A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

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And a special thank you to my children, Heléna-Eve and Laily-Asal who made the experience bearable by their love and hugs on the toughest and frustrating days. It has been a long and demanding four years, but I hope this encourages you to keep at anything you put your mind to, I will always be there for you.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

Abstract

This research study is considering the question, A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? As suggested by the title the research was carried out by systematic review of available, public literature that has been peer reviewed. Mixed method studies, qualitative and quantitative, were considered to provide varied representations of the information and literature. After thorough analysis of eight papers via the CASP appraisal tool, enabled selection of the papers.

Seven themes of body dissatisfaction, online risks and unrealistic portrayal, self-objectification, body size and western society, body dissatisfaction in an international context, sociocultural forces and positive and negative influences of media were explored.

Findings have shown that the negative factors of the themes, outweigh the positives and online and offline risks are enabled by the manipulation of media against adolescents, as most representation of role models are potentially digitally enhanced and thus unrealistic.

There is larger consequences on adolescents in Western culture by pressures from media such as psychological issues such as depression, anxiety and low self-esteem due to comparing body ideals leading to even greater consequences such as Anorexia Nervosa (AN).

Gaps for further investigation include research with adolescents with active AN and more studies conducted in qualitative methods as well as that education on protecting themselves from online and offline risks is needed to protect their well-being. The
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx

emphasis found in this paper was that regulations and education on unrealistic bodies to limit and protect the unnecessary exposure to adolescents.

There is also potential indications that these types of studies may need to take place with younger children as they are also at risk from media influences and negative portrayal.

Some positives were identified, such as support online from adolescents with the same experiences and social media enables them to stay connected with family and friends as well as a good use for their education.

Recognised limitations in this study were identified as lack of professional and research experience and the timescale involved to compile such an array of information.
DECLARATION

This work is being submitted in partial fulfilment of the requirements for the degree of BSc (Hons) Health and Social Care and has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed: (Candidate)

Date:

STATEMENT 1

This dissertation is the result of my own work and investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signed: (Candidate)

Date:

STATEMENT 2

I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loan, for deposit in Cardiff Metropolitan University’s e-repository, and that the title and summary may be available to outside organisations.

Signed: (Candidate)

Date:
Contents

Acknowledgements..........................................................................................i
Abstract...........................................................................................................ii
Declaration.......................................................................................................iv

Chapter 1- Introduction......................................................................................1
Chapter 2- Literature Review............................................................................5
  2.1. Body Dissatisfaction...............................................................................7
  2.2. Online Risks and Unrealistic Portrayal...................................................8
  2.3. Self-Objectification..............................................................................9
  2.4. Body Size and Western Society.............................................................11
  2.5. Body Dissatisfaction in an International Context...............................12
  2.6. Sociocultural Forces.........................................................................13
  2.7. Positive and Negative Influences of Media:
      2.7.1. Positive....................................................................................15
      2.7.2. Negative...............................................................................16
Chapter 3- Methodology...................................................................................19
  3.1. Chosen Papers Selection, Research Methods and Data Collection.......20
  3.2. Epistemology....................................................................................21
  3.3. Ethical Considerations.......................................................................22
  3.4. Literature Search and Selection..........................................................25
Chapter 4- Findings and Discussion................................................................30
  4.1. Body Dissatisfaction.........................................................................31
  4.2. Self-Objectification............................................................................32
  4.3. Sociocultural Forces........................................................................33
  4.4. Body Dissatisfaction in an International Context...............................34
  4.5. Body Size and Western Society..........................................................37
  4.6. Online Risks and Unrealistic Portrayal................................................39
  4.7. Negative Influences of Media.............................................................40
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx

4.8. Summary........................................................................................................42
Reflection..................................................................................................................44
Chapter 5- Conclusion............................................................................................45
References...............................................................................................................47
Appendices:
Appendix A- Ethical Approval..................................................................................59
Appendix B- Signed Declaration..............................................................................61
Appendix C- Fredrickson and Roberts Objectification theory (1997)......................62
Appendix D- Important elements of quality assessment for health care intervention studies........................................................................................................63
Appendix E- CASP Chosen Papers.........................................................................65
Appendix F- Theoretical explanations of body image..............................................95
Appendix G- Globally, Internet Access Varies Widely............................................96
Appendix H- My Pro Ana.........................................................................................97
**Chapter 1- Introduction**

A systematic review, to explore media influences on adolescents and if it is a risk factor for developing anorexia?

This desktop study aims to analyse the relationships between variables and evaluate if there are advantages/benefits and disadvantages of adolescents using media and if it is a risk factor to the development of anorexia. Potentially this will also aim to identify gaps in research that may require future and further investigation.

Shaffer and Kipp (2014, pg. 187) suggest that the onset of adolescence is indicated by two significant changes: one, by an adolescent growth spurt (changes in size and shape) and two, puberty (by reaching sexual maturity of the reproductive system). It is also suggested by Beckett and Taylor (2010, pg. 92-93) that a psychological transition takes place and formed by social contexts and that these changes take place at different times, especially for girls who usually start puberty earlier than boys. Shaffer et al (2014, pg. 187) states that this happens for girls quicker by two or three years before boys.

Erikson proposed that adolescence occurs during a fifth stage (out of eight stages) defined as a conflict between identity and role confusion and by the experiences in this stage being negative or positive, determining the outcome of their entry when reaching the stages of becoming an adult (Werner and DeSimone 2009, pg. 388). Coleman (2001, pg. 15) adds that adolescents face many stressors during the transition, with a demand from their peers with media playing an influential part of blaming those with difficult transitions and ignoring to bring the positive experiences that adolescents face to the forefront.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

One of the stressors during transition, is the idea of body weight, leading to serious eating disorders, such as Anorexia Nervosa (now known as AN throughout this paper), that affects mainly young females (beginning to come forward more for males as well) and is steadily increasing in occurrence rates in societies by possible influence from different types of media’s (Hopton, 2011).

AN is listed within the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (2013, pg. 329) as ‘[A restriction of energy intake to requirements leading to significantly low body weight [as] a core feature [and has] specific disturbances in relation to perception and experience of their, own body weight and shape’. This questions the concern of adolescents using media, and should we be concerned by all that use it, or just by those that suffer from AN?

Arnett (2007, pg.451) suggests a positive benefit to adolescents use of media is that it establishes their identity and enables them to communicate with others facing the same problems, but for those with negative issues such as AN, can use certain sites such as “Pro-Ana” to overtake recovery.

O’Keefe and Clarke-Pearson (2011) added that not all media, in particular social media sites are healthy environments stating that other risks such as cyberbullying are an issue and that efforts should be made by way of protection to ensure access is appropriate. In addition, Roulea and von Ranson (2011) suggest that pro-eating disorders (Pro-ED, relating to Pro-Ana) sites emerge to serve and connect individuals from around the world, that encourage disordered eating behaviours and whereby those around them
should keep a careful watch for further possible risks and dangers. The Social Services
and Wellbeing (Wales) Act 2014 was implemented on the 6th April 2016 and in issues
such as risks and dangers, has emphasised the wellbeing for people who need care and
support. For those under eighteen years old (referred to as a child), it further emphasizes
that they have rights to achieve an independent, caring and happy childhood with their
best interests at the forefront.

Another suggestion by Ho, Lee and Liao (2016), with a theme that emerged in their
study, was that adolescents also suffer from body image dissatisfaction (BID) with
influence by media thus their drive to succeed in achieving the perfect body through
AN.

Nicholls, Lyn and Viner (2011, pg. 295), state that within adolescence, AN is an
important issue as ‘general mental health screening is generally poor at picking up
eating disorders, the diagnosis of which require self report of highly specific conditions
and behaviours, corroborated by physical findings, and [parental report]’. This however
could be an issue as if adolescents do not understand the effects themselves, to name a
few such as sensitivity to the cold, sleep disturbances, lanugo (hair growing in unusual
places such as the back, side of the face and top of the arms), low blood pressure
causing fainting, amenorrhea (the lack of periods or stop altogether), susceptibility to
infections and damage to nerves and muscles because of low weight (Treasure and
Alexander, 2013).
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxx

As suggested by Lavis, (2010) AN is becoming a society-wide concern alongside body image and further research is needed to indicate whether the factors for developing anorexia through the media’s have an influence on adolescents, with this being a goal of the present study. Further to this, exploration of relevant literature, through this systematic review, to see how media is being used and how it is connected to adolescents risk of developing anorexia, by weighing up positive and negative uses of media to gain an insight into the connections. Factors will be discussed and drawn together, and recurring themes will be addressed to analyse the influences they have. A conclusion will provide and give recommendations to further research ideas, noting any limitations to the study.
Chapter 2- Literature Review

The term ‘literature review’ is defined as ‘… [A] study that assimilates and synthesizes, or describes, the findings of more than one study’ Boland, Cherry and Dickson (2014, pg. 12). The importance of a literature review is to summarize the information, make sense of the research and because there is an increase in available knowledge and information of literature, the literature review brings the topic together, organising it in a way that helps the reader to understand it (Aveyard, 2010 pg. 4; Machi and McEvoy, 2012 pg. 4).

Morris and Katzman (2003) suggested that the incidence of eating disorders in the last fifty years has increased amongst adolescents with AN being more common in girls aged 11 to 17 years old. There are ongoing debates for a definition for adolescence as there are, by law, legal markers of when childhood ends and adolescence begins. So a definition for this paper is that adolescence is a period of transition from child to adult which for the included studies spans across the ages of 10-18 years (Jaworska and MacQueen, 2015; Smetana, 2011 pg. 11).

A high prevalence of poor body image is found within adolescents aged between 10 to 15 years old where 1 in 10 of those report that they are unhappy with their appearance (Office for National Statistics, 2015). Increasingly, adolescents are more likely to be concerned about their body shape beliefs and what the ideal body looks like, and as a result, start dieting to lose large amounts of weight. Voelker et al (2015) suggested that ‘many existing influences about how and when body image and weight concerns arise are during the teen years, including transitions (e.g. puberty)…’ and certain behaviours pose as possible risk factors as well as triggers for the development of eating disorders.
such as anorexia. Many researchers such as Mele et al (2016), Slater and Tiggeman (2015) and Bell and Dittmar (2011), have hypothesized that the media and social media, may create and reinforce as a leading cause of body dissatisfaction and may be partly responsible for the increase in the prevalence of anorexia.

