Regulation of Harmful Content on Online Platforms and the Implementation of the Revised Audiovisual Media Services Directive

Submission on behalf of

Bodywhys: The Eating Disorders Association of Ireland

Bodywhys

PO Box 105

Blackrock

Co. Dublin

01-2834963

communications@bodywhys.ie

www.bodywhys.ie

© Think Bodywhys CLG 2019

Introduction

Bodywhys - The Eating Disorders Association of Ireland - is the national voluntary organisation supporting people affected by eating disorders. Our core work includes the provision of a range of support services and information resources about eating disorders, to the promotion of positive body image and media awareness in schools, as well as supporting family members and friends. Bodywhys welcomes the opportunity to address the issue of harmful online content. As with any submission that forms part of this consultation, we are writing from a particular perspective and will focus on the issues which are relevant to our work.

Current submission

Research indicates that the internet is a key source of information and help amongst Irish young people in relation to mental health.^{1,2} Given the nature of the internet, it is possible that users may encounter information which is helpful, but also that which is problematic. People with low levels of happiness are more likely to access harmadvocating material online.³ Victims of online harassment may experience low selfimage and are more likely to access harmful content, including material related to eating disorders.⁴ Bodywhys has for some time expressed concern in relation to harmful websites and content which centre on risky behaviours associated with eating disorders.

This submission addresses:

- Eating disorders
- An evidence based discussion of pro-anorexia websites, social media posts and associated harmful content
- Responses to the questions posed by the Department of Communications, Climate Action and Environment

About Eating Disorders

According to the Health Service Executive's (HSE) Model of Care for Eating Disorders, up to 188,895 people in Ireland may be affected by eating disorders, with 1,757 new cases emerging each year in the 10-49 year age group.⁵ According to the Health Research Board, in 2017, 14% of all admissions of individuals under 18 to Irish psychiatric units and hospitals had a primary diagnosis of eating disorders.⁶ For anorexia nervosa, the peak incidence of onset is 14-18 years of age and for bulimia nervosa, it is 14-22 years.⁷

Eating disorders are recognised as serious and complex mental health illnesses.⁸ They feature severe disturbances in a person's thought processes and their relationship with food, their body and weight. This may lead to significant complications for a person's quality of life, and in their physical and mental health. For example, osteoporosis, heart problems, fertility problems, difficulties concentrating, damage to a person's teeth and chest pain. Individuals may have to take time out from school, college or work during treatment. Social isolation is a common consequence of eating disorders. Parents, carers, siblings and family members also experience significant emotional distress, fear, guilt and uncertainty when someone they care about is unwell. Full recovery is possible, but it is a complex process and an individual's support needs vary from person-to-person.

Associated Risks

People affected by eating disorders may be at risk in terms of their own safety.⁹ This may include medically, psychologically, psychosocially and their capacity for insight and motivation.¹⁰ Eating disorders also lead to risk in terms of mortality and suicidality.¹¹,¹² People affected by eating disorders may be extremely vulnerable, at risk or in crisis. In severe cases, immediate and ongoing medical intervention and supervision may be required.

People affected by eating disorders may also present with:

- Anxiety¹³,¹⁴,¹⁵
- Depression¹⁶,¹⁷,¹⁸
- Self-harm^{19, 20, 21, 22, 23, 24}
- Suicide ideation and behaviour^{25,26}

What is Pro-anorexia?

For over a decade, the mainstream media²⁷,²⁸ along with researchers and health professionals, have reported on the existence and activities of pro-anorexia websites.²⁹,³⁰,³¹,³² Pro-ana websites and online content can be defined as those which tend to focus on the maintenance, promotion and encouragement of

disordered eating behaviours and eating disorders. Typically, the websites operate without professional monitoring, supervision or formal guidance structures or support resources and channels. Terms used in this area include:

- Pro-anorexia (pro-ana)
- Pro-bulimia (pro-mia)
- Pro-eating disorder (pro-ED)

The websites are not unique to English-speaking countries and may be accessible to a global audience at any time.^{33, 34, 35, 36} The growth in availability of the internet and portable devices means that this type of material is no longer limited to websites and message boards – it has been documented on social media platforms such as Reddit,³⁷ Youtube,³⁸ Flickr,³⁹ Tumblr,^{40,41} Instagram⁴² and Twitter.⁴³ Individuals who access pro-anorexia sites intensively do so for approximately 16 hours per week.⁴⁴

Some websites have been closed down, but have opted to relocate under an alternative identity or have used methods to conceal their new location.^{45, 46, 47, 48} Others are no longer updated or feature a notice about being shut down.⁴⁹ Quantifying an accurate number of pro-anorexia websites is challenging and has been described as guesswork.⁵⁰ Pro-anorexia websites are heterogeneous and diverse, and they may serve a range of conflicting purposes.⁵¹ There is no unifying philosophy that underpins the online pro-anorexia/pro-bulimia community.^{52, 53, 54, 55} Some sites are moderate whilst others are uncompromising in their tone, outlook and messages.^{56, 57, 58} The sites and the nature of pro-anorexia in itself have also been described as ambiguous⁵⁹ and contradictory.⁶⁰

For children and young people, exposure to internet content such as self-harm, suicide and eating disorders may increase with age.⁶¹ Young people have reported encountering pro-anorexia websites and online accounts promoting anorexia.⁶² Young girls are more likely to access the sites compared to male peers.⁶³ Parents of children affected by eating disorders may have some awareness of pro-anorexia websites, but little knowledge of their child's usage of such sites.⁶⁴ Parents may also have limited knowledge of pro-recovery websites.⁶⁵ The availability of pro-anorexia websites is a significant cause for concern for families and people affected by eating disorders.⁶⁶

What's the appeal?

