PRELIMINARY STUDY OF THE NARCISSISTIC PERSONALITY

QUESTIONNAIRE

ETHAN MOTTER

BACHELOR OF ARTS IN PSYCHOLOGY

Mount Vernon Nazarene University

May, 2007

submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS IN PSYCHOLOGY

at the

CLEVELAND STATE UNIVERSITY

December, 2009

This thesis has been approved

for the Department of Clinical Psychology

and the College of Graduate Studies by

_____

Thesis Committee Chairperson, Dr. Amir Poreh

_____

Department/Date

_____

Committee Member's Name

_____

Department/Date

_____

Committee Member's Name

_____

Department/Date

_____

Committee Member's Name

_____

Department/Date

_____

Committee Member's Name

_____

Department Date

PRELIMINARY STUDY OF THE NARCISSISTIC PERSONALITY

QUESTIONNAIRE

ETHAN MOTTER

ABSTRACT

This study was designed to create a new measure for narcissism. Furthermore, the NPQ will be based on the 9 DSM-IV-TR criteria for narcissism. The NPQ will be compared to the NPI with is a more established instrument of narcissism. The study examined 124 students from a certain midwestern university in north east Ohio. Results indicate that the NPQ has a higher reliability than the NPI. Additionally, the NPQ displays a high construct validity due the high correlations between the NPQ and the NPI. However, future studies should attempt to replicate the results as well as measure divergent validity in order to increase the statistical prowess of the study.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Personality theories rest on statistically complex tests, which measure an intricate pattern of responses that can be interpreted as a certain personality type. Several instruments have been developed in order to measure personality characteristics, such as the Minnesota Multiphasic Personality Inventory Second Edition, Millon Clinical Multiaxial Inventory Third Edition and the Narcissistic Personality Inventory. However, personality assessments that are considered "gold standard" such as the MMPI-2 (Minnesota Multiphasic Personality Inventory 2nd edition) Furthermore, the MMPI-2 does not directly measure narcissism, rather it indicates that presence of narcissistic tendencies. The purpose of this thesis was to assess the reliability and validity for a new scale of narcissism developed by Poreh and Motter (2009) based on the 9 Diagnostical and Statistical Manual of Mental Disorders Fourth Edition Text Revised criteria.

The following hypotheses were made.

1. The new scale will demonstrate moderate to high internal consistency.

2. The scale will correlate with existing measures of narcissism and thus demonstrate convergence validity

3. Factorial analysis of the scales subtests will demonstrate the underlying dimensions of narcissism that have previously been reported in the literature.

CHAPTER II

REVIEW OF THE LITERATURE

The DSM-IV TR which identifies the 9 criteria for Narcissism Personality

Disorder (American Psychiatric Association [DSM-IV-TR], 2000). The

essential characteristics are a grandiose sense of self-importance,

entitlement, lacking empathy, and uses other for own personal gain

(American Psychiatric Association [DSM-IV-TR], 2000). People with

NPD are preoccupied with daydreams or thoughts of success or power.

However, more often than not people with NPD often (but not always)

have any significant accomplishments. This idea of preoccupation with

fantasies of success and power lend credence to the theory that people

with NPD do not take risks. They would rather not risk appearing less

intelligent or less successful than others with whom they associate

(Ronningstam, 2005). Furthermore, research has shown that the principle

component that drives narcissism in individuals is shame (Ronningstam,

2005). The concept of shame as the invisible force behind narcissism lends insight behind many of the characteristics of NPD.

If deprived of praise or if others are commended instead, people with NPD will become envious or even depressed. However, their depression does not last long. People with NPD will rationalize and externalize setbacks as well as take stock in their own sense of superiority and mastery over themselves and others (Ronningstam, 2005). Furthermore, in order to shelter their fragile sense of self may believe that others around them are envious of them. This explain why people with NPD are often considered detached or do not possess strong interpersonal relationships. However, they may believe that they have many close relationships with those that excessively praise them.

Etiology of NPD

Freud postulated that narcissism was the person's instinctual drive to preserve oneself (Freud, Stracey and Gay, 1990). This, Freud (1990) argues in *The Future of an Illusion*, is what our society attempts to mask from ourselves. Freud postulated that narcissism originated in early childhood when one of the parents (mainly the mother) would subjugate their child to their unrealized desires and aspirations. As a result, the ego is weakened to the point of compensation. Since the child no longer feels love from one or both parents, they resort to loving themselves instead. This Freud claims, is the etiology of pathological narcissism. Freud's other notions about healthy narcissism are somewhat questionable.

The idea that a person has a survival instinct and will naturally choose his or her self over others is challenged by other concepts such as suicide, depression, and other mental illnesses. Therefore, new groundwork needs to be laid for the cause of narcissism.

More recent theories such as Davis and Millon (1999) biosocial model argue that overindulging parents foster a sense of *specialness* and entitlement in their children. These children expect praise for any and all endeavors, whether or not it is of any significant value. Cognitive theories take the biosocial model's conception of overindulging parenting styles a step further. They suggest that parents who instill a sense of entitlement and specialness actually deprive the child of experiencing a wide range of affect (Beck, and Freeman, 1990). In other words, the child only experience emotions such as happiness or pride and not sadness or anger. This explanation matches the descriptions for criteria 6 of the DSM-IV TR (2000): selfishly takes advantage of others, and criteria 7: lack of empathy. Since the child only experiences primarily positive emotions, they are not able to handle negative emotions or relate to another person's emotional encounters. However, Ronningstam (2005) states that there is still not enough research on dispositional or environmental influence on NPD to make this determination.

Twin studies have revealed some interesting results in terms of a genetic influence on NPD. One study in particular found 45% heritability in 483 twin pairings using the Dimensional Assessment of Personality

Problems scale or DAPP-DQ. (Jang, Livelsley, Vernon, and Jackson,

1996). Further studies have yet to be replicated and may provide important

insights on the biological origins of NPD. However, other studies in

Neuropsychology suggest that infants develop a neuronet of responses

specific patterns in reaction to particular parenting styles (Schore, 1994).

When the child is under stress, the child will revert back to a particular

based neuronet behavior pattern. Schore (1994), was able to identify two

types of parenting styles that would contribute to the development of

NPD. The first is an insecure-resistant attachment parenting style. This

parenting style contributes to hyper activation and under regulation of

affect (Ronningstam, 2005). The result is a grandiose sense of self-

importance, entitlement, and aggression towards other people (Shore,

1994). The second parenting style is the depressive- hypo-arousing, which

may cause low energy and overregulation of affect (Ronningstam, 2005).