Statistics reveal according to Best et al (2014) that, on average, a 15-16 year old is online more than 118 minutes a day and within 10-15 year olds, 1 in 10 girls spend over three hours a day on social networks with boys spending far less. It has also been found that 59% of 16-24 year olds prefer their mobile phone compared to watching the television by 17% (Office for National Statistics, 2015; Ofcom, 2015).

The ‘ideal’ female body is portrayed throughout different media’s (articles and newspapers etc.) with a range of psychological characteristics leading to body dissatisfaction and eating disorders. Since the 1980’s, around 90% of body images have been published to identify with the ‘perfect’ female body image and where cultural ideologies of body size and shape have changed over time with mixed views of body perceptions (negative and positive), although portrayals of models, in particular females, have become considerably thinner (Voelker et al, 2015). Literature for this study are in keeping with the question to explore media influences on adolescents and if it is a risk factor for developing anorexia.

Studies such as Mele et al (2016) a small quantitative study of forty participants, (twenty recovered anorexia nervosa patients and twenty healthy) related that exposure to pictures of bodies tested their “liking” judgements of round and thin features, determined the effects on body dissatisfaction and appreciation. Biolcati et al (2016)
was a larger quantitative study of 843 participating adolescents via questionnaire exploring that gender differences and social pressures where correlated with the “perfect body ideal” and Bell and Dittmar (2011) another quantitative study of 199 adolescent females, via survey and exposure of controlled body images, examined the media consumption of adolescents and the impact on the ‘ideal’ body image. These studies have reported significant changes in body size and weight of females, especially models, which are portrayed throughout western societies’ media with the continual concept of the ‘body perfect or ideal body’.

2.1 Body Dissatisfaction.

Dissatisfaction with body image and unhealthy eating behaviours are important issues for adolescent girls and many young women believe that they are overweight and want to weigh less because of the ideology of the ‘body perfect’. Morris and Katzman, (2003), state that ‘44% of adolescent girls [believe] they [are] overweight and 60% [are] actively trying to lose weight even though the majority of these young girls [are] within normal weight ranges’.

A study by Mele et al (2016), characterised that media exposure may lead to the thought process behind body dissatisfaction. The research was conducted with 40 female participants who were looking at pictures of “round and thin” human bodies, and carried out by using judgements of liking or disliking the body shapes. The hypothesis was that those with AN would change their idea of the overall “context” of the body. The study was utilized by quantitative methods, and a number of variable factors to body
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

appreciation were identified such as media (negative portrayal), gender (mainly female based), psychology (behaviours) and puberty (physical changes).

The results found that the healthy participant group liked the round bodies and not the thin, whereas, uncharacteristically for those with AN, were found to like both the round and thin body shapes. It could be seen as contradictory, that although those with AN liked thin bodies, the study found that there were no changes in their judgements when it came to body shape within the AN group.

Indications for future study were identified as needing a larger group of participants, and possibly included in this (but with questionable ethical considerations) may be to examine what is thought of body images/shapes with adolescents during active AN, rather than at the recovery stages.

2.2 Online Risks and Unrealistic Portrayal.

Adolescents as well as children, are somewhat vulnerable to online risks as well as messages and images portrayed by the media. Many adolescents and children are unaware of any lack of realism with the media via air brushing from digital technology/enhancement so that they may think that is the ‘body perfect’. They are unable to distinguish between what they see and what is real, thus being manipulated by industries such as fashion, television ads and magazine publications etc. into what they could never achieve (Want 2009).

Görzig (2015, pg. 9) states that ‘adolescence is a period of increased risk experience and ever more often these occur online’. It was found from the study, via quantitative
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx methods, that online risk could not be explained by single factors and that differing types of risks on and offline require future and further study based on the types of experiences. Görzig continues to suggest that certain adolescents are more vulnerable in differing ways, for example for those that were bullied offline, were in fact bullies online (i.e. cyberbullying) and these were associated with personality and behavioural risk encounters during online and offline use. Dredge et al (2014, pg. 287) stated that ‘cyberbullying victimization has been found to be associated with symptoms of social anxiety, depression, suicidal ideation, somatic symptoms, low self-confidence, and low self-esteem. Behavioural problems such as a decline in in school grades and school attendance, and negative impacts on family relationships are additional consequences’ with a further suggestion by Dredge et al (2014, pg. 287) that there is not enough information about these factors and how individual adolescents may react if subjected to any form of online risks.

Limitations to Görzig’s study concluded that there are plenty of studies of the offline and online risk topics, making results comparable and potentially further replicated with the same findings. It was also found that future studies could focus more on protective programs for adolescents during online use. Risky behaviours are a common theme within online and offline experiences with adolescents.

2.3 Self-Objectification

Slater and Tiggemann (2015) found by quantitative methods, with 1087 female participants aged 12-16 via media exposure in the form of questionnaires, that self-objectification in adolescents was made higher by media exposure and appearance based comments, whereas extracurricular activities (sports etc.) had little effect on self-
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  

Ethics Reference Number: xxxxx

Objectification or that it may take a longer time to develop. Three sets of findings in Slater and Tiggeman’s study, suggested links to associations of disordered eating and influence of how adolescents feel about themselves, with increasing self-objectification to compare against celebrities or those on television, magazines or the internet etc.

Included in the above study, the Fredrickson and Roberts Objectification theory (1997) (see Appendix C), was used to enable a theoretical framework to allow the researchers to test their results. The idea behind the Frederickson and Roberts Objectification theory is that it shows how sexually objectifying females can have consequences because of how that society portrays them. However, later in the study, links were made not only to female adolescents but to adult women, when the original layout of the study was to 12-16 year old females. It was also pointed out that appearance related comments can also have negative effects on how adolescents feel about themselves, proposing that how people communicate should be with caution especially to those within vulnerable age groups. Bell and Dittmar (2011), another quantitative study, had similar findings as Slater and Tiggemann, where both studies were performed in the UK (continual referral to as “the West”) with no mention to mixed cultures or ethnicities and it was conducted via quantified method (another common theme within each study). Bell and Dittmar’s focus was more on the media consumption via survey where the 199 adolescents were split into groups and exposed to music videos, magazines, images of thin models and a controlled condition of cute animals (on the basis of no human body for comparison of results). It was found that the most impact was from the thin model pictures, resulting in high body dissatisfaction, but only because the girls could identify with the models as they knew who they were. Bell and Dittmar (2011) have found regardless of media exposure, the ‘thin ideal’ or ‘body perfect’ still leads to negative thoughts and behavioural triggers of body dissatisfaction with adolescents. It can also lead to negative
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

self-esteem and depression with a great impact on psycho-social well-being for those who have access to media and technology, the influences are having a profound affect (Best et al, 2014).

2.4 Body Size and Western Society.

Kierans and Swords (2016) study investigated the significant concept of peer acceptance and rejection, alongside the misconceptions of body size causing great concern to allow negative body portrayal within Western Society. Thus far within Western countries of the UK & Ireland, USA and Australia, all share similar ideology from the media affecting adolescents and their interpretation of the perfect body. International input is not clearly identified in the other studies of the chosen papers of this literature review, however, Kierans and Swords (2016) have included a mixed variety of adolescent participants made up of 10% from Asia and African backgrounds, resulting in a mixed inclusion of social and cultural ideas. Mixed methods were used for the study, first by focus group (qualitative measures) followed by an ecological survey (quantitative). There were references to class structure, separate gender ideologies and cultural norms within a part of Western Irish society, where it was found that family and friends had a significant impact on values and expressions of the “normal” body (i.e. through popularity, activities of copying what family members do and enjoy). Giddens and Sutton (2013, pg305) explains that ‘People learn how to use their bodies in walking, digging, eating, and much more, and these ‘techniques of the body’ are transmitted across generations [just as] interactions are shaped by the larger social context…social class and ethic dimensions’. This also concludes that from a gender point of view that boys and girls within Kierans and Swords study were affected by their surroundings of
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

Body image and media influence portraying a “normal” view on gender traits (boy’s masculine and girls thin and attractive). Brunet et al (2010) however, describes this as an association and trigger for adolescents, known as social physique anxiety (SPA), specifically relating to gender differences and the desire to be masculine or thinner in body image having a relatable relationship with SPA, which is prominent in Western culture.

2.5 Body Dissatisfaction in an International Context.

Gender and identity is identified within some societies to be constructed by differences of culture, traditions, ethnicity, social class, politics and religion, as it has been found that within different cultures and social groups they can define, accept or dismiss information and ideas that are not “normal” of their values or ideologies (Giddens and Sutton 2013, pg. 307; The National Centre for Eating Disorders, 2012).

However the study by Biolcati et al (2016) that consisted of a quantitative method of 843 Italian adolescents focused on gender indifferences and media influence on their attitude to the body, found that the behaviour and attitudes of the higher educated and younger generation were changing because they have technological links to other countries, especially within the West due to globalization. It was emphasized that Italy has particular factors within its society with its history of strong traditions such as gender roles, values, culture and structure as they have the oldest population in the world (over 65 years make up one fifth) and that those gender norms would be expected to be continued throughout the generations, however the younger generation are not in keeping with those factors and part of a demographic shift where modern Italians are more susceptible to be socially constructed (Biolcati et al, 2016). There was
mentionable high risk to males using drugs to be muscular or the opposite to be thin and it also linked in the pressure created by media for girls to be thin and that sexual objectification was identified within each gender (female to be thin and attractive and males to be masculine and attractive) referring back to Frederickson’s Objectification Theory (Appendix C) and extending the theory to those that are exposed to dominant cultural messages (Knauss et al, 2008). Cosmetic surgery was also another factor to unrealistic body ideas, especially in the younger Italian culture and “cover ups” by tattoo or body art to reach a desired look, was found to become a more common behaviour, showing that their ideal body is not a biological phenomenon.