Reasons for accessing the websites:

- To pursue anorexia as a choice of 'lifestyle' through extreme thinness⁶⁷
- To manage issues that users feel are not adequately addressed in relationships outside of the internet⁶⁸
- To seek support from others with similar beliefs and experiences^{69,70}
- To seek reinforcement and a sense of community⁷¹
- To seek support due to a lack of understanding and feeling marginalised from traditional support structures^{72,73}
- To exchange messages as a form of emotional support⁷⁴
- To cope with stigma and write online postings as a form of self-expression⁷⁵
- To maintain a concealed identity, including from family and friends^{76,77}

What are the concerns?

Behaviours discussed may include:

- How to maintain or initiate eating disorder behaviours and how to resist treatment or recovery⁷⁸,⁷⁹
- How to obtain and use weight loss medications⁸⁰
- How to conceal anorexia from family members⁸¹
- How to behave in social situations involving food, particularly when interacting with people who do not have an eating disorder⁸²
- Information on weight loss strategies, commonly known as tips and tricks^{83,84}
- Diet challenges and competitions^{85,86,87}
- Praise for the denial of nourishment⁸⁸
- Disguising evidence of and how to induce vomiting, the sharing of personal photographs of emaciation in order to seek approval and validation from peers.^{89,90,91}

Based on the available research evidence, four primary areas of concern have emerged from the availability of and exposure to pro-eating disorder websites:

1. Weight and Eating Behaviours

- The use of techniques to aid with food reduction and the subsequent impact on an individual's calorie intake⁹²
- An impact on the drive for thinness and perfectionism in young girls⁹³
- An impact on the drive for muscularity in men⁹⁴
- Reported higher levels of disordered eating amongst pro-eating disorder website users⁹⁵
- Reported preoccupation with weight, diet and food behaviours^{96,97}
- That extreme content, including thinspiration posts, may have the potential to trigger eating disorder behaviours in vulnerable users⁹⁸

2. Thoughts and Feelings

- A negative impact on an individual's self-esteem, emotional state, perceived weight, self-efficacy and comparison with the images of women that were posted^{99,100,101}
- Feelings of worthlessness, weakness and self-loathing towards the body and inner self¹⁰²
- The risk of eating disorder behaviours and thought patterns becoming increasingly entrenched¹⁰³
- Low scores on cognitive dimensions and insight measures amongst blog users¹⁰⁴,¹⁰⁵
- Where an individual has a low sense of social belonging, exposure to proeating disorder websites may be negatively associated with their view of their subjective well-being (SWB) – psychological health, overall happiness and appreciation for life¹⁰⁶

3. Pressure and Stigma

• A fear of disclosure and discovery, feeling under pressure and the encouragement of eating disorder behaviours¹⁰⁷

- The intensification of stigma and the reframing of eating disorder behaviours as positive¹⁰⁸
- The continuation of the behaviours associated with and expected of the ideals of pro-anorexia¹⁰⁹

4. Lack of Support

- Ultimately, the quality of support available has been shown to be short-term relief, elusive, or a 'social mirage'¹¹⁰
- Users may report fewer social connections with the outside world¹¹¹
- Whilst there may be a social component to the interaction on the websites, this is not without limitations and challenges.¹¹²

'Thinspiration' Material and Usage of Social Media

Some websites and social media posts feature content centred on the concept of thinspiration. That is, images, messages, mantras, exercise routines, commentary and suggestions based around thin body ideals and aesthetics. Typically, this is to inspire fellow users and viewers to be thin and to admire the body depicted, with certain poses and a particular look. In most instances, the imagery depicts women. The nature of thinspiration content may be associated with the encouragement of, and motivation to support, endorse and sustain eating disorder behaviours.¹¹³ Imagery may focus on someone with a low weight, often in underwear and with an emphasis of the torso or waist and legs. Online content may also focus on pain and suffering which requires dedication and is not for everyone.¹¹⁴ Thinspiration based emotional messaging may feature praise for thinness, along with body and weight related guilt, objectifying messages and stigma about weight and fat.¹¹⁵ Additional problematic details posted on the sites include how to achieve minimal food intake, along with strategies for circumventing medical assistance or supervision.¹¹⁶ Statements such as 'sore or sorry, you pick', have been noted on some thinspiration blogs.¹¹⁷

Research indicates that internet searches related to thinspiration yield results with higher harm scores compared to searches without this term.¹¹⁸ That is, higher harm scores indicated more harm due large amounts of graphic content, imagery and active encouragement of eating disorder behaviours. It has been suggested that the

6

focal point of thinspiration imagery is to reduce the women depicted to particular body parts, often from below the neck, to create the impression that a woman's worth is contingent on her bodily appearance, and thus discourage eating.¹¹⁹

Pro-eating disorder posts on social media may indicate a high level of vulnerability, risk to personal safety and attitudes that reinforce eating disorder behaviours and self-harm.¹²⁰ A study which examined pro-anorexia Instagram posts found that the content posted by some users exhibited a trend of increasing mental illness severity (MIS) over time.¹²¹ The most severe elements of MIS was evident in tags such as: "anxiety", "depression", "abuse", "ana", "anorexia", "fat", "bulimia", "skinny", "starve", "binge", "purge", "anamia", "donteat", "ugly", "size00", "fasting", "bones", "anatips", "cutting", "suicidal", "hate", "crying", "body", "weightloss", "perfect", "flatstomach", "gross", "alone" and "worthless".

