


## Essay

**Pro-self-harm: Disentangling self-injury and eating disorder content on social media**Veesta Mavandadi <sup>1</sup>, Stephen P. Lewis <sup>1</sup><sup>1</sup> Department of Psychology, University of Guelph, Guelph, CanadaSubmitted: May 21<sup>st</sup>, 2019; Accepted: June 11<sup>th</sup>, 2020; Published: August 25<sup>th</sup>, 2021

**Abstract:** Non-suicidal self-injury (NSSI) represents a reliable and unique predictor of future suicide attempts and is thus a critical mental health concern. Given the stigma associated with NSSI, many individuals who self-injure are drawn to communicating about NSSI through social media and other online platforms. With the emergence of online NSSI content, major social networks have made efforts to limit or ban access to content that promotes or encourages a broad range of self-harm behaviors, including self-injury and eating disorder behaviour. In these cases, pro-self-harm has been historically used as a blanket term to refer to pro-eating disorder and pro-self-injury content. The present commentary addresses the potentially problematic way we may limit access to self-harm content on social media by highlighting important nuances and distinctions regarding the nature of what is broadly defined as pro-self-harm content. Relevant implications for researchers, practitioners, and policy developers are discussed.

**Keywords:** non-suicidal self-injury, pro-self-harm, pro-eating disorder, Internet, online, social networking sites

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Non-suicidal self-injury (NSSI) refers to the deliberate damage of one's own body tissue (e.g., cutting, burning), in the absence of suicidal intent (Nock & Favazza, 2009). Up to one in five youth and emerging adults report lifetime NSSI engagement (Lewis & Heath, 2015; Swannell et al., 2014). Individuals who repeatedly self-injure report considerable mental health difficulties and are at significantly higher risk for suicide (Lewis & Heath, 2015). Indeed, recent evidence indicates that engagement in NSSI uniquely predicts later suicidal thinking and behaviour (Kiekens et al., 2018). Hence, NSSI represents a pressing concern among youth and young adults. Given the stigma associated with NSSI (see Staniland et al., 2020), individuals who self-injure often seek support online, with such content being pervasive on social networking sites, message

boards, and personal websites (e.g., Harris & Roberts, 2013; Kaukiainen & Martin, 2017; Lewis & Seko, 2016; Niwa & Mandrusiak, 2012; Whitlock et al., 2006). To this end, coupled with concerns about sustained NSSI engagement such as the exacerbation of suicide risk (Kiekens et al., 2018), recent research has focused on the manner by which NSSI material is presented online, and the impact this may have for individuals accessing such content (for a review see Lewis & Seko, 2016).

One area of concern pertains to the notion of pro-self-harm content—namely, material that appears to promote, encourage, or glorify a broad range of self-harm behaviours. For instance, pro-eating disorder content has previously been noted as common and easily accessible on platforms such as Tumblr and thus scrutinized for providing tips and guidelines that supported users in the advancement, maintenance, and concealing of eating disordered behaviours. (Martin, 2004; Shade, 2003; Uca, 2004). Along these lines, NSSI content also emerged as a concern, with online messaging boards, blogs, and social media (e.g., YouTube) being identified as platforms on

 Stephen P. Lewis

Address: 50 Stone Rd E, Guelph, Ontario, Canada N1G 2W1

E-mail: slewis03@uoguelph.ca

which individuals could find support, but may also be exposed to content that normalized NSSI and maintained or encouraged the behaviour (Lewis et al., 2011; Whitlock et al., 2006). As a result, several efforts have been made to ban content rendered harmful to people who accessed it. For example, Yahoo! began prohibiting pro-eating disorder sites in 2001 (Holahan, 2001); subsequent efforts were made by Tumblr and Pinterest to remove broadly defined “self-harm material,” (Fung et al., 2019; Tumblr, 2012). Similarly, numerous major social networks (e.g., Facebook, Twitter) have made efforts to constrain or restrict access to promotive self-harm content in an effort to keep users safe online.

