The Role of Identity in the Development and Maintenance of Eating Disorders

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Primarily affecting adolescents, eating disorders such as anorexia nervosa (AN) and bulimia nervosa (BN) are mental illnesses characterized by dissatisfaction with the body and engagement in extreme behaviors to promote weight loss and prevent weight gain. Recently, the concept of identity has been suggested to be a core issue in those with eating disorders, however, this relationship remains widely understudied. This paper proposes a quasi-experimental study in which the role of identity diffusion in the development of AN and BN. The study will utilize surveys to assess identity levels and eating disorder pathology in individuals before and after spending a year being active on eating disorder websites. I hypothesize that the identity of an eating disordered individual is a desirable identity for an identity-diffused individual who is seeking a negative identity due to the social consequences associated with having an eating disorder. Additionally, I am hypothesizing that eating disorder websites can either trigger or prolong the duration of an eating disorder in identity-diffused individuals due to the readily available peer influence on the websites, as well as the strong social network that forms on the websites. Should the proposed hypotheses be correct, revisions can be made to the treatment of eating disorders to incorporate a component of therapy to address the need for an identity.

Keywords: eating disorders, anorexia, bulimia, identity disturbance, Internet

Eating disorders, such as anorexia nervosa (AN) and bulimia nervosa (BN) are mental illnesses that are highly prevalent among adolescents (Crow et al., 2009) and have higher mortality rates than any other psychiatric condition (Smink, van Hoken, & Hoek, 2012). A diagnosis of AN is given to patients who engage in excessive dieting that leads to severe weight loss, while simultaneously experiencing a pathological fear of becoming fat and a distorted body image (Comer, 2014). According to the DSM-V, a person is diagnosed with BN when he or she has recurrent episodes of binge eating, and recurrent inappropriate compensatory behavior, such as self-induced vomiting, over-exercising, and diuretic or laxative abuse, in order to prevent weight gain (Comer, 2014). As a result of malnutrition and dehydration, those who struggle with eating disorders may experience changes in their physical appearance, including a visibly underweight body,

bruising, blue nail beds, and dry, thinning hair (Durand, 2015).

Effects of eating disorders have been identified, however the exact cause of eating disorders remains unclear. While evidence suggests there are some biological bases for the development of eating disorders, there is no doubt environmental factors play a role in their development. Several environmental factors have been studied as predictors for the development of AN or BN in an individual. A perceived pressure to be thin from interpersonal relationships, specifically from peers and family members, receiving criticism about one's appearance (Leonidas & dos Santos, 2014), and a perception of poor social support from family and friend networks increase the risk that an individual will develop an eating disorder (Limbert, 2010).

Individual differences may refer to the variation in personality traits, motivation, and self-concept. Those with higher than average levels of conscientiousness and neuroticism are at an increased risk for developing AN (Bollen & Wojciechowski, 2004), and those who display a high amount of impulsivity are at an increased risk for

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developing BN (Diaz-Marsa, Carrasco, & Saiz, 2000). Those who present with symptoms of anxiety or depression in conjunction with a drive for thinness are also at an increased risk for the development of an eating disorder (Penas-Lledo, Bulik, Lichtenstein, Larsson, & Baker, 2015).

An additional factor that varies among individuals is how one understands his or her identity. Identity formation mainly takes place during adolescence and refers to the process in which the individual strives toward identity synthesis, or the incorporation of all parts of the self into one cohesive whole (Claes & Muehlenkamp, 2014). Alternatively, one may end up in a state known as identity confusion, in which a person has a disorganized sense of self (Claes & Muehlenkamp, 2014). Living in a state of identity confusion leaves a person without understanding of his or her beliefs and desires, which poses difficulty in significant aspects of the individual's life, particularly when it comes to making commitments to choices about career paths (Wilkinson-Ryan & Westen, 2000).

Recent research reports a relationship between poor identity formation and the presence of an eating disorder (Claes & Muehlenkamp, 2014). While this relationship has been identified, little research has been done to allow a full understanding of why the relationship exists, and how exactly the variables interact.

