm can serve different functions—to be reinforced by or to avoid punishment in the person's environment (the environmental model), to protect the person from suicide (the anti-suicidal model), to satisfy sexual motives (the sexual model), to regulate overwhelming affects (the affect-regulation model), to serve as a defense mechanism against a dissociate state (the dissociation model), and/or to help the person to establish borders against others ("the boundaries model"). Klonsky (2007) systematically reviewed the empirical research on the functions of DSH among adults and adolescents, and found converging evidence for self-harm as "an affectregulation function"—a way of alleviating overwhelming negative emotions associated with subsequent relief and calmness. The study also indicated strong support for a



self-punishment function, and the findings were consistent across different ages and samples.

Nock and Prinstein (2004, 2005) introduced an empirically based "four-function model". In their study of a clinical sample of young adults, they found support for NSSI being reinforced automatically (i.e., intrapersonally or by oneself) in positive ways (e.g., by making you feel good or generating energy) as well as in negative ways (e.g., by escaping from negative affect). They also found support for NSSI being reinforced socially (i.e., interpersonally or by others) either in positive (e.g., by gaining attention or access to resources) or negative ways (e.g. to avoid punishment by others). In line with these findings, Bentley and colleagues (2014) argue that NSSI regulates emotional and cognitive experiences and is a way to communicate with or influence others.

Most systematic reviews of self-harm focus mainly on adult participants or include only a few studies with adolescent participants (Klonsky 2007; Swannell et al. 2014). This is also the case in Edmondson and colleagues (2016) review of first-hand accounts on the reasons for self-harm other than an intention to die. The most endorsed reason for selfharm was to handle distress and exert interpersonal influence (for example to get attention or punish someone), but of importance was also positive and adaptive functions like self-validation and a personal sense of mastery. Theoretical functional models are not explicitly based on adolescents' own understanding of their behavior. However, one exception is Jacobson and Gould's (2007) review of self-harm among adolescents in mixed clinical and non-clinical samples. They found that the main reason for NSSI was to regulate negative emotion (negative reinforcement: to end a state of depression, tension, anxiety and/or fear and to reduce anger). A smaller minority of participants endorsed engaging in NSSI to prompt feelings when none exist (automatic positive reinforcement), to elicit attention (social positive reinforcement), or to remove social responsibilities (social negative reinforcement). Still, Jacobson and Gould (2007) and Edmondson and colleagues (2016) primarily included data from self-report questionnaires with pre-determined answer categories for frequency, methods, and reasons for self-harm, and only a few studies included open-ended questions (see also Klonsky 2007). Many of the questionnaires are thorough, but mostly customized as self-report questionnaires for adults and based on findings from adult clinical samples (Swannell et al. 2014). There are some exceptions, for example, Nock and Prinstein (2004, 2005) adjusted their questionnaire after a focus group discussion with adolescents both with and without self-harm experience.

Although quantitative studies have yielded important knowledge about self-harm, qualitative studies offer a unique opportunity to gain insight into the subjective experience of young people who self-harm. For obvious reasons, firsthand accounts from adolescents describing their experience of self-harm are missing in many of the epidemiological studies. In a phenomenological analysis of open interviews with adolescents (18 years or older) from a normal population who harmed themselves, Brown and Kimball (2013) presented three main themes; (1) self-harming is misunderstood, (2) self-harming has an important role in adolescent culture and (3) advice for professionals. The adolescents were concerned with themes such as differentiating between self-harm and suicidal behavior, self-harming as an addiction, interventions meant to help are not helpful, self-harming reflects mental and physical pain or trauma, and self-harming is about control or a need for punishment. In particular, the results of qualitative research on adolescents' subjective experiences associated with intentional self-harm offer the potential to increase our understanding of how self-harm can become an important part of some adolescents'-often girls-movement from adolescence towards adulthood. Whatever the open or hidden purposes, there could be more than just one psychological issue at stake, and they are not necessarily the same for all persons engaging in similar self-harming practices. In review articles, qualitative studies are often excluded due to their relatively small number of cases in each study (Klonsky 2007). Although the number of qualitative studies on self-harm is growing, their clinical application and their contribution to knowledge about development will be limited unless the rich understanding collected from these interpretative studies can be synthesized (Levitt et al. 2016; Walsh and Downe 2004). A meta-synthesis of existing studies of young people's experience of self-harm is a critical step in this direction.

Findings from qualitative studies serve as an essential complement to empirical quantitative studies, which typically focus on general, context-independent knowledge to capture different aspects of the phenomenon of self-harm. In the clinic and in the community, clinicians meet adolescents with different kinds of illness who self-harm for many different reasons and with varying frequency and severity. Findings from qualitative studies may contribute to a deeper understanding of the self-harmer's inner world and experience. Such understanding may increase clinicians' ability to empathize with their patients who self-harm, possibly contributing to more productive treatment processes. Qualitative studies can also serve to inform epidemiological and neurophysiological studies, and the ecological quality of existing questionnaires.

Current Study

This study provides a meta-synthesis of qualitative studies of self-harm among young people by exploring first person experiences of self-harm across relevant studies. The research aim was to investigate the purpose of self-harm,



as understood by the young person herself. Furthermore, we proposed that self-harm in adolescence might be understood from a developmental perspective, i.e. as related to challenges faced in becoming a young woman or man. Adolescence is characterized by cognitive, biological, psychological and social changes (Siegel 2015). Developmental issues like separation, affect regulation, problem solving, autonomy, identity formation and relational fidelity are of great importance (Erikson 1980; Siegel 2015). In this metasynthesis, we payed attention to how self-harm is linked to personal experiences and cultural issues in the studies of adolescents. Our research questions were: (1) What is the purpose of self-harm, as understood by the young person? Further, (2) Can adolescents' experience of self-harm be related to the developmental challenges of becoming a young woman or man?

Method

We applied Noblit and Hare's (1988, 1998) meta-ethnography method for meta-synthesis, and followed the seven steps they described; (1) Getting started, (2) Deciding what is relevant to the initial interest, (3) Reading the studies, (4) Determining how the studies are related, (5) Translating the studies into one another, (6) Synthesizing translations, and (7) Expressing the synthesis. We included qualitative studies focusing on adolescents' experience of self-harm from the field of mental health and other disciplines, with different methodologies, and with clinical and non-clinical populations to highlight nuances in reasons for self-harm

(Noblit and Hare 1988; Timulac 2009). Although the data from the different studies may not be transferable to different contexts, we assumed that the concepts and findings were relevant in a synthesized form. A meta-synthesis can serve to "reveal what is hidden in individual studies and to discover a whole among a set of parts" (Campbell et al. 2003, p. 680). We have found no meta-synthesis of self-harm among adolescents that focus on first-person experiences and open-question interviews. As this was a secondary synthesis of data, ethical approvals were not required.

Literature Search

The main author (LIS) undertook a conventional literature search, guided by words that could connect to self-harm, qualitative research, intention and adolescence (see Appendix for details). The following databases were searched: MEDLINE, Embase, PsycINFO, CINAHL, Web of Science, Pep-Web, ProQuest Dissertations & Theses, ProQuest Sociological Abstracts, Scopus, IBSS and Cochrane Library. We searched both MeSH words and free text in the relevant bases. The electronic search strategy identified 2300 references. We removed 952 duplicates, and 1348 unique records remained.

Inclusion and Exclusion Criteria

The first author (LIS) screened the records against the broad inclusion criteria ages 12–18 years, topic on self-harm, and qualitative methodology based on title and abstracts (see Table 1 for inclusion and exclusion criteria). This step

Table 1 Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Study population	
Participants from 12 to 18 years of age Girls, boys and mixed gender	Participants younger than 12 and older than 18 years of age
Topic of interest	
First-person descriptions of the experience of self-harm Studies from the field of mental health and other disciplines, with different methodologies, nonclinical and clinical populations	Self-harm as part of a particular illness, such as psychosis, eating disorder, personality disorder, or mental retardation Indirect ways of self-harm, such as starving, smoking or using drugs
Qualitative methodology	
Explicit qualitative method for data analysis, and data collected with open interviews, semi-structured interviews or written text	Primarily used quantitative methods, questionnaires or presenting theoretical models
Direct citations	
Includes reports of adolescents' direct citations	No direct citations
Suicide attempt and motives for self-harm	
Studies with participants who had attempted suicide <i>if</i> they also described other motives for self-harming behavior	Studies with participants who primarily described suicidal intention
Articles or Ph.D. thesis	
Articles written in English, published and peer-reviewed in an academic journal or as a Ph.D. thesis	Study reported in another included article



excluded 1208 articles, and identified 140 articles for independent appraisal of the abstract by all reviewers (LIS, HH & SEG). We excluded studies with participants who primarily described suicidal intention. However, we included some studies with participants who had attempted suicide *if* they also described other motives for self-harm. Studies where self-harm was presented as the sequelae of a particular serious illness, such as psychosis, eating disorder, personality disorder, or mental retardation, were not found to be relevant to the meta-synthesis. The same principle for exclusion was applied when studies only covered indirect methods of self-harm, such as starving, smoking or using drugs. We included articles written in English, published and peer-reviewed in an academic journal or as a PhD thesis.

The three authors appraised the appropriateness of the methodology using criteria adapted from Campbell and colleagues (2003). In particular, we looked for interview methods named as "open", "semi-structured" or "in-depth", and paid attention to results presented with direct citations and first-person accounts of self-harm from adolescents with relevant experiences. We excluded some seminal reviews, which primarily brought together the results from quantitative analyses, or knowledge from adults, as well as some books that mainly presented theoretical models (e.g., Adler and Adler 1998; Edmondson et al. 1916; Favazza 2011/1987; Gardner 2001; Hawton et al. 2012; Jacobson and Gould 2007; Klonsky 2007; Nock 2014). We checked reference lists of pertinent articles to complement the electronic search ("gray literature"). We included 41 articles for full-text review by all reviewers (LIS, HH & SEG), and ended with 20 articles after this phase (see Fig. 1 for a flow diagram). The first author (LIS) extracted characteristics of the included studies (author, year, title, context, participant characteristics, research methodology, and data analysis) dating from 1981 to 2016 (see Table 2).

The total number of participants was approximately 550 adolescents between 11 and 28 years of age. We included three studies with participants over 18 years with direct citations from those below 18 years represented in every theme (Adams et al.; Marshall and Yasdani 1999; Rissanen et al. 2008). In four studies, the participants' age was not available, but the sample was based on Internet blogs for adolescents (Adams et al. 2005; Ayerst 2005; Lewis and Mehrabkhani 2017; McDermott et al. 2015). Eleven studies comprised samples with only women, and eight studies comprised mixed-gender samples with more than 75% girls. Two studies did not report gender. The majority of the studies were conducted in the US (n=9) and the UK (n=5). Seven studies were based on non-clinical samples, five in a hospital setting (acute ward or long-term treatment), four based in an outpatient unit, one based on a mixed clinical and non-clinical sample, and four with unknown samples (e.g., internet samples). Most authors

used the concept of self-harm (n=7) (both from UK and US), and some used self-mutilation (n=5) (US and Scandinavia), DSH (n=3) (UK) and NSSI (n=3) (US). The most common form of self-harm among the participants was cutting. The studies represented different qualitative methodological traditions.

Translation and Synthesis

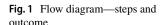
We read and reread the selected studies to identify first-, second-, and third-order constructs (Britten et al. 2002). One of the reviewers (LIS) listed the authors' original findings, using their own concepts (first-order constructs), the authors' interpretations of their findings (second-order constructs in the original studies), and looked for participants' quotes supporting the concepts in each article (see Table 3 for an example). We developed sub-categories of the data between and within every study, and translated these findings from one study to another, by generating sub-themes (third-order constructs). Some of the sub-themes borrowed the terminology of one of the constituent articles (e.g., the term "feeling alive" from Ayerst's (2005) article). The subthemes encompassed most of the original concepts. In the end, we synthesized the sub-categories and sub-themes into meta-themes (third-order constructs).

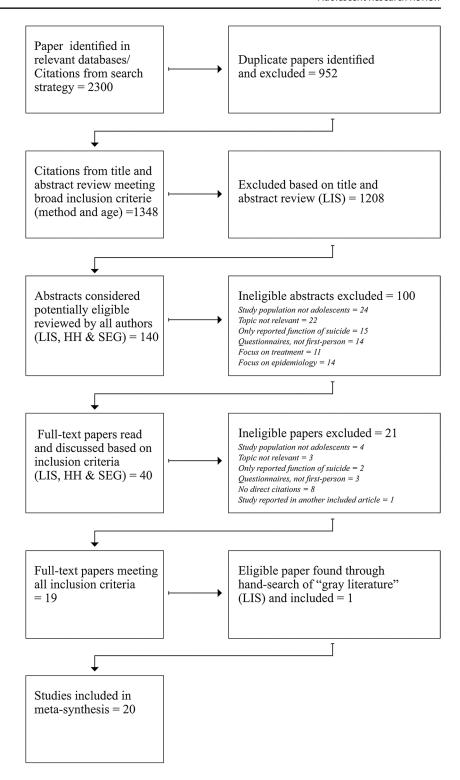
During the review process, the team met for consensus meetings to decide on inclusion criteria and data extraction, to enhance multiple interpretations of data, and to develop concepts, in order to enhance the trustworthiness of our findings (methodological integrity checks; Levitt et al. 2016). In addition, we made individual discussion notes and engaged in self-reflection to enhance reflexivity of our therapeutic perspectives in the reading of the data (Lewitt et al. 2016).

Results

In the following, we document and illustrate how four metathemes represent different ways adolescents experience selfharm: to obtain release or relief from a burden or intense feelings, to gain control over and cope with difficult feelings, to represent unaccepted feelings, and to connect with others. We present the sub-themes within each meta-theme, and each sub-theme was composed of a collection of subcategories (see Table 4). We identified all meta-themes in the results across a majority of the studies (14 to 16 studies), and we found the sub-themes and sub-categories in some studies and not in others. We present the sub-categories with a sample of the original quotes to specify and add meaning to the four meta-themes, and to make the meta-synthesis transferable.







First Meta-theme: Self-Harm as a Way to Obtain Release or Relief from a Burden or Intense Feelings

Release

Ten of the studies highlighted release as the most important experience while self-harming. This sub-theme covered three sub-categories: (1) self-harm makes all the bad things go away (n=6): "I don't always cut to make a point, I cut because I need to...when I cut, when I see the blood, and I feel it rushing, it's such relief. I can feel it; it's like everything that is (bad) is just going out" (Machoian 2001, p. 26). (2) The release of pent up feelings/pressure/distress was experienced as a necessity or else the person would go mad



 Table 2
 Characteristics of studies included in the meta-synthesis

Authors (year)	Title	Country	Characteristics of participants	Sample size/gender	Age	Research design and analysis	Data collection	Concept of self-harm
Abrams and Gordon (2003)	Self-Harm Narra- tives of Urban and Suburban Young Women	US	Non-clinical, urban and suburban	6 girls	15–17	Thematic analysis of narratives	Semi-structured qualitative inter- views	Self-harm
Adams et al. (2005)	Investigating the 'self' in deliberate self-harm	UK	Online discussion forums for self-harmers	13 (11 girls, 2 boys) 16–25	16–25	Interpretive Phe- nomenological Analysis	Two online focus groups and four email interviews	Deliberate self-harm
Ayerst (2005)	The autobiographical construction of self-harm: A discourse-analytic study of adolescent narratives	Canada	Internet (25 narratives)	Mostly girls 1 boy?	12–25	Discourse analysis/ Social-construc- tionist orientation	Narratives by adolescents about self-harm	Self-harm
Bedenko (2001)	A qualitative analysis of the function and intent of self-mutilative behaviour in an adolescent female	NS .	Clinical, therapy	l girl	15	Qualitative study/ Grounded herme- neutic theory/A single subject case-study	Progression and analysis of psychotherapeutic treatment	Self -mutilative behavior
Crouch and Wright (2004)	Deliberate Self- Harm at an Adolescent Unit: A Qualitative Investigation	UK	Adolescent Unit Residential treat- ment setting for adolescents with mental health problems	6 (4 girls, 2 boys)	12–16	Qualitative study/ interpretative phenomenological analysis	Semi-structured interviews and process notes from observations at the unit community meeting	Deliberate Self-Harm
Gulbas et al. (2015)	An exploratory study of non-suicidal self-injury and suicidal behaviors in adolescent Latinas	NS .	Self-harmers with or without suicide from clinic population and non-self-harmers from non-clinic population	NSSI (18 girls) NSSI and attempted suicide (8 girls) Suicide (29 girls)	11–19 years, average 15 years	Exploratory mixed- method analytic design/thematic analysis	In-depth qualitative interviews	No suicidal self-injury
Holley (2016)	The lived experience of adolescents who engage in non-suicidal self-injury	NS .	Outpatient Clinical Purposive sample	6 (5 girls, 1 boy)	14–17	Phenomenological research	Semi-structured interviews/open ended interviews	No suicidal self- injury