In line with the above, Instagram (an image-based platform) has recently recognized the importance of giving users a space to share about self-harm and to procure social support (Instagram, 2019); however they highlight a caveat that “content which could be helpful to some may be harmful to others” (Instagram, 2019). Indeed, images do not need to be inherently promoting or encouraging self-harm to be banned. Instagram advises that to avoid having content removed, users could include trigger warnings, links to help services, and making posts that emphasize help-seeking, reduce stigma, and promote hope and recovery. Because these guidelines are not consistently adhered to by individuals who post this kind of material, Instagram and many social media platforms inadvertently ban a large portion of self-injury related content – regardless of whether it promotes the behaviour. In response, many youth are driven to use secret hashtags, which arguably makes these behaviours secretive and potentially further stigmatized (Fulcher et al., 2020). Adding complexity to this issue is the historical conflation of self-injury and eating disorder online content. Presently, social media sites such as Twitter, Tumblr, and Pinterest continue to conflate self-injury and eating disordered content under the umbrella term “self-harm.” Unfortunately, in doing so, the complexity and nuanced differences between these different forms of online content is overlooked. Accordingly, the aim of the present commentary is to discuss how much of the online content related to NSSI may be inappropriately categorized as promoting or encouraging self-harm and how online content related to NSSI is distinct from eating disorder content and should be treated accordingly. We end by presenting implications and future directions for researchers, practitioners, and policy developers.

### **Online Non-Suicidal Self-Injury Content**

A recent review of the literature points to several potential risks of online NSSI material, some of which

include the potential for material to trigger NSSI urges (e.g., via access to graphic imagery), contribute to stigma among individuals who engage in NSSI (e.g., through propagation of myths or criticism from others), and reinforce NSSI engagement (i.e., repeated access to hopeless messages could thwart help-seeking and recovery efforts) (Lewis & Seko, 2016). Interestingly, the promotion of NSSI has not been reported as a major risk associated with online NSSI content (Lewis & Seko, 2016; Messina & Iwasaki, 2011). In consonance with these reports, Brown and colleagues (2020) interviewed 59 participants (mean age 16.7) who publish and engage with NSSI content on Instagram and found that 30.5% report having been triggered by online content, whereas 89.5% report indifference or positive reactions to the content (i.e., helping others, identification, motivation to stop NSSI). Therefore, although researchers have indicated that there may be some NSSI material that carries some risk (see Lewis & Seko, 2016), this is not the same as the content *encouraging* the behaviour itself. As such, NSSI content should not be broadly referred to as “promoting or encouraging self-harm” in the policies proposed by social media platforms.

In the case of triggering NSSI, the concern that graphic NSSI images (e.g., those depicting NSSI wounds) may provoke instances of NSSI is both understandable and, to a degree, substantiated in the literature (Baker & Lewis, 2013; Brown et al., 2020). However, this does not necessarily imply that images posted online are uploaded with the intent to trigger or promote NSSI. Indeed, much of the literature examining people’s motives for posting these images would suggest that users predominately post these images for social connection, self-disclosure, authentication of their experience, or to document their NSSI over time (Brown et al., 2020; Lewis & Michal, 2016; Rodham et al., 2013; Whitlock et al., 2006). Moreover, studies have found that even when individuals’ online messages acknowledge that NSSI helps to alleviate intense and painful emotions, they do not actually encourage users to engage in NSSI (Lewis & Baker, 2011; Lewis et al., 2011; Rodham et al., 2013). Thus, while certain forms of content may provoke NSSI urges, it seems that much of this material is posted without this explicit goal in mind. In this way, there is a difference between the motive underlying what is posted and the potential impact of the material.

