

# What Impact do Modern Technologies have on Potential and Present Sufferers when Encouraging Abnormal Eating Behaviours?

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## Abstract

There is concern surrounding the prevalence of pro-eating disorder websites and their harmful nature. This article discusses the negative effects that may be experienced by viewers and incorporates study results pertaining to internet behaviour, identity, socialization, treatment and recovery from eating disorders, and the effects of exposure to mass media. The findings from these sources indicate that the concern within the global community is warranted, as they support the premise of negative effects on potential and current sufferers. Further research is necessary to address the implications of these effects on those who are vulnerable to developing an eating disorder.

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## Résumé

Il y a une préoccupation entourant la prévalence des sites Web sur les troubles proboulimiques et leur nature visible. Cet article décrit des effets négatifs que les usagers pourraient éprouver et intègre les résultats d'études relativement au comportement, à l'identité, à la socialisation, au traitement et à l'habilitation des troubles de l'alimentation et les effets de l'exposition aux médias sociaux. Les conclusions de ces sources indiquent que les préoccupations au sein de la communauté mondiale sont justifiées, étant donné qu'elles appuient la prémisse d'effets négatifs sur les victimes potentielles et actuelles. Il faut davantage de recherche pour se pencher sur les conséquences de ces effets sur ceux qui sont vulnérables à développer un trouble de l'alimentation.

concern is the phenomenon of pro-anorexia and probulimia websites that encourage eating disorders and exist on social networking websites, blogs, and websites that are independently created (Morris, 2009). There is apprehension surrounding the manner of involvement in these online communities as it consists of documenting one's current and ideal weight and the amount of calories ingested in daily food journals (Fading Beauty, 2008; Pro Ana, n.d.). As a result of this disapproval, the effects of viewing these websites have been studied. They consist of encouraging the further development of present disorders and increasing eating-related thoughts and behaviours while developing a lowered self-esteem for members in general (Harper, Sperry, & Thompson, 2008). There is also a lowered probability that those living with anorexia will seek treatment, resulting in a higher prevalence rate of health complications (Brown, Mehler, & Hill Harris, 2000). This article addresses these effects by critically analyzing research findings from numerous perspectives. The validity of the negative attention they are receiving is explored in order to develop a deeper understanding of their implications.

Pro-eating disorder websites have become increasingly pervasive as the internet has grown; most notable is the 470% increase in prevalence rate between the years of 2006-2007 (Morris, 2009). One in three female Internet users between the ages of 6 and 15 (n=1500) has reportedly searched the Internet for weight-loss advice, and 35.5% of patients with eating disorders have visited pro-anorexia websites (Morris, 2009). Overtime the negative effects of these websites have become more clear (Davis, 2008): the results of a study conducted at Stanford University and the Lucile Packard Children's Hospital suggest that pro-anorexia websites hinder the success of recovery (Goodstein, 2007). Hospitalization was also found to

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As the internet continues to grow and develop, its contents also become more variant and original – sometimes to the point of controversy. Of particular

be three times more common for website members than non-users (Goodstein, 2007). The authors found that 40% of patients living with an eating disorder are also members of pro-anorexia websites, 61% of which have learned new techniques for weight-loss and purging through these websites (Goodstein, 2007). Another study found that 35% of those living with anorexia who visit pro-anorexia websites also visit pro-recovery websites; however pro-anorexia websites are much more abundant than pro-recovery websites with a 5:1 ratio (Wilson, Peebles, Hardy, & Litt, 2006). The demographics of pro-anorexia website viewers has been gathered from the information provided by the members on their profiles. Though caution must be taken in assuming the validity of the members' reports, they show that the cohort group most often visiting these websites are girls and young women. This causes concern because it is at these stages in life when the basis for self-conception is formed and when individuals are most sensitive to social comparison. Though weight-related concerns are common for this age group, eating disorders are a psychiatric disorder and cannot be developed by the majority of the population. Individuals with strong feelings of isolation, lack of control, and being misunderstood are most susceptible (Dias, 2003). This is especially true when the disorder presents with comorbid depression, an anxiety disorder, and/or obsessive-compulsive disorder, though these are not essential to its development (Lock, Le Grange, Agras, & Dare, 2001). These websites have the ability to exploit these characteristics in an individual by playing on their vulnerabilities and then justifying the illness as a lifestyle.