Table 2 (continued)								
Authors (year)	Title	Country	Characteristics of participants	Sample size/gender	Age	Research design and analysis	Data collection	Concept of self-harm
Lesniak (2010)	The lived experience of adolescent females who selfinjure by cutting	NS .	Students	6 girls	15–18	Qualitative study/ phenomenologi- cal method/The Giorgi method and Humanistic Nursing Theory	Semi-structured Interviews	Self-injure
Lewis and Mehrab- khan (2016)	Every scar tells a story: Insight into people's self-injury scar experiences	US, Europe, Australia and New Zealand	Internet 53 online testi- mony/posts on a popular NSSI message board	52 members		Thematic analysis	Posts online on experiences with scars from NSSI	Non-suicidal self- injury (NSSI)
Machoian, L. (2001)	The possibility of love: A psychological study of adolescent girls' suicidal acts and self-mutilation	US	Private psychiatric hospital on an unlocked, volun- tary adolescent residential unit	3 girls	12–17	Case study analysis/ In-depth semi- The structured cli voice-centred interviews relational method for data analysis, the "Listener's Guide"	In-depth semi- structured clinical interviews	Self-mutilation
Magagna, J. In Briggs, S., Lemma, A., & Crouch, W. (2008)	Attacks on life; suicidality and self-harm in young people	US	Clinical case	l girl	15	Case-study		Self-harm
Marshall, H. & Yazdani, A. (1999)	Locating Culture in Accounting for Self-Harm amongst Asian Young Women	UK	History of self- harm	7 girls	16–28	Qualitative research/discur- sive analysis	In-depth semi- structured inter- views	Self-harm
McAndrew, S. & Warne, T. (2014)	Hearing the voices of young people who self-harm Implications for service providers	UK	Non-clinical sample	7 girls	13–17	Qualitative research/Interpretive phenomenological analysis/ narratives	Face to face interviews	Self-harm
McDermott, E., Roen, K., & Piela, A. (2015)	Explaining Self- Harm: Youth Cybertalk and Marginalized Sexualities and Genders	Internet	Online forums for marginalized sexualities and genders (lesbian, gay, bisexual, and trans (LGBT) people)	49 excerpts, from 290 members	16-25	Qualitative virtual methods/ Thematic analysis	Posts online on emotional distress and self-harm	Self-harm



Table 2 (continued)								
Authors (year)	Title	Country	Characteristics of participants	Sample size/gender	Age	Research design and analysis	Data collection	Concept of self-harm
Moyer, M. & Nelson, K. W. (2007)	Investigating and understanding self-mutilation:	US	Students	6 (4 girls, 2 boys)	12–17	Qualitative research/Phe- nomeno-logical research	In-depth phe- nomenological interviewing, semi-structured interviews	Self-mutilation
Nice, T. (2012)	Troubled minds and scarred bodies: a grounded theory study of adolescent self-harm	ΩK	Presenting to hospital after an episode of self- harm	12 (9 girls, 3 boys)	13–16	Grounded theory study/Thematic analysis using a narrative and construct category based approach	Semi-structured interviews conducted after episodes of self- harm	Self-harm
Parfitt, A. (2005)	On aggression turned against the self	UK	NHS outpatient clinic, Psycho- analytic psycho- therapy	l girl	17	Case-study	Case-analysis	Deliberate self-harm
Privé, A. A. (2007)	An existential- phenomenological investigation of self -cutting among adolescent girls	US	High school, large urban school district	6 girls	15–18	An existential- phenomenological investigation and/ Thematic analysis	Semi-structured interviews, open ended research questions	Self-cutting
Rissanen, ML., Kylmä, J., & Laukkanen, E. (2008)	Descriptions of self- mutilation among Finnish adoles- cents: a qualitative descriptive inquiry	Finland	Non-clinical adoles- 70 (69 girls, 1 boy) cents		12–21	A qualitative descriptive design/Content analysis	Asked to write descriptions of their self-mutilation	Self-mutilation
Yip., KS., Ngan, M-Y., & Lam, I. (2004)	Adolescent self- cutters in Hong Kong	Hong Kong	Secondary school	3 (2 girls, 1 boy)	14–18	Qualitative study/ Thematic analysis	In-depth interviews about cause, pro- cess, and pattern	Self-cutters

Table 3 Example of first- and second-order constructs and participant's quote

Author, year, title	E. E. Holley (2016): The lived experience of adolescents who engage in nonsuicidal self-injury
Participant's quote	"I hate anger. I can't do it. When I show it, I try to stop it right away. I hate when people are angry, so like whatever I hate I try not do it" (p. 70)
Themes and concepts First-order constructs	"Negative emotionality"
Interpretations Second-order constructs	Low distress tolerance, poor affect regulation skills, and utilized NSSI to obtain temporary emotional relief. Self-injurers are avoidant, as they supress both positive and negative emotionality, and actively avoid initiating, managing, or addressing conflict
Subcategory	A struggle to express feelings such as anger and sadness
Subtheme	A struggle to express affective experiences and tame anger
Meta-theme	Self-harm as a way to represent unaccepted feelings

(n=3): "I felt I was going mad. I felt you know, I felt very blocked up inside, I didn't feel normal, I felt different from everyone else. I felt angry and confused and empty, very empty inside, so I felt I was going mad, very much. I thought I was going mad" (Marshall & Yazdani 1999, p. 421). (3) After the release of feelings, the adolescents experienced that they were relieved of the pain, stress, or problem (n=1): "It would be a relief for, basically, like, everything that was going on, the stress. It was a kind of a relief for me because each cut that happened was a relief from a problem" (McAndrew and Warne 2014, p. 573).

Self-Hate

In six articles, adolescents reported self-harm due to selfhate. The sub-theme encompassed three sub-categories: (1) Often, they reported hate towards themselves and a wish to disappear (n=4): "It (body dissatisfaction) made me really depressed, contemplate suicide, and start self-harming" (McDermott et al. 2015, p. 880). Furthermore, "I want to scream, I want to cut myself so much that I disappear, I fucking hate myself" (Parfitt 2005, p. 161). (2) Two articles described how adolescents directed hate towards themselves because they felt ugly and disgusting inside: "I've cut loads recently, there's so much shit inside me and I hate myself so much, I'm such a bitch slut I have to be punished" (Parfitt 2005, p. 161). (3) A few articles (n=2) reported self-harm in relation to a negative internal monologue: "I just get everything going through my head, and then just think about it, and then I just cut myself" (Moyer and Nelson 2007, p. 45).

Feeling Alive

In four articles, self-harm was described as a way to feel alive, and this sub-theme consisted of two sub-categories: (1) Three articles reported self-harm as a possibility to feel alive, or just feel something: "...My harmness to myself is an expression of emotional pain, I needed to feel something, to know that I was still alive..." (Ayerst 2005, p. 90). (2)

Another sub-category was a need to see the blood to know that they are alive (n=1): When I saw my blood running out I knew I was alive (Rissanen et al. 2008, p. 156).

Rush of Positive Feelings

In four articles, the positive feelings related to self-harm were important for the adolescents. This sub-theme included three sub-categories; (1) Self-harm was reported as a way to get a positive feeling and experience of themselves (n=3): "The bliss I felt during it was practically orgasmic. It was the best feeling I had ever felt" (Ayerst 2005, p. 84). (2) Others described a positive feeling of a rush and calmness as an important part of the self-harming experience (n=1): "It's like a drug... It's kinda like a rush that you get in your head and you are like YES" (Privé 2007, p. 78). (3) Some also described the experience more like an addiction (n=1): "I feel I'm hooked on cutting" (Rissanen et al. 2008, p. 157).

Second Meta-theme: Self-Harm as a Way to Control or to Cope with Difficult Feelings

To Get Away from Desperation and Frustration

In eleven studies, adolescents described the effect of self-harm as an escape from desperation and frustration. Three sub-categories were identified: (1) Adolescents described how they used self-harm to get rid of emotional pain, such as anxiety, depression or feeling sad or angry (n=6). An adolescent from Privé's (2007) study said "I was very upset... I was just mad...I was just angry at them... then every time I was mad, I would just sit there...and I wouldn't scream, I would just cut myself" (p. 75). (2) The cutting was also done to get rid of difficult thoughts and feelings after traumatic experiences or to end a dissociated state (n=2), as described by a girl in Ayerst's (2005) study: "The pain washes over, cleaning off the dark and hurtful things that cling to my mind" (p. 88). (3) In some studies (n=4), self-harm is related to getting rid of pain, which also results in



Table 4 Meta-themes, sub-themes, and sub-categories

Meta-themes	Sub-themes	Sub-categories
Self-harm as a way to obtain release or relief from a burden or intense feelings	1.1 Release 1.2 Self-hate 1.3 Feeling alive 1.4 Rush of positive feelings	1.1.1 All the bad things go away 1.1.2 Release of pent up feelings/the pressure/ distress related to an experience of necessity or else become mad 1.1.3 To get rid of pain, the stress, a problem 1.2.1 Hate towards self and a wish to disappear 1.2.2 Because they felt ugly and disgusting inside 1.2.3 A negative internal monologue 1.3.1 To get a feeling of being alive and feel something 1.3.2 A need to see the blood to know that they were alive 1.4.1 To get a positive feeling and experience of themselves 1.4.2 A positive feeling of rush and calm down 1.4.3 Like an addiction
Self-harm as a way to gain control or cope with difficult feelings	2.1 Get away from desperation and frustration 2.2 Control 2.3 Numbness	2.1.1 To get rid of emotional pain, such as anxiety, depression or feeling sad or anger 2.1.2 To get rid of difficult thoughts and feelings after traumatic experiences or ending a dissociated state 2.1.3 To get rid of pain, which also makes the adolescent feel guilty and shameful 2.2.1 To end feelings of alienation 2.2.2 To end specific feelings like sadness or angry 2.2.3 To take back control when helpless and overwhelmed 2.2.4 A way to change emotional pain to physical pain 2.2.5 A way to cope when nothing else helps 2.3.1 To reach a neutral feeling 2.3.2 Could end alienation
3. Self-harm as a way to represent unaccepted feelings	3.1 A struggle to express affective experiences and tame anger 3.2 Protect others	
4. Self-harm as a way to connect with others	4.1 Identification 4.2 A wish to share and be open	 4.1.1 An experiment 4.1.2 The group identity, being connected to others with the same problems or identity - an oppositional element 4.1.3 Searching for self-identity 4.2.1 Unresolved anger 4.2.2 To express feelings and pain to others when other possibilities are unavailable or are unheard by others 4.2.3 To ask for help when they experienced a conflict between others about their problems

An experience of intolerable internal pressure with high intensity, which is overwhelming, has to end, and cannot be shown to other people. Self-harm makes it possible to express difficult affects, and still protect others

the adolescents feeling guilty and shameful: "I'm starting to feel guilty every time. That's the only feeling afterward now" (Moyer and Nelson 2007, p. 46). In this way, self-harm can be seen as a method to get rid of difficult feelings, and to find a solution to reduce tension, frustration, or pressure, but may also contribute to additional problems, such as guilt and shame, for some young people.

Control

In nine of the studies, the adolescents highlighted the element of control that self-harm provided in relation to different feelings and in relation to other people, and five subcategories were included: (1) Control is related to ending feelings of alienation (n = 1): "For once I had a sense of control on my body. I wanted to feel unique and I had to cope with my feelings of alienation" (Ayerst 2005, p. 93). (2) How self-harm can end more specific feelings like sadness or anger was also of importance (n = 5): It was in my hand (the nail file), and I was thinking, "What I'm going to do with this? I'm not going to kill myself because I do not want to die. I want to just stop feeling angry. Inside me was screaming. I was feeling really, really angry" (Gulbas 2015, p. 306). The necessity of taking control was associated with difficulties showing feelings in general: "By self-mutilation, I can avoid crying in the wrong places, stay cool" (Rissanen et al. 2008, p. 156). (3) Self-harm may also be related to a state of helplessness and to feeling overwhelmed and represent a way to take back control (n = 3): "I hate the feeling that other people can make me cry so it's a relief that they are not controlling me crying this time. I can do it myself" (Gulbas 2015, p. 306). (4) Self-harm was also mentioned as a way to change emotional pain to physical pain, which gave a feeling of being in control (n = 1): "Cleansing, just getting rid of it (the pain). Every feeling you feel is going into your cut. The pain you feel goes into that (cutting)" (Moyer and Nelson 2007, p. 46). (5) Some reported selfharm as their last choice, but a way to cope when nothing else helps (n=2): "Writing didn't help anymore, talking didn't help anymore... so I just got the razor blade" (Privé 2007, p. 80). The experience of regaining control after being overwhelmed is a central aspect for these adolescents.

Numbness

In some of the studies (n=6), the element of control was the first step in a process to become neutral. Two sub-categories were found: (1) Self-harm was a way to reach a neutral feeling: "It went numb, I couldn't feel it anymore... I couldn't feel anything" (Privé 2007, p. 80). For some, numbness was the goal. (2) For others, achieving numbness through self-harm could end feelings of alienation.



A Struggle to Express Affective Experiences and Tame Anger

In eight of the studies, adolescents indicated self-harm as part of a struggle to express their own feelings and difficulties. This sub-theme comprised four sub-categories: (1) More specifically, they experienced a struggle to find words, assert their voice, and claim efficacy (n=4) in difficult situations and in interpersonal conflicts: "I feel extremely frustrated when my friend and teacher blame me. I feel crazy. I don't know how to scold back. I feel frustrated. I need to do self-cutting to release my sense of emptiness" (Yip et al. 2004, p. 44). (2) Self-harm may also be a way to clear one's mind and to establish boundaries with others (n = 1): "... clear my mind and get everything else out. It just blocks the whole world so it's just me" (Moyer and Nelson 2007, p. 46). (3) Some mentioned a struggle to express feelings (n = 3), such as anger, as a reason for self-harm: "I hate anger. I can't do it. When I show it, I try to stop it right away. I hate when people are angry, so like whatever I hate I try not to do" (Holley 2016, p. 70). Others struggled to express happiness; "True happiness or joy... it's really hard to express for me. I feel it sometimes I don't know why I can't show it" (Holley 2016, p. 71). (4) Some described self-harm as a way to be aware of their own needs and especially to get help from others (n=2): "I think it's a form of manipulation, of manipulating other people, and I hate that. And I hate to think that I do that, but I know I do... in some ways, I have used it to get the support that I need at that moment of time. And I think that is manipulation. And I hate that" (Machoian 1998, p. 26).

To Protect Others

In five studies, adolescents described how important it was for them to protect others (parents and friends) from their difficult feelings in general or from the fact that they were harming themselves. This subtheme included three sub-categories: (1) Adolescents reported an explicit wish not to hurt others (n=1): "I don't take my anger out on other people. Like some people fight to let out their anger. I don't do that. I hurt myself" (Moyer and Nelson 2007, p. 47). (2) Others avoided the conflicting or negative feelings in relation with others in general (n=4): "I have enormous amounts of rage within and I'm afraid to express it outwardly, and by injuring myself, it is a way of venting my feelings" (Ayerst 2005, p. 92). (3) They also described how they don't want to tell others about their self-harm (secrecy) (n=1): "...'cos I went for years without no-one finding out about my self-harming and I didn't want anyone to know about it, so that makes me



angry, especially when I know some people that do it for attention" (Crouch and Wright 2004, p. 194).

Fourth Meta-theme: Self-Harm as a Way to Connect with Others

Identification

This sub-theme included eight articles and covered three sub-categories related to how adolescents perceived selfharm as part of being in a social group and of identity construction processes: (1) In some studies, adolescents reported starting with self-harm as an experiment (n=2): "When I started junior secondary school, my puberty was beginning. At that time, I cut myself for the first time. It was just an experiment, nothing more" (Rissanen et al. 2008, p. 156) and "I had nothing else to do" (Rissanen et al. 2008, p. 156). (2) In six studies, the group identity (n = 11) for adolescents who harmed themselves was important, especially to be a real self-harmer, not copying others, but also to see themselves as different and having trouble: "I'm also more f***d up in the head than most people. Looking at my cuts this morning made me feel sick—it reminds me that I'm screwed up, that my head doesn't work the same as everyone else's" (Adams et al. 2005, p. 1305). This sub-category also included a positive experience of being connected to others with the same problems or identity as outsiders: "It wasn't until I managed to persuade my mum to get the internet on our computer that I discovered that I was far from being the only one who liked to harm herself. I have met loads of really fab people online through self-harm websites and chat rooms and stuff" (Ayerst 2005, p. 94). An oppositional element was also described: "Why waste my time just so society can think I'm a happy guy like the rest of them?" (Holley 2016, p. 67). (3) The last sub-category was about self-harm as part of a process of searching for self-identity (n=2): "Yeah. What I was and what I was meant to be, and where I was happier. Taking part from then, and now reconnecting it to my experiences and myself now. Well, it's just moving on. And like, I saw that as connected. Like this thing, and like I could have gone down that path or that path, but I took the weird one and it just eventually connected with my real path, the one I was meant to be on" (Bedenko 2001, p. 148). The sub-theme of identity highlighted how adolescents are conscious of self-harm as a cultural sign, and not just as a symptom of mental illness—as an alternative to being an outsider of the dominant culture.