With respect to NSSI reinforcement, concerns relating to the promotion of NSSI primarily rest in the potential for hopeless messages about recovery to thwart help-seeking and contribute to continued NSSI (Lewis & Baker, 2011; Lewis et al., 2011; Lewis, Rosenrot & Messner, 2012). However, rather than actively trying to discourage recovery, these posts

largely appear to be illustrating a person's difficulty with recovery, which may be posted with the goal of: 1) *chronicling their own experience* (Brown et al., 2020; Fulcher et al., 2020; Rodham et al., 2013), or 2) *detering others from continuing with NSSI* (e.g., posting a message such as 'you shouldn't keep self-injuring, you should stop') (Lewis & Baker, 2011; Lewis et al., 2011). Here again, these types of messages do not equate to encouraging NSSI. Instead, it seems that the potential for NSSI to be reinforced (e.g., by repeatedly accessing helpless messages about recovery) is an unintended consequence of these kinds of posts. In a similar manner, even content in which individuals share strategies about NSSI (e.g., concealing scars, 'safe ways' to self-injure) does not necessarily come from a place of encouraging NSSI. Rather, such content may be posted from a place of care for others; that is, to prevent unintended outcomes (e.g., infection) or to help mitigate stigmatizing and judgemental responses from others (Lewis, Heath et al., 2012; Lewis & Seko, 2016). Taken together, despite the concerns expressed through prominent social media outlets that NSSI is being promoted (Instagram, 2019; Tumblr, 2019), the empirical literature points to other reasons for much of the NSSI material posted online. Commensurate with this, it is perhaps unsurprising that several large examinations of online NSSI content (e.g., personal websites, YouTube, Tumblr) have found a paucity of material that seems to purposely "promote" NSSI (Fulcher et al., 2020; Lewis & Baker, 2011; Rodham et al., 2013).

### Online Pro-NSSI and Pro-ED Content

The overarching perception of broad self-harm content as being promotive in nature may stem from concerns pertinent to the more widely studied online pro-eating disorder content. (Borzekowski et al., 2010; Lipczynska, 2007; Rodgers et al., 2016; Rouleau & von Ranson, 2011). However, there are important distinctions between online NSSI material (which, as noted earlier, tends not to actively promote NSSI) and material that is referred to as pro-ED. To this end, when all such material is widely perceived as promoting or encouraging self-harm (broadly defined), there is potential to overlook key differences between these forms of online material. While no study has concurrently examined both pro-ED and NSSI content (including pro-NSSI content), there is some literature pointing to pro-ED content as potentially more prevalent than material explicitly promoting NSSI (Borzekowski et al., 2010; Cheong et al., 2012; Lewis et al., 2011; Syed-Abdul et al., 2013). For instance, in a comprehensive study examining the nature of self-injury videos on YouTube, only 7% were classified as "pro self-injury" (Lewis et al.,

2011). Yet, a study examining anorexia-related YouTube videos found that close to one-third of the videos were pro-anorexia (Syed-Abdul et al., 2013). Moreover, several past reports (e.g., Borzekowski et al., 2010; Rouleau & von Ranson, 2011) as well as recent research (e.g., Ging & Garvey, 2018) indicate pro-eating disorder material is fairly common online. Although it may appear that pro-NSSI content is relatively less common than pro-eating disorder material, a few points warrant consideration. Notably, no study of which we are aware has directly compared the prevalence of eating disorder and NSSI content online; such a study would be a valued contribution to the field. Further, the use of hashtags to maneuver around extant social media guidelines may contribute to more covert content and the creation of groups in which potentially harmful material about NSSI is shared. For example, if a social network platform were to ban use of the hashtag #selfharm, users may modify the hashtag to share material (e.g., adding extra m's to the end of #selfharm). Accordingly, there may be risks associated with sharing content using these more covert hashtags. Research examining the motives of individuals seeking to avoid having their content banned by using different hashtags is thus needed. Second, as described above, online NSSI content may contribute to NSSI enactment, but the motive behind the content in question seldom aims to explicitly promote users to self-injure (Lewis & Michal, 2016; Lewis & Seko, 2016; Rodham et al., 2013). However, in the context of pro-ED content, there seems to be more explicit mention of promoting and encouraging eating disordered behaviours (Borzekowski et al., 2010; Lipczynska, 2007; Rodgers et al., 2016; Rouleau & von Ranson, 2011). For example, members of pro-ED sites commonly provide tips and strategies on how to maintain and increase eating disordered behaviour with the explicit goal of losing significant weight (Lipczynska, 2007). The provision of such advice may exacerbate the severity of ED behaviours. Further, members of pro-ED sites share photos that glorify thin models with the intent to inspire other members to maintain or progress their ED behaviours (i.e., thinspiration) (Borzekowski et al., 2010; Rouleau & von Ranson, 2011). In contrast, research examining online NSSI material, indicates that while users share some strategies (e.g., NSSI methods, concealing NSSI), these strategies are not shared with the intention of helping users advance their NSSI engagement toward a specific goal (Brown et al., 2020; Lewis et al., 2011; Lewis & Michal, 2016; Lewis & Seko, 2016). That is, online self-injury content does not seem to encourage users to engage in more frequent or severe NSSI. Lastly, the manner and extent to which recovery-based messages are communicated may further

