The Qualitative Report

Volume 23 | Number 1 Article 17

1-26-2018

Initiation, Desistence, and Recovery: A Qualitative Examination of Self-Injury from a Life-Course Perspective

Thomas W. Wojciechowski
University of Florida, wojci1tw@ufl.edu

Initiation, Desistence, and Recovery: A Qualitative Examination of Self-Injury from a Life-Course Perspective

Abstract

Self-injury is typically defined as the intentional harm caused to one's own body. This phenomenon has historically been studied mainly from a psychological perspective and has focused less on social forces related to engagement in this behavior. While research on self-injury has examined etiology extensively, there has yet to be an examination of how changes in exposure to risk and protective factors may lead to changes in self-injury habits. This research uses qualitative interview data from 16 former and current self-injurers to examine self-injury from a life-course criminological perspective (Cullen, Agnew, & Wilcox, 2014). These data allowed for identification of concepts associated with social learning theory, general strain theory, social control theory, and social support theory as important risk and protective factors associated with self-injury. Further, this identification allowed for an examination of how the application and withdrawal of these risk and protective factors led to changes in self-injury habits. Future research should seek to generalize these results and further clarify the impact of risk and protective factors across the life-course.

Keywords

Self-Injury, Life-Course, Criminology, Deviance, Qualitative Research

The Qualitative Report 2018 Volume 23, Number 1, Article 17, 222-244

Initiation, Desistence, and Recovery: A Qualitative Examination of Self-Injury from a Life-Course Perspective

Thomas W. Wojciechowski
University of Florida, Gainsville, Florida, USA

Self-injury is typically defined as the intentional harm caused to one's own body. This phenomenon has historically been studied mainly from a psychological perspective and has focused less on social forces related to engagement in this behavior. While research on self-injury has examined etiology extensively, there has yet to be an examination of how changes in exposure to risk and protective factors may lead to changes in self-injury habits. This research uses qualitative interview data from 16 former and current self-injurers to examine self-injury from a life-course criminological perspective (Cullen, Agnew, & Wilcox, 2014). These data allowed for identification of concepts associated with social learning theory, general strain theory, social control theory, and social support theory as important risk and protective factors associated with self-injury. Further, this identification allowed for an examination of how the application and withdrawal of these risk and protective factors led to changes in self-injury habits. Future research should seek to generalize these results and further clarify the impact of risk and protective factors across the life-course. Keywords: Self-Injury, Life-Course, Criminology, Deviance, Qualitative Research

Introduction

Self-injurious behavior (SIB) is an action which is typically understood as immediate self-inflicted damage which one causes to his or her own body. This definition would then typically exclude behavior, like drug abuse, which is harmful to one's own body but often does not have immediate effects (Walsh, 2006). In this study I focus on the experiences of self-injurers who utilize SIB defined here as a mechanism for coping with stress or strain. I investigate how the occurrence of major life events and changes in sources of stress and relationships with others lead to changes in SIB habits.

Despite the deviant nature of SIB, it has historically been understudied from a criminological perspective. In this context, deviance is defined as any behavior which violates a social norm; rather than an inherently "bad" or "wrong" behavior. This dearth of criminological research is indeed quite surprising as the prominent theories of the discipline have demonstrated a great deal of utility in explaining many other deviant behaviors. The only major criminological theory which has been utilized to explain SIB is Agnew's (1992) general strain theory. General strain theory posits that the infliction of strain upon an individual may lead him or her to seek adaptations to mitigate negative feelings that arise from said infliction of strain. The response an individual chooses to mitigate negative feelings may be criminal or noncriminal. Agnew posited that there are certain attributes of the strain as well as internal and external constraints which may increase the likelihood that a criminal or deviant response will be chosen to mitigate negative affect. The dearth of research examining SIB from a general strain theory perspective has provided evidence that the posited strain-response process does indeed help to better understand why people engage in SIB (Hay & Meldrum, 2010; Posick, Farrell, & Swatt, 2013; Wojciechowski, 2017). Research on stress, victimization, and coping also provides additional, albeit indirect, support for the strain-response process as having utility

for explaining why individuals choose to engage in SIB (Chapman, Gratz, & Turner, 2014; Cyr, McDuff, Wright, Theriault, & Cinq-Mars, 2005; Darke, Torok, Kaye, & Ross, 2010; Lauscher & Schulze, 1998). I seek to elucidate greater understanding regarding ways in which changes in exposure to risk and protective factors throughout childhood, adolescence, and early adulthood may result in changes in SIB habits.

Wojciechowski's (2017) qualitative research on SIB found that the processes posited by Agnew's (1992) general strain theory best explain individuals' decisions to initiate and perpetuate engagement in SIB. All 16 participants involved with this study noted that SIB was a coping response chosen to mitigate negative affect which arose because of the infliction of strain. Consistent with general strain theory, the processes associated with Akers' (1973) social learning theory and Hirschi's (1969) social control theory served as moderators which contributed to participants' choice of SIB as a coping response and their choice to perpetually engage in the behavior despite the negative aspects of engagement like pain, scarring, and stigmatization. These moderating processes are defined as external constraints within the general strain theory framework.

Research on SIB from a criminological perspective has mainly focused on the effects of strain (a commonly used term for stress in the criminological literature) on SIB (Hay & Meldrum, 2010; Wojciechowski, 2017). My search of the existing research on SIB found a dearth of literature focused on better understanding ways in which other well-established criminological concepts may help to better understand SIB. The life-course perspective offers fruitful ground for such an examination because of its risk/protective factor approach, thus, allowing for the examination of the contributions of multiple criminological concepts from a variety of perspectives. The following section introduces the life-course perspective and its relevance to the study of SIB.

Life-Course Perspective / Risk Factors

Life-course perspectives of criminal and deviant behavior posit that certain factors or events occurring during various points in an individual's life course contribute to future criminal/deviant engagement and desistence (Cullen, Agnew, & Wilcox, 2014). Some have leveled criticism at research conducted from a life-course perspective as being atheoretical or untestable (Akers & Sellers, 2013). These criticisms are focused mostly on the broad and often integrated nature of life-course theories. While these criticisms are indeed fair (life course theories do often lack parsimony) they do not totally discount the value of the life-course perspective and the empirical support which has been garnered since its rise in popularity beginning in the 1980s (Carlsson & Sarnecki, 2015). The integrated nature of life-course theories results in researchers typically examining causes of criminal/deviant behavior of other prominent criminological theories as "risk factors" which contribute to an individual's propensity to engage in criminal/deviant behavior in a cumulative and/or confluential manner (Cullen et al., 2014; Farrington, 2014). Bernard and Snipes (1996) were the first criminologists to recommend this "risk factor" approach to examining criminal behavior. While the life-course perspective that I take with my research is rooted in the rich history of the criminological canon (Blumstein, Cohen, & Farrington, 1988; Moffitt, 1993; Sampson & Laub, 1995), criminologically trained researchers have found that criminological concepts like those I outline in this section have utility for explaining non-criminal deviant behaviors, like SIB.

Strain

When examining the existing SIB literature, there are several correlates which may be classified as risk factors that contribute to an individual's propensity to engage in SIB. Certain

types of strain specifically seem to be associated with future engagement in SIB. Research has shown that victims of sexual abuse in childhood or adolescence engage in SIB at high rates (Cyr et al., 2005; Maniglio, 2011; O'Connor, Rasmussen, & Hawton, 2014). Other types of victimization, like being the victim of bullying, sexual assault, and childhood physical abuse have also been found to be associated with SIB outcomes (Darke et al., 2010; Hay & Meldrum, 2010; O'Connor et al., 2014). Wojciechowski (2017) again also found that individuals used SIB as a coping response for mitigating negative affect stemming from strain. However, he also found that the source of strain did not necessarily need to be as objectively acute as the aforementioned victimization strains. Some participants noted that academic stress, disappointing parents, loss of loved ones, and interpersonal conflicts with peers also led them to engage in SIB (Wojciechowski, 2017).