Previous literature suggests that a person may escape the undesirable state of identity confusion by adopting a "negative identity" (Wilkinson-Ryan & Westen, 2000). A negative identity is typically one with a role in a group that is recognized as negative by society (Wilkinson-Ryan & Westen, 2000). The tendency of a person experiencing identity confusion to adopt a negative identity leads me to hypothesize that the relationship between poor identity formation and eating disorder development exists, in part, due to certain characteristics of eating disorders, which allow them to be adopted as a negative identity. Specifically, the symptoms of an eating disorder that result in visible bodily changes that separate the individual from healthy individuals, as well as the social consequences and stigmatization of individuals with eating disorders, may make an eating disorder desirable to someone seeking a negative identity because the identity will both be known and looked upon negatively by the general public.

The idea of anorexia as an identity has been minimally researched. In an in-depth ethnographic study, Rich (2006) observed seven women with AN, listened to their stories, and took notes. Many women told of stories in which they felt identified by others by their weight and eating habits (Rich, 2006). Due to the focus on biomedical models of illnesses, the physical and visible symptoms associated with eating disorders are more emphasized and recognized by friends, families and significant others of those with eating disorders than are the cognitive and affective symptoms (Rich, 2006). Girls shared anecdotes about being identified by others by commenting on weight loss and eating patterns, and ignored the social and emotional aspects of AN (Rich, 2006). Someone with AN who is frequently identified by the size of his or her body may internalize others' judgment and come to understand themselves as simply "an anorexic person", instead of a person who happens to have AN, as a result, the eating disorder begins to make up a large part of the person's identity.

Stigmatization of individuals with eating disorders is common and provides a "negative" component to the identity, which is important to those seeking a negative identity. Previous research reveals that people are more likely to blame someone with AN or BN for their mental illness, believe the person is able to discontinue eating disordered behaviors if he or she wanted to, and believe that the person is mostly engaging in eating disordered behaviors to attract attention to themselves (Stewart, Keel, & Schiavo, 2006; Roehrig & McLean, 2010).

While the stigmatization may aid in creating an accessible negative identity for those experiencing identity confusion initially, the stigma associated with having an eating disorder ultimately leads many eating disordered individuals to engage in secretive behaviors for fear of ridicule, which can be responsible for high levels of isolation from traditional social networks (Dias, 2003). Social interaction has been understood as a basic human need that must be met before higher levels of cognitive function can be reached (Maslow, 1943). Those with an eating disorder may remedy this need by using the Internet as a medium for social interaction. Websites focusing on the topic of eating disorders have been emerging. Many of these websites have similar features, such as messaging via email, bulletin boards, and chat rooms that facilitate interpersonal communication between members (Eichhorn, 2008; Dias, 2003), with many discussions revolving around the need to find some sort of control in an otherwise chaotic life, perfection, and solidarity (Gailey, 2009; Leonidas & dos Santos, 2014). These websites provide a safe haven for eating disorder sufferers to connect with other eating disordered individuals, enabling them to talk candidly about their illnesses and providing a place to find a sense of identity, feelings of acceptance, and to pursue thinness (Dias, 2003; Gailey, 2009; Leonidas & dos Santos, 2014).

In a survey of 60 eating disorder forum users, participants reported visiting forums an average of 12 times a week, spending approximately 45 minutes each time on the websites (Ransom, LaGuardia, Woody, & Boyd, 2010). Being that a social network is defined as a set of people that one interacts with on a regular basis (Leonidas & dos Santos, 2014), it can be said that online eating disorder communities are replacing offline social networks. The emergence of these new social networks have been a topic of much controversy, with users

reporting benefits, and outsiders raising concerns about the potential for readers and participants to utilize the information on the sites to develop or worsen an eating disorder.

To evaluate the claims made about eating disorder websites, Csipke and Horne (2007) surveyed 151 users of eating disorder websites and found that users report a generally more improved psychological state after visiting eating disorder websites and correlations were found between frequent visitation of the websites and improvement of subjective self-esteem and decreased feelings of loneliness. Site users receive a notable amount of support on the websites, and report receiving more support than they can find offline and on topics extending beyond eating disorders, giving them a place to process difficult emotions (Walstrom, 2000; Brotsky & Giles, 2007; Mulveen & Hempworth, 2006; Csipke & Horne, 2007; Ransom et al., 2010).