Using a dataset of 7,560 images from Instagram, researchers found that 74% of the images focused on pro-anorexia content.¹²² Through analysis, the following categories were identified:

- Thinspiration images
- Gamified images that is those which imply that a user will engage in fasting or excessive exercise for 'likes'
- Interactive images posts that request the audience to name a food that a user will agree not to eat for a set period of time
- Text-based quotes including, poetry, lyrics and memes that discourage eating
- Pro-anorexia images linked with depression, including feelings of sadness, isolation and worthlessness
- Pro-anorexia images linked with self-harm and suicide
- Tips on maintaining and concealing an eating disorder
- Pro-recovery messages, including encouraging seeking professional help and hope for the future
- Selfies

Instagram provides users with filter and editing options.¹²³ In the context of thinspiration, this can accentuate stylised and aesthetic features and bone protrusion.¹²⁴

As of April 2019, Tumblr has 462 million blogs, 21.1 million daily posts and is available in 18 languages.¹²⁵ Pro-anorexia content on Tumblr has been associated with the following research findings:¹²⁶

- Pro-anorexia posts are more pervasive than those from a pro-recovery perspective
- Pro-anorexia posts describe, endorse and disseminate the progression and maintenance of anorexia nervosa
- Content relating to self-harm and suicide, including graphic descriptions, is three times more common in pro-anorexia posts compared to those of the pro-recovery community
- Pro-anorexia Tumblr users may be less likely to use words related to social and personal concerns, indicating that they are less socially embedded with friends and family. This may be as a consequence of rejection, social isolation or a lack of support
- Users may post fewer cognition and perception words compared to the prorecovery community, indicating possible cognitive impairment

Using a dataset of approximately 877,000 pro-eating disorder Tumblr posts, researchers referred to violations of community guidelines and rules as deviant content.¹²⁷ Currently, pro-anorexia content is rarely reported to moderators.¹²⁸ This study also noted that those looking for support in the pro-anorexia community may be unlikely to recognise that dangerous content is in breach of community guidelines.

A content analysis study that compared social media users' communication about eating disorders on Twitter and Tumblr found that pro-anorexia content was problematic.¹²⁹

- Eating disorders were portrayed as a lifestyle choice something anti-proanorexia users disagreed with, citing concerns of potential glorification
- Physical signs of hunger were viewed positive

- Self-control over hunger was viewed as an achievement
- Fasting and eating low amounts of food were indicators of success

In 2012, Instagram banned some tags in an effort to moderate the content associated with pro-eating disorders posts.¹³⁰ The ban merely made certain posts unsearchable, it did not remove the original posts that contained the prohibited tags. In response to the ban, some users circumvented the restrictions through alternate spelling or variations such as "thynspo", "thinspooo", "th1nspo" and "thingspogram".¹³¹,¹³² A study which focused on the before and after effects of the ban found that the lexical variations used by the pro-eating disorder community were:¹³³

- Used extensively to continue to share pro-eating disorder content
- Used to share more triggering and self-harm content

This, along with participation in communities that used unmoderated tags, tended to reinforce pro-eating disorder beliefs, and over time, contributed to the expression of heightened toxic and vulnerable behaviour.

Response to Strand 1 – National Legislative Proposals

Q. 1. – What system should be put in place to require the removal of harmful content from online platforms? For example, the direct involvement of the regulator in a notice and take down system where it would have a role in deciding whether individual pieces of content should or should not be removed on receipt of an appeal from a user who is dissatisfied with the response they have received to a complaint submitted to the service provider.

Bodywhys Response – Online platforms, internet service providers and social networking companies must implement strategies, policies and mechanisms to promptly remove content intended to promote, maintain and encourage eating disorders and related behaviours, and self-harm and suicide. This includes methods and potential 'how to' content suggesting risky behaviours. Reporting breaches of terms and conditions should be transparent and straightforward to use. Where content is removed appropriate support and information resources should be sent to the user.

Q.2 – If the regulator is to be involved in deciding whether individual pieces of content should or should not be removed, should a statutory test be put in place before an appeal can be escalated to the regulator? Please describe any statutory test which you consider would be appropriate.

Bodywhys Response

An applicable statutory instrument such as Code of Practice or Standards that should be referenced in relation to the management of appropriate content, providing a summary of the minimum requirements, should be developed and providers informed of their obligations. The legal obligations in relation to statutory testing should be used as a guide when monitoring content.

Q.3 – Which online platforms, either individual services or categories of services should be included within the scope of a regulatory or legislative scheme?

Bodywhys Response – Online platforms and services where users can create an account or profile and interact, connect with or respond to each other are typically sources where harmful material can emerge and grow.

Q. 4 – How should harmful online content be defined in national legislation? Should the following categories be considered as harmful content? Online platforms are already required to remove content which it is a criminal offence under Irish and EU law to disseminate, such as material containing incitement to violence or hatred, content containing public provocation to commit a terrorist offence, offences concerning child sexual abuse material or concerning racism and xenophobia. Are there other clearly defined categories which should be considered?