In using Agnew's (1992, 2001) general strain theory as an orienting framework for understanding the experience of strain, there are certain attributes of the inflicted strain itself which may lead to a greater likelihood of criminal or deviant coping responses to be chosen to mitigate negative affect. These attributes of strain include an unjust nature of the strain, perception that the strain is high magnitude, association with low social control, and incentive for criminal coping (Agnew, 2001). This component of magnitude is determined by the degree of harm inflicted by the strain, the recency of the infliction, the duration of the infliction, and how important the value or identity (centrality) affected by the strain was to the victim of strain (Agnew, 2001). So, it would appear that existing research supports the idea that some types of strain serve to increase the likelihood of SIB outcomes more than others. Strain more generally may be seen as a risk factor for engaging in SIB.

Social Control

Another concept which may be considered as a risk factor related to SIB is that of social control. However, unlike the infliction of strain, existing research appears to demonstrate that social control has a more complicated relationship with SIB outcomes. Hirschi's (1969) social control theory posits that engagement in deviant and criminal behavior is restricted by one's bond to conventional society and conventional others. Weaker bonds to conventional society and conventional others results in weaker social control exerted upon their behavior, thus, freeing them to engage in criminal and deviant acts. Research on self-injurers indicates that they tend to have weaker bonds to conventional others and often report feeling socially isolated and SIB has been observed at high rates among socially isolated populations (Haw & Hawton, 2011; Lyons-Ruth, Bureau, Holmes, Easterbrooks, & Brooks, 2013; Tyler, Whitbeck, Hoyt, & Johnson, 2003; Wu, Chang, Huang, Liu, & Stewart, 2013). It would seem that weaker social control then would function as a risk factor for SIB. It must be noted, however, that while most research conducted on the effects of social control theory and social control as a risk factor posits that weak social control frees individuals to engage in criminal or deviant behavior, some research indicates that some populations which have a high degree of social control exerted upon them have rates of SIB higher than that of the general population. Military and prisoner populations have been shown to have heightened rates of SIB (Adler & Adler, 2011; Dixon-Gordon, Harrison, & Roesch, 2012). While researchers have yet to parse out the effect that high levels of strain has on these increased rates of SIB among these populations, the presence of these effects does complicate social control's effect on SIB as a risk factor. Because this data included no participants with a significant military or incarceration history, exploring this effect is beyond the scope of this study.

Social Learning

A final risk factor for SIB which has been identified is association with other individuals who engage in SIB. The field of psychology has extensively explored the social learning processes associated with SIB (Jarvi, Jackson, Swenson, & Crawford, 2013; LeCloux, 2013; Muehlenkamp, Hoff, Licht, Azure, & Hasenzahl, 2008). A meta-analysis of the existing literature indeed confirmed that the employment of SIB is often spread via social learning processes, thus, confirming the association with self-injuring peers as a risk factor for engagement in SIB (Jarvi et al., 2013). These social learning processes have yet to be studied in relation to SIB within the sociological literature. This is shocking considering the utility that has been found for Akers' (1973) social learning theory in explaining an array of deviant and criminal behaviors (Fox, Nobles, & Akers, 2011; Hwang, 2008; Morris & Higgins, 2010; Snethen & Van Puymbroeck, 2008). Despite this dearth of sociological research, the existing psychological research does indeed provide evidence that the processes posited in social learning theory, that is, association with peers who engage in SIB and provide reinforcement for the behavior, should serve as a risk factor for engaging in SIB.

Characteristics of Risk/Protective Factors

It should be noted that some risk factors may exist on a continuum of sorts. Social control processes may be considered as examples of this. Whereas weak attachment to parents may be seen as a risk factor for engagement in criminal/deviant behavior, strong attachment may be seen as a protective factor which lowers one's propensity of engaging in criminal/deviant behavior. Not all protective factors and risk factors exist on a continuum like this though. Take, for example, the administration of an evidence-based drug use prevention program. This may be considered a protective factor for individuals who are administered the program, but not being provided the program cannot automatically be considered a risk factor contributing to one's propensity to use drugs. While this distinction does not bear any major implications for this analysis, the identification of protective factors and their function is necessary for the most comprehensive understanding of the language used in the results section of this article.

With the identification of these risk factors which existing research has indicated contribute to an individual's propensity to engage in SIB, I sought to examine SIB from a life-course perspective. While existing research has identified several risk factors associated with SIB, my research provides the first comprehensive qualitative examination of how changes in these risk factors may generate change in SIB habits. I chose a life-course perspective for this research in order to understand how the experience of risk factors at various points in the life-course affect future engagement and desistence in deviant and criminal behavior. SIB habits may be dynamic processes well-suited to a risk and protective factor analysis consistent with the life-course perspective. Such an examination has yet to be attempted. My study adds to the existing knowledge on the topic by providing the first examination of this phenomenon from a life-course perspective and provides a level of detail that is absent from many life-course studies via the use of qualitative methods. While SIB is not criminal behavior, researchers have used criminological theory and associated risk and protective to better understand engagement in non-criminal deviant behaviors also, like alcohol use. This greater understanding of how these changes in risk and protective factors across the life-course has important implications for the administration of prevention efforts. Therapists and clinicians who work with self-injurers may find my research to be of use for better understanding how changes in social factors may affect the behaviors of self-injurers that they treat. I seek to answer the question:

How do participants view changes in exposure to risk and protective factors as being related to changes in their SIB habits?

Author Context

Characteristics of the author bear acknowledgment, as they provide context for the interpretation of the results of this study. I am a White male sociology graduate student from the University of Florida who spent most of his life in the Midwest. An individual who differs on these, and possibly other, characteristics may have interpreted the data differently. My interest in this topic stemmed from my experience working with mentally ill adults with histories of self-injury. I worked for over a year providing direct care (e.g., cooking, cleaning, medical care) for these adults and witnessed them engaging in self-injury and provided treatment for their self-inflicted wounds on many occasions. This provides me a unique perspective, as I have developed a strong humanistic perspective on a psychiatric issue. I have helped and treated self-injurers at their weakest times and seen them struggle. I truly hope that this research will provide others responsible for the treatment of self-injurers a means of better understanding the environmental antecedents behind a behavior that is often viewed only with a psychiatric lens. My research background is mainly centered in the life-course criminological perspective and the present study is oriented from that perspective. I obtained approval for data collection and subsequent publication of findings for this study from the University of Florida Institutional Review Board prior to conducting any interviews.

Methodology

Participants

I utilized data procured through semi-structured interviews with 16 former and current self-injurers all aged between 18 and 25 years of age. Each participant was interviewed once. My sample was made up of five males and 11 females. The racial makeup of this sample consisted of 10 White participants, 3 Latina/o participants, 1 participant who identified as being of Asian descent, and 2 participants of Arab descent. All participants were offered the option of conducting their interviews with the principal investigator either in person or via telephone. Fourteen in-person interviews and two telephone interviews were conducted.

I incorporated inclusion criteria and utilized several recruiting strategies in order to invite the interviewees who agreed to participate. To meet inclusion criteria, individuals had to currently engage in SIB or have engaged in SIB at some point in the past and be eighteen years or older. Since the focus of my study was on how SIB habits changed over time, I included both of these groups because commencement and desistance are important changes in SIB habits. I chose this age restriction mainly to ensure that individuals had had the chance to undergo numerous life changes by the time of their participation in the study. Given that my study focused on how SIB habits change across the life-course, I desired a sample who had lived through numerous portions of their life since commencing engagement in SIB for the first time.

My primary strategy used to recruit participants for this study was through the use of recruitment posters. These posters were hung at various places around the campus of the university where the majority of the study participants attend. These posters contained details about the study, qualifications for participation, and contact information for the principle investigator. This strategy resulted in the recruitment of 13 participants. Another strategy I utilized to recruit participants for this study was the solicitation through online message boards focused on SIB. I posted information identical to the physical recruitment posters on these

message boards. Two interested individuals contacted me and agreed to be participants in this study. Finally, I utilized a snowball sampling strategy by asking all participants to pass my contact information along to any individuals who were qualified for the study and to have them contact me if they were interested. This resulted in one participant being recruited**.**

Thirteen of the participants were current students at a large southeastern university. One participant was a former student of this same university. The other two participants were current students at two other universities around the United States. None of these participants were acquainted with the principal investigator prior to the study. This sample was made up of six current self-injurers, eight former self-injurers, and two individuals who currently were phasing out their use of SIB. Self-injury was defined as any sort of self-inflicted damage to one's own body tissue that caused immediate harm and was done with the intent of causing harm. This eschewed type of behaviors which may cause damage to one's body after long term use, like alcohol use. Each individual also had to self-identify as a self-injurer at some point in his/her life or he/she would not have considered themselves as qualified to participate in my study.