The depressive-hypo-arousing could be the cause of the *shy narcissistic*

type. These individuals appear timid, and sometimes fragile. However,

upon closer examination they are found to have a very active and

grandiose fantasy life (Ronningstam, 2005). The neuropsychological and

genetic explanations on the origin of NPD provide some insight into future

assessments and treatment options. However, further research must be

performed in order to obtain a better picture of the neuropsychological and

genetic origins of NPD.

Assessment of Narcissistic Personality

The development of the MMPI was used primarily to detect Axis I mental disorders, although at times it is used to detect maladaptive personality characteristics in individuals suffering from a psychological disorder. Several scales have been developed from the MMPI in order to assess narcissism (Rathvon and Holstrom, 1996). The masculinity and femininity (Mf) scale and ego sensitivity scale developed by Pepper and Strong (1958), Serkownek's (1975) Narcissism Hypersensitivity scale and Wink and Gough's (1990) Narcissism Scale to name a few. Another commonly used personality measure is the MCM-III-R which contains a specific sub-scale for the assessment of narcissism.

While the MMPI-2 and the MCM-III-R were designed as general measures of personality, Raskin and Hall's (1979) NPI (Narcissistic Personality Inventory) is perhaps the only scale designed to directly measure narcissism (Samuel and Widiger, 2008). Several studies indicate that the NPI is able to measure many different facets of narcissism with moderate accuracy (Raskin and Hall, 1979). The lack of sensitivity of the NPI may be due to the fact that several of its sub-scales tend to measure a more global range of personality pathology versus specific narcissistic traits (Pryor, Miller, Gaughan, 2008). Although , several other studies argue that the NPI is able to capture the complexity of narcissism and present in the form of a continuum ranging from functional narcissism to pathological narcissism (Watson Sawrie, Greene, Arredondo, 2002).

Raskin and Terry (1988) examined the construct validity of the NPI and compared it to 3 other measures of narcissism such as the Shelder-Westen Assessment Procedure-200 or the MCM-III. In the first study, Raskin and Terry (1988) could not determine if the NPI was an actual measure of narcissism. However, his second and a third studies he confirmed that the scale has a strong construct validity. Soyer, Rovenpor, Kopelman, Mullins, and Watson, (2001) replicated Raskin and Terry's studies and further extended these studies by examining the divergent validity of the NPI. They showed that the NPI has a high construct validity of overt narcissism but not covert narcissism. However, other measures of narcissism had a higher construct and convergent validity for the assessment of covert narcissism (Soyer et al., 2001). Mullins and Kopelman (1988) found that the NPI did not necessarily measure narcissism but was rather positively related to the need for achievement. However, it also had had convergent validity with 3 other measures of narcissism such as the Margolis-Thomas Measure of Narcissism and the Narcissistic Personality Disorder Scale. Therefore, it cannot be said with complete certainty whether or not measures of narcissism such as the NPI actually measure narcissism or another construct such as need for achievement (Mullins and Kopelman, 1988).

According to Samuel and Widiger, (2008) no measure of narcissism has not been entirely conclusive or able to accurately measure narcissism across theoretical orientations. This conundrum, they claim, is

a result of the multiplicity of operational definitions that stem from each psychological theoretical orientation. For instance, The Social Cognition and Object Relations Scale uses narratives from the TAT in order to measure specific cluster-B personality disorders and could not be used in a behavioral oriented analysis (Ackerman, Clemence, Weatherill, Hilsenroth, 1999). Furthermore, instruments that are primarily based on DSM-IV TR criteria only measure the external characteristics of narcissism including, grandiosity and exhibition while having a negative correlation with depression, vulnerability, and sensitivity to criticism (Rathom and Holmstrom, 1996). However, other measures based on the Five Factor Model are able to measure the more destructive effects of narcissism.

Studies conducted with the Five Factor Model (FFM) in relation to narcissism claim to give a more complex and complete picture in terms of measuring manipulation of others, exploitation, and lack of empathy as well as measuring the covert form of narcissism which highly correlates with depression and neuroticism (Roningstam and Maltsberger, 1998). Other studies have found and confirmed that a FFM based instrument on NPD tends to measure a more adaptable form of NPD than previously expected (Miller and Campbell, 2008). Findings suggest that people with NPD tend to load high on factors of extraversion and lower on agreeableness (Lynam and Widiger, 2007)

Finally, a recent study by Shelder and Westem (2004), found that

9

even more complex way to describe personality traits and disorders

beyond the Five Factor Model. Shelder and Westen (2004) support the

empirical soundness of the Five Factor Model, but suggest that the SWAP

200 provides highly complex data on clinical personality traits not

otherwise seen in the Five Factor Model. They further argue that since the

Five Factor Model is a self-administered instrument, the burden of truth

relies completely on the person answering the questions. Furthermore,

tests based on the Five Factor Model typically use specific words or

phrases relevant to the disorder itself, but fail to capture the actual, internal

psychological processes that are also involved (Shelder and Westen,

2004).

Self-report measures versus structured clinical interviews also

remain a constant problem when it comes to measuring narcissism.

Studies comparing a self report measure such as the Personality

Diagnostic Questionnaire-4 (PDQ-4) and clinical judgment using a

structured method based on the longitudinal, expert data approach found

several items that converged and others that diverged between the PDQ-4

and Longitudinal Expert All Data (Miller and Campbell, 2008). The

causes for the divergence may be connected in some way to the lack of an

operational definition for NPD. Also, this study argues that several of the

test items on the PDQ-4 may be worded improperly, which may cause

confusion in terms of how to properly answer the question.

A final issue surrounding self-report instruments for NPD is the

problem of insight into the disorder (American Psychiatric Association

[DSM-IV-TR], 2000). Therefore, certain questions that measure the

vulnerable or covert form of NPD may not be answered truthfully due to

the person's inflated sense of self and misperception of psychological

invulnerability. Finally, people classified as having the covert subtype of

narcissism may appear modest and shy on the measure. Several studies

have shown that instruments for NPD are more likely to find overt or

grandiose narcissism than its more vulnerable counterpart (Samuel and

Widiger, 2008). Therefore, a sensitive measure should be developed in

order to detect both overt and covert forms of NPD.

The following hypotheses can be made.

1. The new test for NPD will have an internal consistency
   (reliability).

2. The new scale will correlate with the NPI.

3. Factor analysis of the new scale subscales will generate two
   factors that will differentially correlate with the NPI two
   dimensions.