For example,

- Serious Cyber bullying of a child (i.e. content which is seriously threatening, seriously intimidating, seriously harassing or seriously humiliating)

- Material which promotes self-harm or suicide

10

- Material designed to encourage prolonged nutritional deprivation that would have the effect of exposing a person to risk of death or endangering health

Bodywhys Response – Bodywhys agrees with the list provided. Posts, comments or hashtags such as 'stop eating' are clearly instructional and risky. 'Nutritional deprivation' is not the sole point of concern in relation to pro-anorexia content, or that which is problematic in an eating context. In addition to material based on restriction, information and messaging centred on purging and that which suggests a dependence on physical activity, or excessive exercise, that which has an emphasis on punishment, or promotes a mindset to engage in behaviours that appear to exclude other aspects of a person's life, is also problematic.

In 2016, the term 'pro-muscular' was identified in the research literature.¹³⁴ In particular, this type of content may emphasise and reflect an extreme pursuit of muscularity:

- Rigid exercise and dietary routines and practices
- Admiration and encouragement of the drive for size
- Promotion the benefits of muscularity
- Derogatory labelling of the non-ideal body
- Marginalisation of social activities in order to pursue muscle building
- The use of muscle enhancing substances

Response to Strand 2 – Video Sharing Platform Services

Q. 6 – The revised Directive takes a principles based approach to harmful online content and requires Video Sharing Platform Services to take appropriate measures to protect minors from potentially harmful video content, the general public from video containing incitement to violence or hatred and certain criminal video content. It also requires that Ireland designate a regulator to oversee the ongoing implementation of these measures.

Given this, what kind of regulatory relationship should there be between a Video Sharing Platform Service established in Ireland and the Regulator?

Q. 7 – On what basis should the Irish regulator monitor and review the measures that a Video Sharing Platform Service has in place, and on what basis should the regulator seek improvements or an increase in the measures the services have in place?

Additional comments from Bodywhys - Potential challenges

It must be acknowledged that, in an online context, distinguishing between personal admissions and disclosures of an eating disorder, as opposed to content which is considered promotion of behaviours, is not straightforward and is a challenge for content reviewers and moderators who enforce policies relating to harmful content.

- Some people with eating disorders may use both pro-recovery and proanorexia websites simultaneously or at different stages of the illness. This reflects the complexity of eating disorders as there is often fear and ambivalence about change, seeking help and recovery.
- Past attempts to regulate pro-anorexia content have had limited success and can send aspects of harmful communities further underground. In some instances, bans lead to the sharing of more risky content. Bans have also been circumvented through alternative spelling.
- Some people with eating disorders use social media to discuss their illness, including recovery. If a person posts photos depicting their illness, e.g. an emaciated image, along with text information about their story, another user may inadvertently report this believing that that it's promoting eating disorders when that was not the original intent.

Signposting to safer options

Bodywhys recommends that pro-anorexia/pro-bulimia websites and online content be recognised as having a serious negative impact on users and be monitored accordingly and acted upon, where required. Mechanisms must be developed to address the potentially damaging implications such usage may incur. Safety developments in this instance could include a facility to offer a safe alternative e.g. a 'click through' facility to BodywhysConnect (age 19+) and Bodywhys YouthConnect (age 13-18) which are safe and supervised online support groups for people affected by eating disorders. ³ Oksanen, A., Näsi, M., Minkkinen, J., et al. (2016). Young people who access harm-advocating online content: A four-country survey. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *10*(2), article 6. http://dx.doi.org/10.5817/CP2016-2-6

⁴ Näsi, M., Räsänen, P. & Oksanen, A. et al. (2014) Association between online harassment and exposure to harmful online content: A cross-national comparison between the United States and Finland. *Computers in Human Behavior, 41,* 137-145.

⁵ Health Service Executive (2018) *Eating Disorder Services, HSE Model of Care for Ireland.*

⁶ Health Research Board (2018) HRB Statistics Series 38. Activities of Irish Psychiatric Units and Hospitals 2017 Main Findings.

⁷ Lock. J, La Via, M.C. and the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI) (2015). Practice parameter for the assessment and treatment of children and adolescents with eating disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 54*(5), 412-25.

⁸ American Psychiatric Association Publishing (2013) Desk Reference for the Diagnostic Criteria from DSM-5TM. Arlington, VA: American Psychiatric Association Publishing.

⁹ Treasure, J. (2009) A Guide to the Medical Risk Assessment for Eating Disorders.

¹⁰ Treasure, J. (2009) *Ibid*

¹¹ Chesney, E., Goodwin, G.M. & Fazel, S. (2014) Risks of all-cause and suicide mortality in mental disorders: A meta-review. *World Psychiatry*, *13*(2), 153-160.

¹² Arcelus, J., Mitchell, A.J., Wales, J. et al. (2011) Mortality rates in patients with anorexia nervosa and other eating disorders: A meta-analysis of 36 studies. *Archives of General Psychiatry, 68*(7), 724-731.

¹³ Swinbourne, J., Hunt, C., Abbott, M. et al. (2012) The comorbidity between eating disorders and anxiety disorders: Prevalence in an eating disorder sample and anxiety disorder sample. *Australian and New Zealand Journal of Psychiatry, 46*(2), 118-131.

¹⁴ Kaye, W.H., Bulik, C.M., Thornton, L. et al. (2004) Comorbidity of anxiety disorders with anorexia and bulimia nervosa. *The American Journal of Psychiatry, 161*(12), 2215-2221.

¹⁵ Pallister, E. & Waller, G. (2008) Anxiety in the eating disorders: Understanding the overlap. *Clinical Psychology Review*, 28(3),366-386.