Data Collection

A key aspect of the analytic strategy that I use relates to saturation in the data, that is, the point at which additional interviews are no longer yielding any new codes/themes or resulting in the reconceptualization of already existing themes. I began by collecting data and analyzed data as I collected it. I continued collecting data as I analyzed it and modified my understanding of the data as I continued to collect it. I continued this process of collecting and analyzing/reanalyzing each case until I reached saturation. In my study, this saturation was reached following the 12th interview. The final four interviews with participants were conducted to assure that saturation had indeed been reached. While these interviews did indeed yield nuance to the results themselves via the incorporation of additional perspectives on SIB, these interviews did not result in the addition or modification of codes/themes, thus, indicating that saturation had been reached.

Data consisted of any statement provided to me, the interviewer, during the course of recorded interview sessions. I informed participants that they were able to withdraw consent for use of their interview data at any point (this did not happen for any participant). The interviews began with me asking questions regarding the social context and personal characteristics of participants prior to engagement in SIB. Specifically, the first prompt of this series of questions was, "Please describe your family and social history from as far back as you can remember up to the time that you began engaging in self injury." Varying questions stemmed from this initial prompt as I focused on the specific experiences of each participant. These questions were often centered on the specific themes of social control, strain, and social learning which were identified as relevant to SIB a priori. These questions were meant to capture the experience of participants' lives prior to the first time that they engaged in SIB. I probed further with unscripted questions in order to obtain the most complete description of the entirety of participants' lives prior to their first engagement in SIB. Questions then focused on social context and personal characteristics of participants at the time that SIB was engaged in for the first time. Questions which were explicitly asked of participants were

- Could you please describe the first time you self-harmed?
- How would you describe your life at the time you first began self-harming?
- How did you first learn about self-injurious behavior?
- How did you decide to engage in self-injurious behavior?

Again, follow-up questions varied by participant based on individual experiences with SIB. These were meant to gauge how participants' lives may have changed directly preceding the time that participants commenced engagement in SIB. Specifically, these questions were:

- How long have you been self-injuring? /Do you still self-injure?
- Have there been any changes in your life since you first began self-harming?

Follow-up prompts varied by participants based upon their individual experience with SIB and their current status as a former, current, or phasing-out self-injurer. The final set of questions probed the social context and personal characteristics of participants following engagement in SIB for the first time. These questions focused on how changes in social context affected SIB habits, possibly leading to deceleration, complete desistance of the behavior, or relapse into engagement in SIB following a point in time in which participants had stopped engaging in the behavior. Finally, participants were asked if there was any more information about their SIB which they would like to add as a conclusion to the interview. This allowed participants to emphasize areas which they felt were important and add any additional information that may provide further context for their actions. Structuring the interview in this way created a logical flow which allowed participants to discuss their life histories in the chronological order in which they occurred. Sampson and Laub (1995) utilized data like mine with similar interview structure and questions to provide a better understanding of deceleration and desistance of criminal behavior among individuals formerly convicted of a crime in their seminal criminological life-course research. As participants directed the interview away from the scripted questions, attempts were made to further probe these points of emphasis, while still maintaining a connection to the original interview script. Interviews usually lasted around 30 minutes, but several lasted as long as 45-60 minutes. Each interview was recorded and transcribed as soon as possible following the interview. The recorded interview files were deleted immediately following transcription.

Analytic Strategy

I utilized a style of qualitative data analysis known as modified analytic induction (Gilgun, 1995) to examine how changes in risk and protective factors produced changes in SIB practices and habits. The traditional form of analytic induction focuses on extracting only the essential components of each case in a sample to provide an "ideal" case which encapsulates every component that is universal to each case in the sample. Researchers ground themselves in the existing literature on the phenomenon of interest in order to make sense of the experiences of participants and code similarities based on preformed categories from past research (Esterberg, 2002; Robinson, 1951). The modification of this method used in this study eliminates the necessity for universality among every case in the sample. Ahi (2016) and Smith, Frazer, Hall, Hyde, and O'Connor (2017) provide examples of research utilizing this analytic method. This modification is desirable for the present question of inquiry because the focus of my study is on how participants view relevant life changes as being important to their SIB. Naturally, not all participants would experience the same life events/changes, so there is unlikely to be the uniformity across the sample which the traditional form of analytic induction necessitates (e.g., some participants would identify experiencing changes in social control, whereas others would not). However, there may be uniformity or similarities in reactions to life events/changes among all participants who did experience a specific event/change (e.g., all individuals who experienced change in social control may react with similar changes in SIB habits). This modification utilizes the strength of describing uniformity across participants without the limitation of restricting uniformity to the entire sample for a theme to be relevant.

Analysis is then guided based on these important concepts identified in the extant literature while still allowing for the emergence of new importance. While a priori codes are identified based on existing research on the topic, the emergence of new themes and codes is not precluded when using analytic induction methods. Themes may emerge which provide more complete understanding of the data. These new codes may simply complement the a priori specified codes and themes, or emergent themes may lead to reconceptualization of the original codes. All of this is dependent on the story that the data tells.

I searched the existing literature on SIB and identified three relevant codes that helped me initially make sense of the data: social control, social learning, and strain. I initially searched the transcripts of all interviews to identify cases in which these codes were present. Using Microsoft Word's highlighter function, I highlighted each instance in which these themes were present. I then reread the testimonies of participants in their experiences during the times surrounding the influence of these themes to determine the effect, if any, that they felt was had on their SIB habits as a result of changes in exposure to these processes. I used Microsoft Word's table function to catalog each instance of participants describing the influence of these processes on their SIB habits. I then rechecked each case to ensure that there were no occurrences of these processes which did not have the uniform effect on SIB habits among participants that was initially documented. This involved a deeper exploration into each mention of an identified risk factor to probe the mechanisms by which SIB habits were impacted by experiencing a change in exposure to a risk/protective factor. Any evidence that the a priori codes were not related to the predicted changes in SIB led to further probing to determine the nature of the relationship between that risk/protective factor and SIB, if any. As the reader will see in the results section, this happened in the case of strain as a risk factor as acute strain may have led to the initiation of SIB, but simply removing that acute strain did not necessarily lead to desistance from SIB.

Following this process of using the preformed codes to categorize the data, I reanalyzed the portions of participants' data on life events/changes to examine whether or not there were other events/changes which were related to changes in SIB habits that were not neatly categorizable as one of the initial codes. The identification of new relevant data that did not neatly fit one of the preformed categories resulted in the creation of a new theme. While researchers using analytic induction methods enter the analysis process with a priori codes, the inductive nature of the method allows for the emergence of new codes from the data itself. An example of this is the theme of "social support." Social support was not identified as an initial code that was likely to be a motivator of change in SIB when exposure to this protective factor changed for participants. However, analysis indicated that changes in social support exposure did indeed result in changes in SIB habits for all participants who identified social support changes throughout their lives. Originally, the concept of social support appeared to be highly related to the a priori identified theme of social control. However, reevaluation of the nature of social control indicated that these two themes were indeed different in the ways that they impacted the SIB habits of participants when changes in exposure occurred. This resulted in a reanalysis of all references to social control themes to ensure that mentions of the effects of social control and social support were clearly delineated. This reanalysis which ensued also involved determining that all effects remained universal, a key methodological requirement of analytic induction. The process of coding and identifying the relevance of the new emergent themes was done in the same way as described above. The data were then reanalyzed to confirm that all codes still best categorized the experiences of participants in their original form. I did not make any major recategorization or changes to the preformed categories based upon this reanalysis. I generated themes based upon how change and continuity in the presence/absence of these risk factors resulted in changes in SIB as identified by participants.