A Wish to Share and Be Open

In twelve studies, adolescents described different ways selfharm was related to expressions of feelings, and three subcategories were identified: (1) In three studies, self-harm was related to unresolved anger: "I just get pissed, and whenever I get mad, I like... throw things, and I'm like really aggressive... and sometimes when I get mad, I just carve things on myself. Whenever I was mad, it was just like a way to calm down. So, sometimes I still do that. Like one time I was mad at my boyfriend, and I did something wrong. And I was sorry. He was pissed, and he didn't want to talk to me. So, I carved it in my arm, but you can't see it anymore" (Abrahms & Gordon 2003, p. 437). (2) Three studies, report self-harm as a way to express emotional pain to others: "It just makes my pain easier to see" (Lesniak 2010, p. 141). The expression of pain in this way was particularly important when other possibilities are unavailable or felt unheard by others: "When they see it, like actually see it (a cut), they're like, wow, maybe something is wrong. It's like yes, you (expletive) idiot something is wrong. I've only been saying it for the last 17 years... People won't believe that something is wrong... It's, it's an actualization of pain, you know...The most basic is that even if you tell people that something is wrong, a lot of times...they won't, they won't know how wrong. But all they'll do is see a cut along a vein, and they get the message right away" (Machoian 1998, p. 25). (3) In five studies, adolescents described self-harm as a way to ask for help about their problems: "It is true that cutting is a cry for help. I wish someone adult would see my cuts and scars and help me. I have no words to ask for it (help)" (Rissanen et al. 2008, p. 156).

Discussion

This meta-synthesis of qualitative studies of first person accounts of self-harm supplements quantitative studies in important ways. This is particularly so when it comes to the conceptual modeling of the psychological functions of self-harm. Attention is moved from "causes" and "risk factors"—which are not very specific—to purpose and consequences. Theories of the function of self-harm are mostly based on the authors' rendering of their clients' understanding of self-harm (Soyemoto 1998), and studies of the participants' experience are often based on questionnaires with pre-determined categories developed from adult clients (Edmondson et al. 2016). Consequently, we had limited knowledge about the motives of self-injuring behavior, particularly among adolescents.

Since the number of qualitative studies of subjective experience of self-harm is growing, there was a need to synthesize existing findings about young people in the phase of life when such behaviors tend to develop. Finding twenty highly relevant studies appeared to be a strong start. During the analysis, it was possible to compare content and design themes across studies including clinical as well as non-clinical samples.



In the following, we discuss how our findings on the purpose of self-harm from the adolescent's perspective support and add nuance to our existing knowledge. We argue that self-harm is a way to regulate affect. Furthermore, we underline how the action of self-harm may be a way to contain important emotional and relational content for the adolescent, and may express an intention or wish to connect and communicate with others. We also discuss common elements across the meta-themes and how self-harm may represent an insufficient solution to conflicting psychological needs and developmental challenges in adolescence. We highlight how the studies included in our meta-synthesis seldom relate their findings to developmental issues in adolescence, or the fact that young girls are overrepresented in the studies on self-harm.

The Purpose of Self-Harm from the Adolescents' Perspective

Common across the four meta-themes is an experience of intolerable internal pressure and intense frustration, which is overwhelming, must be brought to an end, and cannot be shown to other people. Adolescents experience self-harm as a way to obtain release or relief, or to gain control of difficult and overwhelming stress and feelings. The first and second meta-theme in our findings overlap with Klonsky's (2007; Klonsky et al. 2014) and Jacobson and Gould's (2007) focus on self-harm as a way to regulate or activate affect, and Edmondson and colleagues' (2016) report on how self-harm is a way to handle distress and establish a personal sense of mastery. Thus, affect regulation emerges as a major function of self-harm.

The third and fourth meta-theme in our findings nuance our current understanding of adolescents' experience of self-harm. The third meta-theme shows how self-harm may be an important way to represent unacceptable affective experiences in general. Self-harm may be a way of becoming aware of one's own needs and difficulties. Further, selfharm may express the struggle to represent that something is difficult when other options are unavailable (Adams et al. 2005; Machoian 2001), or the ability of symbolization is undeveloped (Bouchard and Lecours 2008). The concrete action of self-harm may bring something to attention from the individual's inner or outer world. The fourth meta-theme highlights how adolescent girls, and some boys, often experience self-harm in a relational context. Self-harm may serve to express internal pain to others in a situation of conflict or to ask for help (Adams et al. 2005; Crouch and Wright 2004). When feeling lonely and isolated, self-harm may convey a wish to connect with others (Lesniak 2010; Machoian 1998) or a way to be part of a sub-group (Moyer & Nelsons 2007; Nice 2012).

Our findings underline the importance of understanding self-harm not only as a disturbance in an individual's capacity for affect regulation, but also in connection to the adolescent's problems in finding ways to express themselves, to communicate more freely, and to share experiences in relation to important others. Communicative and interpersonal functions of self-harm are mentioned in Klonsky's (2007; Klonsky et al. 2014), Nock and Prinstein's (2004, 2005), and Soyemoto's (1998) models of self-harm. Edmondson and colleagues (2016) report that self-harm can serve to define the self and exert interpersonal influence. Jacobson and Gould (2007) underline that self-harm can elicit attention and can be a way to get away from social responsibilities. However, more specifically, adolescent girls and boys often struggle to represent their experiences, and they may adjust their expressions of difficult issues and harm themselves to protect and not hurt important others. In this way, self-harm can contain important emotional content and represent a wish to connect, communicate with, and be understood by others. In a clinical setting, this content may be important to explore further in order to help the self-harming adolescent get to know and tolerate their needs and feelings, and express themselves more freely and less destructively.

Self-Harm as an Expression of a Conflict and Developmental Challenges

A remaining question, however, is why some adolescents end up with a strong inclination to damage their own bodytissue in order to handle unbearable and overwhelming feelings and tensions?

In many of the studies, adolescents reported ambivalence about sharing their experiences with others. They were afraid of showing their feelings or frustration, did not want to be judged by others, but also explicitly wished to gain some understanding from others. In our view, self-harm can be a way to solve a conflict between basic psychological needs and developmental tasks, which are important in adolescence (Erikson 1980; Siegel 2015). On the one hand, the young girl or boy needs to represent and express affective experiences, and on the other, they have a relational need for attachment, safety, acceptance, and affiliation. Expressing unbearable pressure or feelings, such as anger and frustration, may be impossible for some adolescents because of their need to protect others from their feelings and their need for support. Self-harm may be an expression of this inner conflict.

Furthermore, self-harm—after the immediate relief—may evoke strong and difficult feelings and reactions in others, and subsequent feelings of shame, loneliness, and hopelessness in the young girl or boy. Thus, self-harm does not release the adolescent from all of their problems. Nevertheless, self-harmers return to self-harming behaviors



that, although insufficient, still seem to be the only possible solution available to them now. The adolescent can hide the issue causing distress, and yet the adolescent is still trying to express him or herself and share their experience—which could be the ultimate experiential proof of existence. What is at stake here is the ongoing developmental process of psychological separation towards autonomy, to become an authentic self, to establish a boundary between self and others, and to establish new forms of relational reciprocity with important others. In adults, self-harm may have lost its initial association with these issues. From this perspective, self-harm may be a sign (Brady 2014; Motz 2010) of urgent developmental challenges in the process of self-representation and identity formation (Erikson 1980).

Descriptions of self-harm comprise a wide range of affective experiences. Some adolescents specify difficult feelings, thoughts or interpersonal conflicts, but others describe diffuse stress or arousal. For some, self-harm is associated with specific representations of mental content, but for others, self-harm may be a sign of a more pervasive deficit and disturbance in their ability to differentiate and express affect and needs (Bouchard and Lecours 2008).

Many of the reported citations refer to problems with or different ways to deal with anger. Some of the adolescents do not want to experience anger at all, or do not want to show anger to others (Bedenko 2001; Magagna 2008). Other adolescents express relief that they can turn the anger toward themselves and thereby protect others from their own difficult feelings (Parfitt 2005; Yip et al. 2004). Anger is one of our basic emotions and is critical to protecting our body and self from threats in the environment, or from difficult inner feelings, thoughts or fantasies (Panksepp 2010). From this perspective, the "harming" and the violent aspect of self-harm may be related to the adolescent's effort to tame or express anger. Further, self-harm may be a way to establish, or re-establish, a boundary between self and others when they feel intruded or threatened. The harming of the body may represent, in a concrete way, the undeveloped or insufficient solution to psychological challenges in adolescence.

Self-Harm in a Developmental and Cultural Context

Although the participants in the included studies were primarily between 12 and 18 years of age, the authors of the studies seldom related their findings to developmental challenges in adolescence. There are some exceptions (Crouch and Wright 2004; Machoian 2001; McDermott et al. 2015; Parfitt 2005; Privé 2007), but often the findings are interpreted as being "age neutral". In our opinion, it is important to relate our findings to our knowledge of adolescence in general. Impulsivity, sensation seeking, emotional instability, risk behavior—such as self-harm—and testing of limits are usual phenomena in adolescence (Casey et al. 2008).

For many adolescents, this behavior declines as they reach adulthood.

Favazza (2011/1987) argues that the main perspective in the research literature on self-harm is a clinical-medical perspective and that self-harm cannot be reduced to a symptom of a mental illness (see also Adler & Adler 2003). In "The coming of age of self-mutilation", Favazza (1998) asks whether self-mutilation has become more normalized in recent years. Whitlock and Selekman (2014) also ask whether the social motivation for starting to self-harm is increasing. Among the studies included in our meta-synthesis, some authors report social or existential issues as important factors to understanding self-harm, like social belonging and psychosocial exclusion (Abrams & Gordons 2003; Adams et al. 2005; Ayerst 2005), control and vulnerability (Marshall & Yazdani 1999), bullying, and cultural differences (Gulbas 2015; McDermott et al. 2015). Selfharm is underlined as a cultural expression of identity and as an accepted way of coping with difficult feelings.

Participants in the included studies are mostly girls and young women, but only a few authors discuss this gender disparity in their articles (McDermott et al. 2015; Lesniak 2010). The findings are presented in a somewhat "gender neutral" way. Although girls are overrepresented in the studies, it is important to remember that self-harm is not a "normal" behavior among girls in general. Still, adolescent girls (and some boys) may struggle to find "accepted" channels to express frustration and conflicting needs. Self-harm may be related to a narrow and limiting pathway to adulthood in a given cultural context, particularly for girls. Their relational need to be accepted and cared for overrules their need for expressing themselves. In our perspective, self-harm can be a sign of mental illness, but may also be regarded as a destructive "answer" or coping strategy for responding to challenging developmental tasks like separation, autonomy and identity formation in the process to become a young woman.

Limitations of the Current Study

Every included study consists of rich and comprehensive data-material, and our analysis was depending on the findings in every study. Therefore, a meta-synthesis cannot present conclusions, but may serve as a working model. Still, it is valuable to consider the various strengths and weaknesses of the included studies.

In our meta-synthesis, we included studies with different terminology and definitions of self-harm. However, our focus was on the adolescent's perspective of self-harm, rather than a wish to die. There is also heterogeneity in the conduct and presentation of meta-ethnography, and a lack of consistency in reporting procedures for the meta-synthesis (Evans and Hurrell 2016). We have tried to be explicit



concerning our methodological approach, our analytic process, and our presentation of the findings. Despite the limitations, the themes that emerged and their clustering and hierarchy brought more specificity to how a young person experience the act of self-harm and the purposes it serves.

Implications for Further Research

The many related sub-categories highlight the diversity and commonalities among adolescents' descriptions and experiences of self-harm. However, further studies are needed to address hypotheses about sub-groups, which then would be interesting to explore in more detail.

Differences in frequency, methods and mental illness are important aspects of the individual differences among adolescents who harm themselves (Hawton et al. 2012; Bentley et al. 2014; Whitlock and Selekman 2014), but differences in subjective experience could also be an important aspect to study in this regard. For example, are there differences in adolescents' capacity to represent, symbolize and reflect upon their affective and inner experiences? Are there important differences in self-esteem and their representation of self? Further, are there developmental differences (i.e., vulnerabilities or deficits) among adolescents when they start to self-harm that influence their experience of self-harm, the development of pathology such as BPD, or the degree to which self-harm affects their life? These questions are difficult to answer, but may be important in further research on differences between clinical and non-clinical adolescents, and between girls and boys.

Conclusion

Since self-harm seems to start in adolescence and has increased among young people in recent years, there are reasons to see self-harm as a phenomenon with core characteristics, a set of sub-categories, and specific subjective aims. In this meta-synthesis, we translated and integrated findings from prior qualitative studies. The four meta-themes that emerged represent different ways adolescents experience self-harm—as a way to obtain release, to control feelings, to represent unaccepted feelings, and to connect with others. The meta-themes "to obtain release" and "to control feelings" overlap with findings in reviews on adolescents (Jacobson and Gould 2007) and adults using self-report methods (Klonsky; Edmondson et al. 2016), and support the theory of self-harm as a function of affect regulation (Klonsky et al. 2014).

However, the meta-themes "to represent unaccepted feelings" and "to connect with others" highlight the importance of understanding how self-harm may contain emotional and relational content. Self-harm in adolescence is closely related to a struggle to express themselves and a wish to communicate and share experiences with important others. Given that self-harming behavior typically emerges during adolescence, it is helpful to link our knowledge of self-harm to the major developmental challenges adolescents face, such as separation, identity formation, autonomy and relational fidelity (Erikson 1980; Siegel 2015). The meta-themes and the common theme—intolerable internal pressure—points to a psychosocial dynamic understanding. We argue that self-harm can be understood as a conflict between basic psychological needs—a possibility to express frustration and still protect important others. It may be challenging to find ways to represent and express feelings, such as sadness, jealousy, anger, and frustration, because of the enduring need to be cared for in their daily life. Our findings can be important in a clinical setting, particularly by informing the therapist about the necessity of helping the adolescent to explore and develop alternative ways to regulate and express feelings. In addition, it may be fruitful for the therapist, like researchers, to relate self-harm to identity formation, and to the adolescent's developmental need to become an authentic self in relations with others. In this way, self-harm does not need to be the only way to handle overwhelming feelings, trauma, and loneliness.

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Authors' contributions LIS conceived of the study, participated in its design and coordination and drafted the manuscript; HH participated in the design and interpretation of the data; SEG participated in the design and interpretation of the data. All authors read, helped to draft, and approved the final manuscript.

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Compliance with Ethical Standards

Conflict of Interest The authors report no conflict of interests.

Research Involving Human and Animal Participants This article does not contain any studies with human participants or animals performed by any of the authors.



Appendix

The electronic search strategy was developed in liaison with information specialists at the University of Oslo in December 2016. The methodological search terms were informed by technical guidance and worked examples.

MEDLINE 19.12.16

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) < 1946 to Present>.