CHAPTER III

PROCEDURES AND METHODS

Participants

One hundred and twenty four participants from a Midwestern

university made up the sample used for the study. The sample consisted of

52 males and 72 females. The university is located in an urban setting with

a student body that ranges from traditional students to older nontraditional

students. The Narcissistic Personality Inventory and the Narcissistic

Personality Questionnaire were administered in several different classes

including nursing, introductory psychology, and various MBA classes.

Students were offered extra credit for participation.

The NPI

The two self report measures the Narcissistic Personality Inventory

(NPI; Raskin and Hall,1979) and the Narcissistic Personality

Questionnaire (NPQ: Poreh and Motter 2009) were compared to measure reliability between an established measure of NPD and a newly developed measure of NPD respectively. Both the NPI and the NPQ are based on the 9 criteria for NPD and are designed to measure narcissism on a continuum.

The Narcissistic Personality Inventory (Raskin and Hall, 1979) is a questionnaire that consists of 40 items that are answered in a forced choice dichotomous scale (True/ False). The questionnaire was designed to measure narcissism on a continuum from dependent being at the lower scoring end and narcissistic personality disorder on the higher scoring end. The Narcissistic Personality Inventory had a moderate internal consistency of 0.852 and strong reliability (Raskin and Hall, 1979).

Raskin and Hall (1979) developed the Narcissistic Personality Inventory, which is based on the 9 DSM-III criteria for NPD. The measure was later revised to cater towards the 9 DSM-IV criteria (Ronningstam, 2005). The NPI was originally composed of 220 dyadic items believed to contain various sentiments for the construct of NPD (Raskin and Terry, 1988). After several trials of the NPI on undergraduate students, the regression analysis was used to eliminate 166 questions. Further question were eliminated to equal a total of 40 questions on the NPI. This newly revised NPI proved to have a high rate of internal consistency with alphas ranging from 0.80 to 0.86, spanning across several studies (Raskin and Terry, 1984).

Furthermore, through multivariate analysis, the NPI proved to measure several subtypes of narcissism (Emmons, 1984,1987). Principle components analysis was used in order to discover at least four factors of the NPI; Exploitativeness/Entitlement, Leadership/Authority, Superiority/Arrogance, and Self Absorption/ Self-Admiration (Emmons,1984). Observational correlations were also made with each of the four components of the NPI (Raskin and Terry, 1988). These four components show the complexity of the narcissism construct and that these factors taken alone do not provide an entire explanation for NPD. Personal interviews and clinical observations must also be made in to confirm a diagnosis of NPD (Raskin and Terry, 1988). However, a combination of high scores on two or more of the four factors could open up the possibility for different subtypes of narcissism. Consequently, if a person scores high on any of the 9 DSM-IV-TR criteria of the NPQ could reveal a specific type of narcissism. For instance, if a person scores high on haughty attitudes and belief in being special could reveal a specific sub-type of narcissism.

The NPQ

The Narcissistic Personality Questionnaire (Poreh and Motter 2009) is a questionnaire that consists of 102 items that are answered in a forced choice dichotomous scale (Yes/ No). The questionnaire was designed to measure NPD based on the 9 DSM-IV-TR criteria as well as

form subcategories of NPD based on DSM-IV-TR criteria.

Procedure

Students were asked to participate in the study involved completion of two self report measures. Students were then informed that completion of both questionnaires would take 15 to 20 minutes. The students were then given informed consent along with the NPI followed by the NPQ. The informed consent contained the purpose of the study as well as information outlining risks and benefits from the study. Students were also informed that participation in this study is completely voluntary and that there were no repercussions for declining to participate in the study. Students were further informed that they may choose to stop participation at any time during administration of the NPI and the NPQ. Finally, students were asked to write their phone number if they wanted to be personally contacted with the test results from the NPI and NPQ at a later date. Those students who were willing to participate in the study were told to begin answer questions on the NPI and then were directed immediately to the NPQ. After completion of the self reports consent forms were collected and stored in a safe location in order to ensure confidentiality. Students were then reassured that information would only be shared by the thesis advisor and his student.

Analysis

     A regression analysis, using a stepwise entry system was performed on each of the sub-scales and then on the entire scale to determine internal consistency. The degree of internal constancy was demonstrated by Cronbach's Alpha. The 9 sub-scales were analyzed first. Variables were removed that did not significantly correlate in order to increase internal consistency. Afterwards, a factor analysis with a principle components analysis followed by a varimax rotation was used on the revised scales. The factor analysis was used to determine if the NPQ had at least 2 dimensions with a maximum of 9 dimensions each representing the 9 DSM-IV-TR criteria for narcissism. Varimax rotation was used because it provides a simplified explanation by separating each factor as far from the other factors as possible. A regression analysis , using a stepwise entry system was also performed on the sub-scales and the full scale NPI in order to compare the internal consistency of the NPI and the NPQ. The rationale was to compare the internal consistency of a well established instrument that measures the same construct as the NPQ. Furthermore, factor analysis will be used in order to determine if the NPD scale actually measures the 9 DSM-IV criteria. Factor analysis will help the researchers determine if the new NPD scale measures overt and covert forms of narcissism. In addition, oblique rotations will be utilized in order to allow correlations among the instead of maintaining independence. This will provide a more realistic picture of the data despite some risk of

deviating from the more popular orthogonal rotation which is based more in theory and is somewhat more statistically sound. Factor analysis also has some statistical limitations. Since factor analysis only looks at the structure of a measure, the researchers will not be able to determine if the measure itself is statistically sound.

`Finally, multiple regression will be used to analyze whether the questions based on the 9 DSM-IV criteria actually measure narcissism. The results from the multiple regression analysis will be compared to other measures of NPD in order to determine the statistical soundness of the new measure against those already published.

CHAPTER IV

RESULTS

Some of the scoring on the NPQ was reversed in order to detect

and minimize random responding. Individual sub-scales were grouped

according to each of the 9 DSM-IV-TR criteria for narcissism. These

variables were then analyzed according to each individual criterion. The

mean, variance and standard deviation were calculated for both the sum

scale scores of the scale. Participants were then able to be categorized

based on their degree or level of narcissism. (See Table 1).