I took proper rigor during the data collection and analysis processes to ensure the validity of both the interview data and the results of this study. During interviews, I ensured that I was understanding exactly the point that each participant attempted to make by asking them to clarify any statement that was previously unclear to me. I probed each point every time this happened until both myself and the participant were in complete agreement regarding the exact meaning of each point. I attempted to clarify any point which appeared even remotely ambiguous to me so that the perspectives of participants were able to be described in their truest sense. An example of this was when, during an interview with a participant, I asked the participant to please describe his/her relationship with his/her family. Several times, this participant referenced an individual by name, but did not clarify his relationship with the participant. I asked the participant to clarify who this person was. It turns out that this person was not a blood related relative, but rather, a family friend's son who spent nearly most nights every week at the participant's house. Because of this, the participant considered him more as a brother than a friend, as did the participant's family. This led to a deeper discussion of the family structure of the participant and yielded important knowledge about the framing of the interview data gleaned from this participant. Important context would have been lost without this kind of constant clarification and reevaluation of meaning during interviews.

A key principal of validity in qualitative research suggested by Popay, Rogers, and Williams (1998) is saturation. Saturation describes the necessity to only discontinue collection of data when collection is no longer yielding additional results with the collection of additional data. As data were collected, analyses proceeded as described above. Eventually, additional collection of data no longer yielded additional nuance in analyses, thus, reaching saturation. Several additional interviews were conducted to ensure that full saturation was reached. In order to ensure the validity of the results, Marshall (1990) suggests that criticality of one's own analysis is imperative. I ensured that each relevant theme that I identified was reanalyzed to ensure that results were not affected by any confirmation bias and that there could not be alternative explanations. This was done via a constant recognition of my status as a White male criminologist during the analysis process and how this could be framing my interpretation of participants' reports of their issues. This led to a reappraisal of every finding of the present study as the analysis process went on. Even then, these results must be understood within this context.

Results are described in the section below. These results are organized in the form of each identified risk/protective factor that, when removed or applied, was related to changes in SIB habits for participants whose experiences described each of these risk/protective factors. Each heading identifies a discussion of a specific theme identified through analysis as being an important risk/protective factor that, when exposure levels change, were related to participants reporting changes in their SIB habits. Organization in this manner was logical, as the research question of this study focused on how participants felt that these changes, or turning points, was related to their SIB habits.

Results

Participants had all undergone major changes in their lives since first beginning to engage in SIB like moving to college, dealing with parental separations, and obtaining new primary peer groups. When one of these changes occurred, many times SIB habits changed in some way as well. Certain concepts were identified as risk factors or protective factors which contributed to participants' propensity to engage in SIB. Changes in the experience of these risk and protective factors did not have universal effects on each individual participant. Because not every participant experienced the same risk or protective factors or changes in their risk or protective factors, their effects were not seen universally across all cases. However,

analysis did reveal that the self-reported presence of change in these risk or protective factors was associated with behavior change according to the interviewees. In the end, the data obtained for this study revealed that the experience of strain, weak social control, and both direct and social reinforcement of the behavior served as risk factors contributing to participants' propensity to engage in SIB. Analysis also revealed that expressive social support (Cullen, 1994) was perceived as a protective factor which decreased the propensity to engage in SIB.

Changes in Social Control

Changes in the strength of attachment to conventional others that a participant had in her/his life was perceived as precipitating change in SIB frequency and/or intensity. Twelve respondents reported feeling socially isolated or feeling that they had some sort of deficiency in social relationships at some point in their lives. This deficiency in social control may exist in the family or peer relationships, or it may exist for both of these types of relationships. The word deficiency in this case refers to a lack of attachment to conventional others like peers or family members. This was manifested in a participant's inability to establish a loving or trusting relationship with certain people in his or her life. John, a former self-harmer discusses his inability to form meaningful attachments in both his family and among his peers:

> *Okay, could you describe your relationship with your siblings, parents, and family?*
>
> Yeah… very crappy…I don't…I always felt pretty isolated from my family…I just was very different from all of them…we did not get along at all…we fought a lot…back there they do believe in corporal punishment….more like child abuse…so my parents did beat the crap out of me…very…on a regular basis…whenever I didn't do what they wanted me to do…or if I got bad grades or practically anything that did not go along with their plans.
>
> …we didn't participate in any afterschool activities…that wasn't really a thing…we didn't socialize with other people or families…my friend group was very minimal to none at points…just because they were afraid of…due to the security situation there over the years…they never…allowed us to do anything.

John did not enjoy a strong attachment to his family as they did not allow him or his siblings to socialize outside the home often. While this was because of concerns for their safety due to them living in a war-torn country, the effects manifested in John having a weak attachment to his parents. This experience of having weak familial attachment is echoed in the account of Brett, a current self-harmer:

> My family used to be very shaky…so to speak…my dad was always a very strong drug addict and was an alcoholic. My mom was…she liked to start fights with people. So she would start fights with him a lot and they'd end up arguing…and they divorced in 2010 when I was 13 or so…and I had a younger brother at the time who was very…he was slow…he was mentally disabled…and he tried his hardest to understand the situation but he couldn't…so I ended up having to take care of him while the split was going on…and they still fight all the time…my two parents…and my brother has learned how to take over...how to pit both sides against them for his own

> gain…so if he wants something then he will say that the other parent said something else… and they will try to win him over with buying stuff or supporting him rather than emotional or therapeutic help…and having to deal with that type of thing ended up leading to me inducing in self-harm…simply because I felt like I wasn't good enough for both of them…both of my parents at different times said that they didn't love me…behind my back and to my face…and with that type of emotional neglect after a while.

This weak attachment to his parents led to fewer restrictions on his behavior as he was less concerned about disappointing them with his deviant behavior. Both of these cases are consistent with Hirschi's (1969) social control theory. Commonly, dysfunction in establishing strong attachment to these conventional social bonds was associated with some sort of strain, as evidenced by the above accounts. It is in this way that these strains may have a cumulative effect on an individual. Not only do these individuals have strain inflicted upon them, but it is inflicted upon them by individuals (parents) to whom they would otherwise have a strong attachment. Twelve participants went through a large portion of their lives in which they did not feel as though they had strong attachment to conventional familial or peer relationships. One finding of this study regarding social control is that if a strong attachment to a conventional other is finally achieved, it may have a dramatic effect on reducing the use of SIB as a coping mechanism. One conventional relationship that was met with some success in reducing SIB through strong attachment was that of a therapist. While not necessarily a traditional familial or peer relationship, six participants who were given an ample amount of time to work through their problems with a therapist and establish strong attachment reported success in reducing their frequency of SIB. This therapist may even serve as a bridge of sorts in helping an individual to trust other people and establish strong attachment within other conventional relationships that may allow them to further mitigate their negative affective states. This is evident in the case of Patricia, a former self-harmer:

> It gave me a person who I had no choice but to trust…she couldn't tell my dad anything unless I said that I was going to kill myself…or we had talked about…she had actually seen that I had been cutting again…and it forced me to talk to someone and let it out…and she taught how to not feel so insecure about everything that has happened…I think it just helped me deal with it…it helped me not be afraid to trust people…like I'm still…I'm not okay with trusting everybody…but that's a given, people hurt people.
>
> *Do you think your therapist has helped you be able to talk with your girlfriend about your feelings now?*
>
> A lot…I have not trusted a friend or family member as much as I trust her…since I was like 7 years old…that was the last time that I trusted anybody as much as I trust her…and I tell her like, it doesn't bother me anymore…I can trust her…and if I ever feel something I can call her for help…and she will just be there…it all works…it just worked out perfectly…and the therapist helped me a lot.

Patricia was able to use her experience with her therapist to build a strong relationship with her girlfriend. This strong attachment has functioned to continue to keep her from engaging in SIB. Tara, the former self-harmer, describes a similar experience with a counselor who she built rapport and developed strong attachment to:

> *Why do you think that the counselors in your hometown were better than the ones here?*
>
> The counselor that I saw a lot…I think he focused more on having a regular conversation with me…and he didn't make me feel so much like a patient…he kind of just…like I could tell that he was working but he made me feel a lot more comfortable at first…and I didn't feel as rushed as I did here…they were like, "you've got six appointments,"…so I felt like I had to get…like there was pressure to get better by the last time…whereas this time I was home…and I knew that could keep seeing him.
>
> *What kinds of things did you talk about with your counselor at home that helped you?*
>
> Honestly, we would talk a lot about TV and what we were watching on Netflix…and that would help me connect to another person…and kind of getting that human connection…where it didn't feel like I was just alienating myself and being isolated and being alone all of the time…and feeling like I did have the ability to actually talk with people...and interact…all the counseling that I went to helped a lot. I've started getting more involved and more connected with people…

Tara had previously sought treatment from a counselor, but found the approach that this offered was not to her liking. In this new counselor, she was able to form a strong attachment based upon trust and mutual interest. She noted that this counselor helped her to stop engaging in SIB and form other strong relationships.

