Social Feedback Study

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# Table of Contents

Table of Contents ........................................................................................................... 2  
Abstract ......................................................................................................................... 3  
Introduction .................................................................................................................... 4  
  - Familial Factors........................................................................................................ 4  
  - Mother-Daughter Interactions.................................................................................. 5  
  - Modeling.................................................................................................................. 5  
  - Environment............................................................................................................ 7  
Conclusion ...................................................................................................................... 7  
Question ......................................................................................................................... 9  
Method ......................................................................................................................... 9  
  - Overview................................................................................................................. 9  
  - Hypothesis............................................................................................................... 10  
  - Stimuli...................................................................................................................... 11  
Experimental Design ..................................................................................................... 11  
Data Analysis .................................................................................................................. 12  
Results ......................................................................................................................... 12  
  - Demographic.......................................................................................................... 12  
  - Video Ratings......................................................................................................... 13  
  - Self Esteem Questionnaire...................................................................................... 15  
Discussion ...................................................................................................................... 16  
  - Recommendations for Prevention/Treatment ....................................................... 19  
Study Limitations .......................................................................................................... 20  
Conclusion ..................................................................................................................... 22  
References ..................................................................................................................... 23  
Figures and Tables ........................................................................................................ 27  
  - Figure 1: Body Image Model.................................................................................. 28  
  - Table 1: Demographic Characteristics of Participants.......................................... 29  
  - Table 2: Video Ratings.......................................................................................... 31  
  - Table 3: Group Differences on the SDQ III......................................................... 33  
  - Figure 2: General Self Esteem.............................................................................. 34  
  - Figure 3: Emotional Stability.............................................................................. 35  
  - Figure 4: Same-Sex Relationship Confidence..................................................... 36  
  - Figure 5: Physical Appearance............................................................................ 37  
  - Figure 6: BMI Distribution.................................................................................... 38  
APPENDICES .................................................................................................................. 39  
  - Scripts..................................................................................................................... 40  
  - Demographic Questionnaire.............................................................................. 42  
  - Video Ratings....................................................................................................... 47  
  - SDQ III Example .................................................................................................. 50  
  - SDQ III Measure.................................................................................................. 51
Abstract

The mother-daughter relationship is a very complex and personal experience for young females. How this relationship effects the development of body image issues is what we tried to assess in our experiment. In this experiment, we attempted to assess the impact of negative feedback on a young woman’s self esteem. Self esteem was assessed in our study after four separate videos were randomly assigned for participants to watch prior to completing self esteem questionnaires. Two of the videos were concerning body image and weight gain and two were concerning intellectual self esteem and academic failure. 82 participants were tested in the study and significant results were found in self esteem data indicating that negative weight feedback more negatively impacted general self esteem than grade feedback, peer feedback more negatively impacted emotional stability than mother feedback and peer weight feedback more negatively impacted same-sex relationship confidence than the other three conditions.
Introduction

Familial Factors

Familial influences play a large role in an adolescent woman’s life. In many ways, family structures and interactions are central to a child’s development. More specifically, family interactions are fundamental in the development of a healthy body image. In addition to being able to directly influence eating attitudes and tendencies, the effects and concerns can go much deeper. In fact, in families of women with low self esteem, it is common to find a hostile and neglectful parenting style, which can be described as the opposite of an over-bearing parenting style. For many other young self conscious women, it is common to come from familial environments with an intrusive maternal model. (Rorty, Yager, Rosotto & Buckwalter, 2000).

As a whole, adolescent body image and body self esteem are very complex. My basic assumptions are that families, specifically mothers, culture, peers, individual vulnerabilities influence the development of body image issues in young women. Figure 1 shows a model of what it is hypothesized influences a young woman’s life in regards to body image and eating habits. Through these interactions, she can either develop healthy strategies to managing or accepting her body, or develop a dislike and insecurity about her body image. This weight loss strategy will affect the individual, and in turn affect all of the original factors. In my opinion, it is a reciprocal process in which there is constant interaction. The complexity of severe body image insecurities lies in the fact that some young women develop these issues while others do not. Is it solely in the individual coping strategies to these named influences? Or is there a variable that can predict the development of a severe body image issues on its own? There are so many questions that are still left to explore. Hopefully in time we will able to paint a more accurate and involved picture of the development of body image concerns in adolescent females. Some
severe body image issues may even result in the development of an adolescent eating disorder, or other maladaptive coping style. Since a majority of severe body insecurity and eating disorder cases are found in young females, our study focused on them, and more specifically, focused on their relationships with their mothers.

**Mother-Daughter Interactions**

Maternal influences are thought to be the center of familial influences on body image insecurities (McVey, Pepler, Davis, Fleet & Abdolell, 2002). Maternal comments about weight and eating tend to have a significant influence on young women’s body image and eating habits (Alpern, 1990). In fact, studies have shown that daughters of insecure (with respect to body) mothers are much more likely to develop insecurities and even eating disorders themselves (Goldberg, 1994). Mothers with severe body image issues and eating disorders view their daughter as less attractive than other mothers view their children (Pike & Rodin 1991). These mothers tend to put extreme emphasis on food, use food as a manipulative technique, and present irregular eating schedules and courses. The mother’s unhealthy relationship with food and her own body is passed on to the next generation through her behaviors and interactions with her children solely by creating a model for the child to follow (Eisenberg, Neumark-Sztainer & Story, 2003). No one factor has proven to be sufficient enough for the development of eating disorders, yet many factors have proven to increase an adolescent’s risk of developing one, including familial influences (Striegel-Moore, 1997).

**Modeling**

An aspect to mother-daughter interactions is a mother’s modeling influence, the concept that a little girl will learn how to interact with her body and the world through watching her
mother. Through ideas like the gender schema theory, girls tend to look for guidance in their behavior through the interactions with their female role models (Bem, 1981). In general, aspects of modeling could affect the development of a female’s relationship with her body and her relationship with food. A mother could model specific behaviors, eating habits and even psychological vulnerabilities. Eating disordered mothers with severe body image concerns tend to use food as a reward or calming agent from an early age, which may set a precedent for unhealthy and non-nutritional relationships with food in the future (Agras, Hammer & McNicholas, 1997). A certain psychological vulnerability that has been shown to be modeled from mother to daughter is the presence of femininity, defined here as being the concern with physical appearance with underlying distinctions of inferiority to men (Jackson, 1986). The more feminine the mother is, the more likely it is that the daughter will hold these feminine ideals (Jackson, 1986). If mothers model a heightened level self-consciousness, the daughter may develop complex insecurities about her own body (Jackson, 1986). Benedikt, Wertheim and Love (1998) began research on the premise that there were two modes of a mother’s transmission of her own body image ideals, modeling and encouraging. An important finding was that the Daughter’s moderate weight-loss behaviors, like watching what they ate, exercising, and body dissatisfaction were not predicted by their mother’s own exhibition of these behaviors. This suggests that where moderate weight-loss attempts are concerned, there is little evidence for the simple modeling effect. However, these findings were reversed for more extreme strategies of weight loss. A daughter’s report of using fasting, crash dieting and skipping meals was no longer predicted by maternal encouragement of body mass index, it was predicted by their mother’s own body dissatisfaction and reported use of these extreme weight loss attempts.
**Environment**

Parents create an environment for children to grow up in. Mothers, traditionally seen as the caretaker of the children, create the environment in which the child grows and learns. Everything from how much and what kinds of food are kept in the house, to treatment of the body, to eating rituals, to comments about food are shaped and created through the mothers conscious and unconscious decisions. The way that families convey the thinness ideal or body image standard to a young woman is crucial to understanding the process associated with the production of body image (Walsh, 1993). Families provide the first set of external criteria that the child and later the adolescent learns to evaluate herself against (Walsh, 1993). These external evaluations, especially for women, contain elements of physical adequacy (Usmiani & Daniluk, 1997). These initial assessments set the groundwork for underlying psychological vulnerabilities that an adolescent woman may develop towards her body.