¹⁶ Hughes, E., Goldschmidt, A.B., Labuschagne, Z. (2013) Eating disorders with and without comorbid depression and anxiety: Similarities and differences in a clinical sample of children and adolescents. *European Eating Disorders Review, 21*(5), 386-94.

¹ Dooley, B.A. & Fitzgerald, A. (2012) *My World Survey: National Study of Youth Mental Health in Ireland*. Headstrong – The National Centre for Youth Mental Health and UCD School of Psychology, Dublin

² Karwig, G., Chambers. D. & Murphy, F. (2015) *Reaching Out in College: Help-Seeking at Third Level in Ireland*, ReachOut Ireland.

¹⁷ Araujo, D.M., Santos, G.F., Nardi, A.E. (2010) Binge eating disorder and depression: A systematic review. *World Journal of Biological Psychiatry*, *11*(2 Pt 2), 199-207.

¹⁸ Presnell, K., Stice, E., Seidel, A. et al. (2009) Depression and eating pathology: prospective reciprocal relations in adolescents. *Clinical Psychology & Psychotherapy, 16*(4), 357-65.
¹⁹ Verschueren, S.,Berends, T., Kool-Goudzwaard, N. et al. (2015) Patients with anorexia nervosa who self-injure: A phenomenological study. *Perspectives in Psychiatric Care, 51*(1), 63-70.

²⁰ Claes, L.,Norré, J., Van Assche, L. et al. (2014) Non-suicidal self-injury (functions) in eating disorders: Associations with reactive and regulative temperament. *Personality and Individual Differences, 57,* 65-69.

²¹ Claes, L., Fernández-Aranda, F., Jimenez-Murcia, S. et al. (2013) Co-occurrence of non-suicidal self-injury and impulsivity in extreme weight conditions. *Personality and Individual Differences, 54*(1), 137-140.

²² Claes, L., Soenens, B., Vansteenkiste, M. et al. (2012) The scars of the inner critic: perfectionism and nonsuicidal self-injury in eating disorders. *European Eating Disorders Review,20*(3), 196-202.

²³ Claes, L., Jimenez-Murcia, S. Agüera, Z. et al. (2012) Male eating disorder patients with and without non-suicidal self-injury: a comparison of psychopathological and personality features. *European Eating Disorders Review, 20*(4), 335-338.

²⁴ Peebles, R., Wilson, J.L. & Lock, J.D. (2011) Self-Injury in adolescents with eating disorders: Correlates and provider bias. *Journal of Adolescent Health, 48*(3), 310-313.

²⁵ Crow, S.J., Swanson, S.A., le Grange, D. et al. (2014) Suicidal behaviour in adolescents and adults with bulimia nervosa. *Comprehensive Psychiatry*, *55*(7), 1534-9.

²⁶ Suokas, J.T., Suvisaari, J.M., Grainger, M. (2014) Suicide attempts and mortality in eating disorders: a follow-up study of eating disorder patients. *General Hospital Psychiatry*, *36*(3), 355-357.

²⁷ Reaves, J. (2001) Anorexia goes high tech. *Time.* Accessed 3 April 2019. Available from: <u>http://content.time.com/time/health/article/0,8599,169660,00.html</u>

²⁸ Troy, C. (2001) How eating disorders are being promoted on the net. *Irish Independent*. Accessed 3 April 2019. Available from: <u>http://www.independent.ie/unsorted/features/how-eating-disorders-are-being-promoted-on-the-net-26076688.html</u>

²⁹ Chesley, E.B., Alberts, J.D., Klein, J.D. & Kreipe, R.E. (2003) Pro or con? Anorexia nervosa and the internet. *Journal of Adolescent Health, 32*(2), 123-124.

³⁰ Academy for Eating Disorders (2006) *Academy calls for warning labels on pro-anorexia web sites.* Academy for Eating Disorders. Accessed 10 June 2014. Available from:

https://www.newswise.com/articles/academy-calls-for-warning-labels-on-pro-anorexia-web-sites

³¹ Royal College of Psychiatrists (2009) *Psychiatrists urge action to tackle 'pro-ana' websites danger.* London: Royal College of Psychiatrists. Accessed 3 April 2019. Available from: https://www.rcpsych.ac.uk/mediacentre/pressreleasearchives/2009/proanawebsites.aspx

³² Borzekowski, D.L.G., Schenk, S., Wilson, J.L., and Peebles, R. (2010) E-ana and e-mia: A content analysis of pro-eating disorder web sites. *American Journal of Public Health*, *100*(8), 1526-1534.
³³ Castro, T.S. & Osório, A.J. (2013) "I love my bones!" – self-harm and dangerous eating youth behaviours in Portuguese written blogs. *Young Consumers: Insight and Ideas for Responsible Marketers*, *14*(4), 321-330.

³⁴ Teufel, M., Hofer, E., Junne, F. et al. (2013) A comparative analysis of anorexia nervosa groups on Facebook. *Eating and Weight Disorders, 18*(4), 413-420.

³⁵ Wolf, M., Theis, F. & Kordy, H. (2013) Language use in eating disorder blogs: psychological implications of social online activity. *Journal of Language and Social Psychology, 3*2(2), 212-226.

³⁶ Ramos, de Souza, J., Pereira Neto, de Faria,, A. and Bagrichevsky, M. (2011) Pro-anorexia cultural Identity: characteristics of a lifestyle in a virtual community. *Interface (Botucatu)*, 15(37), 447-460. Accessed 3 April 2019. Available from: <u>http://www.scielo.br/scielo.php?pid=S1414-</u>32832011000200010&script=sci_abstract

³⁷ Sowles, S.J., McLeary, M., Optican, A. et al. (2018) A content analysis of an online pro-eating disorder community on Reddit. *Body Image, 24*, 137-144.