While the addition of attachment to conventional others certainly was reported to be effective for individuals to stop engaging in SIB and in mitigating their states of negative affect, losing this strong social bond can lead to decreased ability to cope with the negative effects of strain. This is evident in the account of Tom, a self-harmer who is phasing out his use of SIB:

> The first year that I came here, I basically couldn't talk with anyone…and the separate most of…my support network and there's a difference of seven hours between my country so most of the time when I would like to communicate or contact people…nighttime mostly…people were sleeping anyway and during the day…you know we had some contact, but it is not as effective compared to having direct contact with a person.

Tom's inability to maintain his desired attachment to his social support network because of physical distance led to an increase in the frequency of his SIB as he had to worry less about disappointing them due to decreased communication and their lack of physical presence. This also led to decreased ability to cope in a healthy manner when strain was inflicted. Nine participants who have stopped engaging in SIB for any period of time did discuss an initial deficiency in attachment with a subsequent strong attachment to a new peer, family member, or intimate partner. For one participant, devoting more time and energy to her family members, had an effect on SIB habits also. Erika, a current self-harmer, discusses a reduction in the frequency of her SIB in conjunction with having to devote more time and energy to her family:

> …because recently my parents went through a sort of…they're like separating and it's like complicated and what have you…but I think that I actually did it

> less then because for the sake of my family I needed to be more focused on like their issues…and I needed to appear more like strong…I needed to seem like I had it under control because no one else seemed to have it under control…and so when I was focused on other people's problems and not my own then I didn't realize all of these things that I was doing wrong or whatever…

Erika had to become increasingly involved in her conventional bond with her family. While the social control aspects of commitment and involvement are typically examined in relation to institutions and activities, Erika's experience demonstrates that these aspects seem to apply to how her changing relationship with her family led to decreased use of SIB. Erika had always had a strong attachment to her family. As her relationship changed with her family, it was not so much her level of attachment or the warmth of her relationship which changed. Rather it was the amount of time and energy spent focusing on her family's struggles which led her to focus less on her own problems. This is interesting because this would appear to be a form of additional strain which she was experiencing at the time. Despite this, this would seem to be consistent with Hirschi's (1969) posited commitment or involvement aspects of social control. This increased investment led her to her desistence in SIB due to the increase in what she was risking by engaging in SIB. This also led to increased commitment as she spent more time dealing with her family's problems rather than focusing on her own. This is an interesting finding as researchers have yet to examine these aspects of social control in relation to other individuals, instead choosing to focus solely on an individual's degree of attachment in relation to people, solely on commitment in relation to institutions or goals, and solely on involvement in relation to time spent engaging in activities.

This ability to talk to a trusted person about strain and negative affect may be conceptualized within the theoretical framework of Cullen's (1994) social support theory. Cullen posits that the provision of social support may serve as a factor which serves to decrease the propensity of criminal or deviant behavior. Cullen made a distinction between two types of social support: expressive support and instrumental support. While instrumental support encompasses the provision of monetary and material wellbeing, expressive support is characterized by the provision of an outlet for an individual to discuss his or her feelings and relieve mental and emotional distress (Cullen, 1994). This concept of expressive support appears to be related to the outlet provided by strong attachment to intimate others. In this way, the mechanisms posited by social control theory and social support theory appear to be related. The relationship between changes in the strength of attachment between self-injurers and conventional others appears to be mediated by changes in the presence of expressive support as a protective factor against engagement in SIB. The presence of expressive support allowed participants to mitigate negative affective states stemming from the infliction of strain via discussion of feelings or "venting" with a conventional intimate other. Cullen himself (1994) understood these processes posited in these theories as more than likely complementary rather than competitive. Cullen also discussed the relevance that social support may have for life-course theorists as its effects and its availability may vary across the life-course. Despite these assertions by Cullen himself in his original (1994) postulations, there is little explicit examination of expressive support from a risk/protective factor perspective in the same way as social control processes. This dearth of research naturally belies an explicit examination of expressive support's effect on SIB. While the aforementioned explorations are beyond the scope of this research, this research does indeed provide rationale for these processes to be examined explicitly by future researchers.

Changes in Deviant Peer Association/Social Reinforcement

Another risk factor that participants found to be related to SIB habits when altered was that of the degree of deviant peer association. Deviant peer association often refers to one's degree of association with peers or friends who engage in deviant or criminal behavior in a more general sense. When the term, deviant peer association, is used here, it refers only to having peers who engage in SIB. This association with other self-injurers was important for participants as they were provided social reinforcement which led to them to continue to engage in SIB. The mechanisms by which this social reinforcement functioned to perpetuate the use of SIB are detailed below in the accounts of the participants of this study. There were three participants who mentioned association with a peer who provided social reinforcement for engaging in SIB. These participants were all former self-harmers and they discussed how their SIB began to wane in frequency once these deviant peers were no longer prominent figures in their lives. Gina, a former self harmer, discusses her friendship with a self-harmer and how distancing herself from this relationship led her to discontinue her engagement in SIB:

> …and I think that once I removed myself from that neighborhood and that group of people…I just…and I was surrounded by people who were driven academically…so that became what I did so I think that a lot of the influence came from that neighborhood and that subsequently went to that high school that was zoned there.
>
> But I think at that point I had probably talked to a few people who were more positive in my life…and knowing about what I had done…they kind of discouraged that kind of behavior like, "you know that's really bad…you shouldn't do that," …and I think not looking to anyone who…not having someone who does it as friend I think helped.

These new peers in Gina's life provided definitions unfavorable to SIB, whereas before she had a peer that was a prominent figure in her life that provided definitions favorable to SIB and reinforced her behavior. Had Gina continued to engage in SIB at this point, it is likely that she would have received some sort of social punishment. This may have resulted in a negative punishment as her new friends would have withdrawn their attention from her. The possibility also exists that the punishment may have been categorized as positive as they may have provided increased monitoring of her behavior or pushed her to receive some sort of professional help. Dolores, a former self-harmer, described a similar experience as she distanced herself from a relationship with a self-harmer and discontinued her SIB:

> Yeah…the one girl…she also self-harmed…so we would talk about it…we were very close…we knew each other in elementary school…and then we got pretty close in middle school…always hanging out…always doing whatever together.
>
> Yeah…definitely just hanging out with different people…just realizing what I wanted to do as far as going to college…as far as not wanting to hang out with the certain people that I was hanging out with…I definitely really realized who I was as a person rather than following what other people were doing like in middle school and stuff.

Dolores again demonstrates how distancing herself from deviant peers led to her discontinuing her behavior. In this case, it would seem that the social reinforcement provided by her peers no longer had the same effect for Dolores. Instead, her new peers acted to provide social punishment which discouraged the behavior. She decided that she wanted to focus on more conventional aspirations, thus, the social reinforcement provided by her deviant friend no longer provided reinforcement for the type of behavior that she would now be engaging in to achieve her conventional goal of attending college. Larissa, a former self-harmer, was forcefully distanced from her self-harming peer by her mother as she did not want her daughter to have a friendship with this girl:

> It was junior year and I was going to homecoming…and it was when I had to quit riding with one barn [club] because my mom found out about my friend…the one she didn't really like…the one who was also cutting and stuff…and so I was pulled out of that and I was really upset…and it just got really, really bad really, really fast. and she kind of made a deal with me…she was like, "we can go back and get that dress…but you have to stop…you have to give me everything that you have…and promise me that you're going to talk to me about it," …and so I did…and we went back and got that dress and I haven't done it since I got that dress.

While Larissa was initially upset by the forced distancing from her deviant peer, she was no longer receiving social reinforcement for her behavior. This ultimately allowed her mother to provide a small incentive which led her to discontinue her engagement in SIB. Larissa no longer had to balance the social reinforcement provided by her peer with the punishment provided by her mother's disapproval because the social reinforcement was forcefully taken from her. In this way, the definitions unfavorable to SIB and the reinforcement for desisting in SIB in the form of the present offered by her mother did not have to compete with the social reinforcement provided by Larissa's deviant peer.

