

Self versus Others' perception of Youths' Mental Health

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### Abstract

Data was analyzed in the National Longitudinal Survey Study from 1997 specifically relating to questions regarding depression in youth. In the analysis it was found that how the respondent defined their own depression and poor mental health was different than the perceptions about their mental health from those that live with them in the same household, mostly parents. It was also questioned if gender made a difference regarding poor mental health, both self-assessed and by others in the household. In all cases, the respondents' self perception of mental health was much worse than the perception of those who lived with them. The ramifications from this may mean that the respondent may not get the help they need to improve mental health because others in the household, especially parent figures, are unaware of the depth of the disability. This may also indicate that communication is lacking in this area because of the stigma attached to mental disabilities. It was also found that gender did make a difference in that females considered themselves more depressed than males. What was interesting was that others' impression of the female respondents' mental health was much more positive than others' impression of the males even though self-perception showed the opposite. Either depression in females is more prevalent than in males or males are talking about it more freely. Regardless, it is essential that parents and guardians become educated in distinguishing differences between typical teenage anxiety and depression and communicating about this disorder and knowing what signs to look for. A part of this study also shows the impact that depression has on how much time youth spend at work in a year which collaborates with many previous studies.

## Self vs Others' perception of Youths' Mental Health

### **Background**

Strong evidence indicates that depression has a major impact on disability days, missed work, unemployment, and salary. It is also believed that getting help for those who suffer minor and major depression may save employers high costs in medical benefits and insurance. “Encouraging depressed workers to obtain treatment might be cost-effective for some employers”. (Kessler, et al, 2001) The NLS studies indicate that poor mental health, to include depression, start during the pre-employment years. If this is recognized early, preventive treatment may have a positive impact on future employment of the respondents. “The majority of the LPT costs that employers face from employee depression is invisible and explained by reduced performance while at work. Use of treatments for depression appears to be relatively low. The combined LPT burden among those with depression and the low level of treatment suggests that there may be cost-effective opportunities for improving depression-related outcomes in the US workforce. (Stewart, Ricci, Chee, Hahn, & Morganstein, 2003.)

### **Purpose**

The purpose of this study is two-fold. One purpose is to determine if the sample population in this study matches current studies that indicate that depression impacts weeks worked in a given year. In this case the dependent variable that is used is weeks worked in 2007 and the dependent variable stems from the question of how often the respondent was depressed in the last month for the survey years 2002, 2004, and 2006. The second purpose is to determine if there is a difference in means of the level of depression defined by the respondent and the perception of the respondents' mental health by those who live in the same household. This is done to create an awareness of depression in youth to make help more accessible. Emerging in this study is also the comparison of depression in males and females. This may be helpful in creating an awareness of the potential in depression in one gender vs another. This analysis is meant to

open communication among family members so that the degree of mental health of the respondent is understood by all residing in that household. This awareness would lead to getting the respondent help earlier in his or her teen years and in turn yielding a more productive outlook for them in terms of work in their young adult years.

### ***Population & Sample***

Secondary data was gathered and analyzed from the National Longitudinal Survey of Youths that was begun by the Bureau of Labor and Statistics in 1997. These youth were born between 1980 and 1984 and were 12 to 16 years old by December 31, 1996. This was a nationally representative sample of 9000 youths and the first survey took place in 1997. The main focus of the study was school to work and into adulthood where mostly employment and educational data was collected. Other data including background and history of respondents and family member, household relationships, and health were among the few. The focus of this study is involving health and attitude of respondents and others' perception of the respondents' mental health in the household; mainly parent figures.

### ***Variables***

The variable that I am using in the first part of this study stems from a question relating to how often the respondent felt depressed in the last month of a given year and the impact on weeks worked in a given year. In the second part of the study, I am focusing on the questions that relate to comparisons of mental health and using that data to determine misunderstandings about the mental health of youth. The comparisons are between what the respondent feels himself about his own state of mind, and how others in the household perceive what they believe to be true regarding the respondent's mental well being. All variables come from specific questions related to these topics in the 1997 NLSY surveys.

## Dependent

The dependent variable for the first question stems from the statement, “Number of weeks the respondent worked at any job during the year.” This study is trying to relate this to the respondents’ mental health that was reflected in the 2002, 2004, and 2006 survey years to how many weeks those respondents worked in 2007. The number of weeks worked ranges between 0 and 52.

# WEEKS R WORKED ANY JOB YEAR 07

Number of weeks the respondent worked at any job during the year. (2007)

850	0: 0 Weeks
130	1 TO 5: 1-5 Weeks
161	6 TO 10: 6-10 Weeks
190	11 TO 15: 11-15 Weeks
204	16 TO 20: 16-20 Weeks
228	21 TO 25: 21-25 Weeks
252	26 TO 30: 26-30 Weeks
327	31 TO 35: 31-35 Weeks
696	36 TO 40: 36-40 Weeks
2591	41 TO 45: 41-45 Weeks
1103	46 TO 50: 46-50 Weeks
638	51 TO 999: Up To 52 Weeks
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7370	

## Independent

For the first question, the independent variable stems from the query in the survey that addresses how often the respondent feels depressed. “How much of the time during the last month have you felt so down in the dumps that nothing could cheer you up?” There were 4 alternative responses.