Search strategy	
1	exp Self-Injurious Behavior/or (self-injur* or "self injur*" or selfinjur*).tw,kw. (65,471)
2	exp Self-Mutilation/or (self-mutilat* or "self mutilat*" or selfmutilat*).tw,kw. (3901)
3	(Self-harm* or selfharm* or (self adj2 harm*)).tw,kw. (4481)
4	(self-poison* or "self poison*" or selfpoison*).tw,kw. (1693)
5	(self-injur* or "self injur*" or selfinjur*).tw,kw. (3744)
6	((self-destruct* or "self destruct*" or selfdestruct*) adj2 behav*). tw,kw. (545)
7	(self-cut* or "self cut*" or self- cut*).tw,kw. (164)
8	(self-inflict* or "self inflict*" or selfinflict*).tw,kw. (2005)
9	(non-suicid* or "non suicid*" or nonsuicid*).tw,kw. (1723)
10	parasuicid*.tw,kw. (638)
11	or/1-10 (69,568)
12	exp Qualitative Research/or qualitative*.tw,kw. (222,264)
13	exp Grounded Theory/or "grounded theor*".tw,kw. (8895)
14	exp Interviews as Topic/or (interview* adj3 psychol*).tw,kw. (56,676)
15	exp Interview, Psychological/ (15,644)
16	exp Focus Groups/or "focus group*".tw,kw. (38,728)
17	exp Anecdotes as Topic/or anecdote*.tw,kw. (5997)
18	exp Personal narratives as topic/ (170)
19	exp Narration/or narrative*.tw,kw. (28,585)
20	ethnograph*.tw,kw. (8408)

21	phenomenol*.tw,kw. (20,859)
22	"discourse analysis*".tw,kw. (1333)
23	"thematic analysis*".tw,kw. (8765)
24	(case adj3 stud*).tw,kw. (197,179)
25	or/12-24 (534,727)
26	exp Motivation/or motiv*.tw,kw. (244,813)
27	exp Intention/or intent*.tw,kw. (96,531)
28	(reason* or meaning*).tw,kw. (470,186)
29	driv*.tw,kw. (344,497)
30	caus*.tw,kw. (2,232,491)
31	purpose*.tw,kw. (1,084,654)
32	function*.tw,kw. (3,248,983)
33	explanation*.tw,kw. (114,577)
34	subjectiv*.tw,kw. (117,108)
35	or/26-34 (6,813,738)
36	exp Adolescent/or adolescen*. tw,kw. (1,945,129)
37	teen*.tw,kw. (27,277)
38	youth*.tw,kw. (64,761)
39	exp Minors/or minor*.tw,kw. (267,028)
40	exp Young Adult/or "young adult*".tw,kw. (678,157)
41	or/36-40 (2,504,108)
42	11 and 25 and 35 and 41 (709)

References

- *Bedenko, W. E. (2001). A qualitative analysis of the function and intent of self-mutilative behavior in an adolescent female. (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing. (UMI No. 2001. 3024540).
- *Crouch, W., & Wright, J. (2004). Deliberate self-harm at an adolescent unit: A qualitative investigation. *Clinical Child Psychology and Psychiatry*, 9(2), 185–204. https://doi.org/10.1177/1359104504041918.
- *Gulbas, L. E., Tyler, T. R., & Zayas, L. H. (2015). An exploratory study of nonsuicidal self-injury and suicidal behaviors in adolescent Latinas. *American Journal of Orthopsychiatry*, 85(4), 302–314. https://doi.org/10.1037/ort0000073.
- *Abrams, L. S., & Gordon, A. L. (2003). Self-harm narratives of urban and suburban young women. *Affilia-Journal of Women and Social Work*, 18(4), 429–444. https://doi.org/10.1177/0886109903257668.
- *Adams, J., Rodham, K., & Gavin, J. (2005). Investigating the 'self' in deliberate self-harm. *Qualitative Health Research*, 15(10), 1293–1309. https://doi.org/10.1177/1049732305281761.
- Adler, P. A., & Adler, P. (2011). The tender cut. Inside the hidden world of self-injury. New York: New York University Press.



- Althoff, R. R., Hudziak, J. J., Willemsen, G., Hudziak, V., Bartels, M., & Boomsma, D. I. (2012). Genetic and environmental contributions self-reported thoughts of self-harm and suicide. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 159B(1), 120–127. https://doi.org/10.1002/ajmg.b.32010.
- American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, *5th ed.* American Psychiatric Association: Washington, DC.
- *Ayerst, S. (2005). The autobiographical construction of self-harm: A discourse-analytic study of adolescent narratives. (Doctoral dissertation). Available from ProQuest Dissertations and Thesis database. (UMI No. MR01787).
- Bentley, K. H., Nock, M. K., & Barlow, D. H. (2014). The four-function model of nonsuicidal self-injury: Key directions for future research. *Clinical Psychological Science*, 2(5), 638–656. https://doi.org/10.1177/2167702613514563.
- Borschmann, R. J., Hogg, R., Phillips, P., & Moran, P. (2011). Measuring self-harm in adults: A systematic review. *European Psychiatry*. https://doi.org/10.1016/j.eurpsy.2011.04.005.
- Bouchard, M. A., & Lecours, S. (2008). Contemporary Approaches to Mentalization in the Light of Freud's project. In F. Busch (Ed.), Mentalization: Theoretical Considerations, Research Findings, and Clinical Implications. New York: Taylor and Francis.
- Brady, M. T. (2014). Cutting the silence: Initial, impulsive self-cutting in adolescence. *Journal of Child Psychotherapy*, 40(3), 287–301. https://doi.org/10.1080/0075417X.2014.965430.
- Britten, N., Campbell, R., Pope, C., Donovan, J., Morgan, M., & Pill, R. (2002). Using meta-ethnography to synthesize qualitative research: A worked example. *Journal of Health Services Research & Policy*, 7(4), 209–215. https://doi.org/10.1258/135581902320432732.
- Brown, T. B., & Kimball, T. (2012). Cutting to Live: A phenomenology of Self-Harm. *Journal of Marital and Family Therapy*, 39, 2,195–208.
- Campbell, R., Pund, P., Pope, C., Britten, N., Pill, R., Morgan, M., & Donovan, J. (2003). Evaluating meta-ethnography: A synthesis of qualitative research on lay experiences of diabetes and diabetes care.. *Social Science & Medicine*, *56*, 671–684. https://doi.org/10.1016/S0277-9536(02)00064-3.
- Casey, B. J., Jones, R. M., & Hare, T. A. (2008). The adolescent brain. Annals of the New York Academy of Sciences, 1124, 111–126. https://doi.org/10.1196/annals.1440.010.
- Edmondson, A. J., Brennan, C. A., & House, A. (2016). Non-suicidal reasons for self-harm: A systematic review of self-reported accounts. *Journal of Affective Disorders*, 191, 109–117. https://doi.org/10.1016/j.jad.2015.11.043.
- Emerson, L. E. (1913). The case of Miss A: A preliminary report of a psychoanalytic study and treatment of a case of self-mutilation. *Psychoanalytic Review*, 1(1), 41–54.
- Erikson, E. H. (1980). *Identity and life cycle*. New York: WW Norton. Evans, R., & Hurrell, C. (2016). The role of schools in children and young people's self-harm and suicide: Systematic review and meta-ethnography of qualitative research. *BMC Public Health*, 16, 401–416. https://doi.org/10.1186/s12889-016-3065-2.
- Favazza, A. R. (1998). The coming of age of self-mutilation. *The Journal of Nervous & Mental Disease*, 186(5), 259–268. ISSN: 0022–3018.
- Favazza, A. R. (2011). Bodies under siege. Self-mutilation, nonsuicidal self-injury, and body modification in culture and psychiatry (Third edn.). 2011. Baltimore: The John Hopkins University Press. (/1987.,.
- Gardner, F. (2001). Self-harm: A psychotherapeutic approach. New York: Taylor & Francis Inc.
- Gvion, Y., & Fachler, A. (2015). Traumatic experiences and their relationship to self-destructive behavior in adolescence. *Journal of*

- Infant, Child, and Adolescent Psychotherapy, 14(4), 406–422. https://doi.org/10.1080/15289168.2015.1090863.
- Hamza, C. A., Willoughby, T., & Heffer, T. (2015). Impulsivity and nonsuicidal self-injury: A review and meta-analysis. *Clini*cal Psychology Review, 38, 13–24. https://doi.org/10.1016/j. cpr.2015.02.010.
- Hawton, K., Saunders, K. E. A., & O'Connor, R. C. (2012). Self-harm and suicide in adolescents. *Lancet*, 379, 2373–2382. https://doi. org/10.1016/S0140-6736(12)60322-5.
- *Holley, E. E. (2016). *The lived experience of adolescents who engage in nonsuicidal self-injury* (Doctoral dissertation). Retrieved from Open Access Thesis and Dissertations. (Record No. oai:etd.ohiolink.edu:antioch1434043151).
- Hooley, J. M., & St. Germain, S. A. (2014). Nonsuicidal self-injury, pain, and self-criticism: Does changing self-worth change pain endurance in people who engage in self-injury? Clinical Psychological Science, 2(3), 297–305. https://doi.org/10.1177/2167702613509372.
- Jacobson, C. M., & Gould, M. (2007). The epidemiology and phenomenology of non-suicidal self-injurious behavior among adolescents: A critical review of the literature. *Archives of Suicide Research*, 11(2), 129–147. https://doi.org/10.1080/13811110701247602.
- Kirtley, O. J., O'Carroll, R. E., & O'Connor, R. C. (2016). Pain and self-harm: A systematic review. *Journal of Affective Disorders*, 203, 347–363. https://doi.org/10.1016/j.jad.2016.05.068.
- Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical Psychology Review*, 27, 226–239. https://doi.org/10.1016/j.cpr.2006.08.002.
- Klonsky, E. D., Oltmanns, T. F., & Turkheimer, E. (2003). Deliberate self-harm in a nonclinical population: Prevalence and psychological correlates. *American Journal of Psychiatry*, 160, 1501–1508. https://doi.org/10.1176/appi.ajp.160.8.1501.
- Klonsky, E. D., Victor, S. E., & Saffer, B. V. (2014). Nonsuicidal self-injury: What we know, and what we need to know. *The Canadian Journal of Psychiatry*, *59*(11), 565–568. https://doi.org/10.1177/070674371405901101.
- *Lesniak, R. G. (2010). The lived experience of adolescent females who self-injure by cutting. *Advanced Emergency Nursing Journal*, 32(2), 137–147. https://doi.org/10.1097/TME.0b013e3181da3f2f.
- Levitt, H., Pomerville, A., & Surace, F. I. (2016). A qualitative metaanalysis examining clients' experiences of psychotherapy: A new agenda. *Psychological Bulletin*, 142(8), 801–830. https://doi. org/10.1037/bul0000057.
- *Lewis, S. P., & Mehrabkhani, S. (2017). Every scar tells a story: Insight into people's self-injury scar experiences. *Counselling Psychology Quarterly*, 29(3), 296–310. https://doi.org/10.1080/09515070.2015.1088431.
- *Machoian, L. (2001). Cutting voices. *Journal of Psychosocial Nursing & Mental Health Services*, 39(11), 22–29. ISSN: 02793695.
- Maciejewski, D. F., Creemers, H. E., Lynskey, M. T., Madden, P. A., Heath, A. C., Statham, D. J., Martin, N. G., & Verweij, K. J. (2014). Overlapping genetic and environmental influences on nonsuicidal self-injury and suicidal ideation: different outcomes, same etiology? *JAMA Psychiatry*, 71(6), 699–705. https://doi. org/10.1001/jamapsychiatry.2014.89.
- *Magagna, J. (2008). Attacks on life: suicidality and self-harm in young people. In S. Briggs & S. Lemma, A. & W. Crouch (Eds.), Relating to self-harm and suicide: Psychoanalytic perspectives on practice, theory and prevention (pp. 109–127). New York, NY: Routledge/Taylor & Francis Inc.
- *McAndrew, S., & Warne, T. (2014). Hearing the voices of young people who self-harm: Implications for service providers. *International Journal of Mental Health Nursing*, 23(6), 570–579. https://doi.org/10.1111/inm.12093.
- *McDermott, E., Roen, K., & Piela, A. (2015). Explaining self-harm: Youth cybertalk and marginalized sexualities and genders. *Youth*

- and Society, 47(6), 873–889. https://doi.org/10.1177/00441
- Menninger, K. (1938). Man against himself. New York: Harcourt, BraceWorld, Inc. (/1966. .
- Morgan, C., Webb, R. T., Carr, W. J., Kontopantelis, E., Green, J., Chew-Graham, C. A., Kapur, N., & Ashcroft, D. M. (2017). Incidence, clinical management, and mortality risk following self-harm among children and adolescents: cohort study. *BMJ*, 359, j4351. https://doi.org/10.1136/bmj.j4351.
- Motz, A. (2010). Self-harm as a sign of hope. *Psychoanalytic Psychotherapy*, 24(2), 81-92. https://doi.org/10.1080/02668731003707527.
- *Moyer, M., & Nelson, K. W. (2007). Investigating and understanding self-mutilation: The student voice. *Professional School Counseling*, 11(1), 42–48. ISSN: 1096–2409.
- *Nice, T. (2012). Troubled minds and scarred bodies: A grounded theory study of adolescent self-harm (Unpublished doctoral dissertation). The University of Kent.
- Noblit, G. W., & Hare, R. D. (1988). *Meta-ethnography*. London: SAGE Publications, Inc.
- Nock, M. K. (2014). *The Oxford Handbook of Suicide and Self-injury*. New York: Oxford University Press.
- Nock, M. K., & Prinstein, M. J. (2004). A functional approach to the assessment of self-mutilative behavior. *Journal of Consulting and Clinical Psychology*, 72(5), 885–890. ISSN: 0022-006X.
- Nock, M. K., & Prinstein, M. J. (2005). Contextual features and behavioral functions of self-mutilation among adolescents. *Journal of Abnormal Psychology*, 114(1), 140–146. https://doi. org/10.1037/0021-843X.114.1.140.
- Panksepp, J. (2010). Affective neuroscience of the emotional Brain-Mind: Evolutionary perspectives and implications for understanding depression. *Dialogues in Clinical Neuroscience*, 12(4), 533–545. ISSN: 1294–8322.
- *Parfitt, A. (2005). On aggression turned against the self. *Psychoanalytic Psychotherapy*, 19, 160–173. https://doi.org/10.1080/02668730500115127.
- *Privé, A. A. (2007). An existential-phenomenological investigation of self-cutting among adolescent girls (Doctoral Dissertation). Available from ProQuest Dissertations Publishing (UMI No. 3292573).
- *Rissanen, M.-L., Kylmä, J., & Laukkanen, E. (2008). Descriptions of self-mutilation among Finnish adolescents: A qualitative

- descriptive inquiry. *Issues in Mental Health Nursing*, 29(2), 145–163. https://doi.org/10.1080/01612840701792597.
- Siegel, D. J. (2015). *Brainstorm: The power and purpose of the teenage brain*. New York: Jeremy P. Tarcher/Penguin.
- Soyemoto, K. L. (1998). The functions of self-mutilation. *Clinical Psychology Review*, 18(5), 531–554. https://doi.org/10.1016/S0272-7358(97)00105-0.
- Straker, G. (2006). Signing with a scar: Understanding self-harm. *Psychoanalytic Dialogues*, *16*(1), 93–112. https://doi.org/10.2513/s10481885pd1601_6.
- Swannell, S. V., Martin, G. E., Page, A., Hasking, P., & John, St, N. J (2014). Prevalence of nonsuicidal self-injury in nonclinical samples: systematic review, meta-analysis and meta-regression. Suicide and Life-Threatening Behavior, 44(3), 273–303. https://doi.org/10.1111/sltb.12070.
- Timulak, L. (2009). Meta-analysis of qualitative studies: A tool for reviewing qualitative research findings in psychotherapy. *Psychotherapy Research*, 19(4–5), 591–600. https://doi.org/10.1080/10503300802477989.
- Walsh, D., & Downe, S. (2004). Meta-synthesis method for qualitative research: A literature review. *Journal of Advanced Nursing*, 50(2), 204–211. https://doi.org/10.1111/j.1365-2648.2005.03380.x.
- Whitlock, J. L., & Selekman, M. (2014). Non-suicidal self-injury (NSSI) across the lifespan. In M. Nock (Ed.), Oxford Handbook of Suicide and Self-Injury. Oxford Library of Psychology: Oxford University.
- World Health Organization (2004). The ICD 10 Classification of Mental and Behavioral Disorders. Diagnostic criteria for research. 10th ed.
- *Yip., K.-S., Ngan, M.-Y., & Lam, I. (2004). Adolescent self-cutters in Hong Kong. *Asia Pacific Journal of Social Work and Development*, 14(2), 33–51. https://doi.org/10.1080/21650993.2004.975 5953.
- *Marshall, H., & Yazdani, A. (1999). Locating culture in accounting for self-harm amongst asian young women. Journal of Community & Applied Social Psychology, 9(6), 413–433. doi: 10.1002/(SICI)1099-1298(199911/12)9:6<413::AID-CASP543>3.0.CO;2-U
- Articles with marked with * are included in the meta-synthesis.



PAPER 2

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Title:

Discovering one's own way: Adolescent girls' different pathways into and out of self-harm

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Discovering one's own way: Adolescent girls' different pathways *into* and *out* of self-harm

Abstract

Aim: Self-harm is associated with mental illness and suicide risk. The present study aims to increase knowledge of adolescent girls' pathways into and out of self-harm. Demographics: 19 girls, 13-18 years of age. Setting: Participants were strategically selected from a clinical population. Methodology: A naturalistic multiple case-study with personal interviews. Analysis: The interviews were analyzed using Interpretative Phenomenological Analysis, and capacity for "mentalization" – representation of behavior in terms of mental states – was measured with the Reflective Functioning Scale. Results: Analysis of the topic "beginning self-harm" resulted in two meta-themes: 1) beginning self-harm as a way to handle difficult feelings and relational problems, and 2) becoming influenced by peers to experiment with self-harm. Analysis of the topic "quitting self-harm" resulted in three meta-themes: 1) ambivalence towards help, treatment and ending self-harm, 2) finding one's own way of quitting self-harm, and 3) exploring self-harm together with the therapist. Three case-stories illustrate variations in trajectories of change and capacity for mentalization. Implications: Our findings suggest that self-harm may be related to ways of handling developmental challenges in adolescence, like autonomy and identity formation. Adolescents need a possibility to discover their own way of quitting self-harm. Variations in mentalization may provide for different pathways.

Keywords: adolescence, mental health/psychopathology, identity issues, peers/friends, qualitative methods, suicide.