Direct Reinforcement

All participants noted the experience of direct reinforcement when engaging in SIB. This direct reinforcement refers to the positive feelings or mitigation of negative affect that are elicited through SIB. This is characteristic of the learning process that an individual undergoes when they engage in SIB. This differs from social reinforcement as it does not require any sort of favorable definitions or social incentive to be provided by others for reinforcement to be perceived. Direct reinforcement, as posited by Akers (1973), instead focuses on the aspects of the behavior itself which may lead to reinforcement. It would appear then that experiencing direct reinforcement as a result of engaging in SIB would then serve as a risk factor for perpetuated engagement in SIB. Patricia, the former self-harmer, describes this direct reinforcement:

> During…it made me feel real…and just…alive…like I felt good…I felt like I was doing something right to myself…it hurt but it wasn't a bad hurt…it was like a drug.

This description of being like a "drug" has actually been examined by biologists and there does indeed seem to be short-term hormonal releases which SIB can elicit (Kirtley, O'Carroll, & O'Connor, 2015). This drug-like feeling was not the only type of direct reinforcement sought by participants. The direct reinforcement which participants derived from SIB was somewhat

different for each of them, though it all provided some otherwise unsatisfied need. Tom, the self-harmer phasing out use of the behavior, describes his experience of direct reinforcement:

> just being hurt at that moment and that physical feeling as...that was the very thing that intended from the first place, being able to get away from my mental suffering and transfer it to some physical thing…I think it was just the pain itself.

Tom desired simply to focus on something other than his unbearable mental anguish. While SIB may seem like a drastic measure to achieve this end, at times it was the only coping mechanism which was functional in attaining this goal. A number of other types of direct reinforcement elicited from SIB were reported as well. These included self-punishment, affect regulation, desire to hurt, and decrease feelings of suicidality. While all participants did experience some form of direct reinforcement, none of the participants reported any sort of diminishment or major changes in these effects which led to reduced frequency or intensity or complete desistence.

Changes in the Infliction of Strain

While it would be expected that major changes, like migrating away from a strain to attend college, would certainly have a major effect on the experience of said strain and an individual's need to engage in SIB to mitigate negative emotions, this was not necessarily the case for all participants in this study. The concept of reinforcement appears important to the continuity of SIB past the onset episode. The individual has then learned that this is a coping method that is effective in mitigating negative affect when strain is inflicted. For five participants, the absence of high magnitude strain did indeed negate the need to engage in SIB, but for the 11 other participants, once SIB was revealed as an effective coping method, it would be utilized to mitigate negative affective states stemming from any magnitude of strain. Patricia, the former self-harmer, discusses how leaving an abusive situation helped her to desist engaging in SIB for a time:

> After the rape, it got worse…because I wasn't only trying to deal with the fact that I was raped and I couldn't tell anybody…or I felt like I couldn't tell anybody…but I was also dealing with my mom just getting worse…it progressed it a lot and made everything worse…and then when I moved in with my dad…it was good…I had stopped for a while…I was happy for a while…

Even though Patricia eventually began engaging in SIB again after abuse later in life, she was able to desist for a time after moving away from the home she was raped in and from her abusive mother. This account stands in contrast to Brett, the current self-harmer. Brett was chronically bullied throughout his adolescence and was emotionally abused by his parents during his childhood. But even after graduating high school and moving off to college away from his parents and the bullies in his high school, Brett still found the need to engage in SIB:

> High school graduation wasn't a big thing for me…I just felt like it was moving from school to school…so I didn't really care very much…and then it got progressively worse…and every time…that I stopped for a while or I tried stopping…it ends up coming back worse…

Despite physically removing himself from high magnitude strains, Brett still felt the need to engage in SIB. It was also found that it need not necessarily be an objectively high magnitude strain for inflicted strain to function as a risk factor for engagement in SIB. Tara, a former self-harmer, discusses how strains perceived as low magnitude still led her to engage in SIB:

> Just like little stuff that made me feel like I didn't have control over things…if I was just like late with an assignment or something…or if people were hanging out without me…just because I was already in such a rough mental state that it didn't take much to kind of trigger it…and after I did it like the first time…I felt like I had control over that kind of aspect of my pain…so it…I mean eventually I realized that I didn't have control over it…but at the time that's why I kept doing it.

While Tara does describe having a fragile state of mind at this point, by her account these experienced strains were relatively low magnitude. She had already learned that SIB may help to mitigate her negative emotions regardless of the magnitude of the strain that is inflicted. It is through this reinforcement process that individuals may engage in SIB despite the presence of any sort of high magnitude strain. It should also be noted however that this data does not reveal whether or not participants, like Tara, who engaged in SIB in order to mitigate lower magnitude strains after being reinforced, felt that their negative affective states were insufficiently mitigated using other coping methods when dealing with these relatively minor strains. This limitation leaves several questions begging to be answered. Even if these strains are indeed relatively minor, is SIB the only means to sufficiently mitigate negative affect? Is SIB chosen as a sort of overcompensation for dealing with these negative affective states despite the possibility that other, less harmful, responses to strain may work in these circumstances? This is a limitation of this study as this aspect was not focused on during data collection and only emerged as a theme during the final analysis process. Before full judgment on this issue is passed however, individual perception also must be acknowledged. In recalling past strains that, at the time were high magnitude, Dolores, a former self-harmer, discusses her retrospective account:

> It (SIB) was just kind of something that I could do…and if I had just actually thought about it…then I wouldn't have done it…and if I'd have just been able to calm down and not think of anything as the end of the world…because that's kind of how my thinking is during…or was during it…or anything…then I wouldn't have done it and it would've been fine…the fight or whatever that we got into was stupid…so I think that every time that I did do it…it felt like a bigger…whatever happened was like a bigger deal than it actually was at the time…but instead of actually looking at it like that or actually realizing it for myself…I would just make a really bad decision…and then I would just think about it afterwards.

Borrowing from the symbolic interactionist perspective, it is made clear that one's perception of a strain is ultimately the most important determining factor. Even though Dolores may look back now and understand these strains as very minor, a young adolescent may not have this same ability to fully comprehend the magnitude of an event. General strain theory distinguishes strains as either objective or subjective. Objective strains are those strains that most people within a population would interpret as unpleasant. Subjective strains are those strains that are individually determined to be harmful (Agnew, 2001). It is in this way that we must again defer to general strain theory to understand the feelings associated with strain as a subjective

perception. Understanding that individuals may have different perceptions of the magnitude of particular strains helps to clarify strain's role as a risk factor for engaging in SIB. It appears that strains of all types may indeed function as risk factors for engaging in SIB. Even as participants note that inflicted strains may indeed be of low magnitude, it would appear that at the time of infliction they may be subjectively perceived as more harmful. Because of the nature of SIB as immediate damage that one causes to his or her own body and the immediate relief that it appears to provide, it may be that these participants are able to view these strains with a clearer mind once some of the immediate negative feelings have been relieved. While the data is a bit limited for this to be anything more than speculation at this point, evidence does indeed remain supportive of the idea that desistence from SIB may be difficult even in the absence of strains that served as major triggers in the past once the behavior's direct reinforcement effects have been established.

Discussion

This analysis has revealed how change in the risk factors identified by criminological literature are pertinent to the study, and possibly treatment, of SIB. Key concepts of Akers' (1973) social learning theory were found to play a key role in determining the SIB habits of participants. Participants who reported that they had relationships with peers who engaged in SIB noted that the strength of these associations were directly related to their own level of SIB. The social reinforcement provided by these peers provided an impetus for individuals to continue engaging in SIB beyond the direct reinforcement provided by SIB itself. When social punishment, rather than reinforcement, was presented, participants' degree of engagement in SIB waned. This finding may have important implications for inpatient and outpatient clinicians. If clinicians can identify relationships which are feeding an individual's urge to engage in SIB, then steps may be taken to address the relationship in question. This may be a more feasible treatment option in inpatient settings where clinical teams may have more control over peer groups, but even suggesting to guardians that certain relationships may be aggravating the behavior may foster some benefit as well. This is not to say that individuals who engage in SIB should have all peer relationships severed in order to best ameliorate the risk of deviant peer association. Suggesting such a thing would conflict with another major finding of this study, that strong attachment to others is important for understanding engagement in SIB also.