- 1 All of the time
  - 2 Most of the time
  - 3 Some of the time
  - 4 None of the time
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For the second question the independent variable stemmed from the questions in the NLSY survey relating to the respondents' and others' in the household impression of the respondents' mental health. There was no need for a dependent variable in the second purpose of the study as only the means and standard deviations were used to compare groups from the same sample population.

Included 4 independent variables from the following questions:

Respondent:

1. You are unhappy, sad, or depressed: 0 = not true, 1 = somewhat or sometimes true, and 2 = often true. (Female)
2. You are unhappy, sad, or depressed: 0 = not true, 1 = somewhat or sometimes true, and 2 = often true. (Male)

Others in household:

1. (This youth) is unhappy, sad, or depressed: 0 = not true, 1 = somewhat or sometimes true, and 2 = often true. (Female)
2. (This youth) is unhappy, sad, or depressed: 0 = not true, 1 = somewhat or sometimes true, and 2 = often true. (Male)

## **Analysis**

A regression model was used to determine if there was a relationship between depression and the number of weeks worked in 2007 and descriptive statistics was used to determine if there was a difference in the mean values of respondents self description of depression and others' perception of the respondents' depression. Descriptive statistics were also used to determine if there was a mean difference in how male and female youth identified their own mental health as it relates to depression and the

perception of others, mainly parents, and how they perceived the degree of depression in their offspring.

The Mann-Whitney test was used to determine  $p$  values for statistical significance.

## ***Results***

***Question 1. Determine if the sample population in this study matches current studies that indicate that depression impacts weeks worked in a given year.***

Table 1 and figure 1 refer to the regression analysis done to determine the relationship of depression in certain years and the impact of weeks worked in 2007. The question was used from the NLYS survey, “How much of the time during the last month have you felt so down in the dumps that nothing could cheer you up?” The years chosen to represent this sample were 2002, 2004, and 2006. The dependent value for number of weeks worked in 2007 was determined by the NLSY survey statement, “Number of weeks the respondent worked at any job during the year.” The responses varied from 0 to 52 weeks. All of the years showed a positive linear relationship with weeks worked in 2007 with the results of the 2006 year showing the highest relationship. The mean number of weeks worked in 2007 for a respondent who chose 1 (depressed all of the time) in 2002 was 26 while those who chose 4 (depressed none of the time) the mean weeks worked was 36. The mean number of weeks worked in 2007 for a respondent who chose 1 (depressed all of the time) in 2004 was 27 while those who chose 4 (depressed none of the time) the mean weeks worked was 36. The mean number of weeks worked in 2007 for a respondent who chose 1 (depressed all of the time) in 2006 was 25 while those who chose 4 (depressed none of the time) the mean weeks worked was 36. The  $p$  value for the relationship in all 3 years was 0.000 which indicates a significant relationship in all cases. The  $R^2$  value is 2.7% which indicates that depression explains 2.7% of the dependent variable. This 2.7% represents just one type of disability that impacted work for the respondents in 2007. Regardless, it is substantiated that depression has a negative impact on time spent at work.

TABLE 3. REGRESSION ANALYSIS CHART OF RELATIONSHIP OF DEPRESSION FOR YEARS 2002, 2004, 2006 AND WEEKS WORKED IN 2007.

Predictor	Coef.	Se. Coef.	$R^2$	p value
Constant	14.056	1.590	2.7%	0.000
2002	1.2967	0.3262		0.000
2004	1.7033	0.3680		0.000
2006	2.7045	0.3775		0.000

Source: NLSY 1997 Bureau of Labor and Statistics

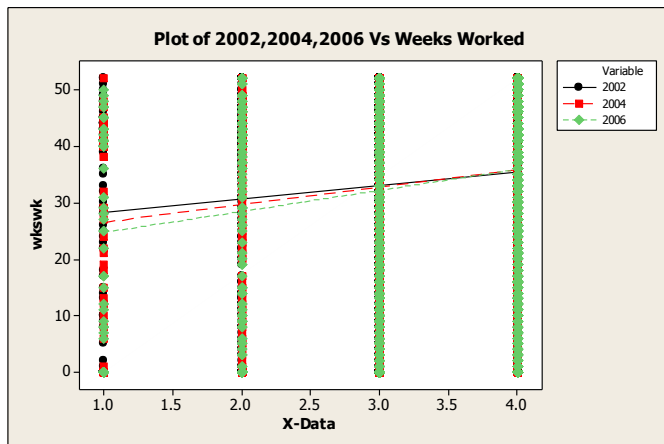


Figure 1. Depression data taken from 3 years, 2002, 2004, and 2006 and the relationship to weeks worked for the year 2007. Though all 3 relationships have a p value of  $0.000 < .05$ , the year 2006 seems to have the highest relationship.