In other countries such as South Africa (SA), perceptions of the ideal female body are larger and seen as “obese” in Western society (Savacool, 2009 pg. 78). In a mixed methods study, first by questionnaire (quantitative) then focus groups (qualitative), in SA by Puoane, Tsislekile and Steyn (2010) of sixty girls, aged 10-18 years, found that being “fat” was associated with happiness, wealth and social acceptance and being thin was associated with illness and diseases such as HIV, Aids and tuberculosis. Adolescents in SA try to mirror their mothers bigger body size and associate it to represent beauty, respect, affluence, fertility and happiness to their ideal body image (Mchiza et al, 2011). However due to media influences and the growing economy within the SA, conflicting ideas of the ideal body size and image is something that may need future investigation for any possible changes as Miclesfield et al, (2013) continues to suggest that the adolescents in SA are less likely to see themselves as overweight regardless of body size compared to the West, confirming that socio-cultural forces have an influence on adolescents and their body image and this will be explored.
2.6 Sociocultural Forces

Tiggemann and Slater (2014) also found in an earlier study than the above, by quantitative methods, of 189 girls aged 10-12 years, were spending more time on the internet and that media consumption was related to an increase in dieting and the desire to be thin. The study also found that sociocultural models have been used to understand and explain the issues of body dissatisfaction and food, leading to disorders such as AN (See Appendix F) where Mitchell and Peterson (2005, pg. 177) explains that ‘sociocultural etiologies have received enormous attention, primarily because BID [Body Image Dissatisfaction] appears to be most prevalent in industrialized nations’, and followed from this the parents of adolescents may reinforce sociocultural ideas of becoming/desire to be thin, either knowingly or unknowingly, having an influence on adolescents to AN. BID is defined by HO et al (2016) as ‘a negative assessment of an individual’s body with regard to size, shape, weight, or muscularity and it is a function of the discrepancy between a person’s idealized body type and their perceived body image’.

Tiggemann and Slater also found that the more time spent on sites such as Facebook and MySpace resulted in a higher indication of body dissatisfaction than compared to other sites such as YouTube, Google and Pro Ana websites (surprisingly, which only a small amount had visited), revealing that sites, such as Facebook, required personal profiles for social, diet and appearance comparisons being major problems causing the users to have higher incidences of body dissatisfaction. A social comparison theory derived by Festinger (1954) suggests that as people compare themselves to one another, they are fulfilling their basic human need for self-evaluation where there a no actual social criteria (Ho et al, 2016) and according to Latzer et al (2015) suggested that ‘… [There is a] need for identifying risk and protective factors [of] groups at risk [as there...
is a] complex interdependent multidimensional causalities, including genetic, biological, psychological, familial and socio-cultural factors ‘.

2.7 Positive and Negative Influences of Media:

2.7.1 Positive

Use of the internet, especially social media has increased rapidly and becoming a more constant and ongoing, everyday trend to be able to access different uses, for different needs, such as keeping the world connected through globalization; socially, educationally, work, shopping, game playing, advice (medical etc.) and simply for access, with “Connection” being for ultimate goals such as important sources for information, products, politics, advertising and communication (Allegrezza 2012, pg. 125; Barve et al, 2015).

Media and online use has also been increasing with a mixed influence on emerging and developing nations, helping to build education by up to 64%, personal relationships by up to 53% and their economies by 52% with accessibility in some countries being more available more than others (See Appendix G) and with socializing being the most popular to keep in touch with family and friends (Pew Research Center, 2015).

Social media has been described as a “powerful tool… a platform for teenage voices to be heard… [and for them] to become active citizens and to voice [their] opinions on the matters that affect or interest [them and to]… explore new ideas as well as to build resilience as they learn to recognise and manage risks” Mental Health Foundation (2016). Adolescents are also using different types of medias for support and advice on
daily issues that they would not be able or feel comfortable in discussing for example with family members, so have a choice to seek help and advice on subjects such as sexuality, where the LGBT community have a variety of support groups since they are now more visible than twenty years ago and this allows adolescents to become more aware and open to their sexuality (Puccio and Havey, 2016).

Other forms of health promotion and prevention have taken place in television shows, where evidence as suggested by Verma (2007) that health-related story lines in popular television programmes may lead to increased viewer knowledge or behaviour change to make the viewers aware of the dangers and consequences, particularly for that of AN.

Education and awareness of eating disorders, in relation to the topic of AN, can in fact be invaluable by raising awareness of the dangers and encourage health promotion and prevention with Increasing information available online to the risks and help adolescents realise that they have a problem and how to seek help (The National Centre for Eating Disorders, 2012).

2.7.2 Negative

Attrill (2015) suggested that the negative impact of media use, out-weighs the positive, with negative issues arising such as psychological symptoms including loneliness, depression, body dysmorphia, eating disorders and low self-esteem due to the comparison of oneself against others and online behaviours can have a detrimental effect on a person when offline becoming disconnected with reality (Mental Health Foundation, 2016). There are many debates about the influence of the media and social behaviour, where interpretation is different to everyone, that media has a long lasting
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Impact relating to the “thin ideal” from all types of exposures even when using the internet for a variety of reasons (Barve et al, 2015; Tiggemann et al, 2014).

Internet addiction, due to social networks such as Facebook, are becoming a more common experience resulting in barriers such as decreases in performance at work/education, social inclusion (offline) and health and well-being (physically and psychologically) primarily due to adolescents having larger social networks than adults (Ryan, 2015). In Tiggemann et al (2014) study found that out of the 189 participants, 43% of those had a Facebook account, which was concluded to have an effect on body image issues and being a strong factor to sociocultural forces.

In emerging and developing nations they observe that media and internet use is having a negative effect and where some countries such as Uganda have only 3% of the population having internet use, considerably low in comparison to other developed countries (Pew Research Center, 2015).

The exposure to ideal images during adolescence is considered to lead to a decline in self efficacy and body image sensitivity, causing anxiety and issues of other body comparisons because of pubertal changes which increases the likelihood of accepting inflicted messages from media, family and friends etc. with dieting as the solution (The National Center for Eating Disorders, 2012).

Inevitably as dieting as the solution, this can lead to anorexia with some media sites celebrating the “thin ideal” via Pro Ana sites, magazines targeting weight and diet with celebrities seen as “role models” to be copied and to remain thin, which promotes the unrealistic “body perfect” (See Appendix H) (Bell et al, 2011) and Steakly-Freeman, Jarvis-Creasey and Wesselman (2015) suggest that “for individuals with eating disorders (EDs), it is possible that certain online communities may reinforce the
negative social aspects that encourage these disorders, rather than positive aspects that would facilitate treatment and recovery’. These sites, such as Pro-Ana, show that they as an internet community, can have an influence on adolescents.
Chapter 3- Methodology

This study considers the question “A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?” A desktop study consists of secondary analysis which is described by Greetham (2014) as “recycled and reinterpreted data” with advantages of being less time-consuming and costly allowing for larger data sets and being able to generalise with the population you are studying. This also allows for discussing trends and social changes and for comparing information or data over time (Greetham, 2014 pp 204).

However Smith, Todd and Waldman (2009) (pp 59) state that there are disadvantages to secondary analysis such as that data and information was originally collected for a different idea, find out why that was and the collective methods for justification of using it in this study. Smith et al (2009) (pp59-60) also explains that another disadvantage to secondary analysis is the time required to “sift” through, find the relevant and reliable resources, first time experience and the demands of understanding of the quality processes in research. However, by reviewing the information and gaining further knowledge of the study subject, gaps could be found for future use.

Chalmers, Hedges and Cooper (2002) define a systematic review as ‘the application of strategies that limit bias in the assembly, critical appraisal, and synthesis of all relevant studies on a specific topic’, thus the research for this study has looked at the studies that have explored the use of media types, more notably online media (internet, Facebook etc.) grey literature used by adolescents and how there are advantages/benefits and disadvantages of adolescents using media and if it is a risk factor to the development of anorexia.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  

Considerations of other factors such as bullying and associated risks (environment, peers and family etc.) have been contemplated and included where relevant.

Sarantakos (2013) defines research as a ‘purposive and rigorous investigation that aims to generate new knowledge. It is the intellectual tool of social scientists, which allows them to enter contexts of personal and/or public interest that are unknown to them, and to search for answers to their questions’. Social research however, is identified that it should look to ‘change society for the better… and investigate, query and critique established practices, institutions, conventions, policy and traditions, if social injustices or forms of inequality are identified’ Carey (2013).

3.1 Chosen Papers Selection, Research Methods and Data Collection.

Scientific research relies heavily on quantitative data with measurable (empirical) changes and differences of the variables, analysing of relationships (statistical findings) so that in the end, results can be compared quantitative data collection is normally collected via questionnaires. Qualitative research requires judgements, interpretations and data that is analysed by words, feelings and opinions etc. through interviews or focus groups (Cottrell, 2008 and Greetham, 2014).

Quantitative and qualitative papers have been explored in this review, however it was common to find that there were more quantitative studies for the collection of data where Chalmers et al (2002) states systematic review methods have primarily been developed with reference to quantitative research.

It appears that qualitative methods need future and further investigation in studies with adolescents, as Kieran’s et al (2016) conveys that the study with the focus group
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  

Ethics Reference Number: xxxxx

allowed alternative and new insights of the perceptions of adolescents when exploring their body image issues and behaviours.

It would appear because of the sensitive nature of the topic of anorexia and involving adolescents, this could be a reason as to why quantitative methods are a more common occurrence. This would take into account the ethical approval required as the potential risks and harm are highly important when dealing with young people.

3.2 Epistemology

Greetham (2014) (pp 29) defines epistemology as a ‘…assumption about what we believe should count as knowledge in this context: the sort of evidence that would count as an answer to our question and how we are to come by it’. By focussing on these they will assist to how the literature and methodology define the subject question and determine the suitability for this systematic review. The epistemological stance for this systematic review has been informed by the selection of papers as they relate to the social and cultural actions within society and the inclusion of two theories within this of critical and interpretivist, as they both link to one another by critical theory enabling a better explanation and understanding of society (with a collection of data and analysing of the tasks at hand) (Carey, 2015) and from a point of interpretivism enables consideration and own meaning to the social actions taking place and inevitably understanding what they mean not only through knowledge (O’Hara et al, 2011). They both have a qualitative approach, however, quantitative methodology allows a more objective view and for this study incorporates an emergence of common themes.
3.3 Ethical Considerations

Ethics is important in all research, where as Sarantakos (2013) (pp23) explains that ‘…nothing can ever justify disrespect to ethical standards [and authenticity] for whatever reason. As many codes of ethics specify, one of the goals of ethical regulations is to educate researchers to what is right and permissible and what is wrong and unacceptable’.