Discovering one's own way: Adolescents' different pathways *into* and *out* of self-harm Self-harm has received increased attention in many countries. "Self-harm" refers to "intentional self-poisoning or self-injury, irrespective of type of motive or extent of suicidal intent" (Hawton, Saunders, & O'Connor, 2012, p. 2374). There is an ongoing discussion of the definition of self-harm – including or excluding suicidal intent. Despite this disagreement on definition, studies show that self-harm usually starts in adolescence (approximately 12-13 years of age) (Whitlock & Selekman, 2014). Cutting is the most common method used by both genders but hitting and scratching are also prevalent.

The estimated prevalence of self-harm depends on the definition used but ranges from 13-17% in nonclinical adolescent populations to 40-60% among inpatient adolescent samples (Swannell, Martin, Page, Hasking, & St. John, 2014). Self-harm is more common among girls than boys during early adolescence (12-15 years of age) (Swannell et al., 2014). Morgan and colleagues (2017) reported that the annual incidence of self-harm was higher in girls (37.4 per 10,000) compared to boys (12.3 per 10,000), and between 2011 and 2014 self-harm increased 68% among girls aged 13-16 (from 45.9 to 77 per 10,000). Given these statistics, we need more knowledge on how self-harm becomes part of a young person's life, particularly among girls, during the *transition* from childhood to adulthood. A qualitative research method offers an option to explore adolescents' inner world, how the idea of self-harm is related to life challenges, and differences among them, which may complement context-independent data from quantitative studies.

The function of self-harm

An urgent question is: "how can we understand self-harming behavior?" Different theoretical models have been proposed to understand the function of self-harm (see Soyemoto, 1998). In a review of empirical research on self-harm among adults and adolescents, Klonsky (2007) found converging support for self-harm as "an affect-regulation function". He described self-harm as a way of managing overwhelming negative emotions and at the same time getting relief and control. Because most reviews on self-harm focus on adults and often exclude qualitative studies of subjective experience, [masked for review] (2018) conducted a meta-synthesis on qualitative studies of adolescents' (12-18 years of age) first-person experience of self-harm in clinical and non-clinical populations. This analysis resulted in four meta-themes: Adolescents experience self-harm as a way 1) to obtain release, 2) to control difficult feelings, 3) to represent unaccepted feelings, and 4) to connect with others. The meta-themes support self-harm as a function of affect-regulation but emphasize

how self-harm may contain important emotional and relational "messages", like a wish to share. [masked for review] (2018) discuss the findings in regard to developmental challenges during adolescence, which is a transitional life-period, including cognitive, biological, psychological and social changes (Siegel, 2015). We argue that self-harm may be a destructive solution to a developmental conflict between a need to express affective experiences *and* a relational need for care that makes it important not to bother caregivers.

Risk factors and the beginning of self-harm

Studies have identified numerous risk factors (socio-demographic factors, negative life events, psychosocial stressors and psychological factors) for self-harm (Larkin, Blasi, & Arensman, 2014). Self-harm is associated with several mental disorders and, and in the worst case, risk of death (Hawton et al., 2012). However, the risk factors are not specific, and could be related to a range of mental disorders. Sinclair and Green (2005) found in a qualitative study that adult persons with a history of self-harm retrospectively associated beginning to self-harm with unpredictability, lack of control and chaos in their family, and ending selfharm was related to less family-conflict. In personal interviews, young people also underline how emotional problems, such as psychological pain and anger (Abrahms & Gordon, 2003), and trauma or conflict in their family and in relations with friends can influence, elicit and sustain self-harming during adolescence (Evans & Hurrell, 2016; McAndrew & Warne, 2014). These findings were supported by a study by Wadman and colleagues (2018) who underline how adolescents experience family, friends and clinical services both as possible stressors to begin self-harm and as important support to end self-harm. In line with these findings, we propose that knowledge of ways into and out of self-harm should be analyzed in relation to developmental psychological challenges in the transformation from childhood to adulthood, such as identity formation (Erikson, 1980; Siegel, 2015) and autonomy (Gullestad, 1993).

Treatment methods and the diversity among adolescents who self-harm

Different treatment methods – like cognitive behavior therapy, dialectic behavior treatment, and mentalization behavior treatment – have been shown to reduce self-harm, depression and suicidal ideation among adults and adolescents, yet more research for effective interventions for adolescent and children are needed (Saunders & Smith, 2016; Hawton et al., 2015). Although some of the treatment methods are adjusted for adolescents, they are primarily developed for adult patients – often with borderline personality disorder. Further, no

single treatment method is able to help every self-harming adolescent, who often struggles with motivation for and/or drops out of treatment. Furthermore, we know that self-harm is carried out once by some, but repeatedly and extensively by others. Therefore, we need more knowledge to understand the relationship between adolescent self-harm and a) the meaning invested in this behavior, b) the mental problems related to self-harm, and c) what is perceived as helpful in coping with these difficulties (Hawton et al., 2012). Even though some studies on adolescents' experience of self-harm do exist, a multiple case-study offers a systematic way to explore girls' different ways *into* and *out* of self-harm.

Self-harming behavior is difficult to understand for others. When confronted with an adolescent's self-harming behavior, parents, as well as therapists and hospital staff (Johnsen, Ferguson, & Copley, 2017), describe overwhelming feelings or lack of empathy. Adult patients underline poor communication and a lack of knowledge of self-harm in clinical treatment services (Taylor, Hawton, Fortune, & Kapur, 2009). As concerns treatment and the question of what helps, young adults who self-harm emphasize the importance of being understood (Brown & Kimball, 2012). To better enable adolescents to feel understood, and presumably increase motivation for treatment, knowledge from their perspective is important.

In several treatment models, self-harm is regarded as a consequence of biological vulnerability and a lack of emotional validation in early relationships (Saunders & Smith, 2016). Consequently, the child may be overwhelmed by emotional difficulties without sufficient problem-solving strategies and "act out" intolerable affect and psychic content by harming. In the theory of mentalization, the quality of the caregivers' way of *talking* and *being with* the child when experiencing difficult emotions is essential for the development of affect-regulation *and* a capacity for mentalization – representation of behavior in terms of mental states – and in turn, an integrated and coherent self-experience and self-organization (Rossouw & Fonagy, 2012). To increase our knowledge on the trajectories of self-harm, we need to study differences in emotional problems, interpersonal stressors and inspirations to begin self-harm. In this regard, youths' ways into and out of self-harm warrant investigation in relation to their capacity for mentalization.

The aim of the study

We present results from a naturalistic qualitative study of self-harm among adolescents (13-18 years of age) in a clinical population. The aim of this study was to explore girls' experiences of beginning and quitting self-harm, and more specifically, of how self-harm became part of their life and development. The research questions were: 1) How do

young girls experience the beginning of self-harm and how was it related to challenges in their life? 2) How do young girls describe finding a way out of self-harm? Do they experience treatment helpful for quitting self-harm (independent of treatment method)? By highlighting three young girls' narratives about the ways into an out of self-harm, we present the diversity in adolescents experience *and* explore differences in terms of level of coherence, integration and capacity of mentalization.

Method

Study Setting and Participants

The study was conducted at an outpatient clinic for children and youths in Norway, offering treatment (free of charge) for mental problems to children 0-18 years of age. Patients were asked to participate if their therapist documented self-harm (impulsive or repetitive, with or without suicide intention) during the initial clinical assessment or in the six months after starting treatment. Exclusion criteria were comprehensive psychosis or high suicidal risk. A total of 33 patients were invited within nine months, and 21 consented to participate.

Although we invited both girls and boys to participate, only two boys accepted (four were invited). To increase sample homogeneity, we chose to focus only on girls in the data analysis. The final sample consisted of 19 girls (13-18 years of age, mean = 15.9 years) (see Appendix A for description of participants). The principal reasons for being referred to the clinic were suspicion of depression (some with suicidal thoughts or an attempt), self-harm and eating disorder. All 19 participants self-harmed though cutting, although 15 also used other methods, like scratching and burning. On average, the participants had started to harm themselves at 13.1 years of age with a frequency of approximately 1-3 times per week. All participants confirmed thoughts of suicide, and eight had an earlier suicide attempt, three of whom had an attempt during treatment. The participants' primary diagnoses were mood disorders (n=13), anxiety (n=3), eating disorders (n=2) and schizophrenia (n=1). Most (n=14) had more than one diagnosis. Thirteen participants met criteria for one or more personality disorders, mostly avoidant, borderline, and depressive type. During the project, three participants withdrew because they moved. They confirmed that the data from the interviews still could be used in the project.

Therapists and therapy. The therapists were five clinical psychologists (three women, two men) and one psychiatrist (woman). All but one had more than ten years of experience in clinical practice with adolescents. They had from one to six participants in the study, and represented different theoretical and methodological orientations, such as

cognitive, integrative and psychodynamic therapy. On average, the participants had 35.4 individual treatment sessions, 4.0 family sessions, and 3.7 sessions with their parent(s) during a treatment period of 20.2 months. On three occasions, the principal investigator informed a participant's therapist about suicidal thoughts in order to ensure sufficient intervention. Apart from that, the principal investigator had no role in the treatment process.

Interviews and Measures

Personal interviews. The adolescents participated in a qualitative in-depth interview, called the *Life-mode Interview* [masked for review] (2018), in which the interviewer invites the informant to describe events from the day before the interview, what they did and who was present. Thereby, their telling about practices of self-harm, and how they battled with self-harm, would be made parallel to other activities related to being a young girl in school, with their family and among friends. The girls were invited to explore and reflect upon their self-harming in their every-day life context together with a reflexive listener, and this focus was useful to obtain adolescents' cooperation and to evoke their personal experiences. The interviewer asked specifically about concrete experiences of self-harm, e.g. when self-harm occurred, when it started and if there were patterns of change. The interviewer asked about feelings and thoughts, and prospects for the future.

Semi-structured interviews. We included some semi-structured interviews to describe our sample – young girls referred to a clinic for mental problems – such as the frequency and methods of self-harm in the last year (Linehan Parasuicide History, LPH; Linehan & Comtois, 1996), symptom disorders (International Neuropsychiatric Interview, MINI; Sheehan et al., 1998), personality disorder (Structured Interview for DSM-IV Personality, SIDP-IV; Pfohl, Blum, & Zimmerman, 1997), and attachment (Transition to Adulthood Attachment Interview, TAAI; Crittenden, 2005; a modified version of the Adult Attachment Interview; George, Kaplan, & Main, 1985). In the TAAI, the adolescent is asked to describe and reflect upon important relationships, every-day routines, separation, trauma, rejection and loss. The Reflective Functioning (RF) Scale (Fonagy, Steele, Steele, & Target, 1998) is an operationalization of mentalizing capacity based on the autobiographical memories. The TAAI was used to rate RF as a measure of an ability to understand mental states on a scale from -1 (negative RF; a systematic resistance to a reflective stance) to 9 (exceptional RF; complex reflections). In a non-clinical population, an RF score of 5 is the common rating (Fonagy et al., 1998). We did not score attachment patterns from the TAAI.

Procedure

After each participant consented to the study, the first author conducted two Lifemode interviews with a week in between, followed by the MINI, SIDP-IV and LPH, and the fourth author did the TAAI, in a 1-month period. Thereafter, the first author met each participant together with their therapist to give feedback about preliminary findings. All participants received a gift card (worth approximately 20 USD). After one year (regardless of whether they were still in treatment), the first author met the participants for a follow up qualitative interview and the LPH to get access to information about change. Qualitative interviews and the TAAI were audio-recorded and transcribed. Both the first and third author scored all of the TAAIs. Concerning inter-rater reliability, the two coders rated the same RF-score on twelve of seventeen interviews. There was a difference of one RF-score on the remaining five interviews, e.g. one of the coders rated RF 2 and the other rated RF 3. Two informants did not complete the TAAI.

Ethics. The Norwegian Regional Committees for Medical and Health Research Ethics approved the study (2014/832). Patients and their parents (when they were under 16 years) received written and oral information from their therapist and the first author. All received treatment regardless of study participation. Adults with experience of self-harm read the interview-guide and the manuscript for quality assurance. Importantly, the first author is a trained clinician and familiar with the clinic and was thus able to provide the adolescents with support in times of heightened risk, such as when experiencing thoughts of suicide. The material is anonymized. Participants read and approved all selected quotes.

Data-Analysis

This multiple case-study (McLeod, 2010) had a qualitative research design allowing for personal explorations of the participants' perspectives. The data analysis was guided by *Interpretative Phenomenological Analysis* (IPA) developed by Smith (2015), which is theoretically rooted in phenomenology, hermeneutics, and ideography. In IPA, there is an explicit aim to explore the participant's perspective, experience and constructions ("hermeneutic") of their world. The researcher aims to suspend and be reflexive of previous assumptions and understanding of the phenomenon to accurately apprehend the participant's descriptions (Smith, 2015). Further, the researcher aims to engage and make sense (interpretation) of how the person understands (interprets) his or her own experience ("double hermeneutic"; Smith, 2015).

Informed by IPA, it was of importance during the interview, that the interviewer (the first author) articulated her understanding (empathically and by questions) of the participant's experience, and the informants could confirm, correct or explore. At the completion of each interview, the interviewer, to enhance reflexivity (Levitt, Pomerville, & Surace, 2016), noted non-verbal communication, feelings, and associations. Further, during the data analysis, the interviewer and two senior researchers (second and fourth author) were especially attentive, while reading the transcribed interviews, to the descriptions and semantics of the participant's experience and self-understanding. Further, we were attuned to the related mental processes (emotional, cognitive, linguistic and physical) of the participant's meaning-making. Therefore, we studied convergences, divergences and patterns in the participants' descriptions and ways of making meaning to their experience and across the participants as a group. The analysis process can be described as "the hermeneutic circle" – interpretation of data involves looking at the part and the whole and back again (Smith, 2011). In this way, the data is not strictly descriptive but also interpreted by researchers in a social culture and knowledge on self-harm and adolescence was applied to understand and discuss data. During the interviews and data analysis, we had to be reflexive of the preconceptions of the topic from clinical and developmental psychology, based on training in psychodynamic and integrative therapy, and as women in Western culture.

We followed an IPA quality evaluation guide (Smith, 2011) to enhance the quality of data-analysis and presentation of results. The data-analysis consisted of several phases, primarily conducted by the primary author yet discussed and nuanced by the research team. Firstly, the first author read each interview to identify preliminary codes and repeating ideas. Secondly, two senior researchers (second and fourth author) read ten personal interviews and made individual notes before they met the principal investigator to analyze case by case.

The interviewer's interpretation of the participants' experiences and way of making meaning (double hermeneutic) were reflected upon. It was checked whether the interpretation was plausible, understandable and overlapping or different from the team members' interpretations of the text (research triangulation; Flick, 2002). Research triangulation was of great importance to increase validity and reflexivity in the data-analysis since the interviewer also had the role of the principle investigator. The team members draw on somewhat different theoretical and methodological perspectives, which helped us to become self-reflective and aware of different ways of reading the data (Lewitt et al., 2016).

Thirdly, reading and discussing the interviews made the team aware of some surprising tendencies. Even though the girls had often been referred to the clinic because of

self-harm, none of them experienced self-harm as the problem that motivated them for treatment. Actually, many of them had lived with self-harm as a personal and secret routine for several years as a rescue from a difficult world. The way they described their life and problems varied – some were clearly articulated, while others had difficulty expressing and differentiating thoughts and feelings. Further, the girls' ways out of self-harm were more indirectly than directly related to treatment experiences. In light of these tendencies, we explored similarities and differences in two topics, "beginning self-harm" and "quitting self-harm". We decided that the next step would be to analyze the selected topics in all interviews.

Fourthly, the first author sorted all qualitative interviews (from the beginning of treatment and follow up after 1 year) in relation to selected topics, organized the content into nodes, sub-themes, themes, and meta-themes, and selected quotes to ensure transparency. For example, most participants described how they had managed to end self-harm in the follow up interviews, but some ended self-harm right after starting in treatment and these descriptions are also included. In several consensus meetings, we continued to discuss multiple interpretations, which ended in agreement (all three agreed) or became integrated into nuances of the material (one or two disagreed), such as renaming, rearranging, adding or merging themes or sub-themes to enhance trustworthiness (researchers and methodological integrity checks; Levitt et al., 2016). The concepts were developed closely with the girls' descriptions (Smith, 2015).

Results

The analysis of two selected topics – beginning and quitting self-harm – resulted in two meta-themes about moving *into* self-harm and three meta-themes about moving *out* of self-harm. Each meta-theme included several themes and sub-themes (see Appendix B). In the following, we present each meta-theme and associated themes with an indication of the frequency of experiences among the participants (Hill et al., 2005): 1) *Most* – result based on data from 15 participants or more, 2) *Many* – based on 10 to 14 participants, 3) *Some* – based on 5 to 9 participants, and 4) *A few* – based on 5 or fewer participants. The sub-themes will not be addressed separately in the text but both themes and sub-themes are enumerated in Appendix B. This overview outlines common features across a selection of cases as well as variations to the extent that each person will appear as a specific composition.