**Question 2. Is there is a difference in means of the level of depression defined by the respondent and the perception of the respondents' mental health by those who live in the same household.**

In table 2 below the mean and percentages of responses are recorded for each category. Self female represents what the females thought about their own sense of wellbeing and whether or not they felt depressed according to scores stated above. The same was done for the self male, others female, and



others male. Others were mainly parent figures and they scored the respondent with a 0 for never, a 1 for somewhat/sometimes, and a 2 for often feeling depressed. For self females, there were 2,608 females that responded for self male, 2,790 males that responded. For others female 1,584 parent figures responded and for others male, 1,709 parent figures responded. In comparing the means of female vs male on self assessment, the mean value for self assessed females was .59 while the mean value for self assessed males was .47. This indicates that the females scored a higher mean score which means they were closer to the somewhat and often category than the boys. (0 being never and 2 being always) and the boys were closer to the never category. It gets interesting when the comparison was done of the self assessment of both girls and boys and the perceptions of the parent figures about their perception of the respondent's feelings. For the girls, the parents mean score about the respondent was .35 against the females own perception of .58 mean score. This is a difference of .24 or a 40% decrease in their assessment of the respondent's disposition. For the male category, the mean for the parents' perception of depression of the respondent was .33, a mean difference of .14 or a 30% decrease. This could mean a few things. The girls are really more depressed than boys at these ages, the girls suppress their feelings of depression more than boys at these ages, or boys overtly either verbally or through obvious behavior communicate their feelings of depression better than girls do.

In table 3 below the Mann Whitney Nonparametric Test was used also to determine differences in the groups and the significance value of .05 is used. All groups that were compared for mean differences showed a *p* value of 0.000 or less except when comparing the groups other's female and other's male. We cannot reject the null hypothesis here with a level of significance of .3830 which means that the parents of both males and females felt about the same towards their child's mental health which appears to be under estimated across the board. The *W* statistic was lowest in this category of the 4 groups and the *p* value was the highest.

Table2. This table shows the relationship between males and females, between self evaluation of depression and others' perception of the respondents' mental health, and the percentages of degree of depression.

Category	Mean	% Somewhat Depressed	% Often Depressed	% Somewhat and Often
Self Female	.5874	77%	19%	96%
Self Male	.4746	61%	10%	71%
Others Female	.3510	44%	3.9%	48%
Others Male	.3309	41%	3.7%	44.7%
Total Mean	.4360	55.75%	9.15%	64.93%

Source: NLSY 1997 Bureau of Labor and Statistics

Table 3. This table uses the Mann Whitney Test to show the relationship between males and females, between self evaluation of depression and others' perception of the respondents' mental health, and between other's perception of male and females.

Category	No.	Median	W	p value
Self Female Vs	2608	0.0000	7354651.0	0.0000
Self Male	2790	0.0000		
Self Female Vs	2608	0.0000	5849574.0	0.0000
Others Female	1584	0.0000		
Self Male Vs	2790	0.0000	6547877.5	0.0000
Others Male	1709	0.0000		
Others Female Vs	1584	0.0000	2628123.0	0.3830
Others Male	1709	0.0000		

Source: NLSY 1997 Bureau of Labor and Statistics

## Discussion

This study has helped to establish four objectives as they relate to our questions. 1. It has been reinforced that depression has an impact on the time that the people spend at work. 2. Parents don't have an accurate awareness about the state of depression of their youth or the degree at which they suffer depression. 3. Girls seem to suffer depression more than their male counterparts. 4. There is a larger gap between self diagnosis and others' diagnosis for that of girls than boys. The above findings should urge parents to become educated in what exactly to look for in deciphering if a child is depressed or going through the normal anxieties that teens go through cyclically. In the online article ("Discerning differences between teen angst and depression", 2004, p. 1) there is reference made to what to look for in children that provides insight as to whether depression is evident.

1. Sudden withdrawal from family, friends, and social activities.
2. Persistent sadness.
3. Hopeless comments that are not normal.
4. Lack of energy.
5. Lack of enthusiasm.
6. Changes in sleeping and eating habits.
7. Agitation, irritability, anger, and rage.
8. Substance or alcohol abuse.
9. Thoughts and notes of suicide.

In the online article ("Discerning the differences between sadness and depression and then getting your teen help quickly is the key", 2009, p. 1) the following symptoms were added:

1. Slipping in academic performance.
2. Failure to follow directions.
3. Lying.

4. Everything seems boring.
5. Flares of temper.
6. Excessive fatigue.
7. Weight gain or loss.
8. Difficulty concentrating.
9. Isolation.

Also, according to the online article, (“Discerning differences between teen angst and depression“, 2004,

p. 1) parents should ask key questions to their child once they spot any of the above symptoms.

1. What are you thinking and feeling?
2. Tell me about those feelings.
3. How can I help?

It is at this point that the parent should explore help for their child through school, child welfare agencies, local mental health agencies, clergy, psychologists, or the family physician.

## References

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