Ethical approval was applied before beginning research, and approved through Cardiff Metropolitan University ethics panel. Ethical issues were considered as the project is based around adolescents and anorexia and as outlined above, the two are sensitive and potentially harmful topics because of the age ranges involved. Also, as an undergraduate student, not only is access to these two groups limited, but their protection and anonymity is fundamental, leading to the decision that a desktop study was more ethical and accessible. Promoting and respecting the rights and interests of the vulnerable, especially those within vulnerable age groups during research, or the study of it, is important as well as by not infringing on their privacy and rights to not come to any harm ensures accountability for own work and responsibility in maintaining, improving knowledge and skills and can undoubtedly plays into one’s own values and morals (O’Loughlin and O’Loughlin, 2008 pp 6-7).

Another crucial issue when selecting the studies for this systematic review include the validating and reliability of the papers without bias, as it is important to include a quality assessment tool against this when in the process of selection, allocation, detection, attrition and reporting (Boland et al, 2014 pp. 65). Using the important elements of quality assessment for health care intervention studies (See Appendix D) alongside the CASP method of selection was used for the selection of papers.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Conducting primary research would have been very difficult and as Hart (2001) emphasizes that personal values, morality and ethics of the researcher for example taking sides as a researcher, are influences that could interfere with the results. Secondary analysis examines studies that have already been performed, so no interference on the result can be affected, which is why choosing secondary analysis was a more logical approach to take. Alongside this, thoughts were also to avoid more or significant harm, as primary analysis could have involved focus groups or questioning and predicting risk or further harm during the process may be impossible, so much so that psychological, physiological or medical consequences may result (Oliver, 2010) and even though this desktop study is not subject to the same principles as above, the studies in themselves are. It is also worth mentioning the fact that representing the research authentically is important, verifying the work that was analysed, interpreting it and valuing the work of others correctly is a must when conducting a desktop study (Thomas and Baker, 2008 pg. 142).

Plagiarism as defined by McMillan and Weyers (2011, Pg.185, cited in University of Dundee, 2005) ‘… as the unacknowledged use of another’s work as if it were one’s own’ and is another important concept when conducting a desktop study in terms of ethics, as it addresses the personal values such as academic honesty, with consideration to legal implications if copying from someone else’s work with disastrous consequences such as exclusion from University.
Anonymity and confidentiality are critical regardless of methodology, however confidentiality as Tinson (2009) states is an occasional ambiguous and confusing concept because if there are concerns for a child by potential harm or risk (in any situation, home, school etc.) then this has professional and moral obligations. In respect of anonymity from a research point of view, a desktop study makes it “easier” to explore sensitive issues, however the idea behind anonymity is that any participant should not be identifiable by any means in any result (close descriptions, linked ethnicity, or other characteristics) thus giving a participant freedom in their views and answers (Oliver, 2009 and Tisdall, Davis and Gallagher, 2008).
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

3.4 Literature Search and Selection

**Titles and abstracts identified and screened**
- n = 7539

**Excluded not women**
- n = 5999

**Excluded years 2010-2016**
- n = 784

**Excluded foreign language**
- n = 16

**Excluded using CASP, unreliable**
- n = 6

**Excluded lit review papers**
- n = 2

**Publications meeting inclusion criteria**
- n = 8

**Publications included in review**
- n = 8

(Centre for Reviews and Dissemination 2008, pg. 26)
Starting with the university Metsearch library catalogue a number of 7,539 hits were found using the keywords: media AND anorexia AND adolescents. An advanced search was required, with all three terms AND NOT WOMEN which narrowed the search down to 1,540 and then within the years of 2010-2016, gave 784 results. This was further refined by filtering and excluding journals that were not in the English language, leaving 16 results. Two of the papers were excluded from the literature review as they were themselves systematic narrative reviews and the remaining six were excluded as they were not considered reliable studies by applying these to the Critical Appraisal Skills Program (CASP) method (CASP UK, 2013). The eight chosen papers (see table 1 below) were drawn together and seriously considered for their relevance and information of the subject, with findings noted and predominantly critiqued. They were then further critiqued by using the CASP method (CASP UK, 2013) (See Appendix E).
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxx

Table 1.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s) and date</th>
<th>Method</th>
<th>Type</th>
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<tr>
<td>Altered exposure-related reshaping body appreciation in adolescent patients with anorexia nervosa.</td>
<td>Mele, S., Cazzato, V., Di Tarantino, F., Maestro, S., Fabbro, F., Muratori, F. and Urgesi, C.</td>
<td>• Quantitative&lt;br&gt;• Females aged 12-18 years&lt;br&gt;• 20 AN patients (recovery)&lt;br&gt;• 20 Healthy&lt;br&gt;• Electronic questionnaire</td>
<td>Journal Article</td>
</tr>
<tr>
<td>Media Exposure, Extracurricular Activities, and Appearance-Related Comments as Predictors of Female Adolescents’ Self-Objectification.</td>
<td>Slater, A and Tiggemann, M.</td>
<td>• Quantitative&lt;br&gt;• 1087 females&lt;br&gt;• Aged 12-16 years&lt;br&gt;• Questionnaire</td>
<td>Journal Article</td>
</tr>
<tr>
<td>Adolescents’ experience of offline and online risks: Separate and joint propensities.</td>
<td>Görzig, A.</td>
<td>• Quantitative and qualitative&lt;br&gt;• 25142, males and females&lt;br&gt;• Aged 11-16 years&lt;br&gt;• Online survey&lt;br&gt;• Interviews</td>
<td>Journal Article</td>
</tr>
<tr>
<td>Exploring the Appearance Culture in Early Adolescence: A Qualitative Focus Group Approach in the Republic of Ireland (ROI).</td>
<td>Kierans, J and Swords, L.</td>
<td>• First stage Qualitative, second quantitative&lt;br&gt;• 39 (19 males, 20 females)&lt;br&gt;• Aged 12-14 years&lt;br&gt;• Focus groups then survey</td>
<td>Journal Article</td>
</tr>
<tr>
<td>Does Media Type Matter? The Role of Identification in Adolescent Girls’ Media Consumption and the Impact of</td>
<td>Bell, B.T, and Dittmar, H.</td>
<td>• Quantitative&lt;br&gt;• 199 females&lt;br&gt;• Aged 14-16 years&lt;br&gt;• Surveys</td>
<td>Journal Article</td>
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A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

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<td>• Quantitative</td>
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<tr>
<td>• Aged 15-18 years</td>
<td>• Aged 10-12 years</td>
<td>• Aged 10-18 years</td>
<td>• Aged 10-18 years</td>
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<tr>
<td>• Questionnaires</td>
<td>• Questionnaires</td>
<td>• Questionnaires</td>
<td>• Questionnaire then Focus Group</td>
</tr>
<tr>
<td>• 843 (507 females, 336 males)</td>
<td>• 189 females</td>
<td>• Then Qualitative</td>
<td>• Questionnaire then Focus Group</td>
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<td>• Questionnaires</td>
<td>• Aged 10-12 years</td>
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Focus on the topic has been vital and considerable care has been taken when choosing the papers. There has also been justification between the literature as arguments have emerged and described by Griffith (2010, Pg. 226) is a ‘reasoned discussion… line of thought (a logically related series of claims) [to] support a thesis and related claims with evidence, and organize claims and evidence clearly and logically’.

The problem with the eight papers was identifying if they were reliable and if the questions were in fact taking into consideration the topic this systematic review requires. By using CASP (2013), enabled the identification of the research papers to contain relevant data, through reading the abstracts and in some refining as to whether in the body of the studies had the content desired and the criteria met. Also, on analysing the papers, attention was paid as to whether they were peer reviewed, this
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ensures that any substantial issues or problems with the work was identified before it was published. Two chosen papers did not meet the criteria of anorexia, but included the factors and terms of adolescents, media and body image which were embodied in the studies, allowing them to be used. The other six papers met the criteria even though they were identified by different wording or considered with extra variables in their findings for example extra-curricular activities, reshaping, exposure, media consumption and preteen.
Chapter 4 - Findings and Discussion

In the course of this study, evidence has been presented by addressing the question of a systematic review: an exploration of media influences on adolescents: a risk factor for developing anorexia?

The main advantage of conducting a desktop study has been the amount of literature available and that considerations of ethical consequences have not been difficult due to not actually partaking in a practical study with adolescents and other reasons as detailed in the Methodology section *number.

Secondary analysis has been the logical choice, mainly as there has been no personal participation interference in the already performed studies. The negative aspect to a secondary analysis is the amount of time taken to sift through all of the information and data so that the viability and reliability of the evidence is authentic and correctly referred to.

The studies in their own rights were disparate in terms of the participants ages (but within the defined adolescent age ranges for this paper), the variations in numbers of attended participants and the methods used (quantitative surveys used different questions and exposure studies), made it difficult to compare the outcomes of each study and interpret them into charts or diagrams etc. but the information in each have comparable relationships with the themes.

Eight studies have been literary reviewed in depth and seven themes have emerged and will be included in this discussion: body dissatisfaction, self-objectification, sociocultural forces, body dissatisfaction in an international context, body size and western society, online risk and unrealistic portrayal and negative influences of media.
4.1 Body Dissatisfaction

Mele et al (2016) used rationale to develop a better understanding of how body appreciation (using body images and body dissatisfaction) in adolescents affects them by influence, experiences and perception, paying attention to those with AN. They selected twenty AN and twenty healthy participants for in depth analysis and identified a weakness in those with AN to their idea of the “perfect” body shape and body appreciation, notably with influence from media, but that research is lacking when considering other factors for body appreciation. Mention to ethics in the procedure was referred to as the Declaration of Helsinki and the general principles that are applied within this such as for those who are conducting medical research involving human subjects (World Medical Association, 2013). However, consideration to define or further address information within the ethics, had not been reflected into the detail of the study. The only real reference to ethical considerations was to consent and that the adolescents were referred to as “naïve” to the purpose of the experiment and because of this “naivety”, they required debriefing, with a suggestion that they were not very well informed or that they did not understand the study, which poses an ethical question about non-maleficence. Donnelly, Dallat and Fitzmaurice (2013, pg. 101) define this as ‘Nonmaleficence is the principle of doing harm’. It is an important ethical concept to keep the dignity of the individual, involving their right to autonomy and perhaps another method of seeking consent at the start of the research such as an information sheet, would have sufficed (Greetham et al, 2014, Pg. 130-131).