In the following we will present three cases – named Anna, Elsa and Sophie – as distinctly different from each other throughout the meta-themes (Appendix C). What we gain by selecting and following such a limited number of persons will be that each one is given a

full portrait and the variations between them capture some divergent points in the data. Further, the citations from these cases are rich in details and their affective stance can be interpreted fairly easily. In the end, overall RF scores for Anna, Elsa and Sophie from the TAAI, and examples are presented to show differences in how the participants represent, nuance and integrate behavior in terms of mental states. However, the RF ratings for these three are not necessarily representative of every participant who described the mentioned themes and sub-themes.

First Selected Topic: Beginning Self-harm

First meta-theme: beginning self-harm as a way to handle difficult feelings and relational problems. Most of the participants highlighted difficult feelings and negative thoughts about themselves as the main reasons for beginning self-harm. In addition, some underlined other mental problems (such as an eating disorder), and most described difficult relationships with their mother or traumatic family events which made it difficult to ask for help. Many were disappointed with the lack of practical and emotional support from their fathers, and many did not know their fathers at all. Only a few had a close friend, and many related self-harming to interpersonal problems with peers, including peer expectations to be best, pretty, and clever. Some did not know why they began to harm themselves.

"I'm disgusting and worthless". Anna was 17 years old, had cut herself with razor blades since she was 12, every day during the first years, but only twice a month during the last year. Anna began to harm herself during a period when she felt depressed, had negative thoughts about herself and felt disgusting: "I know how it is to really have a bad time ... to feel totally down. I struggled with depression all through secondary school. I started to self-harm, I experimented, because I felt disgusting". Her feelings changed suddenly: "I just changed from being very angry to extremely sad, and then very happy, and then sad again". Anna was dissatisfied with her body: "I didn't like my body and I wanted to give myself pain because I was how I was". Although she felt that her mother wanted to help and felt close to her father, it felt unnatural for her to talk to them about problems. She thought they had enough problems after their divorce. Anna also related her self-harm to episodes of being bullied in childhood: "My thoughts about myself were confirmed as true, that I didn't deserve to live or have a good time... They said I was worthless, and I thought I was worthless".

"I just did it. I don't know why". Elsa, 16 years old, started to harm herself three years ago, mainly by cutting or scratching, 1-7 times per week. She experienced the transition to secondary school as difficult, ate less and harmed herself. In the interview, it was difficult

for her to say whether she had problems, what kind of problems, or whether self-harm was related to something in her life. Her description of her problems was diffuse: "I don't know – I don't really feel very much – in general". However, sometimes she felt "kind of bad". Because she had "a nice family and good friends and – nothing traumatic has happened", she did not understand "why I started in the first place". Even though there had been "a lot of troubles" in her family, Elsa could not imagine that this was the reason. While describing her relationship with her mother as close, she still could not ask for help – she did not want to be a worry. Elsa did not think her father understood her problems: "We aren't close. He travels a lot". Elsa had one friend, but they did not talk about problems.

"It was my exit". Sophie, 18 years of age, started to cut herself when she was 11, approximately once a month, because of depressive feelings and unstable emotions: "I don't want to wake up". Her feelings could change swiftly. She connected her difficulties to her mother's struggle with depressive periods, psychotic symptoms and suicide attempts: "... and every time my mother became ... I was stressed and all the time I thought of being careful of what I could say to her or not and how I behaved. And I was so depressed". Being angry with her mother was impossible: "I was very angry at her as a little girl, but then she got ill – psychotic, she was hospitalized for several periods ... Two years ago, she tried to kill herself". Despite feeling deeply alone, Sophie pretended to be happy: "I went out, and then I was THE super happy girl, in a way. I was the clown in my class. But when I got home, I went to my room, and just ... yelled and cried". Losing interest in friends, she got involved with older adolescents or adults, which included risky behavior: "It (self-harm) became my exit ... Because I did several f*** things at the time... I went to school, and then I came back home at 1 o'clock at night... Every day I stole – not because I needed anything, but because it was fun. I went to bars and I smoked weed – I had sex with strangers. I was a real slut. That sort of thing... I did EVERYTHING. Drugs, you name it".

Second meta-theme: becoming influenced by peers or media to experiment with self-harm. Some of the participants heard about self-harm from friends, and some had read about self-harm in the newspaper, on the internet, or through social media channels. Some discovered self-harm coincidentally, and a few did not know how they got the idea.

"Someone else did it". Anna heard about self-harming from friends: "I did it because I heard about it from someone, in a way". In the beginning, it did not feel helpful, just painful, but she decided to keep on and hoped it could help her as well.

"I read about it on the internet". Elsa saw pictures and read about self-harm and mental illness on different blogs on the internet: "I saw some pictures on Facebook or — someone talked about it on social media. Then I started to think about it, and then ... I saw someone had done it ... I couldn't understand why anyone could do it ... Then I just did it". Elsa got the idea of cutting herself while making food. If someone noticed, she thought, she could say she cut herself with the knife. She also heard about self-harm from her friend: "She told me that her mother had discovered her self-harming. Then I got a strong urge to try it out myself. I don't know why. I just had to try it".

"If it helps others, it may help me". Sophie heard about self-harm from other girls at school: "I knew for certain – I realized it could help, in a way. I thought ... I was TOTALLY down, in a way, I was – I was SICK at the time. So, I thought, if SO many who are SO depressed do it, then it has to help in one way or another".

Second Selected Topic: Quitting Self-harm

First meta-theme: ambivalence towards help, treatment and ending self-harm.

None of the participants mentioned a wish for help in ending self-harm as a reason for beginning treatment. Some were referred to the clinic because someone else (usually their mother) discovered their self-harm (self-cutting and/or suicidal thoughts or attempts), some were referred for other reasons, and a few decided on their own to seek help. Initially, many thought treatments could not be helpful, and some had earlier negative treatment experiences. While in treatment, many were ambivalent about ending self-harm. However, they decided to end self-harming due to the negative consequences. Some felt obliged to end self-harm.

"I want to be independent". In the months before Anna started in treatment, she decided on her own to stop self-harming: "I don't think people understand how much energy you have to use, because you become exhausted – it's an addiction. It's something you have to keep yourself from". Afterwards, she was left without methods for managing stress: "You have to find other actions to fill the empty space every time you want to harm yourself (...) the feeling or the thoughts don't disappear before you do the action". She had excessive suicidal thoughts and attempted to die by suicide: "Everything was so shit... I did not want to be me, because I'm so tragic and really deserve to die, and then I decided to kill myself because I do not want to live like this. I took an overdose and my mom found me after 6 hours and she took me to the doctor". The self-cutting and suicide attempt were related to difficult feelings and negative self-thoughts: "It was because of the thoughts of being hopeless and worthless, being a disgusting person – and not having a future". Anna did not think treatment

could help her: "I do think I need help but I'm not responsive ... because being independent and managing things by myself is so important to me".

"I don't want to be a burden". Elsa was referred to the clinic because her mother discovered scars on her arms and got worried: "My mother discovered my self-harming, and then she sent me here". However, Elsa herself did not have a wish to end her self-harm: "It's so strange – I wanted to continue, in a way". Although being worried about whether she deserved help ("I feel my problems are not big enough to get this kind of help"), Elsa realized that she enjoyed talking to the therapist. She was ambivalent about ending her self-harm – she did not want to hurt or disappoint her mother, but ending self-harm left her with a feeling of doing something wrong: "So – it's just – it's so strange, but it's like – to manage ... makes me proud, in a way ... Still, I feel I have done something wrong". When Elsa managed to quit self-harming, she began to eat less and/or exercise harder.

"When I have bad times, I don't want to get better". The last year before Sophie was referred to the clinic, her mother was depressed, and one day, she found her mother after a suicide attempt. Sophie was frightened, overwhelmed and heard voices for the first time: "I got psychosis. I started to hear voices... We had meetings with child custody, and they referred me to the clinic". Her wish to die increased, and she was admitted to a psychiatric hospital for several weeks. During this hospital stay, she was placed in a care-home. She was happy to finally get help, but she also thought it was a waste of time: "To be at the hospital or here at the clinic, it was nice but still – I felt it was a little waste of time and... I'm kind of an agnostic, I don't really believe in it, but I'm open to try, in a way". She was ambivalent and her wish for help vanished when she was troubled: "When I have bad times, I don't want to get better. Then I just want to die". Sophie knew her problems in childhood had been visible to other adults: "I remember – when I was 12 years old, I was involved in some problems, and then they began to talk about self-harm. They drove me home and asked me if I thought about suicide. So, I said yes. They said: Do you want to talk to someone about it? And I said yes. I remember they said: Well, then we have to get you help. But it never happened". Thinking about this today made Sophie bitter and disappointed.

Sophie wanted to quit self-harm, mostly because she did not want to have scars: "I have a hard time, in a way, but ... I don't always cut myself. Because it's like – I try NOT to do it, in a way ... Because it's – I feel very awkward when people ask, in a way ... Or like NOW for example ... it's like 77 Fahrenheit and I have to wear a hoody ... No, it's horrible". Further, two earlier suicide attempts made her afraid of the potentially fatal consequences of

self-harm. Still, she felt addicted to self-harm: "It's like a drug, in a way – people use it to escape, and you don't think about your problems anymore. You get a kind of drug-feeling".

Second meta-theme: finding one's own way of quitting self-harm. Most of the participants quit self-harm during the project period. Most of them found it helpful to distract themselves from overwhelming thoughts and feelings by doing an activity. Some emphasized the benefits of positive thinking, some tried to remember the negative consequences of self-harm, and a few attended to difficult feelings or thoughts in the moment.

"I delay my self-harming". For Anna, it was helpful to do something for a while, often by herself in her room: "I can listen to music, very loud, or I look at Facebook just to keep myself busy". Supporting herself through an inner monologue, she was able to delay the impulse to self-harm: "I know myself ... this is temporary. The urge goes away. I delay the self-harming. So, I think: yes, I will harm myself, but first I have to do my homework".

"Exhausting exercises". Elsa also described different helpful activities – to knit, to draw, listen to music or to read a book: "I always have a book with me". After a year in treatment, many things were changed in Elsa's life – she had moved and started at a new school. She did not want to harm herself anymore. She did not want to disappoint her mother and emphasized her help: "She helped me in a way, I think. She asked if I was doing okay and such". Furthermore, Elsa had started to practice kick boxing several times a week and kept herself busy in general: "I have a long day at school, so I'm too exhausted to think about it". She discovered how much she appreciated being with her family: "If I want my mother's help, or I just want to talk to her about how my day was, I can go to her. I don't need to talk about the difficulties, but it is nice to know that someone is there". In addition, it was easier for her to contact her friends while being troubled – to talk or just be together.

"Be with someone". Initially, Sophie described it as helpful to be with someone, see a movie, play games, or sleep if she had a hard time, but she could not explicitly ask someone to be with her. After a year in treatment, Sophie moved to a more permanent home with sufficient support, she began taking medication, and, of most importance in her opinion, she got a cat: "It's a big difference. Because if I'm sad I can cuddle with it and if I'm worried it will come and lay down beside me. There's so much comfort in it. Earlier, in such situations, I would have been thinking: Should I cut myself? And now it's more like: No, I cuddle with the cat instead! Every depressed person should have a cat". Sophie did not decide to quit self-harming: "It just BECAME like that". She recognized she could resist the impulse to harm herself, to drink so much, or have sex with strangers. Additionally, she could call her mother and ask her to come: "Now, we do have a nice time together. Earlier I was very angry at my

mom, but now – we never argue ... It's more stable. If I'm sad, she may sleep over. I can push her to be up late and watch TV (smiling)". If she had suicidal thoughts, she could even call her doctor: "Last week I woke up and just ... fuck life, in a way. It was really bad, and then I called my doctor and asked: What should I do? So, I went to her. She always prioritizes me and gives me the help I need. I have a really good doctor".

Third meta-theme: exploring self-harm together with the therapist. Most of the participants felt treatment was helpful. Some underlined the positive meetings with the therapist, and many described the benefit of talking openly for the first time. Some described the experience of meeting someone who understood their problems, and some emphasized the therapist as a supervisor helping them to cope in difficult situations. Some described how therapy affected their relations in a positive way, and some highlighted how treatment helped them to reduce self-harm. A few felt treatment was not helpful.

"To get help to remember and find triggers". Anna valued how her therapist listened carefully and tried to understand: "He has a very good memory! So, I feel like, he is like a tape recorder – remembers things, reminds me ... about things, and then he comments – he helps me without me thinking of it – he helps me to help myself if you understand?" Anna emphasized the therapist's support in exploring thoughts and feelings: "He is very clever to find the triggers. He said: Yes, but this situation sounds like the same situation you described last summer ... I was thinking: last summer! (laughing). Yes, you reacted in very much the same way, talked in the same way, and you were angry ... And I thought: Wow! What happened? Yes, the same thing – I was dumped by a boy both times!" Furthermore, Anna cherished concrete supervision in difficult situations and noticed how talking in therapy affected her way of talking to her parents. Although Anna did not experience a direct focus on reducing self-harm, she knew her therapist did not approve of it.

After one year in treatment, Anna thought treatment indirectly helped her to end self-harming by focusing on her tendency to act unsupportively towards herself: "I have always been hard on myself, and I have tried to notice and stop it. If I had continued, I wouldn't get anywhere". Moreover, she motivated herself to end her self-harm by thinking of the therapy, and the negative consequences of self-harm, such as scars, and the pain of her parents. She still felt that it was difficult to trust her friends. However, Anna described how she — presumably because of therapy — talked supportively to herself in difficult situations to delay self-harm: "Even if I'm frustrated and sad, and I want to send a message to tell them what I feel and to end the friendship, I say to myself: You will regret this tomorrow, because she (her friend) has been supportive many times. Don't send the message. Think twice. Wait until

tomorrow. And the day after I don't feel the same. I delay, and my brain begins to function again (laughing) ... I did not have this possibility earlier. I only had feelings, and now it's in a way: feelings-stop-think-action. It's wonderful!" Anna expressed an optimistic attitude towards the future: "Compared to EARLIER – I'm more optimistic. I thought I didn't have a future because I was me. But now I think I have opportunities; I just have to find them. I'm not the problem, but my attitude. I'm not STUPID. I can contribute intellectually or in society IF I find something that interests me. I do HAVE a future, but I don't know which one".

"To begin to talk and to get help to understand". Elsa stressed the importance of beginning to talk to someone about her private feelings, thoughts and problems: "In general, to talk to someone ... it has been useful ... talk about it and – discuss it and try to find out ... I have not been talking to anyone about it before". She underlined the support in reaching an understanding of problematic situations: "I liked to get an explanation for why I acted in this way, my reasons in a way, and that it was not just ME. It helped ... made it easier and more concrete ... there was so much stress in my family ... everyone was influenced by it, especially my mom. She had so many responsibilities, and you did not want to be another burden". However, Elsa found it difficult to say whether treatment had helped her: "It's not a big difference, but in general – to speak with someone – maybe – it has been useful ... clearly it made it easier to talk to others". She experienced that her therapist focused explicitly on reducing self-harm by motivating her to test specific coping strategies – for example to breathe in a difficult situation or to use rubber band: "Yes – it's not taboo using a rubber band around my wrist. It's helping". Still, she did not find the exercises so helpful and wished for more dialogue with her therapist. After one year, treatment was completed. She did not remember being motivated to test different coping strategies. Actually, she wished she had received more specific suggestions for activities to do as a distraction: "I found a solution by myself, so it was okay. Still, it was... maybe ... it might have been better if ... we had talked about how I could manage it in a better way if I felt bad". Elsa had a concrete plan for the future: "I had a dream of becoming a doctor since I was a little girl... I love anatomy! ... And if I want something – I want it REALLY bad. It's the way I am".

"To feel welcome and to be respected". Sophie emphasized how she enjoyed being at the clinic – feeling welcome and respected: "It's cozy and nice, actually, to be here". The therapist made her feel safe from the start: "It was strange. I'm not a person who speaks openly to other people ... but this was another kind of relationship than I have with my friends and family. It was not SO bad. It was easier". Still, she felt the therapist wanted her to quit self-harming, and it was difficult for her because of her own ambivalence. She did not

think she could manage to reach this goal: "To work with... it demands other methods to distract you. I'm not that kind of person: OK, now I go for a walk instead. I'm more like ... When I'm sad, I'm determined to do ONE thing, or else I lose it. I'm in a bubble!"

After a year in treatment, Sophie thought treatment had helped, but it was hard for her to say how: "Lately, I have just felt a little better". She had started in group therapy, and appreciated meeting other people with the same problems: "I meet other people who can feel the same as me... We talk about things that happen now, or if something difficult has happened the last days. If I tell one of my friends how I feel, they don't understand, because they have not had these kinds of difficulties". Sophie noticed that she spent more time at home, and she did not drink as much as before. However, it was still hard for her to think about the future: "It's the thoughts about the future ... what I can do or not. I don't know — I'm so tired. I cannot imagine handling a job or going to school or anything".