One sees that the internal consistency of the 102 items for the

entire scale was relatively high (alpha= 0.881). The reliability of each sub-

scale as measured using the Cronbach's Alpha statistic was also relatively high. Sub-scales 1 and 2 had 12 items, sub-scales 3,4,5,6,7,8 and 9 had 11 items. In general, scales 3,4,5,6,7,8,and 9 had very low to moderately low reliability ranging from 0.454 to 0.577. Sub-scales 1 and 2 had moderately high reliabilities (0.647 and 0.719 respectively). (See Table 1)

Table 1: Reliability for the Full Scale NPQ and the 9 sub-scales.

Scale	Cronbach's Alpha	Mean	SD	Number of Items
Full Scale	0.881	22.83	10.21	73
Self Importance	0.647	4.17	2.364	12
Fantasies of Power	0.719	4.24	2.561	11
Belief in Being Special	0.497	1.56	1.427	8
Excessive Admiration	0.454	4.72	1.872	10
Unreasonable Expectations	0.577	2.69	1.866	10
Uses Others for Own Goals	0.495	2.55	1.674	8
Lacks Empathy	0.50	2.12	1.539	7
Belief that Others are Envious	0.557	2.48	1.564	6
Haughty Attitudes	0.476	1.52	1.910	7

The 9 sub-scales were then empirically analyzed. The first criterion scale measured levels of self-importance and had an internal consistency of 0.647. Two items were removed to increase the internal consistency to

0.649. (See Table 1)

The second criterion scale measured the levels for fantasies of power and had an internal consistency of 0.714. One item was removed to increase the the internal consistency to 0.719. (See Table 1)

The third criterion scale measured the levels for belief in being special and had an internal consistency of 0.444. Four items were removed in order to increase the internal consistency to 0.497. (See Table 1) The fourth criterion scale measured the levels for the need for excessive admiration with an internal consistency of 0.454. One sub-scale was removed in order to increase the internal consistency to 0.454. (See Table 1). The fifth criterion scale measured levels of unreasonable expectations with an internal consistency of 0.542. One item was removed in order to increase the internal consistency to 0.577. (See Table 1) The sixth criterion scale measured the ability to use others for personal gain with an internal consistency of 0.464. Three items were removed in order to increase the internal consistency to 0.495. (See Table 1) The seventh scale measured lack of empathy which had an internal consistency of 0.279. Four items were removed to increase the internal consistency to 0.500. (See Table 1)   Sub-scale eight measured belief that others were envious with a Cronbach's Alpha of 0.486. Seven items were removed to increase the internal consistency to 0.557. (See Table 1). Sub-scale nine measured haughty attitudes towards others with a Cronbach's Alpha of 0.452. Four items were removed in order to increase the internal

consistency to 0.476. (See Table 1)

The internal consistency of the total scale was then analyzed. A total of 23 items were removed from all 9 sub-scales. The Cronbach's Alpha for the total scale was initially 0.877 with a total of 79 items. Six items were then removed to increase the total internal consistency to 0.881. (See Table 1) Removal of I tem(15,18,21,24,34,43,44,47, 48,49,54,60,61,62,72,75,80,86,88,89,90,98,101,102) (See Table 1) contributed to creating a scale that is more reliable than the NPI. While the NPI has an internal consistency of 0.85 (Raskin and Hall, 1979), the NPQ has an internal consistency of 0.881 (Poreh and Motter, 2009). (See Table 1)

A 2 tailed Pearson Correlation was conducted to examine the relationship between the Narcissistic Personality Inventory (NPI) and the Narcissistic Personality Questionnaire (NPQ). The Pearson Correlation for the NPI and NPQ was 0.557 which was significant at the 0.01 level. The analysis shows that NPQ and the NPI clearly measure the same construct (See Table 2). Nevertheless, there is evidence that some of the subscales have low reliability. For example Scales 6 and 7, Use Others for Own Goals and Lack of Empathy correlated poorly with the NPI and it's two dimensions.

Table 2: Correlations between the NPI and the NPQ scales and subscale.

	NPI	NPI – Scale I	NPI – Scale II
NPQ SUM SCORE	**0.557****	**0.477****	0.372**
Self Importance	**0.407****	**0.566****	**0.533****
Fantasies of Power	0.379**	0.408**	0.353**
Belief in Being Special	0.220*	0.358**	0.352**
Excessive Admiration	0.416**	0.197*	0.215*
Unreasonable Expectations	0.422**	**0.429****	0.349**
Use Others for Own Goals	0.203*	**0.428****	0.361**
Lacks Empathy	0.168	0.244*	0.134
Belief that Others are Envious	0.389**	0.199*	0.115
Haughty Attitudes	0.939**	0.359**	0.369**

*** Correlation is significant at the 0.01 level (2-tailed).*
**Correlation is significant at the 0.05 level (2-tailed).*

The nine revised scales were then factor analyzed using principle components analysis followed by a varimax rotation. Furthermore, Barrlett's Test for Sphericity and measure of sampling adequacy were used in order to determine if the factor analysis could even be interpreted. Barrlett's Test for Sphericity which detects that presence of correlations among the variables was significant. However the measure of sampling adequacy was 0.449 which falls within the miserable range. (See Table 3) Therefore, interpretation of the factors should be used with extreme caution, if used at all. A total of 2 factors were found using varimax rotation. Use of a Scree-Plot also indicates the presence of 2 factors as well. (See Figure 1)

22

Figure 1
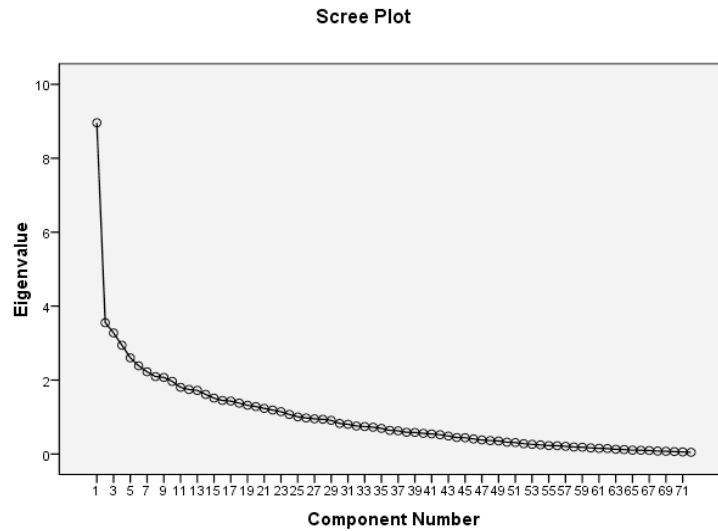
Scree Plot for Two Factor Solution

Scree Plot

Table 3 shows the correlation between the resulting two factor solution

and the NPI two dimensions. One sees that while factor 1, composed of

subscales, self importance, belief in being special, use other for own goals,

lacks empathy belief that others are envious, and haughty attitudes which

correlate with the NPI Scale . Factor 2, which is composed of subscales,

fantasies of power, excessive admiration, and unreasonable expectations

which differentially correlates with NPI-Scale II. This finding supports

the factor structure of the NPQ.