distinguish pro-ED content from online self-injury material. A content analysis of pro-ED websites found that 16% offer rules of membership to users, wherein social support from other users is contingent on the maintenance of eating disordered behaviours (Rodham et al., 2013). Arguably, these rules of membership could lead users to feel pressure to continue ED behaviours in order to maintain social support. As noted earlier, online NSSI content commonly references recovery as a goal that is difficult or impossible to achieve, rather than actively discouraging it (Brown et al., 2020; Fulcher et al., 2020; Lewis & Baker, 2011; Lewis et al., 2011; Rodham et al., 2013).

### Summary and Future Directions

The present paper aimed to offer insight into the scope and nature of online self-injury material, while commenting on the potentially inappropriate way that both eating disorder and self-injury content has been, at times, jointly categorized as promoting or encouraging in nature. To this end, a critical reflection of the language that mental health professionals, researchers, and policy developers use when referencing NSSI content online is warranted. This is especially important considering the impact that language can have on individuals who self-injure (e.g., exacerbating stigma; Lewis, 2017; Hasking & Boyes, 2018; Staniland et al., 2020). Indeed, certain framings (e.g., referring to most or all online content depicting NSSI as pro-NSSI) may inadvertently misconstrue the true nature of the material's intent, thereby stigmatizing or invalidating the individual who posted the material.

When referring to NSSI content, it may be important to consider using an alternative descriptor than "pro" to describe most, if not all, of this material. Indeed, much of the NSSI material online does not appear to actively or overtly promote or encourage NSSI enactment (Lewis & Seko, 2016; Lewis et al., 2019). Online NSSI content is nuanced and complex. While there is content that may trigger NSSI engagement (Brown et al., 2020), this not the same as content that promotes or urges users to engage in NSSI. Importantly, this is not to say that there is no "pro-NSSI" content online, but that such content may be more difficult to access, such as through the use of secretive hashtags (Fulcher et al., 2020). This notwithstanding, even material found via different hashtags may have few qualities befitting the categorization of "pro-NSSI" (Brown et al., 2020).

To date, of the content that may exist online, no research has evaluated the characteristics or impact of pro-NSSI content. If terms such as pro-NSSI are to be used in any context, they should be

contextualized and explicitly defined for readers to avoid obfuscation with the majority of online NSSI material, which does not promote the behaviour (Lewis et al., 2019). Indeed, the term pro-NSSI should only be used when the material explicitly promotes or encourages self-injury. Thus, it may be premature to ban online NSSI content on websites and social media platforms under the guise of limiting access to what is deemed "pro-NSSI" content. Doing so may inadvertently remove an otherwise needed and helpful outlet (and platform) for individuals with lived experience.