Reflective Functioning

On average, the participants scored 2.7 on the RF scale (range: 1-5). There was a diversity in the participants capacity of reflective functioning, which will be illustrated here in three selected cases. While Anna showed nearly an ordinary capacity to represent her own and other's behavior in mental states, Elsa's capacity was low and showed an avoidant tendency, and Sophie's capacity was also weak, and she seemed easily overwhelmed.

More specifically, Anna's RF score was 4: *Ordinary RF*. She has some ability to understand her own and others' behavior in terms of mental states. Interviewer: "To which parent did you feel the closest as a child?" Anna: "It was actually my dad ... Because I've always been daddy's girl and I felt more attached to him. Yet ... I think it felt kind of hopeless to be emotionally attached to him, when I needed something – Because mummy was the one giving me that ... It was just daddy – I was daddy's girl". Interviewer: "Why do you think you felt closest to him?" Anna: "I don't know really. I haven't thought about it. I just remember that I used to shout for daddy and not mummy when I was crying ... Maybe I just felt a bit safer together with daddy" (RF 3). Throughout the interview, she shows some awareness of the nature of mental states and also recognizes developmental aspects of mental states. At the same time, her reflections vary, and are often general, as shown in the example above. In sum, her model of mind is not coherent enough to warrant a total scoring of RF 5.

Elsa's RF score was 1: *Lacking in RF* (1A disavowal). RF is totally absent in this interview. Interviewer: "So how do you think your childhood experiences have affected your personality today?" Elsa: "I don't know... I don't know how things would have been WITHOUT my childhood. It's hard to imagine" (RF 1). Elsa does not mention mental states

of herself or others despite the opportunity to do so. However, her understanding of others' minds is not accompanied by hostility.

Sophie's RF score was 2: *Questionable or low RF*. She has some mental state language without concrete examples. Interviewer: "You have told me about a lot of chaos and your family moving from place to place. How do you think your experiences have affected your personality?" Sophie: "It's a lot of stress. I'm not able to settle down anywhere. Like the place I live now – I don't know – I feel like something's going to happen. I feel like I will – kind of – move away soon anyway" (RF 2). Sophie's understanding of mental states is often vague and general, and she has several examples of absent RF. Moreover, she describes traumatic events in a neutral and distanced language. The diversity in reflective functioning among these three girls will be discussed as a possible contribution to understand the different pathways into and out of self-harm.

Discussion

The present multiple case-study highlights how girls, from their own perspective, began self-harming to handle emotional and relational problems. The results confirm existing knowledge of self-harm by underlining self-harm as a transdiagnostic symptom (Hawton et al., 2012) closely related to difficulty with affect-regulation (Klonsky, 2007) and experienced problems in the interpersonal context (Sinclair & Green, 2005; Wadman et al., 2018). However, the results nuance earlier findings by highlighting girls' struggle to express difficult feelings, and ambivalence towards help and treatment, even if they valued exploring self-harm in therapy. Moreover, most of them were influenced by peers and media to experiment with self-harm and emphasized discovering their *own* way of quitting self-harm. In the following, we propose that self-harm in adolescence should be related to developmental psychological challenges: encountering emotional turmoil, changing relationships with parents and peers, identity-formation and autonomy. Further, we discuss whether differences in *how* they represent and integrate pathways of self-harm indicate diversities in capacity for mentalization and may indicate different resources to cope with developmental challenges and to end self-harm.

Self-harm and Developmental Psychological Challenges during Adolescence

The beginning of self-harm as a way to handle emotional and interpersonal problems. While many of the participants said their parents perceived self-harm as the main problem for which they needed treatment, the girls themselves did not experience self-harm as

a problem they wanted to end or as a reason for getting help. Rather, they viewed self-harm as a way of solving emotional and relational problems (McAndrew & Wrane, 2014), confirming self-harm as an important way to regulate difficult affect (Klonsky, 2007; Abrahms & Gordon, 2003). The results indicate that it is important to explore what self-harm is related to in the adolescent's own view. In the earlier mentioned meta-synthesis, self-harm is highlighted as a way to get relief from and control of emotional difficulties, but also as an attempt to *represent* and *share* experiences that are not possible to communicate in another way [masked for review] (2018). What emerges most clearly in our results, are problems in expressing difficult feelings and thoughts in the relationship with their parents, as well as in establishing close friendships with other girls, and having suffered from repeated bullying.

The lack of congruency between the girls' and their parents' perspectives of the problem is also interesting in relation to developmental issues. In adolescence, parents are still important for emotional and practical support, but adolescents also need to find their own way of solving problems and to establish a sense of agency and autonomy. Interestingly, many girls knew their mother was worried (and for some, their father too) and cared for them but felt unable to turn to them for help. Often, they were afraid to make their mother worried or sad and felt their mother was occupied with personal difficulties, and felt their father was distant or out of reach. From this perspective, self-harm may be an attempt to be "self-sufficient". This "solution", reflecting a lack of ability to share the challenges of becoming a woman in the relationship with their parents, may unfortunately inhibit and disturb further development of autonomy and relational reciprocity.

As a continuation of Erikson's developmental theory, Blatt (2008) proposes that throughout life all people confront two fundamental psychological challenges: a) to establish and maintain reciprocal and personally satisfying interpersonal relationships and b) to establish and maintain a coherent, realistic, differentiated, integrated, essentially positive sense of self (p. 5). Blatt accentuated how biological predispositions and markedly disruptive experiences can disturb this normal dialectic developmental process, resulting in an overly heavy emphasis on one of these two developmental dimensions at the expense of the other. The girls in our study had few strategies for being with others or maintaining a positive coherent sense of self during bad times. Self-harm may be a way to handle problems by themselves, or a tendency for introjection in an attempt to be independent. Still, they are in need of comfort and support. Thus, they struggle in their developmental quest for autonomy.

The role of friends, peers, social media and culture. The girls highlighted difficulties with friends, lasting suffering from bullying, and social isolation. Further, they

underlined being influenced by friends to begin harming themselves. We know from epidemiological studies that exposure to self-harm among family and friends is associated with self-harm (Liu et al., 2017). Interestingly, even the girls who were bullied searched for a way out of problems by looking at their peers. These results point to the importance of renegotiating relationships to peers during adolescence, representing a source not only for inspiration in the process of exploring social roles and developing a confidence in their emerging identity as women, but also for non-adaptive problem-solving.

Moreover, the girls were influenced to begin self-harming by Internet blogs and websites. Some studies indicate that repeated online exposure to self-harm may be associated with self-harm among some adolescents (Liu et al., 2017). In adolescence – when peers become the main source of information – social media may become an extension of the sphere of peers. Adolescents search online for information to handle problems, to share and communicate distress, and to find a community (Swannell et al., 2010). However, going online is not, in itself, associated with increased self-harm. In a meta-analysis, Marchant and colleagues (2017) found both negative influences of Internet use on self-harm, such as normalization, triggering, competition, and contagion, as well as positive influences, such as crisis support, reduction of isolation, therapy, and outreach. For lonely girls, the Internet may become an arena for exploration of identity, and for coping and reducing isolation. However, the Internet can provide access to information, which can lower the threshold to self-harm.

The importance of finding their own way out of self-harm. The participants were ambivalent toward ending their self-harm and obtaining help and treatment. They often viewed self-harm as an effective way of coping with problems, but at the same time, did not want to have scars that others could see and often felt obliged to quit because their caregivers were worried. Thus, we might characterize the adolescents' reasons for ending self-harm as externally motivated. Interestingly, the girls did not relate their way out of self-harm to the helpful elements in treatment. Rather, they emphasized how they found their own way out of self-harm – Anna delayed self-harm, Elsa did exhausting exercises, and Sophie got a cat. Elsa, in her first interview, described how her therapist explicitly focused on exercises to handle self-harm, but in the second interview she said she wished there had been a direct focus on coping activities. Perhaps the experience of discovering their own way out of self-harm can be understood as the girls' attempt to separate and to develop a sense of autonomy. They are, so to speak, "inventing the wheel by themselves". This may indicate that self-harm is closely related to the development of self-agency, autonomy, and identity.

Despite their ambivalence, most of the participants found treatment meaningful and helpful. They appreciated the encounters with the therapist – getting help to begin talking openly and having their experiences sorted and validated. Some wanted to share and explore their problems, others wanted advice for handling difficult situations, and many underlined the importance of making sense of their problems. These helpful elements support knowledge from prior therapy research (Binder et al., 2011). The fact that the participants related ending self-harm to their own discovery of distracting activities does not mean that ending self-harm is not related to therapy at all. This is simply the adolescent's description. One possible interpretation of this finding is that the girls found their own way as a result of being supported by a sufficiently positive therapeutic relationship. The therapist may have an important role by giving developmental support in exploring difficult feelings, thoughts and situations, while not being too close or too distant, relational qualities that may have been lacking or insufficient in the girls' primary relationships.

Differences in the Capacity for Mentalization

Despite the similarities among the participants' symptoms of self-harm, there are differences in how they represent and integrate their problems, behavior, and affective experiences (Fonagy et al., 1998, 2002). Anna, Elsa and Sophie were rated as RF 4, 1 and 2, respectively. How do the differences in the capacity for mentalization relate to different ways in and out of self-harm? Even though Anna, Elsa and Sophie related the beginning of their self-harm to emotional problems, Anna spoke about her problems in a clearly articulated way and experienced her worries as part of herself and could talk about her negative self-image ("I'm worthless"). Anna tended to internalize problems (self-oriented) and had a generally reflective mode. She seemed informed by her actions, thoughts and feelings. Elsa and Sophie had more difficulties in verbalizing the nuances of their problems. Elsa generally struggled to find words to describe her feelings ("I don't know what I feel"). She had problems representing behavior and mental states (non-elaborating), had a non-reflective mode characterized by disavowal, and was surprised by her own actions. Elsa and Sophie both described their problems in terms of a mental illness ("I got an eating disorder", "I was depressed... I got psychosis"). Sophie tended to externalize problems and described trauma in a neutral voice.

How they related to a basic affect like anger also differed between the three of them. Anna was angry at *herself*, Elsa did *not feel* anything, and Sophie was angry at *everyone*. Furthermore, the three girls related self-harm to interpersonal problems but represented their

relational problems differently. In difficult situations, Anna perceived her negative thoughts and feelings about herself as the truth and believed everyone else felt the same way about her. Elsa struggled to represent self-experiences and easily adopted others' descriptions of her. Sophie experienced herself as unpredictable and had problems imagining others' perceptions.

Thus, the girls' different levels of RF and their ability to represent and integrate their mental problems seemed related to different ways into self-harm. Could RF also be related to different ways out of self-harm? Although Anna, Elsa, and Sophie tried to find new ways to distract themselves in order to cope with difficult thoughts, feelings, and the urge to selfharm, their way of coping seemed different. Anna developed a self-supportive monologue, acting as a delay of self-harm, indirectly influenced by the ongoing help from the therapist with sorting out difficult situations. Elsa felt it was best not to think about problems and to just stay busy and occupied but emphasized the benefit of beginning to talk about problems with the therapist. Sophie discovered the possibility of asking for help, as well as obtaining medication, care, support, and respect. We can also see differences among the girls' plans and fantasies about the future. After one year in treatment, Anna could look forward towards a future. It seemed like she had started to fight for herself instead of against herself. Elsa had a concrete plan and was quite sure she would fulfill her project. Maybe she had found a way to express energy. In contrast, Sophie was not sure of anything. However, she had started to accept her vulnerability and dependency. Her anger against everyone may have had a protective function. It seems plausible that what the three girls experienced as helpful in therapy was related to their capacities for mentalization, i.e. sorting difficult situations (Anna), sharing experiences and trying coping-strategies (Elsa) and being respected and receiving practical support (Sophie). These three cases may illustrate how different ways of representing, integrating and coping with problems to end self-harm indicate a diversity in capacity for mentalization, and may express important nuances in affect-integration (Bouchard & Lecours, 2008; Solbakken, Hansen, & Monsen, 2011) and organization of self (Fonagy et al, 2002; Clarkin, Yeomans, & Kernberg, 2007). In this way, self-harming girls do not constitute a uniform group.

Clinical implications

From our perspective, self-harm represents an opportunity to express unacknowledged feelings or self-states that are impossible to express verbally, and therefore have to be expressed concretely through actions. Psychotherapy may create a possibility for translating body language into more direct ways of expressing one's needs and feelings. Findings from

this study may enhance parents' and clinicians' understanding of adolescents' different ways in and out of self-harm, thus helping them to validate the youths' experience of what self-harm is related to in their life. Treatment interventions should focus on emotional *and* interpersonal problems. Effective treatment requires that clinicians pay attention to adolescents' way of speaking about self-harm – how they represent and integrate their affective experiences. Validating the youths' own perspective of their difficulties, and especially in expressing and sharing problems with words, could make them feel understood, may build alliance and prevent drop out. The therapist should validate the struggle to find motivation for ending self-harm when the behavior is experienced as an existential rescue. Therapists should offer the self-harmer an opportunity to explore and discover their own way of coping. In sum, the results underline the importance of meeting the young girls' needs for autonomy *and* sufficient support – by not being too close or too distant.

Future Research

Future research is needed to clarify the relationships between helpful elements in treatment of self-harm and capacity for mentalization. Girls were over-represented among our participants, and further explorations of young girls' and boys' experiences of self-harm and self-experience might add nuances to current knowledge. It could be interesting to study subgroups among adolescents who self-harm by combining personal data with diagnostic categories. Until now, studies on sub-groups have primarily focused on epidemiological methods, mostly adults, and different self-harm methods and diagnoses.

Limitations

This qualitative study enhances knowledge of young girls' experience of self-harm in a clinical context, which may limit the generalization of findings to girls in a community sample, and boys and adults in general. Although the participants represented a range of socio-economic status and ethnic backgrounds in Norway, the findings may not be representative for young persons in other countries and with different cultural backgrounds. However, the concepts and findings from this study may be theoretically generalized and relevant to other samples by further nuancing the pathways of self-harm.

The opportunity to reflect upon their life situation and problems may have had an effect on their treatment process in increasing self-reflections. It should be noted, though, that most of the interviews are from the beginning of treatment. When being asked in the end of the project, the participants appreciated the opportunity to talk to a third person. The principle

investigator of this study and the interviewer were the same person, which may have influenced the analysis of the data. We included member checking, reflexive journaling, and feedback to the participants to minimize these potential limitations. Our findings can supply knowledge on self-harm from with quantitative methods and thus enhance knowledge on the subjective perspectives of living with self-harm.

Conclusion

This multiple case study supports earlier findings on self-harm and shows how adolescent girls use self-harm as a strategy for handling emotional and relational difficulties. The results from this study highlight how adolescent girls express ambivalence about ending their self-harm but still appreciate exploring their self-harm together with a therapist. Most importantly, the young girls need to discover their own way to quit self-harming thus illustrating the importance, developmentally, of establishing autonomy and a separate identity. Further, self-harming girls do not constitute a uniform group. Important variations in capacity for mentalization, ability to represent and integrate problems, difficult feelings and self-experience may lead to different pathways into and out of self-harm and inform useful treatment adjustments — exploration, problem-solving, or practical support. Further studies on sub-groups of self-harm are needed to understand these differences more thoroughly.

References

- Abrams, L. S., & Gordon, A. L. (2003). Self-harm narratives of urban and suburban young women. *Affilia Journal of Women and Social Work, 18*(4), 429-444. doi: 10.1177/0886109903257668
- Binder, P. E., Moltu, C., Hummelsund, K., Sagen, S. H., & Holgersen, H. (2011). Meeting an adult ally on the way out into the world: Adolescent patients' experiences of useful psychotherapeutic ways of working at an age when independence really matters.