While users report the benefits of such websites, the sites are sometimes considered to be "pro-anorexic" (pro-ana) or "pro-eating disorder", and it has been argued that they are responsible for teaching young girls how to develop an eating disorder (Gailey, 2009). Healthcare professionals are concerned about the distribution of information about eating disordered behaviors and the potential for site users to utilize this information as a means to lose weight (Csipke & Hornes, 2007). In a content analysis of over fifteen eating disorder message boards, or discussion threads, Mulveen and Hempworth (2006) identified major themes of discussion on the sites were about tips and techniques, the need for AN, and the debate between AN as an illness and a lifestyle choice. Additionally, the websites contain advice about weight loss, food restriction, and purging (Leonidas & dos Santos, 2011; Mulveen & Hempworth, 2006). Mulveen and Hempworth (2006) also highlighted the fact that there were no healthy messages found on the websites and advice was solely related to continuing eating disordered behaviors. In an additional content analysis, Dias (2003) found common features on eating disorder websites that may be described as "pro-ana" beyond discussion boards, with materials, such as "trigger pictures", meant to keep members inspired and on track in reaching their weight loss goals, often referred to as "thinspiration". Many of these websites often offer a warning on the first page stating that the reader has stumbled upon a pro-anorexia website, and recommends they leave, especially if the reader is in recovery for an eating disorder or does not already have one because the website is potentially "triggering" (Dias, 2003).

Although there is a near equal amount of research highlighting potential positive and negative consequences of eating disorder websites, little research about the effects of the websites has been conducted. Results from a survey of 151 site users present correlations between frequent visitation to eating disorder websites and increased motivation to diet, however, results from the same study also reveal correlations between frequent visitation to eating disorder websites and improvement of subjective self-esteem, and decreased feelings of loneliness, while also showing no significant relationship between frequent visitation and body image, fasting behaviors, comparison to others, or eating behaviors (Csipke & Horne, 2007).

The ambiguity of the existing data is not sufficient for drawing conclusions about the effects of eating disorder websites, and therefore cannot be used to implement practices to maximize the benefits of the websites or minimize the dangers. It is possible that there is conflicting data about how the websites impact the individual due to unexamined differences in identity status among the users. Based on the literature about identity disturbances and the cultural connotations relative to AN and BN, I am hypothesizing the following:

(1) The influence of eating disorder websites on an individual without an existing eating disorder will be mediated by the strength of the individual's level of identity confusion. Specifically, those with high levels of identity confusion will be more likely to develop an eating disorder in response to visitation to eating disorder websites, and those with low levels of identity confusion will remain unaffected by visitation to the eating disorder websites.

(2) Eating disorder websites will prolong the maintenance, and increase the severity of eating disorders in those with eating disorders that include a component of identity confusion, whereas the eating disorder websites will have no effect on the duration or severity of eating disorders in those without an identity confusion component.

(3) Those with eating disorders and identity disturbances will have a difficult time leaving the online community because of the fear associated with losing his or her identity.

Hypothesis (1) is formed based on literature that discusses the desire for a negative identity, and the influence of social networks on identity formation. Specifically, membership to an eating disorder website would provide the individual with a role in a group that is perceived as negative by society at the same time observing other members on the eating disorder website serves as a reference point for the individual as he or she develops emotionally and socially, as well as learns to assign meaning to everyday experiences (Cavaliere & Costa, 2011; Sluzki, 1996). For example, those seeking a negative identity will be allured by conversations among eating disordered individuals on the websites centered around being misunderstood or judged by family and friends offline, and may learn to understand a day of undereating as a success and to respond to this situation with positive emotions, as modeled by others on the website.

Hypothesis (2) is supported by the literature on the topic of cognitive dissonance. Cognitive dissonance arises when an individual's beliefs and behaviors are not in sync. To decrease cognitive dissonance, one must either change the behavior to match the belief; this would mean an eating disordered individual would stop the eating disordered behaviors, or change the belief; which would mean an eating disordered individual would change the understanding he or she has about the detrimental consequences of having an eating disorder. For many, it is easier to change a belief than a behavior, and cognitive dissonance about an unhealthy behavior often results in a change in the belief to allow continuation of the behavior without experiencing the discomfort of dissonance. An eating disordered individual experiencing the pressure of cognitive dissonance associated with knowing of the consequences of an eating disorder and being unable to stop the disordered behaviors may be enabled to change his or her belief that an eating disorder is bad for his or her health after observing other individuals on the eating disorder websites talking about engaging in the same behaviors without mention of the consequences.