Denying that anorexia is an illness acts as a large contributor to sustaining the disorder, and usually appears once the disorder has become severe. These websites promote denial right from the beginning, making interventions and initial diagnosis much more difficult (Kolodny, 2004). By hiding their illness from people offline and employing tips and tricks to appear healthy, the recovery process is slowed down because friends and family are less likely to notice changes in their behaviour and appearance (Rodham, Rodham, Rodham, & Poyer, 2008). To complicate matters, pro-anorexia websites assure the individual with an eating disorder that anyone offering aid actually has bad intentions in mind and should not be trusted. This may also be a result of group polarization where, once a group identity is established, members feel pressure to conform and then begin to compare their views with those of others (Mulveen et al., 2006). Group

identity is established through the "Thinspiration" (My Friend, Ana/Thinspiration, n.d.) that is readily available to members and consists of images, tips, quotations, message boards, and more. The members are encouraged to recite 'Ana's Creed', which belittles the individual with statements such as, "I believe that I am the most vile, worthless, and useless person ever to have existed on the planet, and that I am totally unworthy of anyone's time and attention" (Uca, 2004; Pro Ana Lifestyle, 2007). Members repeatedly state, "It's a lifestyle, not a disease!" (Uca, 2004; Pro Ana Lifestyle, 2007) and "it's not deprivation; it's liberation!" (Fading Beauty, 2008), and argue strongly that anorexia nervosa is a form of self-expression. When we look to those active in body modification for acceptance of this perspective, activists are quick to refute it and voice that starving one's self is unhealthy (Modify, n.d.). Despite this, those living with anorexia view side effects like the loss of hair and growth of lanugo hair as positive changes and as an indication of progress towards obtaining their goal (DeMello, 2007). Members speak proudly of these developments on the forums and group polarization can be applied here as well: individuals who are not experiencing these side effects may progress further into their illness to achieve the same results as their fellow members (Mulveen et al., 2006).

Those living with anorexia are also less likely to seek recovery due to the anonymity offered by the Internet because it provides them with an added tool to keep their illness hidden from those close to them in their daily lives (Rodham et al., 2008). Online, individuals feel as though they are able to reveal as much about themselves as they desire (Joinson, 2003) since they do not face any social consequences in a place where social norms do not exist (Bargh, McKenna, & Fitzsimons, 2002). This occurrence is detrimental for a number of reasons, particularly concerning the physical health complication that are likely to arise: the resulting imbalance of potassium (K+) in the body may account for heart arrhythmias, kidney damage, and renal failure if the imbalance lasts for an extended period. Those who sustain an eating disorder for a prolonged amount of time begin to suffer from the effects of malnutrition. For this reason they are prone to develop illnesses that result from having a lowered immune system, reduced body fat, and vitamin and mineral deficiencies (Brown et al., 2000). Anaemia and osteoporosis tend to be prominent as a result of decreased iron, B12, and calcium intake (Brown et al., 2000). It can be inferred that these websites pose an immense health

and safety risk to their members who struggle with anorexia and cannot be recognized as morally sound.

