

**Assessment of Personality, Anxiety and Depression in
individuals with Auditory Neuropathy Spectrum
Disorder**

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17AUD004

**This Dissertation is submitted as a part of fulfillment
For the Degree of Master of Science in Audiology
University of Mysore, Mysore**



**All India Institute of Speech and Hearing
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May 2019

CERTIFICATE

This is to certify that this dissertation entitled '**Assessment of Personality, Anxiety and Depression in individuals with Auditory Neuropathy Spectrum Disorder**' is the bonafide work submitted in part fulfillment for the Degree of Master of Science (Audiology) of the student with Registration No: **17AUD004**. This has been carried out under the guidance of a faculty of this institute and has not been submitted earlier to any other University for the award of any other Diploma or Degree.

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This is to certify that this dissertation entitled '**Assessment of Personality, Anxiety and Depression in individuals with Auditory Neuropathy Spectrum Disorder**' has been prepared under my supervision and guidance. It is also certified that this has not been submitted earlier to any other University for the award of any other Diploma or Degree.

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This is to certify that this Master's dissertation entitled '**Assessment of Personality, Anxiety and Depression in individuals with Auditory Neuropathy Spectrum Disorder**' is the result of my own study under the guidance Ms. Mamatha N. M., Assistant Professor in Audiology, department of Audiology, All India Institute of Speech and Hearing, Mysuru, and co-guidance of Mr. Hariharan V, Lecturer, department of Psychology, All India Institute of Speech and Hearing, Mysuru and has not been submitted earlier to any other University for the award of any other Diploma or Degree.

Mysuru

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May 2019

Dedicated to
Ajji Shivanna mama Tyson and
Wantie

You guys may not be here but
forever remain in my Heart

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Chapter 1

Introduction

Hearing is reportedly a vital part of communication characterized by spectral, temporal and intensity cues. This information is found to be analyzed from cochlea through afferent auditory pathway to the brain (Huffman & Henson, 1990). If there is a deficit anywhere in these pathways, it leads to deficits in hearing and there will be loss of acoustic cues that will result in disrupted speech perception and communication (Kumar 2007).

Auditory Neuropathy Spectrum Disorder (ANSD) is a condition where people can hear but have difficulty in understanding speech, especially in adverse listening environment such as in presence of noise or reverberation. The main characteristic of this disorder is absence of auditory brainstem responses and presence of otoacoustic emissions and/or cochlear microphonics (Starr, Picton, Sininger, Hood, & Berlin., 1996). Based on clinical findings in auditory neuropathy, it has been found that, the disruption that occurs in the stream of sound information has been localized to one or more of the following probable locations: the inner hair cells of the cochlea, the synaptic junction between the inner hair cells and the auditory nerve, or a lesion of the ascending auditory nerve (Starr et al., 1996). ANSD is referred to a form of hearing impairment wherein cochlear amplification (outer hair cell) function is normal but afferent neural conduction in the auditory pathway is disordered due to problem in the synapse or problem in the auditory nerve itself (Starr et al., 2003; Berlin et al., 2001). Audiologically ANSD is termed as normal or near normal cochlear hair cell (represented by normal otoacoustic emissions/ cochlear microphonics) function and absent or abnormal auditory nerve function (absent/abnormal auditory brainstem

response) that leads to difficulty hearing in noise (Roush, Frymark, Venediktov, & Wang, 2011). Demyelination of auditory nerve is found to affect the conduction velocity in the nerve fibers. This results in temporal asynchrony between the auditory nerve fibers and can reduce the compound action potential of that particular nerve. Auditory brainstem responses are affected due to this asynchrony of the nerve fibers (Kraus et al., 2000; Rance, McKay & Grayden 2004; Starr et al., 1991; Starr et al., 1996; Zeng, Oba, Garde, Sininger, & Starr, 1999; Zeng, Kong, Michalewsk, & Starr, 2005).

The prevalence rate of ANSD is reported to vary from 1% to 10% in children aged between 6-12 years in schools for the deaf, (Lee, McPherson, Yuen, & Wong., 2001; Forest et al 2006) and 10% in newborns (Sininger, 2002) and 40% in hearing impaired individuals found in neonatal intensive-care unit (NICU) (Rea & Gibson, 2003). The onset of ANSD can occur in any of the age groups, symptoms may be exhibited in infancy or childhood or it can develop during adolescence or in adulthood (Berlin, et al.2010; Kumar, 2009). In western population, it is observed that 1 in 4 patients with ANSD is about 10 years old (Sininger & Oba., 2001; Starr, 2000), but in contrast with Indian population it is reported that ANSD is seen more in adolescence (16-25years) age group (Prabhu, 2012; Kumar, 2009; Shivshankar, 2003).

1.1.Need of the study

The effect of hearing loss are different for each individual, but as reported most of the individuals with hearing-impairment suffer from social, psychological and physical problems (Stevenson et al., 2014; Theunissen et al., 2015). The impact of hearing loss on emotional difficulties can be reduced by providing hearing devices and suitable rehabilitative option (Dawes et al 2015). It has been reported that individuals with ANSD don't get benefit or get very limited benefit from most of

the available management. Also compared to individuals with sensorineural hearing loss, individuals with ANSD get very less or no benefit from hearing aids (Narne et al. 2014). If the individuals with ANSD don't get a proper rehabilitation, it will affect their daily life. This might lead to more psychological problems in individuals with ANSD. Hence it is important to know the problems faced by the individuals with ANSD and the extent of the problem that they go through. This would help in providing proper referral and appropriate rehabilitation measures for individuals with ANSD.

1.2.Aim of the study

To assess the severity level of depression, level of anxiety sensitivity and personality traits in individuals with ANSD.

1.3.Objectives of the study

To examine whether the psychological symptoms experienced by the individuals with ANSD are related to their personality traits.

Chapter 2

Review of literature

A study done on individuals with auditory neuropathy spectrum disorder shows that they had a reduce number of conducting fibers due to axonal loss and it also shows that there was a reduction in number of auditory fibers where the auditory nerve is adjacent to cochlear nucleus and it also showed that there was a remarkable amount of demyelination found in the left out surviving auditory nerve fibers and fibers that were there were very thin and it had incomplete myelin sheet. This is the reason why the acoustic reflex in the middle ear will be absent in patients with auditory neuropathy spectrum disorder the reduced neural input due to axon loss will cause the loss of acoustic reflex that is in the middle ear muscle and olivocochlear reflex (Starr, Picton& Kim, 2001) because of the demyelination in the auditor nerve, asynchronous firing of the auditory nerves can be seen in patients with auditory dyssynchrony.

Personality is defined as the characteristic set of behaviors, cognitions and emotional that evolve from biological and environmental (Corr & Philip.J., 2009). The effects of hearing loss are different for each individual, but most hearing-impaired people suffer some social, psychological and physical problems as a result of their hearing loss (Stevenson, 2014; Theunissen et al., 2015).

There is evidence to suggest that people with hearing loss and other symptoms like tinnitus and hyperacusis often suffer with change in their personality (Theodoroff, Lewis, Folmer, Henry, & Carlson, 2015).

The impact of hearing loss on psycho-social behavior can be reduced by providing hearing devices and suitable rehabilitative option. It has been reported that

individuals with ANSD are not benefitted or get limited benefit from most of the management options available, as compared to individuals with sensorineural hearing loss (Narne et al. 2014). This might lead to more problems in individuals with ANSD. Hence it is important to know the psychological problem and the extent of the problem that they go through. This would help for proper referral and appropriate rehabilitation measures. And if the individuals do not get a proper rehabilitation, it will affect their daily life. There are very few studies that have assessed psychological issues in individuals with ANSD.

2.1 Studies on psychological impact due to ANSD:

A study done by (Prabu, 2016) examined 20 individuals with ANSD using Depression Anxiety Stress Scales (DASS) was and reported that individuals with ANSD exhibited moderate degree of depression and anxiety. In this current study, 3 different scales were used for measuring psychological problems. Duration of ANSD is another aspect which can also have differential psychological effect. The result of the study shows that individuals with ANSD do experience depression, anxiety, and stress.

2.2 Studies on Psychological impact due to Tinnitus and Hyperacusis:

In a study done using the mini international neuropsychiatric interview (MINI), the Swedish universities scales of personality (SSP) among having a clinical interview related to symptoms of hyperacusis in a clinical population on personality trait and psychiatric morbidity along with different clinical characteristics have been investigated for the patients, The study sample included 62 Swedish patients with hyperacusis between 18 and 61 years. Majority of the patients, around 79% suffered

from comorbid tinnitus, 56% had at least one psychiatric disorder and 47% had an anxiety disorder. (Linda & Juris., 2013)

In another study done by (Theodoroff et al 2014), they explored the relationship between tinnitus and personality. In this study, 20 subjects above the age of 18 years were included and reported that the personality traits specifically neuroticism schizoid aspects, psychasthenia maybe associated with tinnitus.

A study aimed to identify the key personality traits related to tinnitus and also to examine the relationship between tinnitus and in effective disorder. The results showed anxiety and depression to be more prevalent among the tinnitus population at elevated levels. (Durai, & Searchfield., 2016)

Cattell (1946), first suggested that personality structure should be studied by factor analyzing self-report ratings of descriptive adjectives and statements using an approach called five-factor model (FFM) (Costa & Widiger, 1992). Currently, the FFM may be the most widely used personality theory within psychology. For example, social, personality, and industrial/ organizational psychologists have used the FFM to examine individual differences in a variety of outcomes and processes, including attachment (Noftle & Shaver, 2006), career success (Seibert & Kraimer, 2001), and performance motivation (Judge & Ilies, 2002). Within clinical psychology, the FFM has received increased attention among psychopathology researchers.

NEO Five-Factor Inventory (NEO-FFI) were developed with the aim of assessing the five domains of the FFM: (N) neuroticism, the tendency to experience negative emotions and psychological distress in response to stressors; (E) extraversion, the degree of sociability, positive emotionality, and general activity; (O) openness to experience levels of curiosity, independent judgment, and conservativeness; (A)

agreeableness, one's altruistic, sympathetic, and cooperative tendencies; and (C) conscientiousness, one's level of self-control in planning and organization.