 Psychotherapy Research, 21, 554–566. doi: 10.1080/10503307.2011.587471
- Blatt, S. J. (2008). *Polarities of experience. Relatedness and self-definition in personality development, psychopathology, and the therapeutic process.* Washington DC: American Psychological Association.
- Bouchard, M. A., & Lecours, S. (2008). Contemporary approaches to mentalization in the light of Freud's project. In F. Busch (Ed.), *Mentalization: Theoretical considerations*, research findings, and clinical implications. New York: Taylor and Francis.
- Brown, T. B., & Kimball, T. (2012). Cutting to live: A phenomenology of self-harm. *Journal of Marital and Family Therapy*, 39, 195–208. doi: 10.1111/j.1752-0606.2011.00270.x
- Clarkin, J. F., Yeomans, J. F., & Kernberg, O. F. (2007). <u>Psychotherapy for borderline</u> <u>personality: Focusing on object relations</u>. Washington DC: American Psychiatric Publications.
- Crittenden, P.M. (2005). *The Transition to Adulthood Attachment Interview (TAAI)*. Unpublished manuscript, Miami, FL, USA. https://www.patcrittenden.com/include/attachment_papers.htm
- Erikson, E. H. (1980). Identity and life cycle. New York: WW Norton.
- Evans, R., & Hurrell, C. (2016). The role of schools in children and young people's self-harm and suicide: Systematic review and meta-ethnography of qualitative research. *BMC Public Health*, *16*, 401-416. doi: 10.1186/s12889-016-3065-2
- Flick, U. (2002). *An Introduction to Qualitative Research*. California: SAGE Publications Ltd.
- Fonagy, P., Steele, M., Steele, H., & Target, M. (1998). *Reflective-Functioning manual.*Version 4.1. For application to Adult attachment interviews. London: University College

- London.
- https://www.mentalizacion.com.ar/images/notas/Reflective%20Functioning%20Manual.pdf
- Fonagy, P., Gergerly, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization and the development of the self.* New York: Other Press.
- George, C., Kaplan, N., & Main, M. (1984). *The Adult Attachment Interview*. Unpublished manuscript. University of California, Berkeley.

 http://www.psychology.sunysb.edu/attachment/measures/content/aai_interview.pdf
 [masked for review]
- Gullestad, S. E. (1993). A contribution to the psychoanalytic concept of autonomy. *The Scandinavian Psychoanalytic Review*, *16*, 22-34. doi: 10.1080/01062301.1993.10592286
- Hawton, K., Saunders, K. E. A., & O'Connor, R. C. (2012). Self-harm and suicide in adolescents. *Lancet*, *379*, 2373–2382. doi: 1.1016/S0140-6736(12)60322-5
- Hawton, K., Witt, K.G., Taylor Salisbury, T.L., Arensman, E., Gunnell, D., Townsend, E., van Heeringen, K., & Hazell, P. (2015). Interventions for self-harm in children and adolescents. *Cochrane Database of Systematic Reviews*. 2015(12), CD012013. doi: 10.1002/14651858.CD012013.
- Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, *52*, 196–205. doi: 10.1037/0022-0167.52.2.196
- Johnsen, D. R., Ferguson, K., & Copley, J. (2017). Residential staff responses to adolescents' self-harm: The helpful and unhelpful. *Clinical Child Psychology and Psychiatry*, *22*, 443–454. doi: 10.1177/1359104516689378
- Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical Psychology Review*, *27*, 226–239. doi: 10.1016/j.cpr.2006.08.002
- Larkin, C., DiBlasi, Z., & Arensman, E. (2014). Risk factors for repetition of self-harm: A systematic review of prospective hospital-based studies. *PLoS One*, *9*, e84282. doi: 10.1371/annotation/b3dfd1b3-ada1-4f7e-89d4-a25ddf5d204a
- Levitt, H., Pomerville, A., & Surace, F. I. (2016). A qualitative meta-analysis examining clients' experiences of psychotherapy: A new agenda. *Psychological Bulletin*, *142*, 801–830. doi: 10.1037/bul0000057

- Linehan, M. M. & Comtois, K. (1996). *Lifetime parasuicide history*. University of Washington, Seattle, WA, Unpublished work. http://depts.washington.edu/uwbrtc/wp-content/uploads/L-SASI-Count.pdf
- Liu, H.-C., Liu, S.-I., Tjung, J.-J., Sun, F.-J., Huang, H.-C., & Fang, C.-K. (2017). Self-harm and its association with internet addiction and internet exposure to suicidal thought in adolescents. *Journal of the Formosan Medical Association*, *116*, 153–160. doi: 10.1016/j.jfma.2016.03.010
- Marchant, A., Hawton, K., Stewart, A., Montgomery, P., Singaravelu, V., Lloyd, K., ...John, A. (2017). A systematic review of the relationship between internet use, self-harm and suicidal behaviour in young people: The good, the bad and the unknown. *PLoS One, 12*, e0181722. doi: 10.1371/journal.pone.0181722
- McAndrew, S., & Warne, T. (2014). Hearing the voices of young people who self-harm: Implications for service providers. *International Journal of Mental Health Nursing*, 23(6), 570-579. doi: 10.1111/inm.12093
- McLeod, J. (2010). Case study research in counselling and psychotherapy. London: Sage.
- Morgan, C., Webb, R. T., Carr, W. J., Kontopantelis, E., Green, J., Chew-Graham, C. A., ... Ashcroft, D. M. (2017). Incidence, clinical management, and mortality risk following self-harm among children and adolescents: Cohort study. *BMJ*, *359*, j4351. doi: 10.1136/bmj.j4351.
- Möhl, B., & Skandsen, A. (2012). The prevalence and distribution of self-harm among Danish high school students. *Personality and Mental Health*, 6, 147–155. doi: 10.1002/pmh.191
- Pfohl, B., Blum, N., & Zimmerman, M. (1997). *Structured interview for DSM-IV personality* (SIDP-IV). Washington DC: American Psychiatric Press.
- Rossouw, T. I., & Fonagy, P. (2012). Mentalization-based treatment for self-harm in adolescents: A randomized controlled trial. *Journal of the American Academy of Child Adolescent Psychiatry*, *51*, 1304–1313. doi: 10.1016/j.jaac.2012.09.018
- Saunders, K. E., & Smith, K. A. (2016). Interventions to prevent self-harm: what does the evidence say? *Evidence-Based Mental Health*, 19, 69-72. doi: 10.1136/eb-2016-102420
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., ... Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (MINI): The

- development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, *59*, 22–33.
- Siegel, D. J. (2015). *Brainstorm: The power and purpose of the teenage brain*. New York: Jeremy P. Tarcher/ Penguin.
- Sinclair, J. & Green, J. (2015). Understanding resolution of deliberate self-harm: qualitative interview study of patients' experiences. *BMJ*, 330(7500), 1112. doi: 10.1136/bmj.38441.503333.8F
- Smith, J. A. (2015). *Qualitative psychology. A practical guide to research methods*. London: Sage Publications Ltd.
- Solbakken, O. A., Hansen, R., & Monsen, J. T. (2011). Affect integration and reflective function: clarification of central conceptual issues. *Psychotherapy Research*, 21(4), 482-496. doi: 10.1080/10503307.2011.583696.
- Soyemoto, K. L. (1998). The functions of self-mutilation. *Clinical Psychology Review*, *18*, 531–554. doi: 10.1016/S0272-7358(97)00105-0 [masked for review]
- Swannell, S. V., Martin, G. E., Page, A., Hasking, P., & St. John, N. J. (2014). Prevalence of nonsuicidal self-injury in noncinical samples: Systematic review, meta-analysis and meta-regression. *Suicide and Life-Threatening Behavior*, 44, 273–303. doi: 10.1111/sltb.12070
- Taylor, T. L., Hawton, K., Fortuna, S., & Kapur, N. (2009). Attitudes towards clinical services among people who self-harm: Systematic review. *British Journal of Psychiatry*, 194, 104–110. doi: 10.1192/bjp.bp.107.046425
- Wadman, R., Vostanis, P., Sayal., K., Majumder, P., Harroe, C., Clarke, D., ... Townsend, E. (2018). An interpretative phenomenological analysis of young people's self-harm in the context of interpersonal stressors and supports: Parents, peers, and clinical services. *Social Science and Medicine*, 212, 120–128. doi: 10.1016/j.socscimed.2018.07.021
- Whitlock, J. L., & Selekman, M. (2014). Non-suicidal self-injury (NSSI) across the lifespan. In M. Nock (Ed.), *Oxford handbook of suicide and self-Injury*. Oxford Library of Psychology: Oxford University.

Appendix A *Description of participants (n=19)*

Sample characteristics	n	Mean	Range
Age (years)	19	15.9	13-18
Age self-harm started	19	13.1	9-15
(years)			
Reflective function	17	2.7	1-5
Sessions at the clinic		25.4	0.00
Youth alone	19	35.4	9-89
Family together		4.0 3.7	0-14 0-16
One or both parents Treatment period (months)	19	20.2	6-44
*	I I	ı	
Frequency of self-harm when entering therapy	Regular and ha		m and exceptional month: 3
when entering therapy	1-3 times/ week: 8		es/ year: 1
	2-3 times/ week. 8		es total: 1
Methods of self-harm	Cutting: 19		
withous of sen-natin	Cutting: 19 Cutting only: 3		e attempts: 9
	Scratching: 6		o times: 5
	Alcohol: 5		r times: 1
	Hitting: 4		
	Burning: 4		
	Pain killers: 4		
	Piercing the skin: 3		
	Sex: 3		
	Drugs: 2		
Reasons for clinical referral	Self-harm include	d: 12 Withou	ıt self-harm: 7
Depression, unknown suicide thoughts or plan	2		3
Depression, known suicide thoughts and plan	7		1
Eating disorder	5		2
Self-harm	4		0
Anxiety	3		1
School dropout	1		1
ICD-10 diagnosis	Many cases	Few ca	ses
	Mood disorder: 15		nisuse: 2
	Anxiety disorder: 1		ality disorder: 3
	Eating disorders: 6		: 1
		Schizo	ohrenia: 1
Personality disorder (PD)	Several cases	Few ca	ses
Four had no PD	Avoidant: 7	Obsess	ive Compulsive: 3
Three had 1 PD	Borderline: 6	Negativ	vistic: 2
Seven had 2 PDs	Depressive: 5	Antisod	
Three had 3 PDs		Depend	
Two were not assessed		Parano	id: 1

Appendix B

Different ways into and out of self-harm

Different ways into and o	
FIRST TOPIC: BEGI	NNING SELF-HARM
First meta-theme:	
Beginning self-harm as	s a way to handle difficult feelings and relational problems
Themes	Sub-themes
Difficult feelings and	A feeling of being depressed or sad (n=8)
negative thoughts	A struggle with anxiety and panic $(n=7)$
about self (n=15)	Excessive negative thoughts about themselves (n=7)
	Shifting emotions $(n=4)$
	Suicidal thoughts/ideation (n=3)
	A suicide attempt $(n=1)$
Other mental or	Eating disorders (n=7)
behavioural problems	Sleeping problems $(n=1)$
(n=9)	Psychosis (n=3)
Problems in their	Parents' divorce was very troublesome (n=8)
family (n= 15)	A family member with a mental illness $(n=6)$
	A family member with recurrent suicidal ideation $(n=4)$
	Parent(s) with alcohol and drug misuse (n=5)
	Traumatic event $(n=5)$
	Violence from a parent $(n=2)$
Problems with peers	Feeling lonely and difficulties building friendships $(n=6)$
(n=11)	Social excluding (n=7)
	Risk behaviours and carelessness about their own safety $(n=3)$
Diffuse problem or a	Difficult to say $(n=4)$
problem difficult to	Bored(n=1)
describe (n=6)	Feeling indifferent $(n=1)$
	Fatigue (n=3)
	Somatic pain (n=1)
	ecoming inspired by peers to experiment with self-harm
Themes	Sub-themes
Heard about self-harm	Heard friends talking about self-harm $(n=3)$
from friends (n=6)	Friend or boyfriend who harmed her/himself $(n=3)$
Media and/or internet	Newspapers (n=1)
(n=5)	Internet pages, blogs and social media (n= 5)
	People they met on the Internet who self-harmed $(n=1)$
Coincidentally (n=11)	Something was broken, and they got the idea $(n=3)$
	Impulsively harming themselves while making food $(n=6)$
	Cannot remember (n=3)
	ITTING SELF-HARM
	ivalence towards help, treatment and ending self-harm
Themes	Sub-themes
Someone discovered	Was motivated for treatment, but could not say it $(n=3)$
self-harm and	Thought treatment could destroy their plans $(n=4)$
suggested treatment	
(n=6)	
Referred to the clinic	Went by themselves to the doctor $(n=3)$
but not because of	Told someone about the problems hoping to get help $(n=4)$
self-harm (n=7)	Followed advice to get help $(n=1)$

Ambivalent towards	Did not think treatment could help but open to try it $(n=4)$
treatment (n=10)	Wanted help, but not when they are troubled (n=6)
(Did not feel they deserve the help they got $(n=2)$
Earlier negative	Have a negative experience of being in treatment $(n=5)$
experience (n=8)	People saw their problems and did not react (n=4)
Decided to quit self-	Do not want to have scares (n=7)
harm (n=9)	Do not want to be one of those who harm themselves $(n=1)$
	Afraid of consequences of serious self-harm $(n=1)$
Ambivalent to quitting	Hard to handle the pressure $(n=8)$
self-harm, but	Still experiencing problems. Do not know what to do $(n=3)$
managed and	Cannot manage to ask for help $(n=1)$
experienced new	Eat less $(n=2)$
problems (n=11)	Exercise or run more (n=1)
	Talk to herself for hours $(n=1)$
	Get themselves into risky situations (n=3)
	Suicidal ideation (n=1)
Would not, but felt	Maybe they will feel better if they end self-harming $(n=2)$
obliged to end self-	Do not want to hurt or disappoint someone $(n=3)$
harm (n=8)	Afraid to lose positive aspects associated with self-harm $(n=4)$
	Do not want to quit $(n=2)$
Second meta-theme: D	iscovering one's own way to quitting self-harm
Themes	Sub-themes
Doing something as a	Doing something in their room (knit, read, write/draw, mobile/
distraction from the	PC, game, film, smoke, change clothes/makeup, eat) $(n=9)$
urge to self-harm	Music (listen to a melody/text, play or write a song) $(n=5)$
(n=16)	Try to calm down or sleep $(n=4)$
	Do something for a while to delay self-harm $(n=3)$
	Do something away from home and focus on the activity $(n=3)$
	Be with friends $(n=5)$
	$Drink\ alcohol\ (n=1)$
	Do not have any instrument to harm themselves with $(n=1)$
	Indirectly harm themselves $(n=2)$
Attending to	Think about the clinic and their therapist $(n=3)$
something or thinking	Keep a positive attitude towards life $(n=2)$
positively (n=5)	Think about their wish for a change in life $(n=1)$
Attending to feelings/	Tolerating feelings instead of harming themselves (n=1)
thoughts (n=2)	Talking honestly with someone $(n=1)$
Remember negative	Afraid of increased self-harm lately (n=2)
consequences (n=5)	Scars $(n=3)$
<u> </u>	ploring self-harm together with the therapist
Themes	Sub-themes
A nice meeting with	Felt safe from the start of treatment $(n=1)$
the therapist/clinic	Enjoyed being at the clinic. Feeling welcome $(n=2)$
(n=7)	Treated with respect, and felt they wanted to help $(n=3)$
	Felt comfortable in opposition to earlier experience $(n=3)$
Talking openly about	Speak openly (n=5)
problems for the first	Begin talking to someone about feelings and thoughts (n=6)
time felt good (n=10)	Get help to talk about difficult situations (n=7)
5 (1)	Talk to a person about difficult situations and relations $(n=2)$
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

Being understood	A person who listen and tries to understand $(n=2)$
(n=7)	Mapping feelings, thoughts, and actions in situations (n=3)
	Help to understand and attend to a feeling in a situation $(n=2)$
	Get an answer to what their problems are $(n=3)$
	Get other persons' reflections (n=3)
Being supervised	Supervision in difficult situations (n=3)
(n=6)	Help to breathe in difficult situations $(n=1)$
	Exploring specific alternative coping strategies $(n=3)$
	Knowing the therapist had experience $(n=1)$
Reducing their	Feeling better (n=1)
problems and	Attending to feelings in stressful situations $(n=3)$
affecting their	Irritated or sad when earlier felt stressful (n=3)
relations in positive	Increasing a tolerance for the urge to self-harm (delay) $(n=1)$
ways (n=12)	Their parents are paying more attention to them $(n=1)$
	Talking openly with their parents $(n=3)$
	It took some time, but now treatment is feeling useful $(n=2)$
	Treatment is taking time. Important not having time-limit $(n=1)$
	Feeling better, but do not know if it is related to therapy $(n=4)$
Not feeling any better	Do not feel difference from the beginning of treatment $(n=1)$
(n=3)	They know it takes some time to become better (n=1)
	The recommended exercises were not helpful (n=1)
	Difficult to decide on a focus in treatment (n=1)
Not wanting to stop	Not interested in ending self-harm (n=2)
self-harming (n=3)	Focusing on homework and exercises is boring $(n=1)$

Appendix C Three different ways into and out of self-harm

FIRST TOPIC: BEGINNING SEI E-HARM	Anna	Elsa	Sophie
First meta-theme: Beginning self-harm as a way to handle difficult feelings and relational problems	I'm disgusting and worthless	I just did it. I don't know why	It was my exit
Second meta-theme: Becoming influenced by peers and media to experiment with self-harm	Someone else did it	I read about it on the internet	If it helps others, it may help me
SECOND TOPIC: QUITTING SELF-HARM	Anna	Elsa	Sophie
First meta-theme: Ambivalence towards help, treatment and ending self-harm	I want to be independent	I don't want to be a burden	When I have bad times, I don't want to get better
Second meta-theme: Discovering one's own way to quitting self-harm	I delay my self-harming	Exhausting exercises	Be with someone
Third meta-theme: Exploring self-harm together with the therapist	To get help to remember and find triggers	To begin to talk and to get help To feel welcome and to be to understand respected	To feel welcome and to be respected