Unfortunately, the individuals involved in these websites are oblivious to the negative impact: those members who are currently suffering from anorexia nervosa exhibit an ambivalent attitude toward their illness (Fox, Ward, & O'Rourke, 2005). This ambivalence can be seen through the coexistence of the determination to progress deeper into (or maintain) the disorder and the understanding that the behaviour is damaging and unhealthy (Fox et al., 2005). Despite their understanding of the potential medical complications, these members strongly reject being depicted as sick or as having a disease (Fox et al., 2005). They also deny the theory that their starvation is for beauty or thinness, and indicate that their eating disorder is the result of harmful past experiences and the attempt to achieve control (Fox et al., 2005). These individuals turn to pro-anorexia websites as a coping strategy to deal with the negative stigma associated with the disorder (Dias, 2003). The websites also compensate for society's perceived lack of understanding that contributes to their feelings of dealing with the eating disorder alone (Dias, 2003). Pro-anorexia websites offer their members social acceptance, reversing the effects of the hostility they may feel in the real world. The websites also have a non-judgemental social network established within them, in that individuals can confide in the other members who claim to understand, care, and actively listen (Drentea & Moren-Cross, 2005). For these reasons, some people believe that the extinction of these websites would be disadvantageous, as the fear of intimacy that stems from the isolation associated with the illness can make these websites a refuge for sufferers who otherwise might not have social support (Motz, 2008). The aforementioned study whose findings indicated that pro-anorexia websites hinder recovery contradicts this belief. It is evident that this temporary retreat from reality (Brotsky & Giles, 2007) presents a false sense of community (Kolodny, 2004) that pushes sufferers further away from exploring treatment options. This has the contrary effect of isolating them from reality while they live out their online lives and become increasingly oblivious to the seriousness of their behaviours (Clarke, 2008).

Other media has been scrutinized for instilling unhealthy ideals into the minds of their viewers as well. For example, fashion magazines were found to be a strong force in instilling the idea of obtaining the perfect body in the minds of their readers (Field et al., 1999). The effects seen from pro-eating disorder

websites has been contrasted with research findings from fashion media studies to gauge their severity. In one of these studies, women who view pro-anorexia websites were compared with women who view fashion or home decorating websites. Findings indicated that viewers of pro-anorexia websites demonstrated an increased level of negative effects, including lower self-esteem and lower appearance self-efficacy, than those who viewed fashion websites (Bardone-Cone et al., 2007). Women who viewed pro-anorexia websites were also more likely to exercise, question their weight, view themselves as being overweight, and compare their image with that of others more often (Bardone-Cone et al., 2007). Two other studies found negative effects consistent with these results when they compared the viewing of pro-eating disorder websites to the viewing of neutral websites. One study compared pro-eating disorder websites with professional websites and found that the pro-eating disorder websites demonstrated greater negative consequences in terms of body image and eating-related thoughts and behaviours (Harper et al., 2008). The second study found that these results were consistent among the viewers of pro-anorexia websites regardless of whether or not they were realistically overweight and whether or not they had an existing eating disorder (Bardone-Cone et al., 2007). These study results make it clear that the negative effects of viewing fashion media are exacerbated in individuals who view pro-anorexia websites.

Despite the detrimental effects of pro-anorexia websites, the right to free speech allows people to voice their opinions online regarding anorexia (Motz, 2008) and so an internet patrol group cannot be organized to manage their expansion. However, many pro-anorexia websites have been shut down by online databases such as Facebook, Daily Motion, LiveJournal, and Myspace, and are no longer recognized by certain search engines. This is in accordance with the databases' Statement of Rights and Responsibilities. This acts to disenable the movement by creating barriers to actively seek out these websites while protecting other users from harmful or distressing material (Morris, 2009). Unfortunately, these efforts go generally unnoticed: as websites are being deleted, numbers of others are being created (Morris, 2009). The large amount of website-building software that is freely available allows individuals to recreate pro-anorexia websites whenever formerly existing sites are demolished, making it nearly impossible to end this online movement. The rationale for wanting these websites prohibited is understandable: self-destruct-



tive information and viewpoints are easily accessible to vulnerable individuals and can trigger or encourage the progress of an eating disorder. This is seen through their promotion of anorexia as a lifestyle and outstanding achievement, and by providing an environment for social comparison/competition surrounding calorie restriction (Rich, 2006). Despite the modernity of the relevant research, it shows that these websites have detrimental effects on their viewers and that those currently living with anorexia are especially susceptible to their messages. However, it is not yet clear if those effects are directly related to the development of an eating disorder. Further research in this area is needed in order to be able to assess the effects of pro-anorexia websites in their entirety. Until then, the current information regarding the effects on present sufferers can be used where best suited: as initial intake information prior to treatment, in understanding and studying the patient's perspective of their disorder, and in future sociological studies where internet identities are studied.



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