A NEO-FFI study done by (Benedict & Prior, 2001) evaluated the character change in Multiple sclerosis by using comprehensive trait measures of personality and to determine if there is an association between personality change and cognitive dysfunction. Thirty-four MS patients and 14 healthy volunteers were studied. All underwent comprehensive neurologic and neuropsychological evaluation. Personality assessments included both self and informant reports on the Hogan Empathy Scale and the NEO Personality Inventory. Results showed Abnormalities were found among MS patients indicating elevated neuroticism and reduction in empathy, agreeableness, and conscientiousness.

A study done on 148 subjects with bodily dysmorphic disorder where 100 persons completed the NEOFFI, and on NEOFFI the mean score were in very high range for neuroticism and very low for extraversion and conscientiousness and a average range for openness.(Phillips. k. & McElroy.S.L.,2000)

In a study done by (Smith. W.T. & Christensen. J.A., 1995) they examined the association of NEOFFI to medical regimen adherence in 72 individuals with renal dialysis. Results indicated that Conscientiousness is significantly associated with medication regimen.

Researchers have given increased attention to the FFM (e.g., Costa & Widiger, 2002; Samuel & Widiger, 2006), they may also suffer from certain emotional as well as psychiatric circumstances. However, there is a dearth of studies pertaining to change in personality in individuals with ANSD. There has been less focus on the relations between the FFM and the anxiety and depression disorders in individuals with ANSD.

Rehabilitation of individuals with ANSD is a difficult task as they are not easily benefitted with the conventional methods of rehabilitation. They might be benefitted with therapy provided for their emotional and psychological disturbances. Research in this area is still required. A few of the management options that can be used are listed below.

2.3 Management options available for individuals with auditory neuropathy spectrum disorder

2.3.1 Amplification

As mentioned previously, the behavioral thresholds obtained in patients with auditory neuropathy is not reflective of the communication difficulties faced by them. Hence, providing amplification devices have been usually proven to be unproductive

Hearing aids are one of the options available for management of individuals with ANSD. An Indian study by (Narne, prabhu, chandan & deepthi., 2014) assessed the hearing aid benefit in 128 individuals with ANSD and reported that 89 individuals with ANSD did not get any benefit from hearing aids and only 26 of them were getting benefit from hearing aids in functional use whereas the other 13 had limited usefulness of the hearing aid (only for sound detection and awareness), but in another study by (Rance et al., 2008) promotes the trial of hearing aids fitting. In the study, they admitted that though many of their clients were not benefitted from the hearing aid, but they claim some benefits for the others. The authors have conducted the study on around 200 patients and carried out a follow up for 20 years. They have noted slight benefits like improved awareness and detection skills with hearing aids in a few patients. Persons with auditory neuropathy spectrum disorder, discrimination of

sounds is affected more than detection of sound. For example, a person might have a good score for detection tasks but may have very poor understanding. Although many patients with auditory neuropathy spectrum disorder have reported benefit from amplification, but in clinical practices it has been observed that patients with auditory neuropathy spectrum disorder have not been successful in using hearing aid alone to improve the speech and language communication skills. (Narne et al. 2014)

2.3.2 Assistive Listening Devices

Assistive listening devices are very helpful for auditory neuropathy spectrum disorder patients in noisy environments as it improves the signal and lowers down the noise providing a better sound signal to the person that cannot cope with interference. Moreover, visual information is a necessary step which should be encouraged for the persons with auditory neuropathy spectrum disorder. (Morlet et al., 2014)

2.3.3 Cochlear Implantation

Berlin et al 2010, in his study summarized the results of assessment and management of 260 individuals with ANSD, They reported that approximately 15% got benefit from hearing aids and speech and language improvement was reported in 85% of subjects who had implantation. Hence, cochlear implants are accepted as the most suitable management option for individuals with ANSD. For children and adults with auditory neuropathy spectrum disorder who underwent cochlear implantation demonstrate increased and better speech discrimination abilities. Cochlear implant patients without any auditory nerve abnormality shows better speech perception scores than cochlear nerve abnormalities. (Miyamoto et al., 1999)

2.3.4 NON AUDIOLOGICAL OPTIONS AVAILABLE

Individuals with ANSD may benefit from cues that are not primarily auditory in nature. Hence language learning and acquisition is encouraged via the oral, auditory and visual means. In the recent years education and learning language has become essential, in response education system for auditory neuropathy spectrum disorder can include the American sign language system in which they don't have to compulsorily learn English and how to sign English sounds on the hands, but rather a totally another language structure where English can be best learnt as second language. Many American Sign Language users are both literate and well employed and even some auditory neuropathy patients have been very successful in the deaf culture. Although American Sign Language is a "voice of tool" the person with auditory neuropathy spectrum disorder demonstrated best speech and lip reading skills because they hear sounds and that can give a tremendous advantage over completely deaf individuals who cannot hear sounds, making individuals with ANSD the best candidate to learn and use the ASL. Berlin et al. (2003).

Chapter 3

Methods

Current study aimed at exploring the personality characteristics, anxiety sensitivity, and depression among individuals with ANSD. To fulfill the aim following method was planned.

3.1. Aim of the study

To assess the severity level of depression, level of anxiety sensitivity and personality traits in individuals with ANSD.

3.2. Objectives of the study

To examine whether the psychological symptoms experienced by the individuals with ANSD are related to their personality traits.

3.3. Sample

Individuals with ANSD (N=15) who are attending clinical services at All India Institute of Speech and Hearing, Mysore, constituted the sample. Following the requisite permission from the concerned authorities all participants attending the OPD during their routine evaluation and data was collected from February 2019 to March 2019 were screened using the following inclusion and exclusion criteria.

3.4. Procedure

The sample meeting the criteria were requested for an interview and the objectives of the study were explained. Those willing to participate in the study and given written consent were recruited. The confidentiality of the information collected

was assured in all cases. The study adhered to Ethical guidelines for bio-behavioural research involving human subjects, All India Institute of Speech and Hearing, Mysore.

The study was done on 15 individuals with age range from 12 – 40 years who were clinically confirmed to be diagnosed as ANSD patients. A detailed case history was taken from all the participants to find any pathological conditions of auditory and vestibular system. Since all the individuals were from the state of Karnataka, they were comfortable and fluent in Kannada language.

3.5. Subject selection criteria

The clinical diagnosis of ANSD was done by the criteria recommended by (Starr et al. 1996). All the participants had preserved cochlear amplification reflected by the presence of transient evoked otoacoustic emission and the abnormal auditory nerve responses as indicated by absence or severely abnormal auditory brainstem responses with normal otologic and tympanometric findings and absent acoustic reflexes. It was also seen that the participants who were considered in the study had a speech identification score of <60% and the duration of the disorder was minimum of 6 months.

The following exclusion criteria was used while recruiting the study sample

- History of middle ear pathology.
- History of speech and language problems.
- Individuals have history of past or current substance use were excluded from the study.
- Individuals with any history of head injury or organic disease were excluded from the study.

3.6. MEASURES

3.6.1. NEO- Five Factor Inventory (NEO-FFI)

The NEO Five-Factor Inventory (NEO-FFI) was developed by Paul T. Costa and Robert R. McCrae (1992). It is a shortened version of the NEO PI-R, designed to give quick, reliable and valid measures of the five domains of adult personality. It consists of 60 items that are rated on a five point scale i.e. strongly disagree to strongly agree. The five domains are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. The NEO-FFI scales show correlations of .75 to .89 with the NEO-PI validimax factors and the internal consistency values range from .74 to .89.

3.6.2. Anxiety Sensitivity Index (ASI)

The Anxiety Sensitivity Index was developed by Steven Reiss (1986). It is a 16-item self-questionnaire. Each item is rated on a 5-point Likert-type scale, indicate the extent to which each item corresponds their anxiety symptoms. Where respondents has to their beliefs about the consequences of Items are rated from 0 (not at all) to 4 (very much). Sensitivity Index scores are obtained by summing the total Anxiety the responses to each of the 16 items and it is interpreted as higher the score obtained, higher the Anxiety Sensitivity of the individual. The Anxiety Sensitivity Index has been shown to have excellent psychometric properties clinical and nonclinical samples.

3.6.3. Beck depression inventory (BDI)

It is a widely used questionnaire and easy to administer self-report questionnaire. BDI is a 21-item questionnaire, where each question has a four-point scale that ranges from zero to three (Beck, et al., 1961). The BDI takes approximately ten to fifteen minutes to complete. The total score varies between zero to sixty-three, where zero to thirteen is considered as minimal or no depression, fourteen to nineteen is considered as mild depression, twenty to twenty-eight is considered as moderate depression and twenty-nine to sixty-three is considered as severe depression.

3.7. Phase 1

Translation and re-translation of the questionnaires was carried-out by the professionals from the field of psychology and linguistics.

3.8. Phase 2

3.8.1. Administration of Psychological tests

The following psychological tests were used for the purpose of the current study.

Table 3.1. List of psychological tests

Name of the test	Purpose
BDI	To assess the severity of the Depression
ASI	To evaluate the Fear of Negative Evaluation
NEO-FFI	To assess the Personality traits

3.8.2. Administration procedure

All the questionnaires used in this study are self-report in nature. Followed by the verbal instructions to the clients the questionnaires were given. All the necessary arrangements were taken care while administering the psychological tests (comfort, confidentiality, distraction free environment, etc.).

3.9. Statistical analysis

Analyze of the data was carried out using Statistical Package for Social Science (Version 21).

Table 3.2. Statistical tests

Sl.no	Statistic tests used	Reasons
1	Descriptive statistics	To find the demographic means and SD of ASI and BDI scores
2	Pearson's correlation	To find the relation between ASI, BDI and NEOFFI
3	Chi- square test	To find the statistical significance between ASI, BDI and NEOFFI

Chapter 4

Results

The results of the following study are given below in the tables

Table 4.1.