Findings from Mele et al (2016) suggest that media exposure has an effect on those with AN and that healthy individuals do not experience the same body dissatisfaction. A limitation to the study was that the AN participants were at the recovery stage and that the study required a larger sample of participants to evaluate any future findings.
Grogan (2016) states that ‘Body dissatisfaction is important in its own right as a threat to well-being… [With] girls [having] powerful cultural pressures to be thin [and that it does] not motivate health weight behaviours’. McLean, Paxton and Wertheim (2016) also suggest that media influences attitude (behaviour), decision making and increases risky behaviours such as the development of eating disorders and image concerns.

4.2 Self-Objectification

Korin (2016, pg. 293) explains self-objectification as ‘the extent to which women [any young adolescent women] internalize society’s objectifying gaze of their bodies (i.e. views women’s bodies as sexual objects) and begin to evaluate themselves in those terms’. Slater et al (2015) study explored three factors of self-objectification in female adolescents by media exposure, extra-curricular activities and appearance related comments. The method was conducted through questionnaire by paper and online format, with a sample of 1,087 females aged ten to seventeen, with a noted limitation to the study that only Australian, Caucasian girls took part. Ethics was applied and authorised by three separate ethics committees and consent forms were sent to parents, with a result of 44.2% of the girls participating. An agreement was revisited before starting the questionnaire and assurance of confidentiality and anonymity, followed by a de-brief and gift at the end, promoted their autonomy and beneficence (doing good for others) (Donnelly et al, 2013 pg. 101). Findings from this study were supported via the Fredrickson and Roberts model of objectification (previously mentioned in Literature review section) that influence and exposure to medias such as social media and magazines, increase self-objectification in adolescence. The study considered links to appearance-related comments that were also found to have a negative effect, but it was
found that extra-curricular activities as the researchers hypothesized, did not have an effect.

Slater et al (2015) suggested female adolescents require awareness education to deal and be more judgemental to images they see online so that they experience less social and physical appearance pressures, they also suggested parents should be educated of issues adolescents face on these subjects. For future study the recommendations were identified as taking measurements of psychological variables (psychometric). The education could help adolescents to see that they are not society’s “visual objects” and that they can in fact build on their self-esteem, reduce weight concerns, help them to understand about reduced pressures and that they do not have to comply with society’s norms of expected self-objectification. However, studies such as Heinicke, Paxton, McLean and Wortheim (2007), My Body My Life, brings into the question, if ten years down the line, we are still introducing help activities for adolescents dealing with issues of self-objectification by influence of the medias etc. then this suggests that there has been a difficulty in changing the views of female adolescents (Korin et al, 2016, pg. 300).

4.3 Sociocultural Forces

Bandura’s social learning theory (1986) proposed that individuals learn from others, thus this explains the influence and effects on adolescents by the media, peers and others (family influence by watching parents or older siblings and influencing dress and styles etc.).

Tiggeman et al (2014) examined the relationship between media exposure and body image, with its main focus on the internet. The method was collected by questionnaire,
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

of a sample of 189 girls aged ten to twelve. Ethics was approved by the Institutional Research Ethics Committee and resulted in consent by the parents with a participation sample of 63% and then further consented by the girls prior to starting the questionnaire. The hypothesis was that the internet would have an effect on the girl’s ideas of body image and desire to be thin and that sociocultural forces would also have an effect. It was found within the study that there was a growing trend for younger girls to seek and access different medias (social networks; Facebook, internet, magazines and TV shows) that are ideally meant for older girls and stated that ‘they are highly likely to be exposed to material that they neither fully understand nor evaluate sufficiently critically’ Tiggeman et al (2014). A common recommendation found in this and previous papers, was that intervention programs should be in use and to limit the time that is spent online, concluding from their findings that media is a strong sociocultural force affecting adolescents. Implications for future studies revealed that they there may be research required for even younger girls due to the influence of media.

There appears to be great pressure from media on adolescents obtaining and developing their identity, also by comparison of others, to fit in with their social and environmental cultures which can result in peer acceptance or indeed the opposite (Ricciardelli and Yager, 2016, Pg. 77).

4.4 Body Dissatisfaction in an International Context.

Robert-McComb, Norman and Zumwait (2014, pg. 8-9) suggested that body image and eating disorders are a global issue and that cultural environmental factors influence the ideal body and cause body size “uneasiness”. So in the West, it is predominantly seen in
the culture that thin is the ideal body although, in areas as previously explored such as SA, the ideal body is predominantly larger in size.

Biolcati et al (2016) used quantitative methods in the paper to observe the first use within the chosen eight papers of this research of the two genders, where it consisted of 843 Italian adolescent males (336 in total) and females (507). This provided information on attitudes to cosmetic surgery, body art, physical activity (body modification), gender differences and sociocultural factors. The researchers hypothesized that social pressures by media influence girls to be “body perfect” more than boys and body dissatisfaction is correlated by body art and cosmetic surgery that results in eating problems. The study looked to consider the extent that media influence has and revealed in their results that media has a direct effect on adolescents causing body dissatisfaction in both genders. It addressed concerns about gender specifically and suggested that boys and girls behave and respond differently to disparate factors, such as that each gender is susceptible to underlying characteristics such as anxiety and depression which also have a causal effect of body dissatisfaction. Sepúlveda and Calado (2012) emphasizes that “… to attain [the] ideals of beauty at times implied [by] subjecting oneself to risk behaviours or practices, mainly as regards [to] the female gender… because of globalising dynamics and global access to Western socialising agents’ messages, there appears to be an increasing trend in ideal body image homogenisation regarding gender’. This can be seen in some magazines such as Hello!, Look Again and Cosmopolitan, that aim to promote (and advertise) dieting trends, unrealistic body sizes and looks (i.e. celebrities losing weight but could have had digital enhancements, to slim down or show “perfect” body assets).
Ethical approval and consent was obtained for the study with well-informed information and briefings. Beneficence was adhered to and autonomy was referred to alongside confidentiality and anonymity.

The study by Puoane et al (2010) explained that “…opinions and beliefs about body image start in adolescence” where a selection of sixty girls and their thoughts/beliefs about body size was investigated and conducted via questionnaire (quantitative) and then focus group (qualitative). This was the first study that considered girls perceptions (detailed from White and Black races in SA) of what they classed as a preferable weight and as such concluded that “fatness” was more desired than being thin. However the advantages and disadvantages noted that being either “fatter or thinner” had its health complications, but culturally and with links to race, found that the white adolescent females had more issues with body dissatisfaction than their black counterparts (Puoane et al, 2010). Ethical consent was obtained, yet interestingly the girls aged 16-18 were able to consent themselves. On further investigation, this was because prior to 2012 it was legal to conduct health-related research without parental consent (or legal guardians) but since 2012, consent by a parent etc. by law has been required (Zuch et al, 2012). There were no explored limitations mentioned in the study however recommendations, (although not specifically mentioned) was that interventions during childhood about obesity and education around issues with weight needed further educational consideration.

Cultural environment and food is an important sociological factor that links to body dissatisfaction in differing forms and by cultures being on the heavier or thinner side as to what they class as beauty by status and health. For example heavier sizes in SA signifies royalty and affluence whereby cosmetic surgery affordance and thinness in
Italy signifies wealth and in SA thin women/adolescents are seen as impoverished, low status and not living well.

Even though Italy and SA have been discussed in an international context, this was to show that media has a contrasting influence about body sizes and food related issues from other cultures.

4.5 Body Size and Western Society

Kierans et al (2016) was the second study for mixed methods of qualitative (first stage by focus group), then followed by quantitative (second stage by survey). The focus groups consisted of split gendered groupings (39 in total; nineteen boys and twenty girls), aged twelve to fourteen years. The participants were of mixed ethnicities 10% were Asian, South American and African and the remainder 90% white and took place in Ireland. The ideology behind this study was to show that body dissatisfaction is the same in Ireland as in other parts of the West, as studies like this had never taken place in Ireland before so there were no previous comparable data sets.

Ethical approval, informed consent, environment, audio recorder, moderator researcher (out of the way), information and support services where used, with consideration to the adolescents welfare, beneficence and autonomy (one example in the study by using pseudonyms). Using pseudonyms allows the researcher to remain on a personal level to the participants, however care needs to be taken to gender or ethnic groups, by keeping information close with those exposed to the participants or it could lead to false representation or reveal their true identity in the study(O’Hara et al, 2011, pg. 125).

Sociocultural influences by way of themes were identified by: proximal appearance environment (social rewards by peers by having the ideal body), distal appearance
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethic Reference Number: xxxxx

Environment (media and cultural appearance norms like celebrities and role models) and personal attributes (resilience to the previous two themes). Cultural norms, gender stereotypes and traits, (for both by family, peers; eating habits and appearance), peer pressure and media influence (girls were more interested in celebrities and boys their sports stars) were found to have separate influences of the adolescents and that sociocultural influences require further and in-depth study, and not just in Ireland.

Limitations to the study were noted as not gaining all participant insight (peer pressure can control what is said or what is able to be disclosed in front of others) and over generalising the questions so they were not explored or touched on further, however, this could have been problematic for the researchers with the topic potentially raising sensitive disclosures and have an undesired effect on the adolescents. Future research was implied to in the suggestion that adolescent’s use of the internet is increasing and exploring the personal view of “ideal body types” of the adolescents own views requires further investigation. There was also mention for educational programs to promote healthy body image (diversity of different bodies, appearances and ethnicity) and change the adolescent thought processes in a more positive way. As the world is becoming more interconnected where new cultures and ethnicities are now living in Ireland such as ‘1.9% Asians, 1.4% Black, mixed and other 0.9’ Index Mundi (2016), could open up future research to explore if new cultures have an effect on Irish adolescents and their body ideals.
4.6 Online risks and unrealistic portrayal

Ricciardelli et al (2016, Pg. 77 and 78) expresses that media has a direct and indirect effect on body image and unrealistic portrayals of “perfect” faces, bodies, skin and hair by airbrushing and enhancement techniques that influence adolescents out of any context of realism (linking to online risks), whereby industries (TV, magazines etc.) increase their power by drawing them in and increasing their sales with little thought to the effects.

Görzig (2016) was also a mixed methods study of quantitative (survey) and qualitative (interview) of 19,406 adolescent boys and girls (referred to as youths) of ages eleven to sixteen. The hypothesis was if adolescents experience the same offline and online risks. This was investigated by a ‘bi-factor model’ and it was found that this was supported by evidence from the online survey to identify risks such as bullying (cyberbullying), sexting, crime, drugs, pro bulimia and anorexia sites and self-harm sites. There were two similarities by way of behaviours and the environment of the experiences and whether these were on or offline and if they still shared the same similarities unless strategies were put into place (for example offline: law and policy and online: exposures such as explicit content control).