Parents create the psychological environment as well. The family is the mediator for the ideals for the body of Western society to be communicated (Birch, 1990). Parents can stress these body ideals from infancy, or they can communicate different ideals or coping strategies for the child to develop through childhood before they are under the pressure of peer and social influence in a preschool or school setting (Stein, Murray, Cooper & Fairburn, 1996).

**Conclusion**

Because of a mother’s level of influence on daily life through childhood and adolescence, it would be hard for them not to influence their daughter’s development of body image issues. Those influences can be positive or negative, but are directly linked to a mother’s input. There is some research concerning mothers with severe body image issues themselves and how they shape a child’s relationship with their body from infancy. Also, studies that assess how
attachment issues or other indirect influences impact a child’s relationship with their bodies are very informative. Through research, it has been suggested that in adolescent females the mother-daughter relationship can truly affect her relationship with food and body image.

There are many limitations with the current research on the topic. A great number of the studies are correlational, and many depend on adolescent self report data, which may not always be accurate. At a time when a young female’s body is changing, reliable self-esteem data is very difficult to collect, which could affect data for body image. Self-Reported data always comes with risks of being inaccurate and involving adolescents only increases that risk. As for other limitations, most of the studies done were in strict geographic and socio-economic conditions, making them not generalizable to the population as a whole. Also, the studies that involve coding of personal interviews, attention must be paid to possible biases. Because the rater or interviewer has to know whether or not the girl has an eating disorder or other severe body image concerns based on her answers to certain questions, it may be difficult for them to attain an unbiased opinion of all of the answers. Also, I think that specifically in mother-daughter research, the studies do not do enough to control for outside factors, such as other events that may be happening simultaneously in the home.

Further research is needed on specific body image cues that mothers give their daughters in every day conversations. More research needs to be done on specific ways that a mother has more influence over a daughter than any other person in an adolescent female’s life. A mother could influence her daughter’s life in almost every aspect. But, a mother’s inherent power needs to be assessed. It would also be interesting to research links of body image insecurities of mothers and daughters who have a hard time communicating to each other, versus a very open mother daughter pair. Finally, more research is needed that involves the father.
figure. The father may be just as important in a young girl’s life as a mother, but in different respects. While the girl may not learn modeling techniques from her father, she does learn the social context in which the father treats women, the approach he takes with her and the likelihood that males will tease females about their body. Perhaps the father figure influences the situation in the way he treats the mother about her body issues, or the way he objectifies women’s appearances. Another interesting area would be the effect of divorce or single parent households on the development of body image issues. It would be very interesting to assess that aspect of the parent-child relationships to see if it has any impact on the adolescent’s development of body image issues. What impact do mothers specifically have on the development and continuation of body image issues in adolescent females?

**Question**

How does feedback from a mother figure influence a young woman’s sense of well being? Is feedback from mothers concerning the body especially powerful? Is a Mother’s opinion more important to a young female’s self schema, on both body and non-body situations, than a friend’s opinion? Overall, is body (weight) feedback more negatively impacting that academic (grades) feedback?

**Method**

**Overview**

In this experiment, we attempted to assess the impact of negative feedback on a young woman’s self esteem. The negative feedback was not specifically about the participant, but rather shown in a generic video. There were four separate videos, two concerned body image and weight gain and two concerned intellectual self esteem and academic failure. Each condition
contained an actor talking about the negative attitudes. The actor was either a “friend” actress (age 21) or a “mother” actress (age 51). The participants filled out a demographic questionnaire, were randomly assigned by a computer program to one of the four videos, filled out a general questionnaire ensuring digestion of the video, and then took the SDQ III (a self esteem questionnaire).

**Hypothesis**

We predicted main effects for mother vs. peer and body vs. academic.

*Hypothesis 1* Negative feedback from mothers will be more influential than feedback from peers

It was hypothesized here that a mother is the most important contributor to negative self esteem in a young female’s life. A girl grows up learning from her mother, depends on her mother for gender-appropriate actions and cares about what the mother thinks. Friends, peers and strangers come and go from a young female’s life, but a mother remains constant. It was hypothesized that a mother’s opinion is more important to a young female’s self esteem than a friend’s opinion. In other words, when a mother states a negative opinion, a young female is more likely to internalize this comment, trust the source and let it negatively affect her self esteem. When a friend states some negative opinions, we do not internalize these comments to the same degree. Therefore, a female’s self esteem will be less affected.

*Hypothesis 2*: Negative feedback about body related topics will be more influential to a young woman’s self esteem than feedback about academic ability.

It was hypothesized here that a mother’s negative opinions will mean more in both non-body and body situations. In the non-body situation, a mother negatively speaking about grades would not have a significant effect on body self-esteem, however, it was predicted that the body-related condition, where a mother negatively speaks about her daughter’s body, would have an
affect on general self-esteem and body self esteem data. It was predicted that the friend’s negative opinion would affect the participants self esteem, but not as significantly as the mother’s negative opinions condition.

**Stimuli**

Four Videos (See Scripts)

1. Mother to Daughter Body (Weight gain)
2. Mother to Daughter Academic (Grade decline)
3. Friend to Friend Body (Weight gain)
4. Friend to Friend Academic (Grade decline)

**Experimental Design**

It was a 2 x 2 between subjects design. A computer program randomly assigned participants to conditions to eliminate any confounding variables. The entire study was administered on a computer to reduce experimenter interference. A basic demographic assessment (see Appendices: Demographic Questionnaire) was administered at the beginning of the experiment. In order to ensure their digestion of the video, participants rated the following questions on a 100 point scale (see Appendices: Video Ratings):

1. How realistic do you feel this video clip was? (0=Not Realistic, 100=Very Realistic)
2. How do you think the subject of this video clip should feel, if they saw this video? (0=Grateful for the feedback, 100=hurt by the feedback)
3. Do you feel that the subject of this video is at fault for what she is being accused of? (0=Not Responsible, 100=Totally Responsible)
4. Can you imagine feedback similar to this being said to you? (0=No, not at all, 100=Definitely could happen)

5. Do you identify with the subject of this video? (0=No, not at all, 100=Definitely could happen)

6. Do you identify with the interviewed person in this video? (0=No, not at all, 100=Definitely could happen)

Participants were then asked to fill out the SDQ III Questionnaire (See SDQ III Attached). This Questionnaire assessed different aspects of self-concept in early adults, with subscales: Math, Verbal, Academic, Problem Solving, Physical Ability, Physical Appearance, Same Sex Peer Relations, Opposite Sex Peer Relations, Parent Relations, Spiritual Values/Religion, Honesty/Trustworthiness, Emotional Stability and General Self Esteem. We also recorded each participant’s BMI (weight and height) at the end of the experiment (see figure 6 for distribution).

**Data Analysis**

Because we randomly assigned participants to conditions, we assessed the general self esteem and the body self esteem answers given by participants to make sure no differences existed between the conditions.

**Results**

**Demographic**

Eighty-two female participated in the Social Feedback Study. The original goal was to test 100 participants. Time constraints, forced us to cut off participant testing at 82 participants. There were 22 participants in the Mother Grades condition, 23 in the Mother Weight Condition, 19 in the Peer Grades Condition and 18 in the Peer Weight condition. There were no significant
differences in demographic characteristics by group assignment. The computer generated randomization technique worked.

Demographic characteristics of participants are presented in Table 1. A majority of participants were age 18-20 and freshman or sophomores in college. As expected from the demographics of Vanderbilt as a whole, a majority of our sample was White Non-Hispanic from the Southeast region. 93% of the female participants live with their biological Mother when they go home, and there were no significant difference between those assigned to each condition. There were also no differences in participants assigned to conditions on number siblings or whether or not they were in a committed relationship. The mean BMI was 23.39 with a standard deviation with a 3.61, and did not significantly differ between the groups. Distribution of BMI is presented in Figure 6.

**Video Ratings**

Subjects rated the video immediately after viewing it; the ratings are presented in Table 2 by group assignment. Data were analyzed using a 2 x 2 content (weight, grades) by person (mother, peer) analysis of variance. When asked how realistic the participants thought the video clip was, there was a significant main effect for content (p <0.001). Participants rated the video clips with grade content as more realistic than the video clips with weight content. This maybe because it was hard to imagine anyone criticizing someone’s weight that harshly. Weight tends to be a more sensitive topic than struggling with grades, and therefore could account for the differences in realism ratings.