Socio-demographic Characteristics of the study population (N=15)

	Mean (SD)	Frequency (%)
Demographics		
Age	21.98 (7.99)	-
Domicile		
Rural	-	4 (26.67)
Urban	-	11 (73.33)
Occupation		
Student	-	8 (53.3%)
Employed	-	1 (6.7%)
Unemployed	-	6 (40%)
Family history		
Present	-	0
Absent	-	15 (100%)
Socio economic data		
Slab 1	-	12 (80%)
Slab 2	-	3 (20%)
Degree of HL		
Normal	-	3 (20%)

Minimal	-	4 (26.66%)
Mild	-	4 (26.66%)
Moderate	-	4 (26.66%)
SIS scores		
<u>>60%</u>	-	0
<u><60%</u>	-	15 (100%)
ASI scores		
High scorers	33.72 (5.92)	10 (66.7%)
Low scorers	15.20 (8.58)	5 (33.3%)
BDI scores		
Mild	16.57 (1.90)	7 (46.3%)
Moderate	23.50 (2.32)	8 (53.7%)

4.1. Socio-demographics

Of the 15 participants, (66.7%) females and (33.3%) males. The mean (SD) age of the participants was 21.98(14-39) years. Among participants 53.3% were students, 6.7% were employed and 40% unemployed. And the domicile data indicates that 4 of the patients were from rural place and 11 participants were from urban. All the participants were diagnosed with ANSD. None of them had any family history of ANSD or hearing loss also it was inferred from the table that (80%) of the participants were from low socioeconomic status (slab 1= >15000 rupees per month) and 20% of the participants were from slab 2 (>20000 rupees per month). All the participants considered for the study had Speech identification scores poorer than 60% the degree of hearing loss was normal to moderate hearing loss).

4.2. Anxiety in individuals with ANSD

Descriptive statistics was carried out to estimate the mean of ASI. The results report that mean of ASI was 24.9 out of fifteen participants 10 participants (66.7%) were vulnerable with the mean of 33.72 (5.92) to anxiety and 5 participants (33.3%) were below the mean score with the mean score of 15.20 (8.92).

4.3. Severity of depression among individuals with ANSD

From the table it is evident that the patients with ANSD experience the depression which is of clinical attention. However, the level of severity of the depression ranges from mild to moderate. Among 15 participants, 8 participants (53.3%) had moderate level depression with the mean score of 23.50 (2.32) and 7 participants (46.7%) had mild level of depression with the mean score of 16.57 (1.90).

4.4. Assessment of personality in individuals with ANSD

The obtained raw score was converted to T-scores for each participant in all the 5 domains of NEO-FFI. The gender-based norms were used in raw score conversion. Correlation between the ASI and BDI were carried out to find how the anxiety and depression can affect the expression personality traits among individuals with ANSD.

Table 4.2. Relationship Anxiety Sensitivity Index, Beck Depression Inventory scores and Personality traits

	ASITOTAL	BDITOTAL	Neuroticism	Extroversion	Openness	Agreeableness
ASITOTAL	-					
BDITOTAL	.539*	-				
Neuroticism	.321	-.075	-			
Extroversion	-.498	-.037	-.517*	-		
Openness	-.701**	-.682**	-.131	.374	-	
Agreeableness	-.313	.064	-.595*	.118	.119	-
Conscientiousness	-.222	-.214	-.242	.324	.233	.145

It is clear from the table that ASI and BDI are significantly positive correlated at the level of ($p > 0.05$) ($\rho = .539$) which clearly indicates that the individuals with ANSD having high BDI scores tend to be more sensitive to exhibit anxiety. And also the significant ($\rho = -.701$) and ($\rho = -.682$) ($p < 0.05$) negative correlation between ASI and BDI with Personality trait of openness which indicates individuals tend to use primitive differences and also a lack of insight into the distressing experiences and situations, the correlation between ASI, BDI and (NEO-FFI) Neuroticism and extroversion are significantly negatively correlated ($\rho = .517$) ($p < 0.05$) this indicates bidirectional relationship between mood and the personality traits, also this bidirectional relationship signifies that the people who falls under this category tends to possess pessimistic view in critical situations. On the other hand the relationship

between ($\rho=-.595$) ($p<0.05$) agreeableness and neuroticism signifies temperamental characteristics like anger outburst overlooking the effects of their anger on others and they are prone to verbally and physically abuse.

Table 4.3. Contingency table for ASI, BDI and NEO-FFI

	df	X^2	P
	70	102.67	0.01*
Overall NEO-FFI	70	65.7	0.621

The Chi square test revealed that ASI index score and NEOFFI are statistically significant with the value of ($X^2=102.67$) ($p<0.01$), whereas BDI and NEOFFI reveals that there is no statistical significance with the value of ($X^2=65.7$) ($p>0.05$)

Chapter 5

Discussion

The study shows that the majority of the individuals with ANSD who are considered for the study are prone to exhibit anxiety. Anxiety experienced by these individuals might be because of the lack of rehabilitative options available in the current scenario and most of the samples drawn in the study or from come from the rural area they might not afford cochlear implants which is the best rehabilitation option available to this date (Berlin et al 2010). Because of discrepancy and the stress they are putting to comprehend the normal speech these individuals with ANSD might end up having Anxiety issues. Due to lack of corrective procedure and long lasting discrepancies may lead to higher level of anxiety among individuals with ANSD, also possibly the personality changes along with the ongoing condition lead to restrictions in socialization flexibility and vulnerable to anxiety and depression. Similar to the current study (Stevenson et al., 2015; Theunissen et al., 2014) reported managing emotions found to be impaired among individuals with cochlear hearing loss. In the present study 7 individuals experience clinically mild depression and 8 of them falls under moderate level of depression. This could be because of late onset of ANSD that occurred during adolescence and this would have influenced them to go into depression and these results are in agreement with the study done by (Prabu, 2016). Also As their discrepancy remains same even after correction they may experience depression which agrees with the study findings reported by (Narne et al. 2014; Berlin et al., 2010) research on incidences of anxiety depression appears to vary depending on social class, personality structure and supportive systems. ANSD and presence anxiety, depression gaining attention as a significant risk factor in the development and exacerbation of mental health issues in the current cultural context.

Chapter 6

Summary and conclusion

The study also looked into the correlation between Anxiety and depression with different traits of personality. A total of 15 individuals participated in the study, with all of the participants were diagnosed with ANSD. For the evaluation of the three measures, three separate questionnaires were used, they were Anxiety Sensitivity Index for anxiety, Becks Depression Inventory for depression and NEO-FFI for personality was administered. The individuals with ANSD had depression, 7 participants had mild level of depression and the rest 8 had moderate level of depression. The study also shows that individuals with ANSD are sensitive to anxiety. The study also looked into the correlation between ASI, BDI and NEO-FFI and found that aspects like openness had a negative correlation with both the ASI and BDI scales. And within NEO-FFI agreeableness and extroversion had a negative correlation with neuroticism whereas a positive correlation was found between ASI and BDI. And the study also looked into the relation between those three tests and found out that ASI was statistically significant with NEO-FFI whereas BDI was not statistically significant with NEOFFI in individuals with ANSD. There is an evidence that individuals with ANSD are prone to get anxiety and has depression which is of clinical attention. And the personality traits are also getting affected because of the ANSD

6.1. Clinical implication of the study

The utility of the current study are listed below,

- Effective counselling can be offered with comprehensive assessment of personality, depression and anxiety
- The study of personality helps professionals in comprehensive understanding of the ongoing dynamics
- Also, helps to increase the compliance to the therapy

6.2. Limitation of the study

1. Lack of representation of sample
2. Priory involvement in treatment process might have influence the study results
3. The results need to be compared with age matched cochlear hearing loss group.

Reference

- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of general psychiatry*, 4(6), 561-571.
- Benedict, R. H., Morrow, S. A., Guttman, B. W., Cookfair, D., & Schretlen, D. J. (2010). Cognitive reserve moderates decline in information processing speed in multiple sclerosis patients. *Journal of the International Neuropsychological Society*, 16(5), 829-835.
- Berlin, C. I., Hood, L. J., Morlet, T., Den, Z., Goforth, L., Tedesco, S., & Keats, B. (2000). The search for auditory neuropathy patients and connexin 26 patients in schools for the deaf. In *ARO abstracts* (Vol. 23, No. 23, p. 23).
- Berlin, C. I., Hood, L., Morlet, T., Rose, K., & Brashears, S. (2003). Auditory neuropathy/dys-synchrony: Diagnosis and management. *Mental retardation and developmental disabilities research reviews*, 9(4), 225-231.
- Berlin, C. I., Hood, L. J., Morlet, T., Wilensky, D., Li, L., Mattingly, K. R., ... & Shallop, J. K. (2010). Multi-site diagnosis and management of 260 patients with auditory neuropathy/dys-synchrony (auditory neuropathy spectrum disorder*). *International journal of audiology*, 49(1), 30-43.
- Cattell, H. E. (1996). The original big five: A historical perspective. *European Review of Applied Psychology/Revue Européenne de Psychologie Appliquée*.

- Cheng, X., Li, L., Brashears, S., Morlet, T., Ng, S. S., Berlin, C. & Keats, B. (2005). Connexin 26 variants and auditory neuropathy/dys-synchrony among children in schools for the deaf. *American Journal of Medical Genetics Part A*, 139(1), 13-18.
- Christensen, A. J., & Smith, T. W. (1995). Personality and patient adherence: correlates of the five-factor model in renal dialysis. *Journal of behavioral medicine*, 18(3), 305-313.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and PERSONALITY AND UNSAFE SEX 131 NEO Five-Factor Inventory (NEO-FFI): Professional manual. Odessa, FL: Psychological Assessment Resources.
- Durai, M., & Searchfield, G. (2016). Anxiety and depression, personality traits relevant to tinnitus: a scoping review. *International journal of audiology*, 55(11), 605-615.
- Dawes, P., Emsley, R., Cruickshanks, K. J., Moore, D. R., Fortnum, H., Edmondson-Jones, M., & Munro, K. J. (2015). Hearing loss and cognition: the role of hearing AIDS, social isolation and depression. *PloS one*, 10(3), e0119616.
- Huffman, R.F., & Henson, O.W.J. (1990). The descending auditory pathways and acoustic motor systems: Connection with inferior colliculus. *Brain Research Review*, 15, 295-323
- Foerst, A., Beutner, D., Lang-Roth, R., Huttenbrink, K. B., von Wedel, H., & Walger, M. (2006). Prevalence of auditory neuropathy/synaptopathy in a population of children with profound hearing loss. *International journal of pediatric otorhinolaryngology*, 70(8), 1415-1422.

- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology, 87*(4), 765.
- Kumar, U. A., & Jayaram, M. M. (2006). Prevalence and audiological characteristics in individuals with auditory neuropathy/auditory dys-synchrony: Prevalencia y características audiológicas de la neuropatía/disincronía auditiva. *International journal of audiology, 45*(6), 360-366.
- Kumar, U. A., 2017 Perception of some Temporal Parameters of Speech in Individuals with Auditory Dys- synchrony (Unpublished doctoral Thesis submitted to University of Mysore)
- Lee, J. S., McPherson, B., Yuen, K. C., & Wong, L. L. (2001). Screening for auditory neuropathy in a school for hearing impaired children. *International journal of pediatric otorhinolaryngology, 61*(1), 39-46.
- Mason, J. C., De Michele, A., Stevens, C., Ruth, R. A., & Hashisaki, G. T. (2003). Cochlear implantation in patients with auditory neuropathy of varied etiologies. *The Laryngoscope, 113*(1), 45-49.
- Miyamoto, R. T., Kirk, K. H., Renshaw, J., & Hussain, D. (1999). Cochlear implantation in auditory neuropathy. *The Laryngoscope, 109*(2), 181-185.
- Morlet, T., Rabinowitz, M. R., Looney, L. R., Riegner, T., Greenwood, L. A., Sherman, E. A., & Jinks, R. N. (2014). A homozygous SLITRK6

nonsense mutation is associated with progressive auditory neuropathy in humans. *The Laryngoscope*, 124(3), E95-E103.

Narne, V. K., Barman, A., Deepthi, M., & Shachi. (2014). Effect of companding on speech recognition in quiet and noise for listeners with ANSD. *International journal of audiology*, 53(2), 94-100.

Narne, V. K., Prabhu, P., Chandan, H. S., & Deepthi, M. (2014). Audiological profiling of 198 individuals with auditory neuropathy spectrum disorder. *Hearing, Balance and Communication*, 12(3), 112-120.

Noftle, E. E., & Shaver, P. R. (2006). Attachment dimensions and the big five personality traits: Associations and comparative ability to predict relationship quality. *Journal of research in personality*, 40(2), 179-208.

Phillips, K. A., & McElroy, S. L. (2000). Personality disorders and traits in patients with body dysmorphic disorder. *Comprehensive psychiatry*, 41(4), 229-236.

Prabhu, P. (2016). Evaluation of Depression, Anxiety, and Stress in Adolescents and Young Adults with Auditory Neuropathy Spectrum Disorder. *Scientifica*, 2016.

Ramirez, J., & Mann, V. (2005). Using auditory-visual speech to probe the basis of noise-impaired consonant-vowel perception in dyslexia and auditory neuropathy. *The Journal of the Acoustical Society of America*, 118(2), 1122-1133.

- Rance, G., & Barker, E. J. (2008). Speech perception in children with auditory neuropathy/dyssynchrony managed with either hearing aids or cochlear implants. *Otology & Neurotology*, *29*(2), 179-182.
- Rea, P. A., & Gibson, W. P. (2003). Evidence for surviving outer hair cell function in congenitally deaf ears. *The Laryngoscope*, *113*(11), 2030-2034.
- Reiss, S., Peterson, R. A., Gursky, D. M., & McNally, R. J. (1986). Anxiety sensitivity, anxiety frequency and the prediction of fearfulness. *Behaviour research and therapy*, *24*(1), 1-8.
- Roush, P., Frymark, T., Venediktov, R., & Wang, B. (2011). Audiologic management of auditory neuropathy spectrum disorder in children: a systematic review of the literature. *American journal of audiology*, *20*(2), 159-170.
- Samuel, D. B., & Widiger, T. A. (2006). Clinicians' judgments of clinical utility: A comparison of the DSM-IV and five-factor models. *Journal of Abnormal Psychology*, *115*(2), 298.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of management journal*, *44*(2), 219-237.
- Shivashankar, N., Satishchandra, P., Shashikala, H. R., & Gore, M. (2003). Primary auditory neuropathy—an enigma. *Acta neurologica scandinavica*, *108*(2), 130-135.

- Sininger, Y., & Oba, S. (2001). Patients with auditory neuropathy: who are they and what can they hear. *Auditory neuropathy: A new perspective on hearing disorders*, 15-35..
- Sininger, Y. S. (2002). Identification of auditory neuropathy in infants and children. In *Seminars in Hearing* (Vol. 23, No. 03, pp. 193-200). Copyright© 2002 by Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001, USA. Tel.:+ 1 (212) 584-4662.
- Starr, A., Picton, T. W., Sininger, Y., Hood, L. J., & Berlin, C. I. (1996). Auditory neuropathy. *Brain*, 119(3), 741-753.
- Starr, A., Sininger, Y. S., & Pratt, H. (2000). The varieties of auditory neuropathy. *Journal of basic and clinical physiology and pharmacology*, 11(3), 215-230.
- Starr, A., Michalewski, H.J., Zeng, F.G., Brooks, S.F., Linthicum, F. Kim, C.S., Winnier, D., & Keats, B. (2003). Pathology and physiology of auditory neuropathy with a novel mutation in the MPZ gene. *Brain*, 126, 1604-1619.
- Stevenson, J., Kreppner, J., Pimperton, H., Worsfold, S., & Kennedy, C. (2015). Emotional and behavioural difficulties in children and adolescents with hearing impairment: A systematic review and meta-analysis. *European child & adolescent psychiatry*, 24(5), 477-496.
- Sininger, Y., & Oba, S. (2001). Patients with auditory neuropathy: who are they and what can they hear. *Auditory neuropathy: A new perspective on hearing disorders*, 15-35.

- Theodoroff, S. M., Lewis, M. S., Folmer, R. L., Henry, J. A., & Carlson, K. F. (2015). Hearing impairment and tinnitus: prevalence, risk factors, and outcomes in US service members and veterans deployed to the Iraq and Afghanistan wars. *Epidemiologic reviews*, 37(1), 71-85.
- Theunissen, S. C., Rieffe, C., Netten, A. P., Briaire, J. J., Soede, W., Kouwenberg, M., & Frijns, J. H. (2014). Self-esteem in hearing-impaired children: the influence of communication, education, and audiological characteristics. *PLoS One*, 9(4), e94521.
- Zeng, F.G., Kong, Y.Y., Michalewski, H.J., & Starr, A. (2005). Perceptual consequences of disrupted auditory nerve activity. *Journal of Neurophysiology*, 93, 3050-3063
- Zeng, F.G., Oba, S., Garde, S., Sininger, Y., & Starr, A. (1999). Temporal and speech processing deficits in auditory neuropathy. *NeuroReport*, 10, 34293435

Appendix

Anxiety Sensitivity Index Kannada

ತುಂಬಾಕಡಿಮೆ ಕಡಿಮೆ ಕೆಲವಮ್ಮ ಹೆಚ್ಚು ತುಂಬಾ

- | | | | | | |
|---|---|---|---|---|---|
| 1. ಅಧೀರತೆ ಎಂದು ಕಾಣಿಸದೆ ಇರುವುದು ಮುಖ್ಯ. | 0 | 1 | 2 | 3 | 4 |
| 2. ಒಂದು ಕೆಲಸದ ಮೇಲೆ ಏಕಾಗ್ರನಾಗದಿದ್ದಲ್ಲಿ ನಾನು ಹುಚ್ಚನಾಗಿದೇನೋ ಎಂದು ಚಿಂತಿಸುತ್ತೇನೆ. | 0 | 1 | 2 | 3 | 4 |
| 3. ನನಗೆ ನಡುಕ ಬಂದಾಗ ಹೆದರಿಕೊಳ್ಳುತ್ತೇನೆ. | 0 | 1 | 2 | 3 | 4 |
| 4. ನಾನು ಮೂರ್ಚಿತನಾಗುತ್ತೇನೆ ಎಂದೆನಿಸಿದಾಗ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ. | 0 | 1 | 2 | 3 | 4 |
| 5. ನನ್ನ ಭಾವನೆಗಳನ್ನು ಹತೋಟಿಯಲಿತುಕೊಳ್ಳುವುದು ನನಗೆ ಮುಖ್ಯ | 0 | 1 | 2 | 3 | 4 |
| 6. ನನ್ನ ಹೃದಯದ ಬಡಿತ ತೀವ್ರವಾದಾಗ ನನಗೆ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ. | 0 | 1 | 2 | 3 | 4 |
| 7. ನನ್ನ ಹೊಟ್ಟೆ ಗುಳು ಗುಳು ಶಬ್ದ ಮಾಡಿದಾಗ ನನಗೆ ಮುಜುಗರವಾಗುತ್ತದೆ | 0 | 1 | 2 | 3 | 4 |
| 8. ನನಗೆ ವಾಂತಿ ಬರುವ ಹಾಗೆ ಆದಾಗ ನನಗೆ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ. | 0 | 1 | 2 | 3 | 4 |
| 9. ನನ್ನ ಹೃದಯದ ಬಡಿತ ತೀವ್ರವಾಗಿದೆ ಎಂದು ಗಮನಿಸಿದಾಗ ನನಗೆ ಹೃದಯಾಘಾತ ಆಗಬಹುದೇನೋ ಎಂದು ಚಿಂತೆಯಾಗುತ್ತದೆ | 0 | 1 | 2 | 3 | 4 |
| 10. ನನಗೆ ಉಸಿರಾಡಲು ಕಷ್ಟವಾದಾಗ ನನಗೆ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ | 0 | 1 | 2 | 3 | 4 |
| 11. ನನ್ನ ಹೊಟ್ಟೆ ಕೆಟ್ಟಾಗ, ನನಗೆ ತೀವ್ರವಾದ ಖಾಯಿಲೆಯಾಗಿದೆಯೇನೋ ಎಂದು ಚಿಂತಿಸುತ್ತೇನೆ | 0 | 1 | 2 | 3 | 4 |
| 12. ಒಂದು ಕೆಲಸದಲ್ಲಿ ಏಕಾಗ್ರತೆಗೊಳಿಸಲಾಗದಿದ್ದಾಗ ನನಗೆ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ | 0 | 1 | 2 | 3 | 4 |
| 13. ನಾನಾಗೆ ನಡುಕ ಬಂದಾಗ ಇತರರು ಗಮನಿಸುತ್ತಾರೆ. | 0 | 1 | 2 | 3 | 4 |

14. ಅಸಾಧಾರಣ ಶರೀರದ ಭಾವೋದ್ರೋದಕದಿಂದ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ.