Ethics was mentioned briefly by a reference, although protection was identified by comments on the rights and well-being of children and families.

Limitations to the study was that it focused only on the few previously mentioned risks and that further research could be investigated on so much more of risk factors that are having an effect on adolescents.

Online risks as stated by Livingstone et al (2014) have been reported by 9636 adolescents, where one of the risks that concerned them was content about anorexia and
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx other eating disorders. It was identified that regulation by internet service providers and parents etc. need to address these issues for protection of vulnerable users. Even if access to the sites are “accidental”, or another example such as “accidental” cyberbullying (unrealisation that what may be said may be hurtful to others) are seen as “playful”, where a study by Hamer, Konijn and Keijer (2014) has shown that “…the higher the exposure to antisocial media content, the higher the [negative] behaviour’. Christofides, Muise and Desmarais (2012) also found that negative experiences online such as on Facebook, received unwanted contacts, inappropriate and “awful” behaviours such as bad language and bullying/trolling etc. but this research shows that those with higher self-esteem deal with the issues and protect themselves with securing content and settings restrictions so that it can no longer affect them. This could show that adolescents need instruction on these methods to protect themselves online from such unwanted exposures and negativity.

4.7 Negative Influences of Media

The quantitative study by Bell et al (2011), involved 199 adolescent females completing an anonymous self-report survey. The survey included measures of media use (internet, TV, music, video, magazines and computer games) and body image (body dissatisfaction and appearance). By using deductive reasoning such as removing computer games and internet from patterns of media use (because they were the least used as found in their results), they also considered gender and ethnicity due to the study mainly taking part with white girls from the UK. Ethical approval was only referred to using APA guidelines with more information regarding the procedure of the study, than on the ethics themselves. There was no mention to consent, information or
autonomy in the paper. The researchers also had three hypothesis, where only the third was deemed significant and the other two unsupported. Findings suggested that, from the third hypothesis, adolescents were affected negatively by thin models in the media. This highlighted that exposure to the “thin ideal” damages adolescent’s thoughts and leads to body dissatisfaction.

A recommendation was for media types to introduce sanctions (for example ban underweight models from fashion shows and music videos). In 2015 the French Government banned skinny models and require that their Body Mass Index has to be above a certain level although, it has been suggested and criticised that not enough has been done with the new law and it has not been used widely in other countries (Bromberg and Halliwell, 2017). Should this law become legislated throughout the West, this could help adolescents identify with their role models in a more positive and healthy way, as even models themselves identify that their well-being as well as that discouragement of eating disorders is more than important (Nelson, 2017, See Appendix).
4.8 Summary

All of the studies reported results that media has some influence on adolescents and it is one of many risk factors for the development of anorexia during adolescence. There are reported advantages and disadvantages to media and the data from the findings and studies such as Slater et al (2015) and Biolcati et al (2016), suggest that existing theories such as the Frederickson and Roberts Objectification Theory considers how society portrays and constructs adolescent’s ideas of their bodies leading to potential consequences, such as AN.

As expected, there was enough convincing evidence to suggest that media has an influence on adolescents. The quality of the eight studies were sufficient. Six of those were consistent within the age ranges for adolescence age range requirements, although one study by Biolcati et al (2016) was not entirely consistent and swayed with links to adult women rather than the focus on the ages required. The majority of the studies also implied that future investigation was needed with adolescents in qualitative methods to retrieve their actual view on body image and one study in particular by Mele et al (2016) relayed that future research was required with adolescents during active AN. Further to this, preventative measures for adolescents who are susceptible and vulnerable to the factors and risks as well as a possibility that media may be affecting even younger children, is something that may need to be explored in the future. There is also much needed support and education for adolescents with self-esteem issues, where Advameg, Inc. (2017) explains that ‘children who have high self-esteem have an easier time handling conflicts, resisting negative pressures, and making friends’. As expected the opposite to this leads to self-criticism, negative views of self and anxiety/depression,
as well as with attitudes to food and body image may become distorted, with the eventual result of an eating disorder, such as AN.

The seven themes each in their own different sources of information, have shown how difficult some adolescents encounter the issues through natural biological events (e.g. puberty) and their surrounding world of unnatural events, via media exposure.
Reflection

There have been many issues, challenges, lows and highs such as sense of achievement and developments while producing this research paper. The question was considered because of curiosity as I have never fully understood why adolescents in this advanced day and age struggle with so many issues. I come from an era where the technology was just developing, yet in light of this new found knowledge, feel I am blessed that I have not grown up in this generation of teens. I have found the relevant papers without difficulty by systematically reviewing the evidence and using the time available to ensure research was correctly composed. Time constraints have been the biggest of challenges, with family and employment. Priorities have at times been difficult to manage and great efforts have been made to avoid setbacks and keep everything in balance. Problems in searching for literature included finding articles about anorexia and media that were about adolescents and not women. Results from the studies have pointed out how much more investigation is needed and how the application of preventative as well as protective methods when adolescents are using media is needed. There are other relatively similar studies on the three variables above, however new reviews will have to be adapted, as found by this paper, to explore if the preventative and protective methods are ever applied and if they actually work. I find now and because I have children, that I have awareness to the positives and negatives of media use and how I can utilize this to support and protect my own family.
Chapter 5- Conclusion

The combination of media, anorexia and adolescents within the research question of a systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia shows another perspective to the complexities of media influence on adolescents. This study will provide a small, useful insight to help further understand the topic for future consideration. It also provides a first for the seven themes to be brought together and analysed individually.

All of the studies show that adolescents have been influenced and affected by the media offline and online, with a resulting consequence of anorexia.

It was expected that media may have had some influence on adolescents however, once investigating into the topics further, revealed how significant the influence of media has.

The conclusions from the research indicate that media has a profound effect on adolescents on a global scale, regardless of the size of the individual. However, the true extent on Western culture is greater with issues such as those in the themes of body dissatisfaction and self-objectification from pressures, such as being more social, by their peers and driven by online and media consumption and comparison (celebrities and models) due to unrealistic expectations. There is also comparisons taking place of adolescents on social media adding to the extra pressure. By this, the significance of sociocultural forces has also been a great pressure on adolescents, using it to develop their sense of identity, once again against unrealistic manipulation from the media.

Expanding on the themes, has recognised the need for further investigation and evaluation on younger children in the future as this was identified as a potential problem, and if recommendations for intervention programs succeed in changing
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx

adolescents affected by media, then this topic should be much less to consider. Although, needless to say, it is highly unlikely that the intervention programs will make any significant difference as media is such a large issue.

It has also been concluded that there are negative and positive aspects to media use, although the effects of negative media are more prolific than the positive because of the effects leading to such consequences such as anorexia, outweighing the pros significantly.

More research is needed into the actual experiences of adolescents on the themes by qualitative methods, to gain their actual insight, especially those with active AN, where adults and health professionals and in awareness for other young people, could use the information to help safeguard and protect the vulnerable.

Social networks do provide an advantage for keeping adolescents “connected” with family and friends, but when it is used to compare for the “perfect body”, resulting in body dissatisfaction, psychological issues and AN, questions the overall benefits. Until recommendations such as regulation programs, further sanctions of unrealistic body types and legislation of healthy role models put into place, only then will a potential benefit to media may be seen.

The research of this paper could be used and should future study take place for younger children, or it could also be used for adolescents who already have AN to gaining further insight or help adults (parents or health professions) to understand the difficulties adolescents face.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

References:

From: https://healthofchildren.com/S/Self-Esteem.html


Available at: http://researchonline.nd.edu.au/undalr/vol18/iss1/1

A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx


A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?


A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethan Reference Number: xxxxx


From: https://www.indexmundi.com/ireland/demographics_profile.html


A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx


http://doi.org/10.1016/j.bodyim.2016.08.002

A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  Ethics Reference Number: xxxxx


From: https://www.mentalhealth.org.uk/blog/social-media-and-young-peoples-mental-health


A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx


From: https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2015/time-spent-online-doubles-in-a-decade


From: https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringnationalwellbeing/2015-10-20


A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx


From: https://www.pewglobal.org/2015/03/19/internet-seen-as-a-positive-influence-on-education-but-negative-influence-on-morality-in-emerging-and-developing-nations/


From: https://www.eating-disorders.org.uk/information/the-media-eating-disorders
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx


From: https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/


From: https://www.livescience.com/44376-italian-culture.html

Appendix A.

Friday, 18 November 2016

BSc (Hons) Health & Social Care
Cardiff School of Health Sciences

Dear Applicant

Re: Application for Ethical Approval: A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number

Your ethics application, as shown above, was considered by the Applied Community Sciences Ethics Panel on 16/11/2016

I am pleased to inform you that your application for ethical approval was APPROVED, subject to the conditions listed below – please read carefully.

Standard Conditions of Approval

- Your Ethics Application has been given a Project Reference number as above. This MUST be quoted on all documentation relating to the project (E.g. consent forms, information sheets), together with the full project title.
- All documents must also have the approved University Logo and the Version number in addition to the reference and project title as above.
- A full Risk Assessment must be undertaken for this proposal, as appropriate, and be made available to the Committee if requested.
- Any changes in connection to the proposal as approved must be referred to the Panel/Committee for consideration without delay quoting your Project Reference Number.
- Changes to the proposed project may have ethical implications and so must be approved.
- Any untoward incident which occurs in connection with this proposal must be reported back to the Panel/Committee without delay.
- If your project involves the use of samples of human origin, your approval is given on the condition that you or your supervisor notify the School of your intention to work with such material by completing Part One of the form entitled “Notification of Intention to Work with Human Relevant Material or Human Bodily Material” which must be obtained from the PD (Sean Duggan), BEFORE any activity on this project is undertaken.