Next, a main effect (p<0.001) for content was found for the ratings of the question: “How do you think the target (person being discussed) of this video clip should feel, if they saw this video?” As expected, participants thought that the target hearing feedback about their weight
would much more negatively impacted than targets hearing the feedback about their grades. Weight, as predicted in the study’s hypothesis, is a more sensitive topic and participants agreed that it would have a more substantial negative effect on self esteem.

Participants rated the degree to which the target was at fault for low grades of high weight. There was a significant person by content interaction effect (p<0.001). Participants viewing the peer videos differed believed that that target was at fault for low grades but the target was not at fault for gained weight. The participants that viewed the mother videos all rated the target as moderately at fault in both conditions. The peer weight ratings were significantly lower than in the mother ratings, and in the peer grades ratings in was significantly higher than the mother ratings.

Participants also rated the extent to which they could imagine receiving this kind of feedback. There was a main effect for person (p<0.001). Participants were more able to imagine the feedback coming from mothers than from peers. This suggested that participants could more readily imagine their mothers giving this harsh of feedback, but not their friends. The scores in general for this question were lower than predicted. The goal of the study was that participants would be able to internalize the video clips and be able to imagine feedback of this nature being said to them. The low scores on this rating scale show that this may not have been the case.

Participant’s answer to the question “Do you identify with the target (person being spoken about) in this video?” There was a mina effect for person (p<0.001). Participants could more readily identify with a target that was being criticized by their mothers than their peers. People refuse to think that their friends would talk about them in such a disrespectful and harsh way. However, participants could imagine their mother speaking so harshly.
When asked if the participants identified with the speaker in the video clips, there was a main effect for content (p<0.001). Participants could imagine themselves speaking negatively about grades, and not about weight. Participants could identify with the mother as much as they could identify with the peer. It is however, not surprising that participants would be more willing to criticize a person based on grades than based on weight. This shows how socially inappropriate to speak negatively about someone’s weight.

In summary, participants viewing the weight videos rated them more realistic and hurtful to the target than the participants viewing the grades videos. Participants also were more likely to be able to imagine themselves being given this feedback, and identifying with the target in the video in the mother video conditions than the peer video conditions. Participants viewing the grades videos were more likely to identify with the speaker in the video than participants that saw the weight videos. And last, we saw a person by content interaction effect when participants were asked if the target in the video was at fault. Participants viewing the mother videos rated the subject moderately at fault for both weight and grades, but participants viewing the peer videos rated the grades videos significantly more at fault and rated the weight videos significantly less at fault.

**Self Esteem Questionnaire**

The SDQ III Questionnaire was scored following instructions by Marsh et. al (1984), resulting in the following subscales of confidence in: Math, Verbal, Academic, Problem Solving, Physical Ability, Physical Appearance, Same Sex Peer Relations, Opposite Sex Peer Relations, Parent Relations, Spiritual Values/Religion, Honesty/Trustworthiness, Emotional Stability and General Self Esteem. The differences by group on the SDQ III sub scales are presented in Table
3. Data were analyzed using a 2 x 2 content (weight, grades) by person (mother, peer) analysis of variance.

There was a main effect for content in the General Self Esteem ratings (p<.05) (Figure 2). Participants that saw the video clips concerning weight had lower scores on the general self esteem ratings than those viewing the grade videos. There was a main effect for person on the emotional stability scale (p<.05) (Figure 3). Participants viewing the peer videos scored lower on the emotional stability ratings than participants who viewing the mother videos. There was a person by content interaction effect for the same sex relationships scale (p<0.05) (Figure 4). The effect of weight and grade feedback was similar when coming from the mother, but differed when coming from the peer. Peer feedback about weight, lead to lower same-sex confidence scores, whereas peer feedback about grades lead to higher same-sex confidence scores. There was a marginally significant effect (p<.08) (Figure 5) for content on physical appearance ratings would be present. As predicted, participants viewing the video clips on weight had lower physical self esteem scores than the participants that viewing the video clips on grades.

In summary, participants viewing the weight videos had lower general self esteem and physical appearance confidence (marginally significant) ratings and participants viewing peer videos had lower emotional stability ratings. A person by content interaction effect was also present in same sex relationship confidence, where feedback about weight from a peer produced to significantly lower ratings than peer feedback about grades.

**Discussion**

The study’s hypotheses were that negative feedback from mothers would be more influential than feedback from peers and that negative feedback on body related topics would be more influential to a young woman’s self esteem than feedback about her academic ability. Our
results did not prove that a mother’s feedback was more influential to self-esteem than a friend’s. In fact we may have found evidence that peer feedback more negatively impacted emotional stability and that weight feedback from a peer can significantly decrease confidence in same-sex relationships among young women. Our results did show that weight feedback has a larger impact on self esteem than grade feedback. There was a significant effect for general self esteem and a marginally significant effect on physical appearance self esteem.

The study was an experiment designed to compare the impact from feedback from mothers versus feedback from peers. We varied the type of feedback to be related to grades or body weight. The results of the experiment, however, are somewhat difficult to interpret because participants rather the grades videos as more realistic than the weight videos. Participants were also more likely to be able to imagine themselves being given the grade feedback, and identifying with the target in the video in the mother video conditions than the peer video conditions. It would be much easier to interpret the results of this experiment if the videos were all equal on the degree to which participants saw them as credible and identified with the target.

Despite the differences in the ratings of the tape, the study results consistently show that weight feedback has a more negative impact on a young woman’s self esteem than grade feedback. We were unable to confirm that mother feedback is more important to a young woman’s self esteem than a peer’s feedback. In fact, there is some evidence to the contrary. Peer feedback about weight has an especially negative impact on same-sex confidence.

There was a strong correlation between physical appearance confidence and general self esteem ($r = 0.82$). Interestingly, general self esteem and physical appearance confidence were not correlated with body mass index. In our sample, physical appearance is the strongest predictor of
general self esteem. Therefore, it is not surprising that negative feedback about weight has an impact on both measures.

The videos used were direct, critical and perhaps too socially inappropriate to be considered realistic. The extent to which the criticisms were taken may have also hindered the video’s ability to be internalized in the way they were originally intended. Saying that a friend or a daughter will not be liked by members of the opposite sex anymore because she has gained weight, or that she will not get into any law school because of poor in grades may have been dismissed as unrealistic. It is possible that a video clip that was more realistic in terms of the level of harshness would have been internalized to a greater extent. It was apparently difficult for participants to imagine a mother, let alone a peer, delivering the strong and somewhat dramatic criticisms that were present in the videos. From observing normal social behavior, we know that it is inappropriate to verbalize the criticisms that were being expressed. More women might have been able to imagine a mother or a friend gently criticizing weight gain, instead of stating the problems in such blunt terms.

The videos may also have sent some participants into denial, which again makes it difficult to interpret the findings. This is suggested by the finding that participants in the peer weight condition rated the target as not to be blamed for her weight problems. The videos contained harsh enough feedback that some participants may have basically tried to ignore it and not synthesize the feedback. It might be interesting to try a more subtle approach and determine if that would impact self esteem ratings more significantly.

The fact that there was no difference in the source of the feedback tells us women’s self esteem can be negatively impacted regardless of the person giving negative feedback. Young women face a dual hazard. Whether it is their mother or peer, negative feedback about weight
will negatively impact how they feel about themselves. It is probable that women whose mother’s are very critical, but have very supportive peers may do better than women who have critical peers as well as a critical mother. Women often face subtle forms of feedback, but hardly ever face the harsh criticisms present in the videos. The extent to which a young woman’s self esteem depends on feedback from her mother could also change at different stages of life. In this study, we only tested participants in college, where they most likely do not have daily interactions with their mothers, but rather have daily interactions with many peer women in a dorm setting. Perhaps if we had studied younger women, still living at home, we would have found a different result showing that mothers have a larger influence that we saw in our study.