0 1 2 3 4

15. ನಾನು ಅಧೀರನಾದಾಗ ನಾನು ಹುಚ್ಚನಾಗುವನೇನೋ ಎಂದು ಚಿಂತಿಸುತ್ತೇನೆ

0 1 2 3 4

16. ನಾನು ಅಧೀರನಾದಾಗ ನನಗೆ ಹೆದರಿಕೆಯಾಗುತ್ತದೆ

0 1 2 3 4

Anxiety Sensitivity Index

Please rate each item by selecting one of the five answers for each question. Please answer each statement by circling the number that best

	very little	a little	some	much	very much
1. It is important not to appear nervous.	0	1	2	3	4
2. When I cannot keep my mind on a task, I worry that I might be going crazy.	0	1	2	3	4
3. It scares me when I feel shaky.	0	1	2	3	4
4. It scares me when I feel faint.	0	1	2	3	4
5. It is important to me to stay in control of my emotions.	0	1	2	3	4
6. It scares me when I my heart beat rapidly.	0	1	2	3	4
7. It embarrasses me when my stomach growls.	0	1	2	3	4
8. It scares me when I am nauseous (sick stomach).	0	1	2	3	4
9. When I notice my heart beating rapidly, I worry that I	0	1	2	3	4

might be having a heart attack.

10. It scares me when I become short of breath.	0	1	2	3	4
---	---	---	---	---	---

11. When my stomach is upset, I worry that I might be seriously ill.	0	1	2	3	4
---	---	---	---	---	---

12. It scares me when I am unable to keep my mind on a task.	0	1	2	3	4
---	---	---	---	---	---

13. Other people notice when I feel shaky.	0	1	2	3	4
--	---	---	---	---	---

14. Unusual body sensations scare me.	0	1	2	3	4
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15. When I am nervous, I worry that I might be mentally ill.	0	1	2	3	4
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16. It scares me when I am nervous.	0	1	2	3	4
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BDI kannada

ದುಃಖ

೦ ನನಗೆ ದುಃಖವಾಗುತ್ತಿಲ್ಲ

೧ ನನಗೆ ದುಃಖವಾಗುತ್ತಿದೆ

೨ ನನಗೆ ಸದಾ ದುಃಖವಾಗುತ್ತದೆ ಮತ್ತು ನನಗೆ ಅದ್ವಿಂಧ ಹೊರಗೆ ಬರಲಾಗುತ್ತಿಲ್ಲ

೩ ನನಗೆ ಎಷ್ಟು ದುಃಖ ಮತ್ತು ಅಸಂತೋಷವಾಗಿದೆ ಎಂದರೆ ನನಗೆ ತಡೆಯಲಾಗುತ್ತಿಲ್ಲ

ನಿರಾಶೆ

೦ ನಾನು ಬವಿಶ್ಯದಬಗ್ಗೆ ನಿರ್ದಿಷ್ಟವಾಗಿ ನಿರುತ್ಸಾಹನಾಗಿಲ್ಲ

೧ ನಾನು ಬವಿಶ್ಯದಬಗ್ಗೆ ನಿರುತ್ಸಾಹನಾಗಿದೆನೆ

೨ ನನಗೆ ಮುಂದಕ್ಕೆ ಎದುರು ನೋಡಲು ಏನು ಇಲ್ಲ ಎಂದೆನಿಸುತ್ತದೆ

೩ ನನಗೆ ಭವಿಷ್ಯವು ನಿರಾಶಾದಾಯಕವಾಗಿದೆ ಮತ್ತು ಪರಿಸ್ಥಿತಿಗಳು ಸುಧಾರಿಸುವುದಿಲ್ಲ ಎಂದೆನಿಸುತ್ತದೆ