This approval expires on 16/11/2017. Please set a reminder on your Outlook calendar or equivalent if you need to continue beyond this approval date. It is your responsibility to reapply / request extension if necessary.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Appendix A continued…

Yours sincerely

Professor George Karani
Chair of Applied Community Sciences & Protection Ethics Panel
Cardiff School of Health Sciences
Tel: 029 20 188 855
E-mail: pkarani@cardiffmet.ac.uk
Cc: Stevens-Woods, Kirsten

PLEASE RETAIN THIS LETTER FOR REFERENCE
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Appendix B- Signed Declaration

DECLARATION

This work is being submitted in partial fulfilment of the requirements for the degree of BSc (Hons) Health and Social Care and has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed: (Candidate)

Date: 2nd May 2017

STATEMENT 1

This dissertation is the result of my own work and investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signed: (Candidate)

Date: 2nd May 2017

STATEMENT 2

I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loan, for deposit in Cardiff Metropolitan University’s e-repository, and that the title and summary may be available to outside organisations.

Signed: (Candidate)

Date: 2nd May 2017
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

Appendix C- Fredrickson and Roberts Objectification theory (1997)

Figure 1. Theoretical model of media exposure, extracurricular activities, and appearance-related comments and self-objectification.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  
Ethics Reference Number: xxxxx

Appendix D- Important elements of quality assessment for health care intervention studies

<table>
<thead>
<tr>
<th>Element</th>
<th>What does this mean?</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection bias</td>
<td>Were the individuals selected to participate in the study likely to be representative of the target population? How were the participants selected?</td>
<td>You need to be able to assess how generalizable and transferable the study results are to the target population.</td>
</tr>
<tr>
<td>Allocation bias</td>
<td>How were participants allocated to the treatment groups? Could anyone in the study predict or control allocation to treatment groups?</td>
<td>Type of study design determines how participants are allocated to treatment groups; generally, the ‘stronger’ the study design the less risk of bias from allocation to treatment.</td>
</tr>
<tr>
<td>Performance bias</td>
<td>Were the participants, providers of the intervention, or the study investigators aware of the treatment that participants received or were they blinded?</td>
<td>You need to be able to assess whether there was awareness of treatment received by certain study personnel and whether this could bias study results.</td>
</tr>
<tr>
<td>Detection bias</td>
<td>Were the people who measured the study outcomes aware of what treatment participants received or were they blinded?</td>
<td>You need to be able to assess whether there was awareness of treatment received by study personnel and whether this could bias study results.</td>
</tr>
<tr>
<td>Attrition bias</td>
<td>What proportion of participants in each group stopped having the treatment? Did they stop by themselves (drop-outs) or were they stopped by study personnel (withdrawal) for whatever reason (for example, adverse event, non-compliance, did not meet inclusion criteria).</td>
<td>If a relatively large proportion of drop-outs occurred, this could weaken the generalizability of the study and it might also reflect that the intervention is hard to ‘stick to’ (it might not ‘work’ or it might have unpleasant side effects in the target/general population). Attrition rates can also give the reader an insight into compliance rates; if withdrawal/drop-out rates were unequal between treatment groups then this may bias the results in favor of one group. What reasons were given to explain the failure to report all stated outcomes? The treatment may appear more favorable than it really is if negative results from other outcomes are not reported within the paper.</td>
</tr>
<tr>
<td>Reporting bias</td>
<td>Were all outcomes stated to be measured actually reported or did the study authors fail to report outcomes which showed no (or a negative) effect? Were some results measured post hoc, that is, was an outcome measured and reported because there seemed to be a beneficial effect or perhaps the data were trawled for an ‘effective’ outcome?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D- continued…

<table>
<thead>
<tr>
<th>Element</th>
<th>What does this mean?</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confounders</td>
<td>At baseline, were the patient characteristics, such as age, sex, gender or health status, similar across all treatments?</td>
<td>Participants should be equally balanced in terms of variables considered important to study outcomes (for example, gender, age, health status) otherwise there is a risk that results will be biased in favor of one group/intervention.</td>
</tr>
<tr>
<td>Concurrent/ subsequent intervention</td>
<td>Did any of the participants receive other treatments which could have influenced the study outcomes?</td>
<td>Confidence that the study intervention did/did not have an effect is weakened if participants were not all treated in the same way (except for study intervention).</td>
</tr>
<tr>
<td>Analysis</td>
<td>Were the data for all participants included in the final analysis (even those participants who withdrew)?</td>
<td>If there are data missing for a number of participants and these are not accounted for, published results will not properly reflect the results of the study.</td>
</tr>
<tr>
<td>Funding bias</td>
<td>Who funded the study?</td>
<td>Funders may have a vested interest in demonstrating positive outcomes for one group/intervention.</td>
</tr>
</tbody>
</table>

Boland, Cherry and Dickson (2014, Pg. 66-67).
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  

Ethics Reference Number: xxxxx

Appendix E- CASP Chosen Papers

10 questions to help you make sense of a review

ST20049466 - Tiggemann and Slater (2014)

(A) Are the results of the review valid?

Screening Questions

1. Did the review address a clearly focused question?  
   - Yes  
   - Can’t tell  
   - No

HINT: An issue can be ‘focused’ in terms of
   - The population studied
   - The intervention given
   - The outcome considered

2. Did the authors look for the right type of papers?  
   - Yes  
   - Can’t tell  
   - No

HINT: ‘The best sort of studies’ would
   - Address the reviews question
   - Have an appropriate study design (usually RCTs for papers evaluating interventions)
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

3. Do you think all the important, relevant studies were included?
   [ ] Yes  [ ] Can’t tell  [ ] No

HINT: Look for:
- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

4. Did the review’s authors do enough to assess the quality of the included studies?
   [ ] Yes  [ ] Can’t tell  [ ] No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. (“All that glisters is not gold” Merchant of Venice – Act II Scene 7)

5. If the results of the review have been combined, was it reasonable to do so?
   [ ] Yes  [ ] Can’t tell  [ ] No

HINT: Consider whether
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  

Ethics Reference Number: xxxxx

6. What are the overall results of the review?

**HINT: Consider**
- If you are clear about the review’s ‘bottom line’ results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

Body image concerns correlated with time spent online (internet/social media)

7. How precise are the results?

**HINT: Look at the confidence intervals, if given**

Clear demonstration that exposure to the internet relates to issues of “ideal” thinness, esteem and eating/dieting behaviours
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

8. Can the results be applied to the local population? ☑ Yes ☐ Can’t tell ☐ No

HINT: Consider whether
- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered? ☑ Yes ☐ Can’t tell ☐ No

HINT: Consider whether
- Is there other information you would like to have seen

10. Are the benefits worth the harms and costs? ☑ Yes ☐ Can’t tell ☐ No

HINT: Consider
- Even if this is not addressed by the review, what do you think?

ethics addressed and no cost implications
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

ST20049486- Gorzig (2016)

(A) Are the results of the review valid?

**Screening Questions**

1. Did the review address a clearly focused question?  
   - HINT: An issue can be ‘focused’ in terms of  
     - The population studied  
     - The intervention given  
     - The outcome considered  
   - Yes ☒  Can’t tell ☐  No ☐

2. Did the authors look for the right type of papers?  
   - HINT: ‘The best sort of studies’ would  
     - Address the reviews question  
     - Have an appropriate study design (usually RCTs for papers evaluating interventions)  
   - Yes ☒  Can’t tell ☐  No ☐
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxx

### Detailed questions

#### 3. Do you think all the important, relevant studies were included?

**HINT:** Look for
- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

#### 4. Did the review's authors do enough to assess the quality of the included studies?

**HINT:** The authors need to consider the rigor of the studies they have identified. Lack of rigor may affect the studies' results. ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

#### 5. If the results of the review have been combined, was it reasonable to do so?

**HINT:** Consider whether
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed
6. What are the overall results of the review?

**HINT:** Consider
- If you are clear about the review’s ‘bottom line’ results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

7. How precise are the results?

**HINT:** Look at the confidence intervals, if given

Precise to focused selection or risk experiences on and offline— further studies need differing risks
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

8. Can the results be applied to the local population?  
   Yes ☐  Can’t tell ☐  No ☒

HINT: Consider whether

- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered?  
   Yes ☐  Can’t tell ☐  No ☒

HINT: Consider whether

- Is there other information you would like to have seen

   examples of different risks to consider

10. Are the benefits worth the harms and costs?  
    Yes ☐  Can’t tell ☐  No ☒

HINT: Consider

- Even if this is not addressed by the review, what do you think?

ethics addressed and no cost implications, important subject
ST20049486 - Pucane, Tsolekile and Steyn (2010)

(A) Are the results of the review valid?

Screening Questions:

1. Did the review address a clearly focused question?  
   - [ ] Yes  
   - [ ] Can't tell  
   - [ ] No
   
   *HINT: An issue can be 'focused' in terms of:
   - The population studied
   - The intervention given
   - The outcome considered

---

2. Did the authors look for the right type of papers?  
   - [ ] Yes  
   - [ ] Can't tell  
   - [ ] No
   
   *HINT: 'The best sort of studies' would:
   - Address the reviews question
   - Have an appropriate study design (usually RCTs for papers evaluating interventions)

   *mixed methods

---

3. Do you think all the important, relevant studies were included?  
   - [ ] Yes  
   - [ ] Can't tell  
   - [ ] No
   
   *HINT: Look for:
   - Which bibliographic databases were used
   - Follow up from reference lists
   - Personal contact with experts
   - Search for unpublished as well as published studies
   - Search for non-English language studies

   although some reasonably dated, still worth the investigation

---

4. Did the review's authors do enough to assess the quality of the included studies?  
   - [ ] Yes  
   - [ ] Can't tell  
   - [ ] No
   
   *HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results. (*"All that glisters is not gold" Merchant of Venice – Act II Scene 7)*
5. If the results of the review have been combined, was it reasonable to do so?

HINT: Consider whether:
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

Yes ☐  Can’t tell ☐  No ☐

unique- black African girls
and their experiences/attitudes/voice

6. What are the overall results of the review?

HINT: Consider:
- If you are clear about the review’s ‘bottom line’ results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

perceptions of body image
to acceptance within different
ethnicities and cultures
results focus group and
labelled/categorized

7. How precise are the results?

HINT: Look at the confidence intervals, if given

Attitudes and beliefs were in comparison
and contradictory beliefs were
different to those with personal/different
body sizes - whilst more thin/ blacks more
larger- culture/norms etc.
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  

Ethics Reference Number: xxxxx

8. Can the results be applied to the local population?  
   ☑ Yes ☐ Can’t tell ☐ No

HINT: Consider whether
- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review even though based in South Africa - learn from different experiences and cultures (migration etc.)