**Recommendations for Prevention/Treatment**

Because we accurately predicted the direction of the impact on body image feedback on physical appearance self esteem and found a marginally significant main effect, I think this study has important implications for communications with young women. We can see from this study that negative feedback on the body negatively impacts both general self esteem and physical appearance self esteem more than feedback about grades. Understanding these concepts would signal that addressing weight gain with a young lady needs to be done in a very sensitive, considerate and gentle manner, as opposed to perhaps blatantly criticizing a young woman on her weight gain.

We found that participants are more likely to imagine their mother’s saying these criticisms than they can their friends. They trust their mother to be honest about their weight gain or their decline in grades. We can also see a significant difference in the way participants assigned fault to the target in the videos. Results show that when a mother criticizes her daughter for either weight gain or poor grades, it was the general consensus that it was the young woman’s
fault. However, when a friend was criticizing weight gain, participants felt that it was significantly less the targets’ fault. When the peer was criticizing grades, participants felt that it was significantly more the targets’ fault. This could be explained by the idea that a friend most likely has a better understanding of the academic requirements of the young woman and therefore can accuse the young woman of not trying hard enough. The friend however does not have all the information needed to criticize a young woman’s weight. The mother, on the other hand has the right and the information to judge both academic and weight issues equally. As for prevention and treatment, this study does not develop any new techniques or targets of prevention and treatment. However, it does support the importance of being careful with weight criticisms.

Perhaps the most important implication for prevention or treatment is the strong correlation of physical self confidence to general self esteem. This could imply that girls need to develop a broader base of self esteem that relies less on physical appearance. If young women were able to accomplish this when they encounter negative feedback about weight, it would only significantly alter their physical self esteem and not their general self esteem. By establishing a sense of self-esteem that involved many different aspects of a person’s character and abilities instead of depending so heavily on physical appearance, young women would be better equipped to defend themselves against negative feedback.

**Study Limitations**

Regardless of the way the videos were perceived, there are significant limitations to the study because no mother or friend should behave in this manner. Even in the videos, the feedback was not directly given to the young woman target. This implies that even the findings that we saw may not be generalizable to the way that young women interact with their mothers.
and their peers and the way they impact each other’s self esteem. While experimental settings are often more dramatized to produce an effect, if we were really trying to understand how mother-daughter interactions affect body image, a more naturalistic study might be more appropriate. For example, one might video tape mothers and daughters talking about weight, and see if girls with more negative self esteem receive more negative comments from their mothers.

Perhaps the video clips were not as well internalized as we had hoped, or the content of the videos was not as generalizable to the average female population as we had intended. While the majority of participants were non-Hispanic whites, participants from other ethnic backgrounds, might have found it hard to identify with the actresses in the videos. From the previous discussion on the limitations of the video clips, it is possible that the videos were not as effective at targeting the mother-daughter relationship or weight insecurities as originally planned.

There are problems generalizing from a sample of only psychology students at one university. We sampled 82 women from Vanderbilt, with a majority being white underclassmen with low BMIs. The average BMI, 23.39, was lower than the average BMI for adult females. There were also only six participants considered obese (BMI $\geq 30$) (Figure 6). There could be biases present that we did not control for in the study. When asking academic self confidence questions, there may be a bias in the sample because the participants are at a high ranking academic institution. The lack of variability in body weight and academic ability may limit the generalizability of the sample. On the other hand, there is a significant representation of eating disorders on Vanderbilt’s campus. Perhaps controlling for previous body image issues may have produced a different result. It might have been beneficial to include a pre-video self esteem
rating. There are problems with this approach because asking body image questions might prime the subjects to be thinking about weight.

**Conclusion**

This study supports our hypothesis self esteem is more negatively impacted by body feedback than by body neutral feedback. The study was unable to confirm that self esteem is more negatively impacted by mother feedback than by peer feedback, although the results might differ if a younger sample had been used. While there are some significant limitations to the study, there are also implications for treatment and prevention.
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relations between parents' masculinity, femininity, and child-rearing behaviors and their

between maternal and adolescent weight-related behaviors and concerns: the role of


Figures and Tables
Figure 1: Body Image Model
Table 1: Demographic Characteristics of Participants

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<td>White Non-Hispanic</td>
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<td>18</td>
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</tr>
<tr>
<td>Live With</td>
<td>Mother Grades</td>
<td>Mother Weight</td>
<td>Peer Grades</td>
<td>Peer Weight</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------</td>
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<td>-------------</td>
<td>-------------</td>
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<td></td>
<td>FREQ</td>
<td>%</td>
<td>FREQ</td>
<td>%</td>
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<tr>
<td>Biological Mother and Father</td>
<td>14</td>
<td>64%</td>
<td>18</td>
<td>78%</td>
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<tr>
<td>Biological Mother and Step Father</td>
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<td>5%</td>
<td>2</td>
<td>9%</td>
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<tr>
<td></td>
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<td>Biological Mother Only</td>
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<td>Biological Father Only</td>
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<tr>
<td>Siblings</td>
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<tr>
<td>Yes Siblings</td>
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<td>87%</td>
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<td>No Siblings</td>
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<td>Yes, with a Male Partner</td>
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<td>Not Currently</td>
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There were no significant differences in demographic characteristics in group assignment. Randomization worked.
<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>s.d.</th>
<th>Mean</th>
<th>s.d.</th>
<th>Mean</th>
<th>s.d.</th>
<th>Mean</th>
<th>s.d.</th>
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<tbody>
<tr>
<td>How Realistic the Video Clip Was?</td>
<td>79.2</td>
<td>22.4</td>
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<td>12.0</td>
<td>55.4</td>
<td>24.4</td>
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<tr>
<td>How should the target (person being talked about of the video clip) should feel if they saw the video?</td>
<td>61.8</td>
<td>25.4</td>
<td>80.8</td>
<td>21.1</td>
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<tr>
<td>Do you think the target of the video is at fault for what she is being accused of?</td>
<td>65.0</td>
<td>15.1</td>
<td>63.5</td>
<td>21.3</td>
<td>89.8</td>
<td>9.6</td>
<td>45.0</td>
<td>28.9</td>
</tr>
<tr>
<td>Can you imagine feedback similar to this being said to you?</td>
<td>65.7</td>
<td>35.1</td>
<td>46.3</td>
<td>36.4</td>
<td>32.2</td>
<td>30.7</td>
<td>33.2</td>
<td>31.7</td>
</tr>
<tr>
<td>Do you identify with the target of this video?</td>
<td>70.2</td>
<td>31.4</td>
<td>55.0</td>
<td>36.5</td>
<td>23.5</td>
<td>21.6</td>
<td>26.1</td>
<td>30.0</td>
</tr>
<tr>
<td>Do you identify with the speaker in</td>
<td>47.7</td>
<td>35.9</td>
<td>26.5</td>
<td>24.9</td>
<td>46.3</td>
<td>36.0</td>
<td>17.2</td>
<td>22.8</td>
</tr>
</tbody>
</table>
this video? ###

| * main effect for person (Mother/Peer) * p < 0.05 ** p< 0.01 *** p < 0.001 |
| # main effect for content (Weight/Grades) # p < 0.05 ## p< 0.01 ### p < 0.001 |
| ^ person by content interaction ^ p < 0.05 ^^ p< 0.01 ``` p < 0.001 |
### Table 3: Group Differences on the SDQ III