Table 3: NPQ Two Factor Solution

	FACTOR I	FACTOR II
Self Importance	0.403	0.264
Fantasies of Power	0.381	0.453
Belief in Being Special	0.393	0.058
Excessive Admiration	0.80	0.466
Unreasonable Expectations	0.253	0.318
Use Others for Own Goals	0.399	-0.126
Lacks Empathy	0.278	-0.51
Belief that Others are Envious	0.392	-0.60
Haughty Attitudes	0.492	0.004

Table 4: Correlations between the NPI Factor scale and the NPI.

NPQ	NPI Sum Score	NPI- Scale I	NPI- Scale II
FACTOR 1	**0.469****	**0.514****	0.136
FACTOR 2	**0.403****	0.190*	**0.452****

** Correlations are significant at the 0.01 level (2-tailed).
* Correlations are significant at the 0.05 level (2-tailed).

CHAPTER V

DISCUSSION

The propose of the present study was to assess the reliability and validity of a new scale for the assessment of narcissism, the NPQ (Poreh and Motter, 2009). The present study confirmed the hypothesis that the NPQ has reasonably high reliability. In fact, the NPQ has significantly higher reliability then the NPI. Prior to this study the literature indicated that the NPI had the highest reliability as compared to other tests of narcissism such as the Margolis-Thomas Measure of Narcissism and the Narcissistic Personality Disorder Scale (Mullins and Kopelman, 1988). However, in order to confirm the high reliability of the NPQ a replication study should be performed.

The NPQ also had high construct validity due to significant correlations with the NPI and significant correlations between the sub-scales of each test. Since the NPI is a well established measurement for narcissism it could be said that the significant correlations between the

measures indicate that the NPQ also measures narcissism which is consistent with most of the literature. However, Mullins and Kopelman (1988) indicated that the NPI many not only measure the construct of narcissism, but also the construct of need for achievement. Therefore, further tests on the construct validity of the NPQ should be tested in order to confirm a high construct validity.

Furthermore, high correlations between the NPQ sum score and the NPI sum score and factor 1 score are due to the fact that the NPQ was designed to measure overt forms of narcissism. Additionally, factor 1 of the NPI and the sub-scales labeled, self importance, unreasonable expectations, and uses others for their own goals also have significant correlations. These correlations provide evidence that the NPI may not necessarily be a measure of need for achievement, but could a measure of need for power. Need for power could also be interpreted as a need to control or dominate others which is at least confirms four of the criteria for narcissism, uses others for their own needs, fantasies of power, self importance, and unreasonable expectations. However, 5 out of the 9 DSM-IV-TR must be met in order to confirm a diagnosis of Narcissistic Personality Disorder.

The two factor solution of the NPQ also correlates with the two factors of the NPI. However, the two factors of the NPQ are skewed. Only two sub-scales, self importance and belief in being special, in factor 2 correlated significantly enough to become designated as a factor. However,

the correlations between the factor 1 of the NPI and the factor of the NPQ have a significant correlation as well as the correlations between the factor 2 of the NPI and the factor 2 of the NPQ. These correlations with the NPI indicate and confirm that there are two dimensions contained in the NPQ as indicated by the literature.

Clinical Implications

The NPQ was designed ultimately to fit into a much larger scale personality instrument. This instrument will first use questions pertaining to the entire spectrum of personality disorders. Afterwards, the patient would only be given questions that apply to the specific personality disorder. Since the NPQ's reliability is extremely high for the construct of narcissism it at least shows promising clinical implications. Furthermore, it appears that the NPQ has a significantly higher reliability than the NPI which is a more established measure of narcissism.

In addition, the 2 dimensional factor structures can provide a better understanding of narcissistic personality disorder. The 9 DSM-IV-TR criteria for narcissism appear to fall under factor 1 which is called overt narcissism or factor 2 which is called covert narcissism. Out of the 9 criteria, self importance, haughty attitudes, belief in being special, uses other for their own goals, lacks empathy, and belief that other are envious seem to correlate highly with overt narcissism. Fantasies of power, unreasonable expectations, and excessive admiration correlate highly with covert narcissism. The constructs for the 9 criteria seem to fit the label of

either overt or covert narcissism. Self importance and uses others for their own goals would be a proper explanation of an overt or a more observable form of narcissism. On the other hand, fantasies of power and unreasonable expectations could explain a more emotional or covert form of narcissism.

Although treatment outcomes for narcissism are a difficult at best due to the extremely low number of patients that actually seek therapy for narcissistic personality disorder, insight into a two factor solution for narcissism could provide treatment opportunities. However, patients tend to be in treatment for indirect reasons such as martial therapy, employment assistance programs, addictions therapy and forensics. Behavior modification programs could be implemented to treat the outward behaviors of narcissism, while more emotional oriented styles of therapy could target covert forms of narcissism. However, further research into effective therapy should be implemented first before proper use of the 2 factor solution can be utilized.

Limitations

One highly contributing limitation was the low number of participants in the study. Factor analysis could not be adequately interpreted with only 124 participants. Part of the problem was inaccessibility to a wide range of different classrooms in the University. Therefore, collecting data quickly from a wide pool of students was a difficult task. Since determining the factor structure of the NPQ could not

be determined with the limited amount of participants, the results remain inconclusive.

Low reliability on sub-scales 4, 5, 6, and 7 could be due in part to the very nature of a self assessment. Participants as a whole may answer inconsistently because of the halo effect. Since the participants knew that the NPQ would be evaluated by the experimenters, they may have attempted to present themselves in a better or in this case more "humble" light. Rewording of the questions in this scale, or the addition of a validity scale of some kind could detect scores whether or not scores are consistent. Furthermore, a rewording of the question in the respective sub-scales with low reliability and re-testing of the new questions may improve the reliability as well.

One very important limitation was the low number of questions in the sub-scales that had low internal reliability. A solution to this problem could be to add questions to the sub-scales that are low in internal reliability. The addition of new questions should increase the reliability significantly. Increase of reliability within the sub-scales themselves should also increase the reliability of the instrument as a whole.