9. Were all important outcomes considered?  
   ☑ Yes ☐ Can’t tell ☐ No

HINT: Consider whether
- Is there other information you would like to have seen?

10. Are the benefits worth the harms and costs?  
    ☑ Yes ☐ Can’t tell ☐ No

HINT: Consider
- Even if this is not addressed by the review, what do you think? as above
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?  
Ethics Reference Number: xxxxx

ST20049480- Bilocati, Ghigi, Mameli and Passini (2016)

(A) Are the results of the review valid?

Screening Questions:

1. Did the review address a clearly focused question?  
   □ Yes  □ Can't tell  □ No

   HINT: An issue can be 'focused' in terms of
   • The population studied
   • The intervention given
   • The outcome considered

2. Did the authors look for the right type of papers?  
   □ Yes  □ Can't tell  □ No

   HINT: 'The best sort of studies' would
   • Address the reviews question
   • Have an appropriate study design (usually RCTs for
     papers evaluating interventions)

   questionnaire quantitative
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

3. Do you think all the important, relevant studies were included?

☐ Yes  ☐ Can't tell  ☐ No

HINT: Look for:
- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

although some reasonably dated, still worth the investigation

4. Did the review’s authors do enough to assess the quality of the included studies?

☐ Yes  ☐ Can't tell  ☐ No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. ("All that glisters is not gold" Merchant of Venice – Act 1 Scene 7)

Italian sources used, written/transcribed into English

5. If the results of the review have been combined, was it reasonable to do so?

☐ Yes  ☐ Can't tell  ☐ No

HINT: Consider whether:
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

unique- black African girls and their experiences/attitudes/voice
6. What are the overall results of the review?

HINT: Consider
- If you are clear about the review’s ‘bottom line’ results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

7. How precise are the results?

HINT: Look at the confidence intervals, if given

- more girls affected than boys
- confirmed social pressures ‘perfect body ideal’
- cosmetic surgery, tattoos (body art)
- eating problems/diets
- confusing in equation model
- written results relied upon
8. Can the results be applied to the local population?  □ Yes  □ Can't tell  □ No

HINT: Consider whether
- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered?  □ Yes  □ Can't tell  □ No

HINT: Consider whether
- Is there other information you would like to have seen

10. Are the benefits worth the harms and costs?  □ Yes  □ Can't tell  □ No

HINT: Consider
- Even if this is not addressed by the review, what do you think?

as above
ST20049486- Mele, Cazzato, Taranto, Maestro, Fabbro, Muratori and Urgesi (2016)

(A) Are the results of the review valid?

Screening Questions

1. Did the review address a clearly focused question?  ☑ Yes  ☐ Can’t tell  ☐ No

HINT: An issue can be ‘focused’ in terms of:
- The population studied
- The intervention given
- The outcome considered

mention of AN in title

2. Did the authors look for the right type of papers?  ☑ Yes  ☐ Can’t tell  ☐ No

HINT: ‘The best sort of studies’ would
- Address the reviews question
- Have an appropriate study design (usually RCTs for papers evaluating interventions)
3. Do you think all the important, relevant studies were included?  
☐ Yes  ☐ Can’t tell  ☐ No

HINT: Look for
- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

4. Did the review’s authors do enough to assess the quality of the included studies?  
☐ Yes  ☐ Can’t tell  ☐ No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. (“All that glitters is not gold” Merchant of Venice – Act II Scene 7)

5. If the results of the review have been combined, was it reasonable to do so?  
☐ Yes  ☐ Can’t tell  ☐ No

HINT: Consider whether
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed
6. What are the overall results of the review?

HINT: Consider
- if you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc)

- appreciation (liking judgements thin/round body types)
- beauty ideals
- adolescents
- AN
- not during active AN- in recovery

7. How precise are the results?

HINT: Look at the confidence intervals, if given

- different phases
evidenced weak re-shaping body
appreciation in AN-
(CONTRADICTORY IN RECOVERY! AFFECTS RESULTS)
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

8. Can the results be applied to the local population?  
   □ Yes  □ Can’t tell  □ No

HINT: Consider whether
- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered?  
   □ Yes  □ Can’t tell  □ No

HINT: Consider whether
- Is there other information you would like to have seen
  possible experiences from those with active AN in the future (ethical implications)

10. Are the benefits worth the harms and costs?  
    □ Yes  □ Can’t tell  □ No

HINT: Consider
- Even if this is not addressed by the review, what do you think?
  as above, for understanding help those with AN considerations (ethics)
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

ST20049496- Slater and Tiggemann (2015)

(A) Are the results of the review valid?

Screening Questions

1. Did the review address a clearly focused question?  
   - Yes  
   - Can’t tell  
   - No

HINT: An issue can be “focused” in terms of
   - The population studied
   - The intervention given
   - The outcome considered

2. Did the authors look for the right type of papers?  
   - Yes  
   - Can’t tell  
   - No

HINT: ‘The best sort of studies’ would
   - Address the reviews question
   - Have an appropriate study design (usually RCT’s for papers evaluating interventions)

3. Do you think all the important, relevant studies were included?  
   - Yes  
   - Can’t tell  
   - No

HINT: Look for
   - Which bibliographic databases were used
   - Follow up from reference lists
   - Personal contact with experts
   - Search for unpublished as well as published studies
   - Search for non-English language studies

4. Did the review’s authors do enough to assess the quality of the included studies?  
   - Yes  
   - Can’t tell  
   - No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. (“All that glisters is not gold” Merchant of Venice— Act II Scene 7)
5. If the results of the review have been combined, was it reasonable to do so?

**HINT:** Consider whether
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

Yes ☒ Can’t tell ☐ No ☐

6. What are the overall results of the review?

**HINT:** Consider
- If you are clear about the review’s ‘bottom line’ results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

Predictors self-objectification
- Media exposure, comments,
- Extra curricular activities—no effect
- Female adolescents—use of objectification theory

7. How precise are the results?

**HINT:** Look at the confidence intervals, if given

Associated as hypothesis suggested
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Ethics Reference Number: xxxxx

8. Can the results be applied to the local population? Yes

HINT: Consider whether

- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered? Yes

HINT: Consider whether

- Is there other information you would like to have seen possible experiences from those with active AN in the future (ethical implications)

10. Are the benefits worth the harms and costs? Yes

HINT: Consider

- Even if this is not addressed by the review, what do you think? as above, for understanding help those with AN considerations (ethics)
ST20049486- Bell and Dittmar (2011)

(A) Are the results of the review valid?

Screening Questions

1. Did the review address a clearly focused question?  ☑ Yes ☐ Can’t tell ☐ No

HINT: An issue can be ‘focused’ in terms of
   - The population studied
   - The intervention given
   - The outcome considered

2. Did the authors look for the right type of papers?  ☑ Yes ☐ Can’t tell ☐ No

HINT: ‘The best sort of studies’ would
   - Address the reviews question
   - Have an appropriate study design (usually RCTs for papers evaluating interventions)
Detailed questions

3. Do you think all the important, relevant studies were included?

☐ Yes ☐ Can’t tell ☐ No

HINT: Look for
- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

4. Did the review’s authors do enough to assess the quality of the included studies?

☐ Yes ☐ Can’t tell ☐ No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. (“All that glitters is not gold” Merchant of Venice – Act II Scene 7)

5. If the results of the review have been combined, was it reasonable to do so?

☐ Yes ☐ Can’t tell ☐ No

HINT: Consider whether
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed
6. What are the overall results of the review?

HINT: Consider
- if you are clear about the review’s “bottom line” results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

exposures to thin ideal damaging
leads to body dissatisfaction
media types - influence
developmental
models - law?

7. How precise are the results?

HINT: Look at the confidence intervals, if given

2 studies as above

8. Can the results be applied to the local population?

HINT: Consider whether
- The patients covered by the review could be
  sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

Yes  Can't tell  No

9. Were all important outcomes considered?

HINT: Consider whether
- Is there other information you would like to have seen

but more on ethics

Yes  Can't tell  No

10. Are the benefits worth the harms and costs?

HINT: Consider
- Even if this is not addressed by the review,
  what do you think?
ST20049486- Kierans and Swords (2016)

(A) Are the results of the review valid?

**Screening Questions**

1. Did the review address a clearly focused question?  [x] Yes  [ ] Can't tell  [ ] No

**HINT:** An issue can be ‘focused’ in terms of
- The population studied
- The intervention given
- The outcome considered

2. Did the authors look for the right type of papers?  [x] Yes  [ ] Can't tell  [ ] No

**HINT:** ‘The best sort of studies’ would
- Address the reviews question
- Have an appropriate study design (usually RCTs for papers evaluating interventions)

3. Do you think all the important, relevant studies were included?  [x] Yes  [ ] Can't tell  [ ] No

**HINT:** Look for
- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

4. Did the review’s authors do enough to assess the quality of the included studies?  [x] Yes  [ ] Can't tell  [ ] No

**HINT:** The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. (“All that glitters is not gold” Merchant of Venice – Act II Scene 7)
5. If the results of the review have been combined, was it reasonable to do so?
	× Yes    ☐ Can’t tell    ☐ No

HINT: Consider whether:
- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

6. What are the overall results of the review?

HINT: Consider:
- If you are clear about the review’s ‘bottom line’ results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

7. How precise are the results?

HINT: Look at the confidence intervals, if given

perceptions - reflected upon, theories on body image, gender, strengths and limitations ethics vital
8. Can the results be applied to the local population?  ☑ Yes  ☐ Can’t tell  ☐ No

HINT: Consider whether
  • The patients covered by the review could be sufficiently different to your population to cause concern
  • Your local setting is likely to differ much from that of the review

9. Were all important outcomes considered?  ☑ Yes  ☐ Can’t tell  ☐ No

HINT: Consider whether
  • Is there other information you would like to have seen?

ethics and procedure information

10. Are the benefits worth the harms and costs?  ☑ Yes  ☐ Can’t tell  ☐ No

HINT: Consider
  • Even if this is not addressed by the review, what do you think?
Appendix F- Theoretical explanations of body image

Mitchell and Peterson (2005, pg. 177)
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia?

Appendix G-

Globally, Internet Access Varies Widely

Percent who access the internet at least occasionally or own a smartphone

Pew Research Center (2015)
A systematic review: An exploration of media influences on adolescents: a risk factor for developing anorexia? Ethics Reference Number: xxxxx

Appendix H- My Pro Ana