<table>
<thead>
<tr>
<th></th>
<th>Mother Grades</th>
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<th>Mother Weight</th>
<th></th>
<th>Peer Grades</th>
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<th>Peer Weight</th>
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<td>s.d.</td>
<td>Mean</td>
<td>s.d.</td>
<td>Mean</td>
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<tr>
<td>Math Confidence</td>
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<td>18.1</td>
<td>40.1</td>
<td>15.4</td>
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<td>14.8</td>
<td>41.5</td>
<td>17.7</td>
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<td>Physical Ability Self Confidence</td>
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<td>46.9</td>
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<td>47.8</td>
<td>13.5</td>
<td>44.1</td>
<td>13.0</td>
</tr>
<tr>
<td>Spiritual Confidence</td>
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<td>56.2</td>
<td>23.8</td>
<td>47.8</td>
<td>22.5</td>
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<td>18.8</td>
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<td>67.5</td>
<td>16.1</td>
<td>72.2</td>
<td>10.4</td>
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<td>Honesty Confidence</td>
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<td>67.5</td>
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<td>68.5</td>
<td>8.2</td>
<td>64.7</td>
<td>9.5</td>
</tr>
<tr>
<td>Opposite Sex Confidence</td>
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<td>10.6</td>
<td>46.3</td>
<td>9.9</td>
<td>46.2</td>
<td>10.6</td>
<td>44.6</td>
<td>11.5</td>
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<td>Verbal Confidence</td>
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<td>10.4</td>
<td>53.7</td>
<td>7.6</td>
<td>53.8</td>
<td>7.6</td>
<td>53.4</td>
<td>10.4</td>
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<tr>
<td>Emotional Stability *</td>
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<td>11.0</td>
<td>50.2</td>
<td>11.6</td>
<td>45.5</td>
<td>11.4</td>
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<td>16.7</td>
</tr>
<tr>
<td>Parent Relationship Confidence</td>
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<td>11.7</td>
<td>52.9</td>
<td>13.8</td>
<td>58.5</td>
<td>8.4</td>
<td>53.3</td>
<td>16.2</td>
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<td>Academic Confidence</td>
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<td>6.1</td>
<td>53.1</td>
<td>8.3</td>
<td>55.6</td>
<td>7.8</td>
<td>53.6</td>
<td>10.6</td>
</tr>
<tr>
<td>Problem Solving Confidence</td>
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<td>10.3</td>
<td>44.0</td>
<td>7.0</td>
<td>46.0</td>
<td>11.5</td>
<td>46.9</td>
<td>11.2</td>
</tr>
<tr>
<td>Physical Appearance Confidence</td>
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<td>14.5</td>
<td>45.2</td>
<td>16.1</td>
<td>50.7</td>
<td>11.3</td>
<td>42.9</td>
<td>9.0</td>
</tr>
<tr>
<td>Same Sex Confidence ^</td>
<td>51.1</td>
<td>11.5</td>
<td>53.0</td>
<td>10.3</td>
<td>57.2</td>
<td>8.6</td>
<td>49.6</td>
<td>10.8</td>
</tr>
</tbody>
</table>

* main effect for person (Mother/Peer) (* p < 0.05 ** p< 0.01 *** p < 0.001)
# main effect for content (Weight/Grades) (# p < 0.05 ## p< 0.01 ### p < 0.001)
^ person by content interaction (^ p < 0.05 ^^ p< 0.01 ^^^ p < 0.001)
Figure 2: Effect for Content
General Self Esteem Ratings (SDQ III)

Figure 2: General Self Esteem
Figure 3: Emotional Stability Ratings (SDQ III)

![Graph showing Emotional Stability Ratings](image)
Figure 4: Person by Content Interaction Effect
Same-Sex Relationship Confidence Ratings (SDQ III)

Figure 4: Same-Sex Relationship Confidence
Figure 5: Marginal Effect for Content
Physical Appearance Confidence Ratings (SDQ III)

Figure 5: Physical Appearance
Figure 6: BMI Distribution
APPENDICES
### Scripts

<table>
<thead>
<tr>
<th>Mom-Daughter</th>
<th>Body: Weight gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement of the problem</strong></td>
<td>My Daughter is a sophomore at Vanderbilt University and over the past year, I have become increasingly more concerned with her weight. When she went away to college she was working out a lot and looked great. But now, after college life has set in, she has gained quite a few pounds—I would say around 10-15—and she is not as pretty as she used to be.</td>
</tr>
<tr>
<td><strong>Statement of the Cause of the problem</strong></td>
<td>“I think the main issue is that she eats whatever she wants, and since she isn’t playing sports anymore, like she was in high school, all those calories are really catching up to her. I don’t think she doesn’t care about her appearance any longer, but she does not seem to be making any effort to lose the extra weight that she put on her freshman year—and this really concerns me.”</td>
</tr>
<tr>
<td><strong>Immediate Consequences</strong></td>
<td>“I am concerned that people won’t like her if she continues to gain weight. There is a really negative stereotype against fat people in our country, and I don’t want her to go through that. She is not what I would consider fat—but she would look a lot better if she lost some weight. Every Mother just wants her daughter to be perfect, and my daughter has so much going for her, but she just needs to pay a little more attention to her weight.”</td>
</tr>
<tr>
<td><strong>Long term Consequences</strong></td>
<td>“I think one of the things I am most worried about is that boys will not be interested in her any longer. I know she cares so much about if boys like her or not and Men really care about the way a young female looks, and if she gains weight they will be less attracted to her. I just want her to be happy in the long run, and I don’t feel that she will achieve true happiness if she keeps gaining weight.”</td>
</tr>
<tr>
<td><strong>Summary of how concerned that person is for the welfare of the subject</strong></td>
<td>“I love my daughter and I just am trying to help her out by suggesting that she pay a little more attention to her recent weight gain. Maybe she just needs to start working out more, or just going to the gym more often, but I really truly feel that she needs to do something because she is not as cute and thin as she used to be.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mom-Daughter</th>
<th>Non-Body: School: Grade Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statement of the problem</strong></td>
<td>“My daughter is a sophomore at Vanderbilt University—and I am so proud of her getting into such a great school but I am a little concerned about her current grades. She was such a good student in high school and got all As and now her GPA is not very good.”</td>
</tr>
<tr>
<td><strong>Statement of the Cause of the problem</strong></td>
<td>“I don’t know if it’s just that the classes are that much harder, or she is having too much fun in college and her grades are suffering because of it. I know that she could be doing a lot better if she just pushed herself a little bit harder and put in a little extra effort. She is such a bright girl, I just think that she does not care as much anymore.”</td>
</tr>
<tr>
<td><strong>Immediate Consequences</strong></td>
<td>“I think she would be so much happier with herself if she did better in school. She would be so proud of herself if she made the dean’s list. I know that should would get so much more out of the college experience if she put more attention and care into her course work. She could join honor societies and be a better asset to the organizations that she is currently in.”</td>
</tr>
<tr>
<td><strong>Long term Consequences</strong></td>
<td>“I am worried that is she doesn’t pull up her GPA, she will not get into law school at all, let alone the law school that she wants. I think that she thinks her charm and LSAT score are all that are going to matter, but I know that her undergraduate commitment and assessments are going to matter too. If she doesn’t get into law school, I am not sure anyone will hire someone that clearly does not care about their level of performance in college.”</td>
</tr>
<tr>
<td><strong>Summary of how concerned that person is for the welfare of the subject</strong></td>
<td>“I just want my daughter to get the most she can out of her education, and I feel that she really is not getting what I had hoped out of her Vanderbilt Education. I want her to be satisfied with her level of performance in college down the road and to be happy in whatever path she decides to pursue—and her GPA currently does not lead me to believe that she will be able to achieve these goals that I have for her.”</td>
</tr>
</tbody>
</table>
### Friend-Friend

#### Body: Weight gain

**Statement of the problem**

“I am a sophomore here at Vandy and I guess one of the things concerning me right now, is that one of my close friends has recently put on a lot of weight. It was kind of a gradual thing over the past year or so, she has gained about 10-15 pounds, but it doesn't seem to bother her right now.”

**Statement of the Cause of the problem**

“I think it's a combination of her going out all the time, eating out all the time and never really putting forth a lot of effort into working out and staying healthy. I often try to talk her into going to the gym with me, but she always says that she is too busy. I mean she isn't ugly or anything, I just know that people her put a lot of emphasis on weight and appearance, and I know that has gained enough weight that people can notice.”

**Immediate Consequences**

“I think it's hard for me because I notice that she has gained a lot of weight, but don't really know how to approach it with her. I don't really want to be friends with someone that doesn't care about their appearance. We are in the same sorority, and I just wish that she would take more pride in her appearance, especially when she wears our sorority letters around campus.”

**Long term Consequences**

“If she keeps gaining weight, I am worried that we will drift apart. She will be jealous because she won't be asked to as many fraternity parties or on as many dates, and she just won't fit in with our group anymore. Like I said, she is not an ugly girl, she was just so much prettier before she started gaining weight throughout the past year.”