Another potential limitation was the lack of diversity in the population in terms of age, race, and gender. Since all the data was collected from college students it is not an accurate representation of the population at large. However, there were several participants who were non-traditional students ages ranging from 24-65. Thus, it may be slightly

more representative of the general population than strictly using college aged student from 18 years to 24 years.

Gender also contributed to the lack of diversity among the population. There were significantly more female participants than male participants. Thus, the reliability could be brought into question because there was not an even dispersion between males and females. However, some college majors that were primarily dominated by females had a higher degree of representation than did other more male dominated college majors. Therefore, the consistency of responses may only be consistent for females and not males.

A final and very important limitation is that the validity of the NPQ has not been properly examined to the full extent. Future studies should concentrate on clinical samples that are compared to the general population. Even though the reliability of the NPQ is high, it does not guarantee that instrument measures narcissism instead of something else. Future research should pertain to these issues of divergent validity for instance, in order to solidify the statistical strength of the instrument.

Future Research

Future research should attempt to reach a much wider population pool. This should include participants from outside the university. Furthermore, a larger participant pool should be collected in order to have a more confident interpretation of factor analysis. In addition, factor analysis will more capable of finding 2 or more dimensions within the

NPQ. The ultimate goal would be to find 9 dimensions that are highly

correlated to the 9 DSM-IV-TR criteria for narcissistic personality

disorder.

Further research should also be focused on the validity of the NPQ.

A double blind study could be utilized in which the participants are

administered the NPQ and then interviewed after some time after test

administration. The interviewer will have no prior knowledge as to

whether the participant scored high or low on the NPQ. The rational

would be to eliminate experimenter bias.

CHAPTER VI

CONCLUSION

The current study yields some interesting results. The reliability of

the NPQ was higher than the reliability of the NPI. By itself, this is a

remarkable development for this construct. In general, it is difficult to

generate an instrument for narcissism that has a high internal consistency.

However, a duplicate study should be performed in order to determine if

the internal consistency remains the same. Until then, it cannot be

concluded with certainty that the NPQ has a high reliability.

In terms of validity, the NPQ displays high construct validity due

to its correlations with the NPI. Furthermore, the NPI was designed to

measure the presence of overt and covert narcissism. Although

inconclusive at the moment, the NPQ appears to correlate highly with the

two constructs of overt and covert narcissism. This discovery allows for a

better understanding of narcissism. However, studies should be conducted in order to determine the divergent validity of the scale, comparing instruments that measure other Cluster-B personality disorders such as borderline personality disorder and histrionic personality disorder.

Therefore, the NPQ shows promise as a new measure for narcissism. It is based on the 9 DSM-IV-TR criteria which lend to it validity as a true measure of narcissism. In addition, it also displays a high rate of reliability overall, however, steps should be taken in order to increase the low reliability of some of the sub-scales. Furthermore, future studies should attempt to replicate the current study in order to ensure accurate conclusions for both the reliability and validity of the NPQ.

REFERENCES

Ackerman, Steven J.; Clemence, Amanda J.; Weatherill, Robin;

    Hilsenroth, Mark J. "Use of the TAT in the assessment of DSM-IV

    Cluster B personality disorders." *Journal of Personality*

    Assessment, v. 73 issue 3, 1999, p. 422-442

American Psychiatric Association. (2000). Diagnostic and statistical

    manual of mental disorders: DSM-IV-TR. Washington, DC: Author

Beck, Aaron T.; Freeman, Arthur M Cognitive therapy of personality

    disorders. (1990) Guilford Press, New York, NY, US xviii, 396pp.

Davis, Roger D.; Millon, Theodore 1999 p.485-522 *Oxford textbook of*

    psychopathology. Oxford University Press, New York, NY, US xii,

    732pp.

Emmons, R.A. (1984). Factor Analysis and Construct Validation of the

    narcissistic personality inventory. *Journal of Personality*

    *Assessment,   4,*291-300.

Emmons, R.A. (1987). Narcissism: Theory and measurement. *Journal of*

    Personality and Social Psychology, 52(1), 11-17.

Freud, Sigmund, Stracey, James, and Gay, Peter (1990) W.W. Norton

    &Co., The Standard Edition NY/NY, US.

Jang, K.L., W.J. Livesley, P.A. Vernon & D.N. Jackson. (1996).

Heritability of personality disorder traits: A twin study. *Acta

Pschiatrica Scandinavica* 94, 438-444.

Lynam, Donald R.; Widiger, Thomas A. "Using a general model of

personality to understand sex differences in the personality

disorders." *Journal of Personality Disorders*, v. 21 issue 6, 2007,

p. 583-602.

Miller, Joshua D.; Campbell, W. Keith. (2008) "Comparing clinical and

social-personality conceptualizations of narcissism." *Journal of

Personality*, v. 76 issue 3, 2008, p.   449-   476.

Mullins and Kopelman (1988). Toward the Assessment of the Construct

Validity of Four Measures of Narcissism. *Journal of Personality

Assessment,52*(4), 610-625.

Raskin and Terry (1988). A principle components analysis of the

narcissistic personality inventory and further evidence of its

construct validity. *Journal of Personality and Social

Psychology,54*, 890-902.

Raskin, Robert N.; Hall, Calvin S. (1979) "A narcissistic

personality inventory." *Psychological Reports*, v. 45

issue 2, 1979, p. 590.

Rathvon, N., & Holmstrom, R. (1996). An MMPI-2 portrait of nar-

cissism. Journal of Personality Assessment, 66, 1-19.

Ronningstam, Elsa F. Identifying and understand the narcissistic

    personality. (2005) Oxford University Press, New York, NY, US.

    xiv, 239pp.

Ronningstam, Elsa F.; Maltsberger, John T. "Pathological narcissism and

    sudden suicide-related collapse." *Suicide and Life-Threatening*

    Behavior, v. 28 issue 3, 1998, p. 261-271.

Samuel, Douglas B.; Widiger, Thomas A. "A meta-analytic review of the

    relationships between the five-factor model and DSM-IV-TR

    personality disorders: A facet level analysis." *Clinical Psychology*

    Review, v. 28 issue 8, 2008, p. 1326-1342.

Samuel, Douglas B.; Widiger, Thomas A. "Convergence of narcissism

    measures from the perspective of general personality functioning."

    Assessment, v. 15 issue 3, 2008, p. 364-374.