³⁸ Syed-Abdul et al. (2013) Misleading health-related information promoted through video-based social media: Anorexia on YouTube. *Journal of Medical Internet Research,* 15(2), e30.

³⁹ Yom-Tov, E., Fernandez-Luque, L., Weber, I. & Crain, S.P. (2012) Pro-anorexia and pro-recovery photo sharing: a tale of two warring tribes. *Journal of Medical Internet Research, 14*(6), :e151.

⁴⁰ National Eating Disorders Association (2012). *National Eating Disorders Association partners with Tumblr*. Accessed on May 6, 2014. Available from: <u>http://www.nationaleatingdisorders.org/press-</u> <u>room/press-releases/2012-press-releases/national-eating-disorders-association-partners-tumblr</u>

⁴¹ De Choudhury, M. (2015) Anorexia on Tumblr: A characterization study. Proceedings of the 5th International Conference on Digital Health 2015.

⁴² Chancellor, S., Jerry Lin, Z. & Goodman, E.L. et al. (2016) Quantifying and predicting mental illness severity in online pro-eating disorder communities. Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing.

⁴³ Arseniev-Koehler, A., Lee, H. & McCormick, T. (2016) op.cit.

⁴⁴ Peebles et al. (2012) op.cit.

⁴⁵ Brotsky, S.R. and Giles, D. (2007) Inside the "pro-ana" community: A covert online participant observation. *Eating Disorders: The Journal of Treatment & Prevention, 15*(2), 93-109.
⁴⁶ Borzekowski., et al. (2010) op.cit.

⁴⁷ Boero, N. & Pascoe, C.J. (2012) Pro-anorexia communities and online interaction: Bringing the proana body online. *Body & Society, 18*(2), 27-57.

⁴⁸ Castro, T.S. & Osório, A.J. (2012) Online violence: Not beautiful enough... not thin enough.
Anorectic testimonials in the web. *PsychNology Journal, 10*(3), 169-186. Accessed 3 April 2019.

Available from:

http://www.psychnology.org/File/PNJ10(3)/PSYCHNOLOGY_JOURNAL_10_3_CASTRO.pdf

⁴⁹ Cobb, G. (2017) "This is not pro-ana": Denial and disguise in pro-anorexia online spaces. *Fat Studies, 6*(2), 189-205.

⁵⁰ Crowe, N. & Watts, M. (2016) 'We're just like Gok, but in reverse': Ana Girls – empowerment and resistance in digital communities. *International Journal of Adolescence and Youth, 21*(3), 379-390.

⁵¹ Giles, D. (2006) Constructing identities in cyberspace: The case of eating disorders. British Journal of Social Psychology, 45(3), 463-477.

⁵² Brotsky and Giles (2007) op.cit.

⁵³ Jett, S., LaPorte, D.J. & Wanchisn, J. (2010) Impact of exposure to pro-eating disorder websites on eating behaviour in college women. *European Eating Disorders Review, 18*(5), 410-16.

⁵⁴ Williams, C. & Riley, S. (2013) Finding support and negotiating identity: an analysis of the structure and content of newbie posts and their elicited replies on five pro-eating disorder websites. *Social Science Research on the Internet, 1*(2), 49-72. Accessed 3 April 2019. Available from: http://www.journal-reset.org/index.php/RESET/article/view/14/18

⁵⁵ Strife, S.R. & Rickard, K. (2011) The conceptualization of anorexia: The pro-ana perspective. *Affilia*, *26*(2), 213-217.

⁵⁶ Tierney, S. (2006) The dangers and draw of online communication: Pro-anorexia websites and their implications for users, practitioners, and researchers. *Eating Disorders: The Journal of Treatment & Prevention, 14*(3), 181-190.

⁵⁷ Hammersley, M. & Treseder, P. (2007) Identity as an analytic problem: who's who in `pro-ana' websites? *Qualitative Research, 7*(3), 283-300.

⁵⁸ Bond (2012) op.cit.

⁵⁹ Giles, D. (2016) Does ana = anorexia? Online interaction and the construction of new discursive objects. In M. O'Reilly & J. Lester (Eds). *The Palgrave Handbook of Adult Mental Health: Discourse and Conversation Studies* (pp. 308-328). Basingstoke: Palgrave.

⁶⁰ Cobb, G. (2017) "This is not pro-ana": Denial and disguise in pro-anorexia online spaces. *Fat Studies, 6*(2), 189-205.

⁶¹ Livingstone, S. & Haddon, L. (2013) *EU Kids Online: Final Report.* Accessed 9 June 2014. London: London School of Economics. Available from:

http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20I%20%282006-9%29/EU%20Kids%20Online%20I%20Reports/EUKidsOnlineFinalReport.pdf

⁶² Barbovschi, M. et al. (2014) In Smahel, D. & Wright, M.F. (eds) *The meaning of online problematic situations for children.* Accessed 5 November 2014. Available from:

http://eprints.lse.ac.uk/56972/1/EU_Kids_Online_Report_Online_Problematic_Situations_for_Children _June2014.pdf

⁶³ Custers, K. & Van den Bulck, J. (2009) Viewership of pro-anorexia websites in seventh, ninth and eleventh graders. *European Eating Disorders Review, 17*(3), 214-219.