Participants' strength of attachment to others also predicted the degree and severity of engagement in SIB. When participants reported strong attachment to others marked by warm and caring relationships, they also reported less desire to engage in SIB. In the case of several clients, relationships with therapists or counselors helped them to establish strong relationships with other individuals which helped them to stop engaging in SIB. This highlights the importance that rapport may play in any client-clinician relationship. While this may seem like common sense, multiple participants who noted a good relationship with a clinician also reported experiences with other clinicians that did not develop into strong attachment or warm relationships. These findings suggest that clinicians/counselors treating self-harmers could make these aspects of treatment a priority if they hope to foster behavioral change. Beyond the attachment itself, the expressive social support provided by clinicians provided participants with a means of discussing personal issues that they did not feel comfortable discussing with others. The expressive support provided would appear to be another component of the relationship that may allow them a healthy outlet for their emotions, rather than turning to SIB. Participants who did establish warm relationships with their clinician found themselves able to establish relationships like this with others following treatment. In this way, the treatment setting allowed participants a means of practicing building trust with another individual, which

then translated into being able to establish relationships characterized by warm attachment and the provision of expressive social support beyond the clinical setting. Considering the high prevalence of past abuse that is found among self-harmers, it is unsurprising that this population may have trouble establishing such relationships. This again implicates the establishment of strong relationships with trained treatment professionals as possibly being a turning point which may lead to desistence.

While some participants did note that physical and temporal distance from high magnitude strains did indeed lead to decreased frequency and intensity or even outright desistence in SIB engagement, others noted that the establishment of SIB as a coping response in relation to one strain led to its use for mitigating negative affect arising from other sources from strain as well. Among this sample of self-injurers, this was because of the direct reinforcement provided by SIB in the form of the mitigation of negative affect. Wojciechowski's (2017) research indicated that SIB functioned as the most effective response to strain for this same sample of participants. This degree of effectiveness was in relation to other responses to strain that participants noted that they utilized to mitigate negative affect. SIB provided the greatest degree of reinforcement of all adaptations to strain, therefore, these participants utilized it to mitigate negative affect stemming from sources of strain other than the original strain which led to their initial episode of SIB. In some cases, SIB was the only adaptation to strain that participants even reported using to mitigate negative affect. In an applied context, this finding, and the findings concerning other relevant risk and protective factors, is important as it may be related to the improvement of prevention and intervention strategies targeted at reducing the frequency and intensity of SIB.

When putting these findings into an applied prevention science context, it is important to understand how these risk factors and protective factors may be targeted to best mitigate SIB outcomes. When considering the application of the results of this study to intervention strategies focused on SIB, it would appear that simply removing a specific strain as a risk factor may not be enough to enough to lead an individual to desist from SIB engagement after the initial episode. It is the direct reinforcement provided by SIB that may lead individuals to engage in SIB as a response to a variety of strains. Because the prevention of the infliction of any strain throughout the life-course is simply impossible, intervention should then focus on the identification of other adaptations to strain which may provide direct reinforcement in the form of mitigating negative affect arising from strain. These newly identified responses to strain may be viewed as protective factors which may lead to reduced use or complete desistence from SIB. This approach is consistent with relevant existing programs which target undesirable behaviors, like dialectical behavior therapy (DBT).

DBT is perhaps the most prominent cognitive behavioral therapy available in the present day. DBT focuses on the provision of coping skills which therapists emphasize should be used to mitigate negative affect when strain is inflicted instead of using SIB as a response (Linehan, Schmidt, Kanter, Craft, Comtois, & Recknor, 1999). DBT also focuses on the establishment of a strong patient-therapist relationship which provides an additional form of social control which may function as a protective factor restricting the use of SIB. While DBT is a somewhat holistic approach to intervention as multiple protective factors are strengthened through undergoing therapy, it should be noted that it also results in patients' increased exposure to deviant peers. Group therapy focused on teaching and practicing newly learned skills functions as a major component of DBT. While this group therapy certainly serves a purpose as a major component of the DBT process, it should be noted that exposing patients to other deviant peers may function as a risk factor which may contribute to increased engagement in SIB through social reinforcement of the behavior. Certainly, practitioners of DBT and other similar intervention programs may argue that this component is necessary to the DBT process, but it may be interesting to see how removing this component affects DBT's effects on SIB

desistence. It may be possible to examine these effects via a randomized control trial which compares the effects of the typical DBT treatment and a modified DBT treatment. Despite this criticism, numerous randomized control trials have shown that DBT has a great deal of utility in having desirable effects on SIB outcomes (Andreasson, 2015; Gibson, Booth, Davenport, Keogh, & Owens, 2014; Harned, Korslund, & Linehan, 2014; van Goethem, Mulders, de Jong, Arntz, & Egger, 2015). Other, similar, prevention and intervention efforts aimed at reducing the use of SIB should also continue to take a risk and protective factor approach when seeking to affect SIB outcomes.

I must note a final limitation of my research. The life-course data examined herein spanned from early childhood to the present-day lives of participants, all of whom were currently in early to mid-adulthood. While this yielded retrospective longitudinal data regarding this important segment of the life-course, this research was limited in its ability to examine SIB during later periods of the life-course. Future research should seek to provide data on SIB during other parts of the life-course, as well as data that is not purely retrospective in nature.

Despite the limitations of this work, there are several strengths which make this work unique and provide the systematic import desired by empirical research. One major strength of this study is that the qualitative data utilized allowed for the examination of risk factors and protective factors across the life-course. This is the first study to use qualitative data to examine how changes in risk and protective factors across the life-course actually function to change SIB habits as an outcome of interest. The delineation of these processes by this research may help clinicians better recognize the distinct risk and protective factors as they appear in individual cases. This may help them to better identify which factors are most in need of being addressed for each client. Another strength of this study is that a marginalized group of participants were able to discuss their experience in a nonjudgmental setting. While not a novel aspect of this study, past research on SIB has also noted the utility of this experience for the participants themselves (Adler & Adler, 2011), a benefit often overlooked in the process of research. Many participants discussed feeling isolated and socially stigmatized because of their engagement in SIB. Participants also demonstrated excitement in regard to the possibility that their involvement would help other individuals who were struggling with SIB.

References

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

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology, 30*(1), 47-87. doi:10.1111/j.1745-9125.1992.tb01093.x

Agnew, R. (2001). Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency, 38*(4), 319-361. doi:10.1177/0022427801038004001

Ahi, B. (2016). A study to determine the mental models in preschool children's conceptualization of a desert environment. *International Electronic Journal of Elementary Education, 8*(3), 333-349. doi: 1782246538.

Akers, R. (1973). *Deviant behaviour: A social learning approach*. Belmont, CA: Wadsworth Press.

Akers, R. L., & Sellers, C. S. (2013). *Criminological theories: Introduction, evaluation and application* (6th ed.). New York, NY: Oxford University Press.

Andreasson, K. (2015). Dialectical behaviour therapy with skills training seems to be more effective in reducing non-suicidal self-injury. *Evidence Based Mental Health, 18*(4), e10-e10. doi:10.1136/eb-2015-102139

Bernard, T. J., & Snipes, J. B. (1996). Theoretical integration in criminology. *Crime and justice, 20*, 301-348.

Blumstein, A., Cohen, J., & Farrington, D. P. (1988). Criminal career research: Its value for criminology. *Criminology, 26*(1), 1-35.

Carlsson, C., & Sarnecki, J. (2015). *An introduction to life-course criminology*. Thousand Oaks, CA: Sage.

Chapman, A. L., Gratz, K. L., & Turner, B. J. (2014). Risk-related and protective correlates of nonsuicidal self-injury and co-occurring suicide attempts among incarcerated women. *Suicide and Life-Threatening Behavior, 44*(2), 139-154. doi:10.1111/sltb.12058

Cullen F. T. (1994). Social support as an organizing concept for criminology: Presidential address to the academy of criminal justice sciences. *Justice Quarterly, 11*(4), 527-559.