ಹಿಂದಿನ ವೈಫಲ್ಯ

೦ ನಾನು ನಿಶ್ಚಲನಾಗಿದೆನೆ ಎಂದೆನಿಸುವುದಿಲ್ಲ

೧ ಸಾದಾರಣ ವ್ಯಕ್ತಿಗಿಂತ ಹೆಚ್ಚು ನಿಶ್ಚಲನಾಗಿದೆನೆ ಎಂದೆನಿಸುತ್ತದೆ

೨ ನನ್ನ ಕಳೆದ ಜೀವನವನ್ನು ನೋಡಿದರೆ ನಾನು ಅನೇಕ ವೈಫಲ್ಯಗಳನ್ನು ಮಾತ್ರ ಕಂಡಿದ್ದೇನೆ

೩ ನಾನು ಸಂಪೂರ್ಣವಾಗಿ ವ್ಯಫಲವಾದ ಮನುಷ್ಯ ಎಂದೆನಿಸುತ್ತದೆ

ಸಂತೋಷದ ನಷ್ಟ

೦ ಮುಂಚೆ ಹೇಗೆ ವಸ್ತುಗಳಿಂದ ತೃಪ್ತಿಪಡುತ್ತಿದ್ದೆನೋ ಈಗಲೂ ಹಾಗೆ ಪಡುತ್ತೇನೆ

೧ ಮುಂಚೆ ಹೇಗೆ ವಸ್ತುಗಳಿಂದ ತೃಪ್ತಿಪಡುತ್ತಿದ್ದೆನೋ ಈಗಲೂ ಹಾಗೆ ಪಡುತ್ತಿಲ್ಲ

೨ ಇನ್ನುಮುಂದೆ ವಸ್ತುಗಳಿಂದ ನಿಜವಾದ ತೃಪ್ತಿ ಸಿಗುವುದಿಲ್ಲ

೩ ನನಗೆ ಎಲ್ಲದರಲ್ಲೂ ಅತ್ಯಪ್ತಿ ಅಥವಾ ಬೇಸರ ಬಂದಿದೆ

ತಪ್ಪಿತಸ್ಥ ಭಾವನೆಗಳು

೦ ನನಗೆ ನಿಜವಾಗಿ ತಪ್ಪಿತಸ್ಥ ಭಾವನೆ ಇಲ್ಲ

೧ ಸುಮಾರು ಸಮಯ ನಾನು ತಪ್ಪಿತಸ್ಥ ಎಂಬ ಭಾವನೆ ಇದೆ

೨ ಹೆಚ್ಚಿನ ಸಮಯ ನಾನು ತಪ್ಪಿತಸ್ಥ ಎಂಬ ಭಾವನೆ ಇದೆ

೨ ಯಾವಾಗಲೂ ನಾನು ತಪ್ಪಿತಸ್ಥ ಎಂಬ ಭಾವನೆ ಇದೆ

ಶಿಕ್ಷೆಯ ಭಾವನೆಗಳು

೦ ನಾನು ಶಿಕ್ಷೆಗೆ ಒಳಗಾಗಿದ್ದೇನೆ ಎಂದು ನಾನು ಭಾವಿಸುತ್ತಿಲ್ಲ

೧ ನಾನು ಶಿಕ್ಷೆಗೆ ಒಳಗಾಗಬಾರದು ಎಂದು ಭಾವಿಸುತ್ತೇನೆ

೨ ನಾನು ಶಿಕ್ಷೆಗೆ ಒಳಪಡುತ್ತೇನೆ ಎಂದೆನಿಸುತ್ತದೆ

೩ ನಾನು ಶಿಕ್ಷೆಗೆ ಒಳಗಾಗಿದ್ದೇನೆ ಎಂದು ಭಾವಿಸುತ್ತೇನೆ

ಸ್ವಯಂ ಇಷ್ಟವಿಲ್ಲ

೦ ನನ್ನಲ್ಲಿ ನನಗೆ ನಿರಾಸೆ ಎಂಬ ಭಾವನೆ ಇಲ್ಲ

೧ ನನ್ನಲ್ಲಿ ನನಗೆ ನಿರಾಸೆಯಾಗಿದೆ

೨ ನನ್ನಲ್ಲಿ ನನಗೆ ಬೇಸರವಾಗಿದೆ

೩ ನನ್ನನ್ನು ನಾನು ದ್ವೇಷಿಸುತ್ತೇನೆ

ಸ್ವಯಂ ನಿರ್ಣಾಯಕತೆ

೦ ಇತರರಿಗಿಂತ ನಾನು ಕಳಪೆ ಎಂಬ ಭಾವನೆ ನನಗಿಲ್ಲ

೧ ನನ್ನ ತಪ್ಪುಗಳಿಗೆ ಅಥವಾ ಬಲಹೀನತೆಗೆ ನನ್ನನ್ನು ನಾನು ಪರಿಶೀಲಿಸಿಕೊಳ್ಳುತ್ತೇನೆ

೨ ನನ್ನ ತಪ್ಪಿಗೆ ನಾನು ಸದಾ ನನ್ನನೇ ದೊಷಿಸುತ್ತೇನೆ

೩ ಏನೇ ಕೆಟ್ಟದು ನಡೆದರೂ ನನ್ನನೇ ನಾನು ದೊಷಿಸುತ್ತೇನೆ

ಆತ್ಮಹತ್ಯೆ ಆಲೋಚನೆಗಳು ಅಥವಾ ಆಶಯ

೦ ಆತ್ಮಹತ್ಯೆ ಮಾಡಿಕೊಳ್ಳುವ ಯೋಚನೆಗಳು ನನಗಿಲ್ಲ

೧ ಆತ್ಮಹತ್ಯೆ ಮಾಡಿಕೊಳ್ಳುವ ಯೋಚನೆಗಳು ನನಗಿವೆ, ಆದರೆ ಆಗೇ ನಾನು ಮಾಡುವುದಿಲ್ಲ

೨ ನಾನು ಆತ್ಮಹತ್ಯೆ ಮಾಡಿಕೊಳ್ಳಲು ಇಚ್ಛಿಸುತ್ತೇನೆ

೩ ಅವಕಾಶ ಸಿಕ್ಕಿದರೆ ನಾನು ಆತ್ಮಹತ್ಯೆ ಮಾಡಿಕೊಳ್ಳುತ್ತಿದ್ದೆ

ಅಳುವುದು

೦ ಸಾಧಾರಣಕ್ಕಿಂತ ಹೆಚ್ಚಾಗಿ ನಾನು ಅಳುವುದಿಲ್ಲ

೧ ಮುಂಚೆಗಿಂತ ಹೆಚ್ಚಾಗಿ ನಾನು ಅಳುತ್ತೇನೆ

೨ ಈಗ ಸದಾ ಅಳುತ್ತೇನೆ

೩ ಮುಂಚೆ ಅಳುತ್ತಿದೆ ಆದರೆ ಈಗ ಅಳಬೇಕೆಂದರು ಅಳಲು ಆಗುತ್ತಿಲ್ಲ

ಕಿರಿಕಿರಿ

೦ ಮುಂಚೆ ವಸ್ತುಗಳಿಂದ ಕಿರಿಕಿರಿ ಆಗುವಹಾಗೆ ಈಗ ಆಗುತ್ತಿಲ್ಲ
೧ ಸಾಧಾರಣಕ್ಕಿಂತ ಸ್ವಲ್ಪ ಹೆಚ್ಚಾಗಿ ಕಿರಿಕಿರಿಯಾಗುತ್ತದೆ
೨ ಸುಮಾರು ಹೊತ್ತು ನನಗೆ ತುಂಬಾ ಬೇಸರ ಅಥವಾ ಕಿರಿಕಿರಿಯಾಗುತ್ತದೆ
೩ ಸದಾ ನನಗೆ ಕಿರಿಕಿರಿಯಾಗುತ್ತದೆ

ನಿರಾಸಕ್ತಿ

೦ ನಾನು ಇತರರಲ್ಲಿ ಆಸಕ್ತಿ ಕಳೆದುಕೊಂಡಿಲ್ಲ
೧ ಈಗ ಮುಂಚೆಗಿಂತ ಇತರರಲ್ಲಿ ಕಡಿಮೆ ಆಸಕ್ತಿ ಇದೆ
೨ ನಾನು ಇತರರಲ್ಲಿ ಹೆಚ್ಚಿನ ಆಸಕ್ತಿ ಕಳೆದುಕೊಂಡಿದ್ದೇನೆ
೩ ನಾನು ಇತರರಲ್ಲಿ ಪೂರ್ಣವಾಗಿ ಆಸಕ್ತಿ ಕಳೆದುಕೊಂಡಿದ್ದೇನೆ

ಅನುಚಿತ್ತತೆ

೦ ಮುಂಚೆ ಹೇಗೆ ಮಾಡುತ್ತಿದ್ದೇನೋ ಆಗಿಯೇ ಈಗಲೂ ನಿರ್ಧಾರಗಳನ್ನು ಮಾಡುತ್ತೇನೆ
೧ ಮುಂಚೆಗಿಂತ ಹೆಚ್ಚಾಗಿ ನಿರ್ಧಾರಗಳನ್ನು ಮಾಡುವುದನ್ನು ನಿಲ್ಲಿಸಿದ್ದೇನೆ
೨ ಮುಂಚೆಗಿಂತ ಹೆಚ್ಚಾಗಿ ನಿರ್ಧಾರಗಳನ್ನು ಮಾಡಲು ಹೆಚ್ಚು ಕಷ್ಟವಾಗುತ್ತದೆ
೩ ಇನ್ನುಮುಂದೆ ನಿರ್ಧಾರಗಳನ್ನು ಮಾಡಲು ಆಗುವುದೇ ಇಲ್ಲ

ನಿಷ್ಪ್ರಯೋಜಕತೆ

೦ ಮುಂಚೆಗಿಂತ ಕೆಟ್ಟದಾಗಿ ನಾನು ಕಾಣಿಸುತ್ತೇನೆ ಎಂದು ನಾನು ಬಾವಿಸುತ್ತಿಲ್ಲ
೧ ನಾನು ವಯಸಾಗಿರುವ ಅಥವಾ ಆಕರ್ಷಣೆ ಇಲ್ಲದಹಾಗೆ ಕಾಣಿಸುತ್ತೇನೆ ಎಂಬ ಚಿಂತೆ ಆಗಿದೆ
೨ ಆಕರ್ಷಣೆ ಇಲ್ಲದಿರುವ ಆಗೇ ಕಾಣಲು ಕಾರಣವಾಗಿರುವ ಖಾಯಂ ಬದಲಾವಣೆಗಳಾಗಿವೆ
ನಾನಲ್ಲಿ ಎಂದೆನಿಸುತ್ತಿದೆ
೩ ನಾನು ಕುರೂಪಿಯಾಗಿ ಕಾಣುತ್ತೇನೆ ಎಂದು ನನ್ನ ನಂಬಿಕೆ

ಶಕ್ತಿಯ ನಷ್ಟ

೦ ನಾನು ಮುಂಚಿನಂತೆಯೇ ಕೆಲಸ ಮಾಡಬಲ್ಲೆ
೧ ಯಾವುದಾದರೂ ಕೆಲಸ ಪ್ರಾರಂಭಿಸಲು ಹೆಚ್ಚಿನ ಶ್ರಮ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ
೨ ಏನಾದರೂ ಮಾಡಲು ನನ್ನನು ನಾನು ತುಂಬಾ ಬಲವಂತ ಪಡಿಸಿಕೊಳ್ಳಬೇಕು
೩ ನನಗೆ ಯಾವುದೇ ಕೆಲಸ ಮಾಡಲಾಗುತ್ತಿಲ್ಲ

ಮಲಗುವ ಮಾದರಿಯಲ್ಲಿ ಬದಲಾವಣೆ

೦ ನನ್ನ ಮಲಗುವ ಮಾದರಿಯಲ್ಲಿ ಬದಲಾವಣೆಯಾಗಿಲ್ಲ

೧a ನಾನು ಮುಂಚೆಗಿಂತ ಸ್ವಲ್ಪ ಹೆಚ್ಚು ಮಲಗುತ್ತೇನೆ

೧b ನಾನು ಮುಂಚೆಗಿಂತ ಸ್ವಲ್ಪ ಕಡಿಮೆ ಮಲಗುತ್ತೇನೆ

೨a ನಾನು ಮುಂಚೆಗಿಂತ ತುಂಬಾ ಹೆಚ್ಚು ಮಲಗುತ್ತೇನೆ

೨b ನಾನು ಮುಂಚೆಗಿಂತ ತುಂಬಾ ಕಡಿಮೆ ಮಲಗುತ್ತೇನೆ

೩a ನಾನು ದಿನದ ಬಹುಪಾಲು ಮಲಗಿರುತ್ತೇನೆ

೩b ಮಾಮೂಲಿಗಿಂತ ಒಂದೆರಡು ಗಂಟೆಗಳ ಮುಂಚೆ ಏಳುತ್ತೇನೆ ಮತ್ತು ಮತ್ತೆ ಮತ್ತೆ ನಿದ್ರೆ ಮಾಡಲು ಆಗುತ್ತಿಲ್ಲ

ಆಂದೋಲನ

೦ ಸಾಧಾರಣಕ್ಕಿಂತ ಹೆಚ್ಚಾಗಿ ನನಗೆ ಆಯಾಸವಾಗುವುದಿಲ್ಲ

೧ ಮುಂಚೆಗಿಂತ ಹೆಚ್ಚಾಗಿ ನನಗೆ ಆಯಾಸವಾಗುತ್ತದೆ

೨ ಏನೇ ಮಾಡಿದರು ನನಗೆ ಆಯಾಸವಾಗುತ್ತದೆ

೩ ಏನೇ ಮಾಡಿದರು ನನಗೆ ತುಂಬಾ ಆಯಾಸವಾಗುತ್ತದೆ

ಹಸಿವು ಬದಲಾವಣೆಗಳು

೦ ನನ್ನ ಹಸಿವು ಮಾಮೂಲಿಗಿಂತ ಕಳಪೆ ಆಗಿಲ್ಲ

೧ ನನ್ನ ಹಸಿವು ಮುಂಚಿನಷ್ಟು ಚೆನ್ನಾಗಿಲ್ಲ

೨ ನನ್ನ ಹಸಿವು ಈಗ ತುಂಬಾ ಕಡಿಮೆ ಆಗಿದೆ

೩ ನನಗೆ ಹಸಿವೆ ಆಗುವುದಿಲ್ಲ

ಏಕಾಗ್ರತೆಯಲ್ಲಿ ತೊಂದರೆ

೦ ನಾನು ಮುಂಚೆಯಂತೆಯೇ ಗಮನ ಕೊಡಬಲ್ಲೆ

೧ ನನಗೆ ಮುಂಚೆಯಂತೆ ಗಮನ ಕೊಡಲಾಗುತ್ತಿಲ್ಲ

೨ ನನ್ನ ಗಮನವನ್ನು ತುಂಬಾ ಸಮಯ ಒಂದೇ ಕೆಲಸದಮೇಲೆ ಇಡಲು ತುಂಬಾ ಕಷ್ಟ

೩ ನಾನು ಯಾವುದರಮೇಲೆಯೂ ಗಮನ ಕೊಡಲಾಗುತ್ತಿಲ್ಲ

ದಣಿವು ಅಥವಾ ಆಯಾಸ

೦ ನಾನು ನನ್ನ ಆರೋಗ್ಯದ ಬಗ್ಗೆ ಮಾಮೂಲಿಗಿಂತ ಹೆಚ್ಚು ಚಿಂತಿಸುತ್ತಿಲ್ಲ

೧ ನಾನು ಶರೀರ ತೊಂದರೆಗಳಾದ ನೋವುಗಳು, ಹೊಟ್ಟೆ ತೊಂದರೆ ಅಥವಾ ಮಲಬದ್ಧತೆ ಬಗ್ಗೆ ಚಿಂತಿಸುತ್ತೇನೆ

೨ ನಾನು ಶರೀರ ತೊಂದರೆಗಳ ಬಗ್ಗೆ ತುಂಬಾ ಚಿಂತಿಸುತ್ತೇನೆ ಮತ್ತು ಬೇರೆ ವಿಷಯಗಳ ಬಗ್ಗೆ ಯೋಚಿಸಲು ಕಷ್ಟವಾಗುತ್ತದೆ