**Summary of how concerned that person is for the welfare of the subject**

‘I really want my friend to be happy—after all she is one of my closest friends here at school, and I think that she will be happier here at Vandy if she just takes a little more pride in her appearance. Making healthy food decisions and working out more often is not that hard. I totally feel like it’s worth her effort to look great—because I don’t want her to be a bad reflection on our sorority or to drift apart from our group of friends because she isn’t as thin as we are anymore.’

### Friend-Friend

#### Non-Body: School

**Statement of the problem**

“I am a sophomore here at Vandy and I think grades and classes are the reason that we are here at Vanderbilt. Recently, one of my closest friends has stopped caring about her grades and just goes out all the time. Her GPA last semester was way lower than it ever has been before and I am worried that she doesn't realize the consequences of bad grades in college.”

**Statement of the Cause of the problem**

“I think she tries to convince herself that it is just because her classes are really hard, and that she is at such a great school, but I know she could be doing so much better if she just put a little more effort into her grades. She needs to realize that you are at college to get an education, not to pay this much money to have social time. I mean I have plenty of fun too, but when an important test or paper is coming up, I know when to say no to going out to make sure that I end up with a satisfactory grade on the assignment or test.”

**Immediate Consequences**

“I don’t think that she realizes that her having an increased social life is directly impacting her GPA. I recently joined a new honor society, and she was jealous that she did not get invited to join, nor was she on the Dean's list last semester...and that frustrates me because she has no right to be jealous when if she had just been serious about her commitment to her schoolwork, she totally could have been on the Dean's list and invited to apply for the honor society.”

**Long term Consequences**

“I know her and I share the same aspirations to go to law school—we both would love to get into Vanderbilt together—but I know that I am taking the actions that are necessary to get me there, while I don't think she realizes that her GPA really matters when you apply to law school. She is not going to get into any law school if her GPA continues to fall—let alone a good school like Vanderbilt. I think she will also have a hard time getting a first job with the GPA that she currently has.”

**Summary of how concerned that person is for the welfare of the subject**

“I think she just really needs to have a better understanding of how important an undergraduate GPA is, especially when you are applying to graduate school right out of undergrad. I really feel like she could be getting so much more out of her education if she just put a little more effort into her school work. I am sick of her being mad or jealous when I do better in school—when she has the potential to do just as well—she just doesn't put forth the effort. I really care about her happiness, and I think that she would be so much happier if she had a higher GPA to be proud of.”
Demographic Questionnaire
Video Ratings

Process Analysis Web System (PAWS)

Completing form:

Instructions: Please rate this item on a 100 point scale, where 0 is Not realistic at all and 100 is Very realistic.
Answer by: Typing a number in the typing box
Question: How realistic do you think this video clip was?

Typing Area

Multiple Choice Area
- OFF
- Select ONE
- Select ANY

Status:

4 start
SDQ III Example
SDQ III Measure

SDQIII®
INSTRUMENT

All information supplied will be kept strictly confidential

NAME: ___________________ AGE: ______ (years) ______ (months) DATE: ______ / ______ / ______

MALE / FEMALE (circle one) GROUP: ___________________

PLEASE READ THESE INSTRUCTIONS FIRST

This is not a test - there are no right or wrong answers.

This is a chance for you to consider how you think and feel about yourself. This is not a test – there are no right or wrong answers, and everyone will have different responses. The purpose of this study is to determine how people describe themselves and what characteristics are most important to how people feel about themselves.

On the following pages are a series of statements that are more or less true (or more or less false) descriptions of you. Please use the following eight-point response scale to indicate how true (or false) each item is as a description of you. Respond to the items as you now feel even if you felt differently at some other time in your life. In a few instances, an item may no longer be appropriate to you, though it was at an earlier period of your life (e.g., an item about your present relationship with your parents if they are no longer alive). In such cases, respond to the item as you would have when it was appropriate. Try to avoid leaving any items blank.

After completing all the items, you will be asked to select those that best describe important aspects – either positive or negative – of how you feel about yourself. Consider this as you are completing the survey.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<td>Definitely False</td>
<td>False</td>
<td>More False</td>
<td>More True</td>
<td>Definitely True</td>
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<tr>
<td>1</td>
<td>I find many mathematical problems interesting and challenging.</td>
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<tr>
<td>2</td>
<td>My parents are not very spiritual/religious people.</td>
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<tr>
<td>3</td>
<td>Overall, I have a lot of respect for myself.</td>
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<tr>
<td>4</td>
<td>I often tell small lies to avoid embarrassing situations.</td>
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<tr>
<td>5</td>
<td>I get a lot of attention from members of the opposite sex.</td>
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<tr>
<td>6</td>
<td>I have trouble expressing myself when trying to write something.</td>
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<tr>
<td>7</td>
<td>I am usually pretty calm and relaxed.</td>
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<tr>
<td>8</td>
<td>I hardly ever saw things the same way as my parents when I was growing up.</td>
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<tr>
<td>9</td>
<td>I enjoy doing work for most academic subjects.</td>
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<tr>
<td>10</td>
<td>I am never able to think up answers to problems that aren't already been figured out.</td>
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<tr>
<td>11</td>
<td>I have a physically attractive body.</td>
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<tr>
<td>12</td>
<td>I have few friends of the same sex that I can really count on.</td>
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<tr>
<td>13</td>
<td>I am a good athlete.</td>
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<tr>
<td>14</td>
<td>I have hesitated to take courses that involve mathematics.</td>
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<tr>
<td>15</td>
<td>I am a spiritual/religious person.</td>
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<tr>
<td>16</td>
<td>Overall, I lack self-confidence.</td>
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<tr>
<td>17</td>
<td>People can always rely on me.</td>
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<tr>
<td>18</td>
<td>I find it difficult to meet members of the opposite sex whom I like.</td>
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<tr>
<td>19</td>
<td>I can write effectively.</td>
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<tr>
<td>20</td>
<td>I worry a lot.</td>
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<tr>
<td>21</td>
<td>I would like to bring up children of my own. (If I have any) I like my parents raised me.</td>
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<tr>
<td>22</td>
<td>I hate studying for many academic subjects.</td>
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<tr>
<td>23</td>
<td>I am good at combining ideas in ways that others have not used.</td>
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<tr>
<td>24</td>
<td>I am ugly.</td>
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<tr>
<td>25</td>
<td>I am comfortable talking to members of the opposite sex.</td>
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<tr>
<td>26</td>
<td>I am awkward and poorly coordinated at many sports and physical activities.</td>
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<tr>
<td>27</td>
<td>I have generally done better in mathematics courses than other courses.</td>
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<tr>
<td>28</td>
<td>Spiritual/religious beliefs have little to do with my life philosophy.</td>
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</tr>
</tbody>
</table>