Mental health professionals will likely encounter clients who engage in NSSI and/or have an eating disorder, and who also access related online content (Lewis & Heath, 2015). Although there are guidelines to assist clinicians when working with clients in this regard (Lewis & Arbuthnott, 2014; Lewis, Heath et al., 2012; Lewis et al., 2019), these guidelines do not explicitly mention or demarcate pro-ED and pro-self-injury content (or even self-injury versus pro self-injury content). If all online NSSI content is viewed as promoting the behaviour, there is potential for clients to feel misunderstood or invalidated when sharing that they view or post this content online (Lewis et al., 2019). By virtue of gaining a more refined understanding of the various forms of online ED and NSSI content, practitioners may be able to engage in more effective dialogue with clients about their online activity and thus foster a greater understanding of the impact such activity may have on client well-being.

Finally, in keeping with recent policies on several social media platforms, resources should be readily available to people who search for self-injury and eating disorder content online (Instagram, 2019; Lewis, Heath et al., 2012; Lewis & Arbuthnott, 2014; Lewis et al., 2019; Storey, 2016; Tumblr, 2019). To this end, we offer a list of resources that may be helpful to researchers, clinicians, and policy makers in Table 1. Currently, users accessing pro-NSSI and pro-ED content are provided general resources pertaining to an array of concerns. The utility of these resources could be enhanced if the resultant resources were specifically tailored to the nature of the search (e.g., NSSI-specific resources on alternative coping strategies, or ED-specific resources on body image and healthy eating). Partnerships with reputable organizations specializing in NSSI (e.g., siosoutreach.org) or EDs (nedic.ca) can further ensure users have access to the most up-to-date, research-informed, and helpful resources. Ultimately, such efforts are conducive to mitigating the possible detrimental effects of harmful online material.

**Table 1. Online resources for self-injury and eating disorders**

Online Self-injury Resources	
Canada/International	Self-injury Outreach & Support: <a href="http://www.sioutreach.org">www.sioutreach.org</a>
Australia	Shedding Light on Self-injury: <a href="http://www.self-injury.org.au">www.self-injury.org.au</a>
United States	Self-injury & Recovery Resources: <a href="http://www.selfinjury.bctr.cornell.edu">www.selfinjury.bctr.cornell.edu</a>
International	International Society for the Study of Self-injury: <a href="http://www.itriples.org">www.itriples.org</a>
Online Eating Disorder Resources	
Canada	National Eating Disorders Information Centre NEDIC: <a href="http://www.nedic.ca">www.nedic.ca</a> National Initiative for Eating Disorders (NIED): <a href="http://www.nied.ca">www.nied.ca</a> Body Brave: <a href="http://www.bodybrave.ca">www.bodybrave.ca</a>
Australia	Eating Recovery Center: <a href="http://www.eatingrecoverycenter.com">www.eatingrecoverycenter.com</a>
United States	National Eating Disorder Association: <a href="http://www.nationaleatingdisorders.org">www.nationaleatingdisorders.org</a>
United Kingdom	BEAT Eating Disorders: <a href="http://www.beateatingdisorders.org.uk">www.beateatingdisorders.org.uk</a>