 ⁶⁴ Wilson, J.L., Peebles, R., Hardy, K.K. & Litt, I.F. (2006) Surfing for thinness: A pilot study of proeating disorder web site usage in adolescents with eating disorders. *Pediatrics*, *118*(6), 1635-1643.
⁶⁵ Wilson, J.L., Peebles, R., Hardy, K.K. & Litt, I.F. (2006) Surfing for thinness: A pilot study of proeating disorder web site usage in adolescents with eating disorders. *Pediatrics*, *118*(6), 1635-1643.
⁶⁶ Smith, A. T. and McGowan, K. A. (2011) Quality of eating disorders websites: What adolescents and their families need to know. *Journal of Child and Adolescent Psychiatric Nursing*, *24*(1), 33-37.
⁶⁷ Fox, N., Ward, K. & O' Rourke, A. (2005) Pro-anorexia, weight-loss drugs and the internet: An 'antirecovery' explanatory model of anorexia. *Sociology of Health & Illness*, *27*(7), 944-971.

⁶⁸ Ransom, D.C. et al. (2010) Interpersonal interactions on online forums addressing eating concerns. *International Journal of Eating Disorders*,*43*(2),161-70.

⁶⁹ Williams, S. & Reid, M. (2007) A grounded theory approach to the phenomenon of pro-anorexia. *Addiction Research and Theory, 15*(2), 141-152.

⁷⁰ Williams, S. and Reid, M. (2010) Understanding the experience of ambivalence in anorexia nervosa: The maintainer's perspective. *Psychology and Health*, *25*(5), 551-567.

⁷¹ Arseniev-Koehler, A., Lee, H. & McCormick, T. (2016) #Proana: Pro-eating disorder socialization on Twitter. *Journal of Adolescent Health, 58*(6), 659-664.

⁷² Haas, S. M., Irr, M. E., Jennings, N. A. & Wagner, L. M. (2011) Communicating thin: A grounded model of online negative support groups in the pro-anorexia movement. *New Media and Society*, *13*(1), 40-57.

⁷³ Yeshua-Katz, D., and Matins, N. (2013) Communicating stigma: The pro-ana paradox. *Health Communication*, *28*(5), 499-508.

⁷⁴ Tom Tong, S.T. et al. (2013) The use of pro-ana blogs for online social support. *Eating Disorders: The Journal of Treatment & Prevention, 21*(5), 408-422.

⁷⁵ Yeshua-Katz & Martins (2013) op.cit.

⁷⁶ Gavin, Rodham & Poyer (2008) op.cit.

⁷⁷ Ramos, Pereira Neto and Bagrichevsky (2011) op.cit.

⁷⁸ Norris, M.L., Boydell, K.M., Pinhas, L., & Katzman, D.K. (2006) Ana and the Internet: a review of pro-anorexia websites. *International Journal of Eating Disorders, 39*(6), 443-447.

⁷⁹ Harshbarger, J.L., Ahlers-Schmidt, C.R., Mayans, L., Mayans, D., & Hawkins, J.H. (2008) Proanorexia websites: What a clinician should know. *International Journal of Eating Disorders, 4*2(4), 367-370.

⁸⁰ Fox, Ward & O' Rourke (2005) op.cit.

⁸¹ Giles (2006) op.cit.

⁸² Haas et al. (2011) op.cit

⁸³ Ibid

⁸⁴ Boero, N. & Pascoe, C.J. (2009) *Anas Mias and wannas: Authenticity and embodiment in proanorexia discussion groups.* American Sociological Association Annual Meeting, San Francisco, CA. Accessed 10 May 2014. Available from: http://citation.allacademic.com/meta/p mla apa research citation/3/0/9/4/1/pages309419/p309419-1.php

⁸⁵ Rich (2006) op.cit.

⁸⁶ Borzekowski et al. (2010) op.cit.

⁸⁷ Bond (2012) op.cit.

⁸⁸ Csipke and Horne (2007) op.cit.

⁸⁹ Tierney (2006) op.cit.

90 Castro & Osório (2013)

- ⁹¹ Tom Tong et al. (2013) op.cit.
- ⁹² Jett, LaPorte, & Wanchisn (2010) op.cit.

⁹³ Custers & Van den Bulck (2009) op.cit.

⁹⁴ Juarez, L., Soto, E., Pritchard, M.E., (2012) f*Eating Disorders: Journal of Treatment & Prevention, 20*(2), 99-112.

⁹⁵ Peebles et al. (2012) op.cit.

⁹⁶ Yeshua-Katz and Martins (2013) op.cit.

⁹⁷ Wolf, Theis & Kordy (2013) op.cit.

⁹⁸ Branley, D.B. & Covey, J. (2017) Pro-ana versus pro-recovery: A content analytic comparison of social media users' communication about eating disorders on Twitter and Tumblr. *Frontiers in Psychology,*

⁹⁹ Cornelius, T. & Blanton, H. (2015) The limits to pride: A test of the pro-anorexia hypothesis. *Eating Disorders: The Journal of Treatment & Prevention*,1-10. [Epub ahead of print]

¹⁰⁰ Bardone-Cone, A.M. & Cass, K.M. (2007) What does viewing a pro-anorexia website do? An experimental examination of website exposure and moderating effects. *International Journal of Eating Disorders, 40*(6), 537-548.

¹⁰¹ Higbed, L. and Fox, J. R. E. (2010) Illness perceptions in anorexia nervosa: A qualitative investigation. *British Journal of Clinical Psychology*, *49*(3), pp 307-325.