Overall, I am pretty accepting of myself.  
Being honest is not particularly important to me.  
I have lots of friends of the opposite sex.  
I have a poor vocabulary.  
I am happy most of the time.  
I still have many unresolved conflicts with my parents.  
I like most academic subjects.  
I wish I had more imagination and originality.  
I have a good body build.  
I don't get along very well with other members of the same sex.  
I have good endurance and stamina in sports and physical activities.  
Mathematics makes me feel inadequate.  
Spiritual/religious beliefs make my life better and make me a happier person.  
Overall, I don't have much respect for myself.  
Most of my friends are more comfortable with members of the opposite sex than I am.  
I am an avid reader.  
I am anxious much of the time.  
My parents have usually been unhappy or disappointed with what I do and have done.  
I have trouble with most academic subjects.  
I enjoy working out new ways of solving problems.  
There are lots of things about the way I look that I would like to change.  
I make friends easily with members of the same sex.  
I hate sports and physical activities.  
I am quite good at mathematics.  
My spiritual/religious beliefs provide the guidelines by which I conduct my life.  
Overall, I have a lot of self-confidence.  
I sometimes take things that do not belong to me.
<table>
<thead>
<tr>
<th></th>
<th>1 Definitely False</th>
<th>2 False</th>
<th>3 Mostly False</th>
<th>4 More False Than True</th>
<th>5 More True Than False</th>
<th>6 Mostly True</th>
<th>7 True</th>
<th>8 Definitely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am comfortable talking to members of the opposite sex.</td>
<td>57</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>I do not do well on tests that require a lot of verbal reasoning ability.</td>
<td>58</td>
<td></td>
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<tr>
<td>3</td>
<td>I hardly ever feel depressed.</td>
<td>59</td>
<td></td>
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<tr>
<td>4</td>
<td>My values are similar to those of my parents.</td>
<td>60</td>
<td></td>
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<tr>
<td>5</td>
<td>I am good at most academic subjects.</td>
<td>61</td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>I am not much good at problem solving.</td>
<td>62</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>My body weight is about right (neither too fat nor too skinny).</td>
<td>63</td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>Other members of the same sex find me boring.</td>
<td>64</td>
<td></td>
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<tr>
<td>9</td>
<td>I have a high energy level in sports and physical activities.</td>
<td>65</td>
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<tr>
<td>10</td>
<td>I have trouble understanding anything that is based upon mathematics.</td>
<td>66</td>
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<tr>
<td>11</td>
<td>Continuous spiritual/religious growth is important to me.</td>
<td>67</td>
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<tr>
<td>12</td>
<td>Overall, I have a very good self-concept.</td>
<td>68</td>
<td></td>
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<tr>
<td>13</td>
<td>I never cheat.</td>
<td>69</td>
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<tr>
<td>14</td>
<td>I am quite shy with members of the opposite sex.</td>
<td>70</td>
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<tr>
<td>15</td>
<td>Relative to most people, my verbal skills are quite good.</td>
<td>71</td>
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<tr>
<td>16</td>
<td>I tend to be highly-strung, tense, and restless.</td>
<td>72</td>
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<tr>
<td>17</td>
<td>My parents have never had much respect for me.</td>
<td>73</td>
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<tr>
<td>18</td>
<td>I am not particularly interested in most academic subjects.</td>
<td>74</td>
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<tr>
<td>19</td>
<td>I have a lot of intellectual curiosity.</td>
<td>75</td>
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<tr>
<td>20</td>
<td>I dislike the way I look.</td>
<td>76</td>
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<tr>
<td>21</td>
<td>I share lots of activities with members of the same sex.</td>
<td>77</td>
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<tr>
<td>22</td>
<td>I am not very good at any activities that require physical ability and coordination.</td>
<td>78</td>
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<tr>
<td>23</td>
<td>I have always done well in mathematics classes.</td>
<td>79</td>
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<tr>
<td>24</td>
<td>I rarely, if ever, spend time in spiritual meditation or religious prayer.</td>
<td>80</td>
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<tr>
<td>25</td>
<td>Overall, nothing that I do is very important.</td>
<td>81</td>
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<tr>
<td>26</td>
<td>Being dishonest is often the lesser of two evils.</td>
<td>82</td>
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<tr>
<td>27</td>
<td>I make friends easily with members of the opposite sex.</td>
<td>83</td>
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<tr>
<td>28</td>
<td>I often have to read things several times before I understand them.</td>
<td>84</td>
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<tr>
<td>29</td>
<td>I do not spend a lot of time worrying about things.</td>
<td>85</td>
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<tr>
<td>30</td>
<td>My parents treated me fairly when I was young.</td>
<td>86</td>
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<tr>
<td>31</td>
<td>I learn quickly in most academic subjects.</td>
<td>87</td>
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<tr>
<td>32</td>
<td>I am not very original in my ideas, thoughts, and actions.</td>
<td>88</td>
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<tr>
<td>33</td>
<td>I have more social features.</td>
<td>89</td>
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</tr>
<tr>
<td>34</td>
<td>Not many people of the same sex like me.</td>
<td>90</td>
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<tr>
<td>35</td>
<td>I like to exercise vigorously at sports and/or physical activities.</td>
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<tr>
<td>36</td>
<td>I never do well on tests that require mathematical reasoning.</td>
<td>92</td>
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<tr>
<td>37</td>
<td>I am a better person as a consequence of my spiritual/religious beliefs.</td>
<td>93</td>
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<tr>
<td>38</td>
<td>Overall, I have very positive feelings about myself.</td>
<td>94</td>
<td></td>
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</tr>
<tr>
<td>39</td>
<td>I am a very honest person.</td>
<td>95</td>
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</tr>
<tr>
<td>40</td>
<td>I have had lots of feelings of inadequacy about relating to members of the opposite sex.</td>
<td>96</td>
<td></td>
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</tr>
<tr>
<td>41</td>
<td>I am good at expressing myself.</td>
<td>97</td>
<td></td>
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</tr>
<tr>
<td>42</td>
<td>I often get depressed.</td>
<td>98</td>
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<tr>
<td>43</td>
<td>It has often been difficult for me to talk to my parents.</td>
<td>99</td>
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<tr>
<td>44</td>
<td>I hate most academic subjects.</td>
<td>100</td>
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<tr>
<td>45</td>
<td>I am an imaginative person.</td>
<td>101</td>
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<tr>
<td>46</td>
<td>I wish that I were physically more attractive.</td>
<td>102</td>
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</tr>
<tr>
<td>47</td>
<td>I am popular with other members of the same sex.</td>
<td>103</td>
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<tr>
<td>48</td>
<td>I am poor at most sports and physical activities.</td>
<td>104</td>
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</tr>
<tr>
<td>49</td>
<td>At school, my friends always came to me for help in mathematics.</td>
<td>105</td>
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<tr>
<td>50</td>
<td>I am basically an atheist, and believe that there is no being higher than man.</td>
<td>106</td>
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<tr>
<td>51</td>
<td>Overall, I have a very poor self-concept.</td>
<td>107</td>
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<tr>
<td>52</td>
<td>I would feel OK about cheating on a test as long as I did not get caught.</td>
<td>108</td>
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<tr>
<td>53</td>
<td>I am comfortable being affective with members of the opposite sex.</td>
<td>109</td>
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<tr>
<td>54</td>
<td>In school I had more trouble learning to read than most other students.</td>
<td>110</td>
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<tr>
<td>55</td>
<td>I am inclined to being an optimist.</td>
<td>111</td>
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</tr>
<tr>
<td>56</td>
<td>My parents understand me.</td>
<td>112</td>
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</tr>
<tr>
<td></td>
<td>1 Definitely False</td>
<td>2 False</td>
<td>3 Mostly False</td>
<td>4 More False Than True</td>
<td>5 More True Than False</td>
<td>6 Mostly True</td>
<td>7 True</td>
<td>8 Definitely True</td>
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<tr>
<td>113</td>
<td>I get good marks in most academic subjects.</td>
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<td></td>
<td>I like my parents.</td>
</tr>
<tr>
<td>114</td>
<td>I would have no interest in being an inventor.</td>
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<td></td>
<td></td>
<td>I could never achieve academic honours, even if I worked harder.</td>
</tr>
<tr>
<td>115</td>
<td>Most of my friends are better looking than I am.</td>
<td></td>
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<td></td>
<td>I can often see better ways of doing routine tasks.</td>
</tr>
<tr>
<td>116</td>
<td>Most people have more friends of the same sex than I do.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>I am a good looking.</td>
</tr>
<tr>
<td>117</td>
<td>I enjoy sports and physical activities.</td>
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<td></td>
<td></td>
<td></td>
<td>I have lots of friends of the same sex.</td>
</tr>
<tr>
<td>118</td>
<td>I have never been very excited about mathematics.</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>I am a sedentary type who avoids strenuous activity.</td>
</tr>
<tr>
<td>119</td>
<td>I believe there will be some form of continuation of my spirit or soul after my death.</td>
<td></td>
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<td>Overall, I do lots of things that are important.</td>
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<tr>
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<td>I am not a very reliable person.</td>
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<td>121</td>
<td>I value integrity above all other virtues.</td>
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<td>Spiritual/religious beliefs have little to do with the type of person I want to be.</td>
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<td>122</td>
<td>I never seem to have much in common with members of the opposite sex.</td>
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<td>I have never stolen anything of consequence.</td>
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<td>123</td>
<td>I have good reading comprehension.</td>
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<td>Overall, I am not very accepting of myself.</td>
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<tr>
<td>124</td>
<td>I tend to be a very nervous person.</td>
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<td>Few, if any of my friends are very spiritual or religious.</td>
</tr>
</tbody>
</table>

Different characteristics, both positive and negative, vary in their importance in determining how you feel about yourself. For example, the statement “I am unusually talented” may be very inaccurate as a description of you, but it may also be very unimportant about how you feel about yourself. Below are statements about different characteristics. For each statement please judge: 1) how ACCURATE the statement is as a description of you; and 2) how IMPORTANT the characteristic is in determining how you feel (either positive or negative) about yourself. Please use the following response scale:

<table>
<thead>
<tr>
<th></th>
<th>1 Very Inaccurate</th>
<th>2 Inaccurate</th>
<th>3 Unimportant</th>
<th>4 Moderate or Average</th>
<th>5 Accurate</th>
<th>6 Important</th>
<th>7 Very Important</th>
</tr>
</thead>
</table>

**ACCURACY:**

How accurate is this statement about you?