೩ ನಾನು ಶರೀರ ತೊಂದರೆಗಳ ಬಗ್ಗೆ ಎಷ್ಟು ಚಿಂತಿಸುತ್ತಿದ್ದೆನೋ ಎಂದರೆ ಬೇರೆ ವಿಷಯಗಳ ಬಗ್ಗೆ
ಯೋಚಿಸಲು ಸಾಧ್ಯವಾಗುತ್ತಿಲ್ಲ

ಲೈಂಗಿಕ ಆಸಕ್ತಿಯ ನಷ್ಟ

೦ ನನ್ನ ಲೈಂಗಿಕ ಆಸಕ್ತಿಯಲ್ಲಿ ಇತ್ತೀಚಿನ ಬದಲಾವಣೆಯನ್ನು ನಾನು ಗಮನಿಸಿಲ್ಲ

೧ ಮುಂಚೆಗಿಂತ ನನ್ನ ಲೈಂಗಿಕ ಆಸಕ್ತಿ ಕಡಿಮೆಯಾಗಿದೆ

೨ ನನಗೆ ಲೈಂಗಿಕದಲ್ಲಿ ಆಸಕ್ತಿ ಇಲ್ಲವೇ ಇಲ್ಲ

೩ ನಾನು ಲೈಂಗಿಕದಲ್ಲಿ ಸಂಪೂರ್ಣವಾಗಿ ಆಸಕ್ತಿ ಕಳೆದುಕೊಂಡಿದ್ದೇನೆ

Beck's Depression Inventory

This depression inventory can be self-scored.

1. sadness		
	0	I do not feel sad
	1	I feel sad
	2	I am sad all the time and I can't snap out of it
	3	I am so sad and unhappy that I can't stand it
2. Pessimism		
	0	I am not discouraged about the future
	1	I feel more discouraged about the future than I used to be
	2	I do not expect things to work out for me
	3	I feel the future is hopeless and will only get worse
3. Past Failure		
	0	I do not feel like a failure
	1	I feel I have failed more than the average person
	2	As I look back on my life, all I can see is a lot of failures
	3	I feel I am a complete failure as a person
4. Loss of Pleasure		
	0	I get much pleasure as I ever did from the things I enjoy
	1	I don't enjoy things the way I used to
	2	I get very little pleasure from the things I used to enjoy
	3	I cannot get any pleasure from the things I used to enjoy
5. Guilty Feelings		

	0	I don't feel particularly guilty
	1	I feel guilty a good part of the time
	2	I feel quite guilty most of the time
	3	I feel guilty all of the time
6. Punishment Feelings		
	0	I don't feel I am being punished
	1	I feel I may be punished
	2	I expect to be punished
	3	I feel I am being punished
7. Self-Dislike		
	0	I feel the same about myself
	1	I have lost confidence in myself
	2	I am disappointed in myself
	3	I dislike myself
8. Self-Criticalness		
	0	I don't criticize or blame myself more than usual
	1	I am critical of myself than I used to be
	2	I criticize myself all of my faults
	3	I blame myself for everything bad that happens
9. Suicidal Thoughts or Wishes		
	0	I don't have any thoughts of killing myself
	1	I have thoughts of killing myself, but I would not carry them out
	2	I would like to kill myself
	3	I would kill myself if I had the chance
10. Crying		

	0	I don't cry any more than usual
	1	I cry more now than I used to
	2	I cry over every little things
	3	I feel like crying, but I can't.
11. Agitation		
	0	I am no more restless or wound up than usual
	1	I feel more restless or wound up than usual
	2	I am so restless or agitated that it's hard to stay still
	3	I am so restless or agitated that have to keep moving or doing something
12. Loss of Interest		
	0	I have not lost interest in other people or activity
	1	I am less interested in other people or things than I before
	2	I have lost most of my interest in other people or other things
	3	It's hard to get interested in anything
13. Indecisiveness		
	0	I make decisions about as well as ever
	1	I find it more difficult to make decisions than usual.
	2	I have much greater difficulty in making decision than I used to
	3	I have trouble making any decisions
14. Worthlessness		
	0	I don't feel I'm worthless
	1	I don't consider myself as worthwhile and useful as I used to
	2	I feel more worthless as compared to others people.
	3	I feel utterly worthless

15. Loss of Energy		
	0	I have as much less energy as ever
	1	I have less energy than I used to have
	2	I don't have enough energy to do very much
	3	I don't have enough energy to do anything
16. Changes in Sleeping Pattern		
	0	I can sleep as well as usual
	1	I sleep somewhat more or less than usual
	2	I sleep a lot more or less than usual
	3	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
17. Irritability		
	0	I am no more irritable than usual
	1	I am more irritable than usual
	2	I am much more irritable than usual
	3	I am irritable all the time
18. Changes in Appetite		
	0	I have not experienced any changes in my appetite
	1	My appetite is somewhat less or greater than usual.
	2	My appetite is much less or greater than usual.
	3	I have no appetite at all or I crave food all the time
19. Concentration Difficulty		
	0	I can concentrate as well as ever
	1	I can't concentrate as well as usual
	2	It's hard to keep my mind on anything for very long
	3	I find I can't concentrate on anything

20. Tiredness		
	0	I am no more tired or fatigued than usual
	1	I get more tired and fatigued more easily than usual
	2	I am too tired or fatigued to do a lot of the things I used to do
	3	I am too tired or fatigued to do most of the things I used to do
21. Loss of Interest in Sex		
	0	I have not noticed any recent change in my interest in sex
	1	I am less interested in sex than I used to be
	2	I have almost no interest in sex
	3	I have lost interest in sex completely

INTERPRETING THE BECK DEPRESSION INVENTORY

Now that you have completed the questionnaire, add up the score for each of the twenty-one questions by counting the number to the right of each question you marked. The highest possible total for the whole test would be sixty-three. This would mean you circled number three on all twenty-one questions. Since the lowest possible score for each question is zero, the lowest possible score for the test would be zero. This would mean you circles zero on each question. You can evaluate your depression according to the Table below.

Total Score _____ Levels of Depression

NEO-FFI

1. I am not a worrier.
2. I like to have a lot of people around me.
3. I don't like to waste my time daydreaming.
4. I try to be courteous to everyone I meet.
5. I keep my belongings clean and neat.

6. I often feel inferior to others.
7. I laugh easily.
8. Once I find the right way to do something, I stick to it.
9. I often get into arguments with my family and co-workers.
10. I'm pretty good about pacing myself so as to get things done on time.

11. When I'm under a great deal of stress, sometimes I feel like I'm going to pieces
12. I don't consider myself especially "light-hearted"
13. I am intrigued by the patterns I find in art and nature.
14. Some people think I'm selfish and egotistical.
15. I am not a very methodical person.

16. I rarely feel lonely or blue.
17. I really enjoy talking to people
18. I believe letting students hear controversial speakers can only confuse and mislead them.
19. I would rather cooperate with others than compete with them.
20. I try to perform all the tasks assigned to me conscientiously.

21. I often feel tense and jittery.
22. I like to be where the action is
23. Poetry has little or no effect on me.
24. I tend to be cynical and skeptical of others intentions.
25. I have a clear set of goals and work toward them in an orderly fashion.

26. Sometimes I feel completely worthless.
27. I usually prefer to do things alone.
28. I often try new and foreign foods.
29. I believe that most people will take advantage of you if you let them.
30. I waste a lot of time before settling down to work.

31. I rarely feel fearful or anxious.
32. I often feel as if I'm bursting with energy.
33. I seldom notice the moods or feelings that different environments produce.
34. Most people I know like me.
35. I work hard to accomplish my goals.

36. I often get angry at the way people treat me.
37. I am a cheerful, high-spirited person.
38. I believe we should look to our religious authorities for decisions on moral issues.
39. Some people think of me as cold and calculating.
40. When I make a commitment, I can always be counted on to follow through.
41. Too often when things go wrong, I get discouraged and feel like giving up.
42. I am not a cheerful optimist.
43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
44. I'm hard-headed and tough-minded in my attitudes.
45. Sometimes I'm not as dependable or reliable as I should be.
46. I am seldom sad or depressed.
47. My life is fast-paced.
48. I have a little interest in speculating on the nature of the universe or the human condition.
49. I generally try to be thoughtful and considerate.
50. I am a productive person who always gets the job done.

51. I often feel helpless and want someone else to solve my problems.
52. I am a very active person.
53. I have a lot of intellectual curiosity.
54. If I don't like people, I let them know it.
55. I never seem to be able to get organized.