**References**

- Baker, T.G., & Lewis, S. P. (2013). Responses to online photographs of non-suicidal self-injury: A thematic analysis. *Archives of Suicide Research, 17*, 223-235.
- Borzekowski, D. G., Schenk, S., Wilson, J. L., & Peebles, R. (2010). E-Ana and e-Mia: A content analysis of pro-eating disorder web sites. *American Journal of Public Health, 100*, 1526-1534.
- Brown, R. C., Fischer, T., Goldwich, D. A., & Plener, P. L. (2020). "I just finally wanted to belong somewhere" - Qualitative analysis of experiences with posting pictures of self-injury on Instagram. *Frontiers in Psychiatry, 11*, 1-8.
- Cheong, C., De Leon, K. J., Gabriel, M.D., & Lewis, S. P. (June 2012). *I still haven't found what I'm looking for: The search for pro self-injury websites*. Poster presented at the International Society for the Study of Self Injury, Chapel Hill, N.J.
- Fulcher, J. A., Dunbar, S., Orlando, E., Woodruff, S. J., & Santarossa, S. (2020). #selfharm on Instagram: understanding online communities surrounding non-suicidal self-injury through conversations and common properties among authors. *Digital Health, 6*(1), 1-13.
- Fung, I. C. H., Blankenship, E. B., Ahweyevu, J. O., Cooper, L. K., Duke, C. H., Carswell, S. L., ... & Fu, K. W. (2019). Public health implications of image-based social media: A systematic review of Instagram, Pinterest, Tumblr, and Flickr. *The Permanente Journal, 24*, 1-10.
- Ging, D., & Garvey, S. (2018). 'Written in these scars are the stories I can't explain': A content analysis of pro-ana and thinspiration image sharing on Instagram. *New Media & Society, 20*(3), 1181-1200.
- Harris, I. M., & Roberts, L. M. (2013). Exploring the use and effects of deliberate self-harm websites: An internet-based study. *Journal of Medical Internet Research, 15*, e285.
- Hasking, P., & Boyes, M. (2018). Cutting words: A commentary on language and stigma in the context of nonsuicidal self-injury. *Journal of Nervous and Mental Disease, 206*, 829-833.
- Instagram. (2019). Community guidelines. Retrieved April 2, 2019 from <https://help.instagram.com/477434105621119>
- Holahan C. (2001, August 4). Yahoo removes pro-eating disorder internet sites. *Boston Globe*. A.2.
- Kaukiainen, A., & Martin, G. (2017). Who engages with self-injury related Internet sites, and what do they gain?. *Suicidology Online, 8*, 47-58.
- Kiekens, G., Hasking, P., Boyes, M., Claes, L., Mortier, P., Auerbach, R. P., ... & Myin-Germeys, I. (2018). The associations between non-suicidal self-injury and first onset suicidal thoughts and behaviors. *Journal of Affective Disorders, 239*, 171-179.
- Lipczynska, S. (2007). Discovering the cult of Ana and Mia: A review of pro-anorexia websites. *Journal of Mental Health, 16*, 545-548.
- Lewis, S. P., & Baker, T. G. (2011). The possible risks of self-injury web sites: A content analysis. *Archives of Suicide Research, 15*, 390-396.
- Lewis, S. P., Heath, N. L., St. Denis, J. M., & Noble, R. (2011). The scope of non-suicidal self injury on YouTube, *Pediatrics, 127*, 552-557.
- Lewis, S. P., Heath, N. L., Michal, N. J., & Duggan, J. M. (2012) Non-suicidal self-injury, youth, and the Internet: What mental health professionals need to know. *Child and Adolescent Psychiatry and Mental Health, 6*, 6-13.