Hypothesis (3) is derived from the published research on the topic of intimate relationships among those with identity confusion. An identity confused individual tends to allow intimate relationships to define a large part of his or her identity, resulting in difficulties that arise when attempting to leave such relationships, due to the threat associated with losing a large portion of the established identity (Wilkinson-Ryan & Westen, 2000). In the same respect, an individual with identity confusion may allow the intimate relationships formed on the eating disorder websites to define a substantial part of his or her identity, which would pose a threat of losing his or her identity when attempting to leave the website.

PROPOSED METHOD

Participants

A sample size of at least 600 participants is desired. Participants will be conveniently recruited via advertisements of the study on selected eating disorder websites. This method of recruitment will ensure the target sample of eating disorder website users will be reached. The specific websites will be chosen after a comprehensive search of the most popular and active eating disorder websites. The researcher will conduct separate searches on "dogpile", which is a search engine that includes results from the most popular search engines, for several terms associated with eating disorder websites including "anorexia", "bulimia", "proanorexia", "probulimia", "proana", "promia", "anorexia support", "eating disorder", "proeating disorder", "proED", "eating disorder support", and "eating disorder lifestyle" in order to create a diverse population that includes different types

of eating disorder websites, allowing for variation of the level of "pro" eating disorder attitudes. The links first five pages of results for each search will be recorded and rated based on popularity (number of members) and activity (new posts per day). The 10 websites with the highest combined score of popularity and activity will be selected to host advertisements for the study, which will be posted on the homepage of each website, after the owners of each of the websites grant the researcher permission to do so. The advertisement will provide an active link that will take the user directly to the study with an informed consent page. Continuation beyond the first page will imply informed consent.

The first stage of the study will require the completion of a survey. Based on responses to survey questions, participants will be excluded from the study if they report being a member or a reader of an eating disorder website for over one month at the time of survey completion.

Materials

A survey created for the purposes of this study will be administered online. This initial survey will include a screening question in which the participant has to report the date they first accessed an eating disorder website. The survey will also contain the appropriate scales to assess the variables in question.

The first variable that will be assessed is the level of eating disorder pathology, which will be measured by the Eating Disorder Examination Questionnaire (EDE-Q), which is an adaptation of the Eating Disorder Examination (EDE) that allows for self-reporting. The EDE-Q contains a total of 28 items and measures food restriction and purging behaviors and preoccupation with weight and shape in terms of both intensity and frequency in the 28 days prior to examination. A complete version of the scale can be found in Appendix A. The participants will also be asked to provide information about when their eating disordered behaviors first began, whether or not they have been diagnosed by a healthcare professional, and how long ago this diagnosis was received.

The second variable to be measured is the level of identity confusion in each participant. An adapted version of the Objective Measure of Ego-Identity Status (OMEIS) will be used to assess the participant's level of identity diffusion, which is characterized by a lack of commitment and disinterest in occupation and ideological matters. The OMEIS is a 64-item, 5-point scale that assesses approaches to lifestyle choices, and only the 15 questions that directly assess identity diffusion will be included. A complete version of the 15-item scale can be found in Appendix B.

A measure to assess the participant's level of cognitive dissonance will be included in the survey. Items will assess the participants' perception of the consequences of having an eating disorder, a ranking scale for the

participants to indicate how much they desire or do not desire these consequences, as well as a measure of the participant's intent to discontinue eating disordered behaviors.

The survey will also include an open-ended question in which participants will be asked to describe their intentions in using the eating disorder website.

A post-test survey will be administered and will include the same items as the first survey to measure eating disorder pathology and level of identity diffusion. The second survey will omit the question about intentions of using eating disorder websites and instead will be replaced by an open-ended question asking participants to describe what they took away from the website and what it has done for them. The second survey will also include questions that assess each of the participants' activity levels on the eating disorder websites during the treatment period. Items of this measurement will require the participant to provide information about how often he or she accessed the website and read without posting, accessed the website and posted without reading, and accessed the website and both posted and read others' posts. Information about the duration of time spent posting and reading each week will also be requested.

Procedure

All participants will be required to complete the first survey and then asked to take the second survey one year later. This longitudinal design will allow for the specific change in each individual to be observed, unlike previous research on this topic The first survey will act as a pre-test, measuring the initial level of eating disorder pathology and identity diffusion among each participant. The second survey will act as a post-test, measuring the final level of eating disorder pathology and identity diffusion. The two different survey periods will allow the time in between to serve as a treatment period, in which participants are engaging in eating disorder website activity.