Schore, A. (1994). *Affect regulation and the origins of the self.* Hillsdale,

    NJ: Lawrence Erlbaum.

Serkownek, K. (1975). Subscales for Scale 5 and 0 of the MMPI.

    Unpublished manuscript.

Soyer, R.B. Rovenpor, J.L. , Kopelman, R.E., Mullins, L.S., Watson, P.J.

    (2001). Further Assessment of the Construct Validity of the Four

    Measures of Narcissism: Replication and Extension. *Journal of*

    Psychology, 135(3) 245-258.

Watson, P. J.; Sawrie, Stephen M.; Greene, Roger L.; Arredondo, Rudy.
"Narcissism and depression: MMPI-2 evidence for the continuum
hypothesis in clinical samples." *Journal of Personality Assessment*,
v. 79 issue 1, 2002, p. 85-109.

APPENDIX

Figure 2
Consent Form

You are being asked to participate in a research study on certain personality traits led by Dr. Amir Poreh and his student Ethan Motter. Research has shown that people respond to situations, circumstances, and events in unique and different ways. Furthermore, research points to certain traits or patterns of responding on a consistent basis after the age of 18. This research in particular will ask participants to answer a series of questions that are true or false statements. Students are not obligated to participate in the study or if there is any point in which a person experiences discomfort of any type, they are allowed to opt out of the study without any threat or fear of being penalized. Your personal information is confidential and will not be shared with any person other than the principle advisor and his student. There are no known risks either psychologically or physically from taking this questionnaire. Average time for the questionnaire is 20 to 30 minutes.

I _____ have read and understand the terms and conditions of this research study. I understand that if I have any questions about my rights as a research subject I can contact the Institution Review Board at (216) 687-3630.

I understand that I also may contact the primary researcher Amir Poreh at (216) 687-3718 and his student Ethan Motter at (419) 566-7863.

(ID Number Here) _____(Contact Number)_____

Figure 3

NPI

ID_____

Date:_____

1.	I have a natural talent for influencing people	I am not good at influencing people	
2.	Modesty doesn't become me	I am essentially a modest person	
3	I would do almost anything on a dare.	I tend to be a fairly cautious person.	
4	When people compliment me I sometimes get embarrassed.	I know that I am good because everybody keeps telling me so.	
5	The thought of ruling the world frightens the hell out of me	If I ruled the world it would be a better place.	
6	I can usually talk my way out of anything.	I try to accept the consequences of my behavior.	
7	I prefer to blend in with the crowd	I like to be the center of attention.	
8	I will be a success.	I am not too concerned about success.	
9	I am no better or worse than most people.	I think I am a special person.	
10	I am not sure if I would make a good leader.	I see myself as a good leader.	
11	I am assertive.	I wish I were more assertive.	
12	I like to have authority over other people.	I don't mind following orders.	
13	I find it easy to manipulate people.	I don't like it when I find myself manipulating people.	
14	I insist upon getting the respect that is due me.	I usually get the respect that I deserve.	
15	I don't particularly like to show off my body.	I like to show off my body.	

16	I can read people like a book	People are sometimes hard to understand.	
17	If I feel competent I am willing to take responsibility for making decisions	I like to take responsibility for making decisions.	
18	I just want to be reasonably happy.	I want to amount to something in the eyes of the world.	
19	My body is nothing special.	I like to look at my body	
20	I try not to be a show off.	I will usually show off if I get the chance.	
21	I always know what I am doing.	Sometimes I am not sure of what I am doing.	
22	I sometimes depend on people to get things done.	I rarely depend on anyone else to get things done.	
23	Sometimes I tell good stories.	Everybody likes to hear my stories.	
24	I expect a great deal from other people.	I like to do things for other people.	
25	I will never be satisfied until I get all that I deserve.	I take my satisfactions as they come.	
26	Compliments embarrass me.	I like to be complimented.	
27	I have a strong will to power	Power for its own sake doesn't interest me.	
28	I don't care about new fads and fashions.	I like to start new fads and fashions.	
29	I like to look at myself in the mirror.	I am not particularly interested in looking at myself in the mirror.	
30	I really like to be the center of attention.	It makes me uncomfortable to be the center of attention.	
31	I can live my life in any way I want to.	People can't always live their lives in terms of what they want.	
32	Being an authority doesn't mean that much to me.	People always seem to recognize my authority.	

33	I would prefer to be a leader.	It makes little difference to me whether I am a leader or not.	
34	I am going to be a great person	I hope I am going to be successful.	
35	People sometimes believe what I tell them	I can make anybody believe anything I want them to.	
36	I am a born leader.	Leadership is a quality that takes a long time to develop.	
37	I wish somebody would someday write my biography.	I don't like people to pry into my life for any reason.	
38	I get upset when people don't notice how I look when I go out in public.	I don't mind blending into the crowd when I go out in public.	
39	I am more capable than other people.	There is a lot that I can learn from other people.	
40	I am much like everybody else.	I am an extraordinary person.	

Figure 4

NPQ

1.	Many of my ideas are ingenious but people have difficulty in understanding how great they are.	Yes ○ No ○
1.	I often try to imagine what it would be like to have remarkable achievements in my work and/or investments.	Yes ○ No ○
1.	I often try to fly first class so that I can meet people like myself.	Yes ○ No ○
1.	People enjoy hearing about my accomplishments.	Yes ○ No ○
1.	When I go to restaurants I try to get special service.	Yes ○ No ○
1.	If someone develops somebody else's idea they should get the credit.	Yes ○ No ○
1.	I don't have much patience to listen to other people's problems	Yes ○ No ○
1.	It is sometimes frustrating to see how some people succeed so easily.	Yes ○ No ○
1.	People have told me that I am patronizing.	Yes ○ No ○
1.	I have had some great discoveries and/or ideas.	Yes ○ No ○

1.	I have had several brilliant business schemes	Yes ○ No ○
1.	People who do well in my line of work don't associate with unsuccessful people.	Yes ○ No ○
1.	People often ask for my advice on things.	Yes ○ No ○
1.	I have no trouble in complaining about poor service.	Yes ○ No ○
1.	Having good social skills is one of the secrets for my success.	Yes ○ No ○
1.	I sometimes think how difficult it is to be a waiter/waitress.	Yes ○ No ○
1.	The success of some of the people I know makes me resent them.	Yes ○ No ○
1.	I often feel that it is a waste of time to compliment close people who are just doing their jobs.	Yes ○ No ○
1.	Very few people in my line of work have my skills.	Yes ○ No ○
1.	I have had people tell me that I look like a movie star.	Yes ○ No ○
1.	I often find that I can only be understood by people like myself.	Yes ○ No ○
1.	I don't get enough praise for my ideas or work.	Yes ○ No ○