- Lewis, S. P., Rosenrot, S. A., & Messner, M. A. (2012). Seeking validation in unlikely places: The nature of online questions about non-suicidal self-injury. *Archives of Suicide Research, 16*(3), 263–272.
- Lewis, S. P., & Arbutnott, A. E. (2014). Non-suicidal self-injury, eating disorders, and the Internet. In L. Claes, J. J. Muehlenkamp (Eds.), *Non-suicidal self-injury in eating disorders* (pp. 273-293). Heidelberg, Germany: Springer Berlin Heidelberg, pp. 279-293.
- Lewis, S. P., & Heath, N. L. (2015). Nonsuicidal self-injury among youth. *Journal of Pediatrics, 166*, 526–530.
- Lewis, S. P., & Michal, N. J. (2016). Start, stop, and continue: Preliminary insight into the appeal of self-injury e-communities. *Journal of Health Psychology, 21*, 250-260.
- Lewis, S. P., & Seko, Y. (2016). A double-edged sword: A review of benefits and risks of online Nonsuicidal self-injury activities. *Journal of Clinical Psychology, 72*, 249–262.
- Lewis, S. P. (2017). I cut therefore I am? Avoiding labels in the context of self-injury. *Medical Humanities, 43*, 204.
- Lewis, S. P., Bryant, L. A., Schaefer, B. M., & Grunberg, P. H. (2017). In their own words: Perspectives on Nonsuicidal Self-Injury Disorder among those with lived experience. *Journal of Nervous and Mental Disease, 205*, 771-779.
- Lewis, S. P., Kenny, T. E., & Pritchard, T. R. (2019). Toward an understanding of online self injury activity: Review and recommendations for researchers and clinicians. In J. J. Washburn (Ed.). *In Nonsuicidal self-injury: Advances in research and practice.* (203-223) New York: Routledge.
- Martin, A. K. (2004). Stick a toothbrush down your throat: An analysis of the potential liability of pro-eating disorder websites. *Texas Journal of Women and the Law, 14*, 151-172.
- Messina, E. S., & Iwasaki, Y. (2011). Internet use and self-injurious behaviors among adolescents and young adults: An interdisciplinary literature review and implications for health professionals. *Cyberpsychology, Behaviour, and Social Networking, 14*, 161-168.
- Niwa, K. D., & Mandrusiak, M. N. (2012). Self-injury groups on Facebook. *Canadian Journal of Counselling and Psychotherapy, 46*, 1-20.
- Nock, M. K., & Favazza, A. R. (2009) Nonsuicidal self-injury: Definition and classification. In: M.K. Nock. (Ed.) *Understanding nonsuicidal self-injury: Origins, assessment and treatment* (pp. 9 – 18). Washington, DC: APA Publishing.
- Rodham, K., Gavin, J., Lewis, S. P., St. Denis, J. M., & Bandalli, P. (2013). An investigation of the motivations driving the online representation of self-injury: A thematic analysis. *Archives of Suicide Research, 17*, 173-183.
- Rodgers, R. F., Lowy, A. S., Halperin, D. M., & Franko, D. L. (2016). A meta-analysis examining the influence of pro-eating disorder websites on body image and eating pathology. *European Eating Disorders Review, 24*, 3-8.
- Rouleau, C. R., & von Ranson, K. M. (2011). Potential risks of pro-eating disorder websites. *Clinical Psychology Review, 31*, 525–531.
- Shade, L. R. (2003). Weborexics: The ethical issues surrounding pro-ana websites. *Acm Sigcas Computers and Society, 33*, 2-8.
- Storey, K. (2016, October 17). These new Instagram tools could actually help save lives. *Seventeen Magazine*. Retrieved from <https://www.seventeen.com/life/news/a43281/new-instagram-tools-perfectlyme/>
- Staniland, L., Hasking, P., Boyes, M. & Lewis, S.P. (2020). Stigma and nonsuicidal self-injury: Application of a conceptual framework. *Stigma & Health*. <https://doi.org/10.1037/sah0000257>
- Swannell, S. V., Martin, G. E., Page, A., Hasking, P., & St John, N. J. (2014). Prevalence of nonsuicidal self-injury in nonclinical samples: Systematic review, meta-analysis and meta-regression. *Suicide and Life-Threatening Behavior, 44*, 273-303.
- Syed-Abdul, S., Fernandez-Luque, L., Jian, W. S., Li, Y-C., Crain, S., Hsu, M-H., ... Liou, D-M. (2013). Misleading health-related information promoted through video-based social media: Anorexia on YouTube. *Journal of Medical Internet Research, 15*, e30.
- Tumblr. (2012). A new policy against self-harm blogs. Available at <http://staff.tumblr.com/post/18132624829/self-harm-blogs>
- Tumblr. (2019). Community guidelines. Retrieved on April 2, 2019 <https://www.tumblr.com/policy/en/community>.
- Uca, E. R. (2004). *Ana's girls: The essential guide to the underground eating disorder community online*. Bloomington: AuthorHouse.
- Whitlock, J. L., Powers, J. L., & Eckenrode, J. (2006). The virtual cutting edge: the internet and adolescent self-injury. *Developmental Psychology, 42*, 407-417.