For purposes of analysis the participants will be broken up into categories based on level of identity diffusion, as measured in survey 1, and website activity, omitting medium levels of both identity diffusion and website activity, resulting in four groups; (1) high identity diffusion/high website activity, (2) high identity diffusion/low website activity, (3) low identity diffusion/high website activity, and (4) low identity diffusion/low website activity. The average change in levels of eating disorder pathology will be calculated for each of the four groups, and it is expected that there will be a significant increase in pathology among those in the high identity diffusion/high website activity group.

CONCLUDING REMARKS

Limitations

Perhaps the biggest limitation of this proposed study is the lack of ability to randomly assign participants to low and high identity conditions as well as low and high website activity conditions. The quasi-experimental design does not allow for the conclusion of any causal relationships and any findings would reflect correlations because it cannot be confirmed that extraneous variables that may contribute to changes in eating disorder pathology were controlled and therefore not the cause of the differences between groups. Additionally, the sampling method proposed is not ideal because a convenience sample may not include participants who are more secretive about their eating disorders and perhaps would score on identity scales and eating disorder pathology scales in a way that would affect the overall statistical trends in the data. The sampling method also does ensure that the sample is representative of the population at hand, and results cannot be generalized to all users of eating disorder websites or all individuals with identity disturbances.

Significance

The proposed study builds upon prior research that suggests a relationship between identity confusion and eating disorder pathology, and the results, should they come out as expected, would further confirm this relationship. With a growing number of individuals in the world accessing the Internet, it is necessary to understand how such websites affect individuals, especially if they cause harm, and this research speaks to that need. Understanding both the dangers and benefits of such websites allows healthcare professionals and academics to begin a conversation about possible ways to maximize the benefits of the websites, while also reducing the potential harm and risk they pose.

If the proposed research confirms that eating disorders have roots in identity disturbances, applications can be made to both the diagnosis and treatment of AN and BN. This information may prompt the development of an eating disorder subtype with etiology in identity disturbance. The differentiation between an identity-linked eating disorder and eating disorders in general can aid clinicians in better diagnosing clients, and in turn providing more specific and effective treatment options that fill the need for an identity so the eating disorder loses at least some of its appeal for these clients.

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APPENDIX A

Eating Disorder Examination Questionnaire (EDE-Q)
Instructions: The following questions are concerned with the past four weeks (28 days) only. Please read each question carefully. Please answer all the questions. Thank you.

Questions 1 to 12: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days) only.

On how many of the past 28 days .....

1 Have you been deliberately trying to limit the amount of food you eat to influence your shape or weight (whether or not you have succeeded)?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

2 Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your shape or weight?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

3 Have you tried to exclude from your diet any foods that you like in order to influence your shape or weight (whether or not you have succeeded)?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

4 Have you tried to follow definite rules regarding your eating (for example, a calorie limit) in order to influence your shape or weight (whether or not you have succeeded)?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

5 Have you had a definite desire to have an empty stomach with the aim of influencing your shape or weight?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

6 Have you had a definite desire to have a totally flat stomach?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days

    5 – 23-27 days
    6 - Every day

7 Has thinking about food, eating or calories made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

8 Has thinking about shape or weight made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

9 Have you had a definite fear of losing control over eating?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

10 Have you had a definite fear that you might gain weight?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

11 Have you felt fat?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

12 Have you had a strong desire to lose weight?
    0 – No days
    1 – 1 to 5 days
    2 – 6 to 12 days
    3 – 13 to 15 days
    4 – 16-22 days
    5 – 23-27 days
    6 - Every day

Questions 13-18: Please fill in the appropriate number in the boxes on the right. Remember that the questions only refer to the past four weeks (28 days).
Over the past four weeks (28 days) ......
13 Over the past 28 days, how many times have you eaten what other people would regard as an unusually large amount of food (given the circumstances)?
14 ... On how many of these times did you have a sense of having lost control over your eating (at the time that you were eating)?
15 Over the past 28 days, on how many **DAYS** have such episodes of overeating occurred (i.e., you have eaten an unusually large amount of food and have had a sense of loss of control at the time)?
16 Over the past 28 days, how many times have you made yourself sick (vomit) as a means of controlling your shape or weight?