1.	Great things should come to people like myself.	Yes ○ No ○
1.	Many friends have cut their ties with me.	Yes ○ No ○
1.	I try to help people who become sick or lose their jobs.	Yes ○ No ○
1.	I sometimes envy people who have more money than me.	Yes ○ No ○
1.	An open door policy is a bad policy for running a business.	Yes ○ No ○
1.	I have worked harder than most people to get to where I am.	Yes ○ No ○
1.	I wish I was more famous.	Yes ○ No ○
1.	I seldom (rarely) like to associate with ordinary people.	Yes ○ No ○
1.	People who know of my talents don't hesitate to contact me.	Yes ○ No ○
1.	I get irritated when I don't get the treatment I deserve.	Yes ○ No ○
1.	I often get people to do what I want	Yes ○ No ○
1.	I sometimes try to understand my friends better by imagining how things look from their perspective.	Yes ○ No ○

1.	People sometimes appear to be envious of my achievements.	Yes ○ No ○
1.	I have no trouble reprimanding people when they do a poor job.	Yes ○ No ○
1.	People often admire my accomplishments.	Yes ○ No ○
1.	My hope that one day I will be rich and influential.	Yes ○ No ○
1.	I enjoy going to diners and other mom and pop restaurants.	Yes ○ No ○
1.	My life is boring.	Yes ○ No ○
1.	I have a knack for getting special treatment.	Yes ○ No ○
1.	I have taken advantage of someone because it was the only way to get what I wanted.	Yes ○ No ○
1.	When I see someone being taken advantage of, I get upset.	Yes ○ No ○
1.	The attitude of some people who have "made it" makes me angry.	Yes ○ No ○
1.	People who don't have my skills shouldn't bother to be in my profession.	Yes ○ No ○
1.	Most people would describe me as a very confident person.	Yes ○ No ○

1.	I sometimes fantasize about things like ideal love.	Yes ○ No ○
1.	I dislike pretentious people.	Yes ○ No ○
1.	Many things that I do are mundane and not worth talking about.	Yes ○ No ○
1.	I have a reputation for having others do whatever I say.	Yes ○ No ○
1.	Sometimes, when there is no other option, it is legitimate to take advantage of other people.	Yes ○ No ○
1.	I am often concerned for people who are less fortunate than me.	Yes ○ No ○
1.	Sometimes I feel that people envy my unique abilities.	Yes ○ No ○
1.	Most people would say that I am a very forgiving person.	Yes ○ No ○
1.	Sometimes I feel that people are unwilling to admit to how successful I am.	Yes ○ No ○
1.	I sometime daydream about being famous.	Yes ○ No ○
1.	I prefer shopping for brand name merchandise.	Yes ○ No ○
1.	When others compliment me, I often feel uncomfortable.	Yes ○ No ○

1.	People like me should be paid more for their hard work.	Yes ○ No ○
1.	People often manipulate others for their own needs.	Yes ○ No ○
1.	When I see someone get hurt, I tend to remain calm.	Yes ○ No ○
1.	I often like to talk about the success of famous people.	Yes ○ No ○
1.	People often overate my abilities.	Yes ○ No ○
1.	I find it hard to find people who are as creative as I am.	Yes ○ No ○
1.	I often dream that one day I will be find the perfect love.	Yes ○ No ○
1.	I rarely go to discount stores.	Yes ○ No ○
1.	I dislike people who don't pat attention to what I have to say.	Yes ○ No ○
1.	I often try to find ways to get special discounts that are not commonly available.	Yes ○ No ○
1.	Getting people to do what you want is a valuable skill.	Yes ○ No ○
1.	It bores me to listen to other people's sob stories.	Yes ○ No ○

1.	There have been times when people have ended relationships with me because they were envious of my talents.	Yes ○ No ○
1.	There is no reason to be ashamed of being successful.	Yes ○ No ○
1.	I am not suited for being a manager.	Yes ○ No ○
1.	I have better taste in clothes than most people.	Yes ○ No ○
1.	People who don't come from my background rarely understand me.	Yes ○ No ○
1.	My accomplishments are truly unique but are not recognized as much as I would like.	Yes ○ No ○
1.	I am often bumped up to first class.	Yes ○ No ○
1.	I am willing to get paid less to be in the helping profession.	Yes ○ No ○
1.	When I read about the accomplishments of people I know in the newspaper, I often know that the reporters are exaggerating their contributions.	Yes ○ No ○
1.	When someone is successful he has every right to get special service.	Yes ○ No ○
1.	Most of the people in my work place don't have my kills.	Yes ○ No ○
1.	I often wonder what it would be like to be so famous that people will recognize me on the street.	Yes ○ No ○

1.	I prefer befriending people who are important.	Yes ○ No ○
1.	I don't like to draw attention to myself.	Yes ○ No ○
1.	I sometimes have difficulty understanding when someone is offended by something I have said.	Yes ○ No ○
1.	Long term relationships are over rated.	Yes ○ No ○
1.	I am quiet around strangers.	Yes ○ No ○
1.	I get easily offended.	Yes ○ No ○
1.	People who are unfamiliar with certain issues should keep quiet.	Yes ○ No ○
1.	I know a lot of important and successful people.	Yes ○ No ○
1.	When I am in a social gathering, I enjoy being the center of attention.	Yes ○ No ○
1.	Because I am so busy I sometime try to bypass long lines.	Yes ○ No ○
1.	Its not what you know but who you know that is important life.	Yes ○ No ○
1.	Seeing people cry doesn't upset me.	Yes ○ No ○

1.	It is not nice to talk down to people but sometimes I don't have any other choice.	Yes ○ No ○
1.	When I talk to people, I like to listen about their experiences.	Yes ○ No ○
1.	I am very skilled at getting people to do what I want.	Yes ○ No ○
1.	People tell me that I am a good listener.	Yes ○ No ○
1.	I am very aware of whether people have attended a good school/college.	Yes ○ No ○
1.	It is more important to have a close relationship with your boss than your co-workers.	Yes ○ No ○
1.	I don't like to waste my time with unsuccessful people.	Yes ○ No ○
1.	My friends often makes unreasonable demands from me.	Yes ○ No ○