Cullen, F. T., Agnew, R., & Wilcox, P. (2014). *Criminological theory: Past to present* (5th ed.). New York, NY: Oxford University Press.

Cyr, M., McDuff, P., Wright, J., Theriault, C., & Cinq-Mars, C. (2005). Clinical correlates and repetition of self-harming behaviors among female adolescent victims of sexual abuse. *Journal of Child Sexual Abuse, 14*(2), 49-68. doi:10.1300/J070v14n02_03

Darke, S., Torok, M., Kaye, S., & Ross, J. (2010). Attempted suicide, self-harm, and violent victimization among regular illicit drug users. *Suicide and Life-Threatening Behavior, 40*(6), 587-596. doi:10.1521/suli.2010.40.6.587

Dixon-Gordon, K., Harrison, N., & Roesch, R. (2012). Non-suicidal self-injury within offender populations: A systematic review. *International Journal of Forensic Mental Health, 11*(1), 33-50. doi:10.1080/14999013.2012.667513

Esterberg, K. (2002). *Qualitative methods in social research*. Boston, MA: McGraw-Hill.

Farrington, D. P. (2014). Integrated cognitive antisocial potential theory. In G. Bruinsma & D. Weisburd (Eds.), *Encyclopedia of criminology and criminal justice* (pp. 2552-2564). New York, NY: Springer.

Fox, K. A., Nobles, M. R., & Akers, R. L. (2011). Is stalking a learned phenomenon? An empirical test of social learning theory. *Journal of Criminal Justice, 39*(1), 39-47. doi:10.1016/j.jcrimjus.2010.10.002

Gibson, J., Booth, R., Davenport, J., Keogh, K., & Owens, T. (2014). Dialectical behaviour therapy-informed skills training for deliberate self-harm: A controlled trial with 3-month follow-up data. *Behaviour Research and Therapy, 60*, 8-14. doi:10.1016/j.brat.2014.06.007

Gilgun, J. F. (1995). *Modified analytic induction.* [Presentation]. Presented at the Annual Conference of the National Council on Family Relations, Portland, OR.

Harned, M. S., Korslund, K. E., & Linehan, M. M. (2014). A pilot randomized controlled trial of dialectical behavior therapy with and without the dialectical behavior therapy prolonged exposure protocol for suicidal and self-injuring women with borderline personality disorder and PTSD. *Behaviour Research and Therapy, 55*, 7-17. doi:10.1016/j.brat.2014.01.008

Haw, C., & Hawton, K. (2011). Living alone and deliberate self-harm: A case-control study of characteristics and risk factors. *Social Psychiatry and Psychiatric Epidemiology, 46*(11), 1115-1125. doi:10.1007/s00127-010-0278-z

Hay, C., & Meldrum, R. (2010). Bullying victimization and adolescent self-harm: Testing hypotheses from general strain theory. *Journal of Youth and Adolescence, 39*(5), 446-459. doi:10.1007/s10964-009-9502-0

Hirschi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.

Hwang, S. (2008). A comparative study of drinking behavior by Korean and American adolescents focusing on social learning theory. *Health and Social Science, 23*, 5-29.

Jarvi, S., Jackson, B., Swenson, L., & Crawford, H. (2013). The impact of social contagion on non-suicidal self-injury: A review of the literature. *Archives of Suicide Research, 17*(1), 1-19. doi:10.1080/13811118.2013.748404

Kirtley, O. J., O'Carroll, R. E., & O'Connor, R. C. (2015). The role of endogenous opioids in non-suicidal self-injurious behavior: Methodological challenges. *Neuroscience and Biobehavioral Reviews, 48*, 186-189. doi:10.1016/j.neubiorev.2014.11.007

Lauscher, S., & Schulze, C. (1998). Severity of sexual abuse and long-term sequelae. *Zeitschrift Fur Klinische Psychologie-Forschung Und Praxis* [Journal of Clinical Psychology Research and Practice], *27*(3), 181-188.

LeCloux, M. (2013). Understanding the meanings behind adolescent non-suicidal self-injury: Are we missing the boat? *Clinical Social Work Journal, 41*(4), 324-332. doi:10.1007/s10615-012-0417-y

Linehan, M. M., Schmidt, H., Dimeff, L. A., Kanter, J. W., Craft, J. C., Comtois, K. A., & Recknor, K. L. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *American Journal on Addiction*, *8*(4), 279-292.

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*(2), 273-281. doi:10.1016/j.psychres.2012.09.030

Maniglio, R. (2011). The role of child sexual abuse in the etiology of suicide and non-suicidal self-injury. *Acta Psychiatrica Scandinavica*, *124*(1), 30-41.

Marshall, C. (1990). Goodness criteria: Are they objective or judgement calls. In E. G. Guba (Ed.), *The paradigm dialog* (pp. 188-197). Newbury Park, CA: Sage.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, *100*(4), 674.

Morris, R. G., & Higgins, G. E. (2010). Criminological theory in the digital age: The case of social learning theory and digital piracy. *Journal of Criminal Justice*, *38*(4), 470-480. doi:10.1016/j.jcrimjus.2010.04.016

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

O'Connor, R. C., Rasmussen, S., & Hawton, K. (2014). Adolescent self-harm: A school-based study in Northern Ireland. *Journal of Affective Disorders, 159*, 46-52. doi:10.1016/j.jad.2014.02.015

Popay, J., Rogers, A., & Williams, G. (1998). Rationale and standards for the systematic review of qualitative literature in health services research. *Qualitative Health Research, 8*(3), 341-351.

Posick, C., Farrell, A., & Swatt, M. L. (2013). Do boys fight and girls cut? A general strain theory approach to gender and deviance. *Deviant Behavior, 34*(9), 685-705. doi:10.1080/01639625.2012.748626

Robinson, W. S. (1951). The logical structure of analytic induction. *American Sociological Review*, *16*(6), 812-818.

Sampson, R. J., & Laub, J. H. (1995). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.

Smith, R., Frazer, K., Hall, P., Hyde, A., & O'Connor, L. (2017). "Betwixt and between health and illness" - Women's narratives following acute coronary syndrome. *Journal of Clinical Nursing.* doi:10.1111/jocn.13711

Snethen, G., & Van Puymbroeck. (2008). Girls and physical aggression: Causes, trends, and intervention guided by Social Learning Theory. *Aggression and Violent Behavior, 13*(5), 346-354. doi:10.1016/j.avb.2008.05.003

Tyler, K. A., Whitbeck, L. B., Hoyt, D. R., & Johnson, K. D. (2003). Self-mutilation and homeless youth: The role of family abuse, street experiences, and mental disorders. *Journal of Research on Adolescence, 13*(4), 457-474. doi:10.1046/j.1532-7795.2003.01304003.x

van Goethem, A., Mulders, D., de Jong, J., Arntz, A., & Egger, J. (2015). Self injurious behavior and suicidal ideation during dialectical behaviour therapy (DBT) of patients with borderline personality disorder. *Clinical Neuropsychiatry, 12*(1-2), 37-45.

Walsh, B. W. (2006). *Treating self-injury: A practical guide*. New York, NY: Guilford.

Wojciechowski, T. W. (2017). Pathways to self-injury: A qualitative exploration of social psychological processes. *The Qualitative Report, 22*(2), 567-588. Retrieved from http://nsuworks.nova.edu/tqr/vol22/iss2/13

Wu, C. Y., Chang, C. K., Huang, H. C., Liu, S. I., & Stewart, R. (2013). The association between social relationships and self-harm: A case-control study in Taiwan. *BMC Psychiatry, 13*(1), 7. doi:10.1186/1471-244x-13-101

Author Note

Thomas W. Wojciechowski is a PhD Candidate and MA sociology at the University of Florida in the Department of Sociology and Criminology & Law. His research focuses on the relationship between mental health and criminality, substance use, and prevention science. He specializes in longitudinal data analysis. Correspondence regarding this article can be addressed directly to: wojci1tw@ufl.edu.

Article Citation

Wojciechowski, T. W. (2018). Initiation, desistence, and recovery: A qualitative examination of self-injury from a life-course perspective. *The Qualitative Report, 23*(1), 222-244. Retrieved from http://nsuworks.nova.edu/tqr/vol23/iss1/17