**IMPORTANT:**

How important is the characteristic to you?

---

I am good at sports and physical activities

I am physically attractive/good looking

I have good interactions/relationships with members of the opposite sex

I have good interactions/relationships with members of the same sex

I have good interactions/relationships with my parents

I am an emotionally stable person

I am a spiritual/religious person

I am an honest/reliable/trustworthy person

I have good verbal skills/reasoning ability

I have good mathematical skills/reasoning ability

I am a good student in most academic subjects

I am good at problem solving/creative thinking

---
Breakdown of SDQIII Items

Maths

1 I find many mathematical problems interesting and challenging.
14* I have hesitated to take courses that involve mathematics.
27* I have generally done better in mathematics courses than other courses.
40* Mathematics makes me feel inadequate.
53 I am quite good at mathematics.
66* I have trouble understanding anything that is based on mathematics.
75 I have always done well in mathematics classes.
92* I never do well on tests that require mathematical reasoning.
105 At school, my friends always came to me for help in mathematics.
118* I have never been very excited about mathematics.

Verbal

6* I have trouble expressing myself when trying to write something.
19 I can write effectively.
32* I have a poor vocabulary.
45 I am an avid reader.
58* I do not do well on tests that require a lot of verbal reasoning ability.
71 Relative to most people, my verbal skills are quite good.
84* I often have to read things several times before I understand them.
97 I am good at expressing myself.
110* In school I had more trouble learning to read than most other students.
123 I have good reading comprehension.

Academic

9 I enjoy doing work for most academic subjects.
22* I hate studying for most academic subjects.
35 I like most academic subjects.
48* I have trouble with most academic subjects.
61 I am good at most academic subjects.
74* I am not particularly interested in most academic subjects.
87 I learn quickly in most academic subjects.
100* I hate most academic subjects.
113 I get good marks in most academic subjects.
126* I could never achieve academic honours, even if I worked harder.

Problem Solving

10* I am never able to think up answers to problems that haven’t already been figured out.
23 I am good at combining ideas in ways that others have not tried.
36* I wish I had more imagination and originality.
49 I enjoy working out new ways of solving problems.
62* I am not much good at problem solving.
75 I have a lot of intellectual curiosity.
88* I am not very original in my ideas, thoughts and actions.
101 I am an imaginative person.
114* I would have no interest in being an inventor.
127 I can often see better ways of doing routine tasks.
Physical Ability

13 I am a good athlete.
26* I am awkward and poorly coordinated at many sports and physical activities.
39 I have good endurance and stamina in sports and physical activities.
52* I hate sports and physical activities.
65 I have a high energy level in sports and physical activities.
78* I am not very good at any activities that require physical ability and coordination.
91 I like to exercise vigorously at sports and/or physical activities.
104* I am poor at most sports and physical activities.
117 I enjoy sports and physical activities.
130 I am a sedentary type who avoids strenuous activity.

Physical Appearance

11 I have a physically attractive body.
24* I am ugly.
37* I have a good body build.
50* There are lots of things about the way I look that I would like to change.
63 My body weight is about right (neither too fat nor too skinny).
76* I dislike the way I look.
89 I have nice facial features.
102* I wish that I were physically more attractive.
115* Most of my friends are better looking than I am.
128 I am good looking.

Same Sex Peer Relations

12* I have few friends of the same sex that I can really count on.
25 I am comfortable talking to members of the same sex.
36* I don't get along very well with other members of the same sex.
51 I make friends easily with members of the same sex.
64* Other members of the same sex find me boring.
77 I share lots of activities with members of the same sex.
90* Not many people of the same sex like me.
103 I am popular with other members of the same sex.
116* Most people have more friends of the same sex than I do.
129 I have lots of friends of the same sex.

Opposite Sex Peer Relations

5 I get a lot of attention from members of the opposite sex.
18* I find it difficult to meet members of the opposite sex whom I like.
31 I have lots of friends of the opposite sex.
44* Most of my friends are more comfortable with members of the opposite sex than I am.
57 I am comfortable talking to members of the opposite sex.
70* I am quite shy with members of the opposite sex.
83 I make friends easily with members of the opposite sex.
96* I have had lots of feelings of inadequacy about relating to members of the opposite sex.
109 I am comfortable being affectionate with members of the opposite sex.
122 I never seem to have much in common with members of the opposite sex.
Parent Relations

82° I hardly ever saw things the same way as my parents when I was growing up.
21 I would like to bring up children of my own (if I have any) like my parents raised me.
14° I still have many unresolved conflicts with my parents.
47° My parents have usually been unhappy or disappointed with what I do and have done.
60° My values are similar to those of my parents.
73° My parents have never had much respect for me.
86° My parents treated me fairly when I was young.
99° It has often been difficult for me to talk to my parents.
112° My parents understand me.
125° I like my parents.

Spiritual Values/Religion

2° My parents are not very spiritual/religious people.
15° I am a spiritual/religious person.
28° Spiritual/religious beliefs have little to do with my life philosophy.
41° Spiritual/religious beliefs make my life better and make me a happier person.
54° My spiritual/religious beliefs provide the guidelines by which I conduct my life.
67° Continuous spiritual/religious growth is important to me.
80° I rarely ever spend time in spiritual meditation or religious prayer.
93° I am a better person as a consequence of my spiritual/religious beliefs.
106° I am basically an atheist, and believe that there is no being higher than man.
119° I believe that there will be some form of continuation of my spirit or soul after my death.
132° Spiritual/religious beliefs have little to do with the type of person I want to be.
138° Few, if any of my friends are very spiritual or religious.

Honesty/Trustworthiness

4° I often tell small lies to avoid embarrassing situations.
17° People can always rely on me.
30° Being honest is not particularly important to me.
43° I nearly always tell the truth.
56° I sometimes take things that do not belong to me.
69° I never cheat.
82° Being dishonest is often the lesser of two evils.
85° I am a very honest person.
106° I would feel OK about cheating on a test as long as I did not get caught.
122° I value integrity above all other virtues.
132° I am not a very reliable person.
154° I have never stolen anything of consequence.

Emotional Stability

7° I am usually pretty calm and relaxed.
20° I worry a lot.
33° I am happy most of the time.
46° I am anxious most of the time.
59° I hardly ever feel depressed.
72° I tend to be highly-strung, tense, and restless.
85° I do not spend a lot of time worrying about things.
98° I am often depressed.
111° I am inclined towards being an optimist.
124° I tend to be a very nervous person.
General Esteem

3 Overall, I have a lot of respect for myself.
16* Overall, I lack self-confidence.
29 Overall, I am pretty accepting of myself.
42 Overall, I don't have much respect for myself.
65 Overall, I have a lot of self-confidence.
88 Overall, I have a very good self-concept.
81* Overall, nothing that I do is very important.
94 Overall, I have pretty positive feeling about myself.
107* Overall, I have a very poor self-concept.
120* Overall, I have pretty negative feelings about myself.
131 Overall, I do lots of things that are important.
155* Overall, I am not very accepting of myself.