17 Over the past 28 days, how many times have you taken laxatives as a means of controlling your shape or weight?

18 Over the past 28 days, how many times have you exercised in a "driven" or "compulsive" way as a means of controlling your weight, shape or amount of fat, or to burn off calories?

Questions 19 to 21: Please circle the appropriate number. Please note that for these questions the term "binge eating" means eating what others would regard as an unusually large amount of food for the circumstances, accompanied by a sense of having lost control over eating.

19 Over the past 28 days, on how many days have you eaten in secret (ie, furtively)? ..... Do not count episodes of binge eating
  0 – No days
  1 – 1 to 5 days
  2 – 6 to 12 days
  3 – 13 to 15 days
  4 – 16-22 days
  5 – 23-27 days
  6 - Every day

20 On what proportion of the times that you have eaten have you felt guilty (felt that you've done wrong) because of its effect on your shape or weight? ..... Do not count episodes of binge eating
  0 – No days
  1 – 1 to 5 days
  2 – 6 to 12 days
  3 – 13 to 15 days
  4 – 16-22 days
  5 – 23-27 days
  6 - Every day

21 Over the past 28 days, how concerned have you been about other people seeing you eat? ..... Do not count episodes of binge eating
Questions 22 to 28: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days).
  0 – No days
  1 – 1 to 5 days
  2 – 6 to 12 days
  3 – 13 to 15 days
  4 – 16-22 days
  5 – 23-27 days
  6 - Every day

Questions 22 to 28: Please circle the appropriate number on the right. Remember that the questions only refer to the past four weeks (28 days).

Over the past 28 days .....
22 Has your weight influenced how you think about (judge) yourself as a person?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

23 Has your shape influenced how you think about (judge) yourself as a person?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

24 How much would it have upset you if you had been asked to weigh yourself once a week (no more, or less, often) for the next four weeks?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

25 How dissatisfied have you been with your weight?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

26 How dissatisfied have you been with your shape?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

27 How uncomfortable have you felt seeing your body (for example, seeing your shape in the mirror, in a shop window reflection, while undressing or taking a bath or shower)?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

28 How uncomfortable have you felt about others seeing your shape or figure (for example, in communal changing rooms, when swimming, or wearing tight clothes)?
  0 – Not at all
  1 –
  2 – Slightly
  3 –
  4 – Moderately
  5 –
  6 – Markedly

What is your weight at present? (Please give your best estimate.) _____

What is your height? (Please give your best estimate.) _____

If female: Over the past three-to-four months have you missed any menstrual periods? _____

If so, how many? _____

Have you been taking the "pill"? _____

THANK YOU

APPENDIX B

Objective Measure of Ego Identity Status (OM-EIS)
Response Scale:
1 = strongly agree
2 = moderately agree
3 = agree
4 = disagree
5 = moderately disagree
6 = strongly disagree.

1. I haven't really considered politics. They just don't excite me much.
2. I might have thought about a lot of different things but there has never really been a decision since my parents said what they wanted.
3. When it comes to religion I just haven't found any that I'm really into myself.
4. My parents had it decided a long time ago what I should go into and I'm following their plans.
5. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.
6. I don't give religion much thought and it doesn't bother me one way or the other.
7. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.
8. I haven't chosen the occupation I really want to get into, but I'm working toward becoming a _____ until something better comes along.
9. A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.
10. It took me a long time to decide but now I know for sure what direction to move in for a career.
11. I really never was involved in politics enough to have to make a firm stand one way or the other.
12. I'm not so sure what religion means to me. I'd like to make up my mind but I'm not done looking yet.
13. I've thought my political beliefs through and realize I may or may not agree with many of my parent's beliefs.
14. It took me awhile to figure it out, but now I really know what I want for a career.
15. Religion is confusing to me right now. I keep changing my views on what is right and wrong to me.
16. I'm sure it will be pretty easy for me to change my occupational goals when something better comes along.
17. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.
18. I've gone through a period of serious questioning about faith and can now say I understand what I believe in as an individual.
19. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.
20. I just can't decide how capable I am as a person and what jobs I'll be right for.
21. I attend the same church as my family has always attended. I've never really questioned why.
22. I just can't decide what to do for an occupation. There are so many possibilities.
23. I've never really questioned my religion. If it's right for my parents it must be right for me.
24. Politics are something that I can never be too sure about because things change so fast. But I do think it's important to know what I believe in.