¹⁰² Haas et al 2011

¹⁰³ Bardone-Cone, A.M. & Cass, K.M. (2006) Investigating the impact of pro-anorexia websites: A pilot study. *European Eating Disorders Review, 14*(4), 256-262.

¹⁰⁴ Wolf, Theis & Kordy (2013) op.cit.

¹⁰⁵ Lyons, E., Mehl, M., & Pennebaker, J. W. (2006). Pro-anorexics and recovering anorexics differ in their linguistic internet self-presentation. *Journal of Psychosomatic Research, 60*(3), 253-256.

¹⁰⁶ Turja, T., Oksanen, A & Kaakinen, M. et al. (2016) Proeating disorder websites and subjective well-being: A four-country study on young people. International Journal of Eating Disorders,
¹⁰⁷ Yeshua-Katz and Martins (2013) op.cit.

¹⁰⁸ Chang, P.F. & Bazarova, & N.N. (2015) Managing stigma: Disclosure-response communication patterns in pro-anorexic websites. *Health Communication, 31*(2), 217-29.

¹⁰⁹ Chang, P.F. & Bazarova, & N.N. (2015) op.cit

¹¹⁰ Brotsky and Giles (2007), op.cit. p. 107

¹¹¹ Wolf, Theis & Kordy (2013) op.cit.

¹¹² Sheldon, P. (2008) The relationship between unwillingness-to-communicate and students'

Facebook use. Journal of Media Psychology: Theories, Methods, and Applications, 20(2), 67-75.

¹¹³ Lapinski (2006) op.cit.

¹¹⁴ Crowe, N. & Watts, M. (2016) 'We're just like Gok, but in reverse': Ana Girls – empowerment and resistance in digital communities. *International Journal of Adolescence and Youth, 21*(3), 379-390.

¹¹⁵ Boepple, L. & Thompson, J.K. (2016) A content analytic comparison of fitspiration and thinspiration websites. *International Journal Eating Disorders, 49*(1), 98-101.

¹¹⁶ Talbot, S (2010) The effects of viewing pro-eating disorder websites: A systematic review. *West Indian Medical Journal, 59*(6), 686-697.

¹¹⁷ Cobb, G. (2017) "This is not pro-ana": Denial and disguise in pro-anorexia online spaces. *Fat Studies, 6*(2), 189-205.

¹¹⁸ Lewis & Arbuthnott (2012) op.cit.

¹¹⁹ Talay (2013) op. cit.

¹²⁰ Chancellor, S., Jerry Lin, Z. & De Choudhury, M. (2016) "This post will just get taken down": Characterizing removed pro-eating disorder social media content. Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems.

¹²¹ Chancellor, S., Jerry Lin, Z. & Goodman, E.L. et al. (2016) Quantifying and predicting mental illness severity in online pro-eating disorder communities. Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing.

¹²² Ging, D. & Garvey, S. (2017) '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, 1-20* ¹²³ Ging, D. & Garvey, S. (2017) '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, 1-20* ¹²⁴ Ging, D. & Garvey, S. (2017) '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, 1-20* ¹²⁴ Ging, D. & Garvey, S. (2017) '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, 1-20*

¹²⁵ Press Information. Accessed 03 April 2019. Available from: <u>https://www.tumblr.com/press</u>

¹²⁶ De Choudhury, M. (2015) op.cit.

¹²⁷ Chancellor, S. Kalantidis, Y., Pater, J.A. (2017) Multimodal classification of moderated online pro-eating disorder content. In Proceedings of the 34th Annual ACM Conference on Human Factors in Computing Systems (Denver, CO, May 6-11, 2017), to appear. CHI 2017.

¹²⁸ Chancellor, S. Kalantidis, Y., Pater, J.A. (2017) Multimodal classification of moderated online pro-eating disorder content. In Proceedings of the 34th Annual ACM Conference on Human Factors in Computing Systems (Denver, CO, May 6-11, 2017), to appear. CHI 2017.

¹²⁹ Branley, D.B. & Covey, J. (2017) Pro-ana versus pro-recovery: A content analytic comparison of social media users' communication about eating disorders on Twitter and Tumblr. *Frontiers in Psychology,*

¹³⁰ Instagram (2012) *Instagram's New Guidelines Against Self-Harm Images & Accounts.* Accessed 22 November 2016. Available from: <u>http://blog.instagram.com/post/21454597658/instagrams-new-guidelines-against-self-harm</u>

¹³¹ Duca, L. (2013) *Can Thinspiration Really Be #Banned From Instagram?* Accessed 22 November 2016. Retrieved from: <u>http://www.huffingtonpost.com/lauren-duca/thinspiration-banned-from-instagram_b_3829155.html</u>

¹³² Kenny, M. (2013) *How Instagram Became the New Hub for Pro-Anorexia and Thinspiration Culture.* Accessed 22 November 2016. Retrieved from: <u>http://www.pedestrian.tv/features/arts-and-culture/how-instagram-has-become-the-new-hub-for-pro-anore/986b7550-fd4c-4d7b-a096-c478223d611a.htm</u>

¹³³ Chancellor, S., Pater, J. & Clear, T. (2016) #thyghgapp: Instagram Content Moderation and Lexical Variation in Pro-Eating Disorder Communities. Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing.

¹³⁴ Murray, S.B., Griffiths, S. & Hazery, L. et al (2016) Go big or go home: A thematic content analysis of pro-muscular websites. *Body Image, 16,* 17-20.