56. At times I have been so ashamed I just wanted to hide.
57. I would rather go my own way than be a leader of others.

- 58. I often enjoy playing with theories or abstract ideas.
- 59. If necessary, I am willing to manipulate people to get what I want.
- 60. I strive for excellence in everything I do

Enter your responses here—remember to enter responses across the rows.
 SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

1	SD	D	N	A	SA	2	SD	D	N	A	SA	3	SD	D	N	A	SA	4	SD	D	N	A	SA	5	SD	D	N	A	SA
6	SD	D	N	A	SA	7	SD	D	N	A	SA	8	SD	D	N	A	SA	9	SD	D	N	A	SA	10	SD	D	N	A	SA
11	SD	D	N	A	SA	12	SD	D	N	A	SA	13	SD	D	N	A	SA	14	SD	D	N	A	SA	15	SD	D	N	A	SA
16	SD	D	N	A	SA	17	SD	D	N	A	SA	18	SD	D	N	A	SA	19	SD	D	N	A	SA	20	SD	D	N	A	SA
21	SD	D	N	A	SA	22	SD	D	N	A	SA	23	SD	D	N	A	SA	24	SD	D	N	A	SA	25	SD	D	N	A	SA
26	SD	D	N	A	SA	27	SD	D	N	A	SA	28	SD	D	N	A	SA	29	SD	D	N	A	SA	30	SD	D	N	A	SA
31	SD	D	N	A	SA	32	SD	D	N	A	SA	33	SD	D	N	A	SA	34	SD	D	N	A	SA	35	SD	D	N	A	SA
36	SD	D	N	A	SA	37	SD	D	N	A	SA	38	SD	D	N	A	SA	39	SD	D	N	A	SA	40	SD	D	N	A	SA
41	SD	D	N	A	SA	42	SD	D	N	A	SA	43	SD	D	N	A	SA	44	SD	D	N	A	SA	45	SD	D	N	A	SA
46	SD	D	N	A	SA	47	SD	D	N	A	SA	48	SD	D	N	A	SA	49	SD	D	N	A	SA	50	SD	D	N	A	SA
51	SD	D	N	A	SA	52	SD	D	N	A	SA	53	SD	D	N	A	SA	54	SD	D	N	A	SA	55	SD	D	N	A	SA
56	SD	D	N	A	SA	57	SD	D	N	A	SA	58	SD	D	N	A	SA	59	SD	D	N	A	SA	60	SD	D	N	A	SA

Have you responded to all of the statements? _____ Yes _____ No
 Have you entered your responses in the correct boxes? _____ Yes _____ No
 Have you responded accurately and honestly? _____ Yes _____ No

1. ನಾನು ಚಿಂತೆ ಮಾಡುವವನಲ್ಲ.
2. ನನ್ನ ಸುತ್ತಮುತ್ತ ಹೆಚ್ಚು ಜನರು ಇರುವುದು ನನಗೆ ಇಷ್ಟ.
3. ಹಗಲು ಕನಸು ಕಾಣುತ್ತಾ ಸಮಯ ಕಳೆಯಲು ನಾನು ಇಷ್ಟಪಡುವುದಿಲ್ಲ.
4. ನಾನು ಭೇಟಿಯಾಗುವ ಎಲ್ಲರೊಂದಿಗೆ ವಿನಯಶೀಲನಾಗಿರಲು ಪ್ರಯತ್ನಿಸುತ್ತೇನೆ.
5. ನಾನು ನನಗೆ ಸೇರಿದ ವಸ್ತುಗಳನ್ನು ಸ್ವಚ್ಛವಾಗಿ, ಅಚ್ಚುಕಟ್ಟಾಗಿ ಇಟ್ಟುಕೊಳ್ಳುತ್ತೇನೆ.
6. ನಾನು ಬೇರೆಯವರಿಗಿಂತ ಕೀಳು ಎಂದು ನನಗೆ ಅನಿಸುತ್ತದೆ.
7. ನಾನು ನಕ್ಕುಬಿಡುತ್ತೇನೆ.
8. ಯಾವುದೇ ಕೆಲಸ ಮಾಡಲು ನನಗೆ ಸರಿ ಅನಿಸಿದ್ದಲ್ಲಿ ನಾನು ಅದಕ್ಕೆ ಅಂಟಿಕೊಳ್ಳುತ್ತೇನೆ.
9. ನಾನು ನನ್ನ ಕುಟುಂಬದವರೊಂದಿಗೆ ಹಾಗೂ ಸಹೋದ್ಯೋಗಿಗಳೊಂದಿಗೆ ವಾದ ಮಾಡುತ್ತೇನೆ.
10. ಸಮಯಕ್ಕೆ ಸರಿಯಾಗಿ ಕೆಲಸ ಮಾಡಿಸಲು ನಾನು ಉತ್ತಮನಾಗಿದ್ದೇನೆ.
11. ಕೆಲವೊಮ್ಮೆ ಅತಿಯಾದ ಒತ್ತಡ ಇರುವಾಗ ನಾನು ಚಿದ್ರ ಚಿದ್ರವಾಗುತ್ತಾ ಇರುವೆನು ಎಂದು ನನಗೆ ಅನಿಸುತ್ತದೆ.
12. ನಾನು ನನ್ನನ್ನು ಹಗುರ ಹೃದಯದವನು ಎಂದು ಪರಿಗಣಿಸುವುದಿಲ್ಲ.
13. ನಿಸರ್ಗ ಮತ್ತು ಕಲೆಯನ್ನು ನೋಡಿದಾಗ ನನಗೆ ಕಿರಿಕಿರಿ ಉಂಟಾಗುತ್ತದೆ.
14. ಕೆಲವು ಜನ ನಾನು ಸ್ವಾರ್ಥಿ ಮತ್ತು ಅಹಂಕಾರಿ ಎಂದು ಯೋಚಿಸುತ್ತಾರೆ.
15. ನಾನು ತುಂಬಾ ಶಿಸ್ತಿನ ವ್ಯಕ್ತಿಯಲ್ಲ.
16. ನಾನು ಅತಿ ವಿರಳವಾಗಿ ಒಂಟಿತನ ಅಥವಾ ಖಿನ್ನತೆ ಅನುಭವಿಸುತ್ತೇನೆ.
17. ನನಗೆ ಬೇರೆಯವರೊಂದಿಗೆ ಮಾತನಾಡುವುದೆಂದರೆ ಉತ್ಸಾಹ.
18. ನನ್ನ ನಂಬಿಕೆ ಪ್ರಕಾರ ನನಗೆ ಅನಿಸುವುದು ಏನೆಂದರೆ ವಿದ್ಯಾರ್ಥಿಗಳು ವಿವಾದಾತ್ಮಕ ಮಾತುಗಾರರ ಮಾತನ್ನು ಕೇಳುವುದರಿಂದ ಅವರು ಗೊಂದಲಕ್ಕೆ ಒಳಗಾಗುತ್ತಾರೆ ಮತ್ತು ಇದು ಅವರನ್ನು ತಪ್ಪುದಾರಿಗೆ ಎಳೆಯಬಹುದು.
19. ನಾನು ಬೇರೆಯವರೊಂದಿಗೆ ಸ್ವಾರ್ಥಿಸುವ ಬದಲು ಅವರೊಂದಿಗೆ ಸಹಕರಿಸುವಂತವನು.
20. ನನಗೆ ವಹಿಸಿದ ಕಾರ್ಯವನ್ನು ನಾನು ಗಮನಕೊಟ್ಟು ನಿರ್ವಹಿಸಲು ಪ್ರಯತ್ನಿಸುತ್ತೇನೆ.
21. ಸಾಮಾನ್ಯವಾಗಿ ನನಗೆ ಗಲಿಬಿಲಿ ಮತ್ತು ಗೊಂದಲ ಅನಿಸುತ್ತದೆ.
22. ನಾನು ಕೆಲಸ ಕಾರ್ಯಗಳು ಇರುವಲ್ಲಿ ಇರಲು ಆಶಿಸುತ್ತೇನೆ.
23. ನನ್ನ ಮೇಲೆ ಕವಿತೆಗಳು ಸ್ವಲ್ಪವಾಗಲಿ ಅಥವಾ ಯಾವುದೇ ಪ್ರಭಾವ ಉಂಟುಮಾಡುವುದಿಲ್ಲ.
24. ನಾನು ಇತರರ ಉದ್ದೇಶಗಳ ಬಗ್ಗೆ ಸಿನಿಕತನ ಮತ್ತು ಸಂಶಯ ಹೊಂದಿದ್ದೇನೆ.
25. ನಾನು ಸರಿಯಾದ ಗುರಿ ಹೊಂದಿದ್ದು ಅವುಗಳೆಡೆಗೆ ವ್ಯವಸ್ಥಿತವಾದ ರೀತಿಯಲ್ಲಿ ಮುಂದುವರೆಯಲು ಕಾರ್ಯ ಕೈಗೊಳ್ಳುತ್ತೇನೆ.
26. ನನಗೆ ಕೆಲವೊಮ್ಮೆ ನಾನು ಸಂಪೂರ್ಣವಾಗಿ ಬೆಲೆಯಿಲ್ಲದವನು ಎಂದು ಅನಿಸುತ್ತದೆ.
27. ನಾನು ಸಾಮಾನ್ಯವಾಗಿ ಒಬ್ಬಂಟಿಗನಾಗಿ ಕಾರ್ಯ ಕೈಗೊಳ್ಳಲು ಆದ್ಯತೆ ನೀಡುತ್ತೇನೆ.
28. ನಾನು ಹೊಸ ಮತ್ತು ವಿದೇಶಿ ಆಹಾರಗಳ ರುಚಿ ನೋಡಲು ಬಯಸುತ್ತೇನೆ.
29. ನನ್ನ ನಂಬಿಕೆ ಪ್ರಕಾರ ನೀವು ಸಲಿಗೆ ಕೊಟ್ಟರೆ ಅನೇಕರು ನಿಮ್ಮಿಂದ ಲಾಭ ಪಡೆಯುವವರೇ ಆಗಿರುತ್ತಾರೆ.
30. ನಾನು ಕೆಲಸ ಕೈಗೊಳ್ಳುವ ಮುನ್ನ ಸಾಕಷ್ಟು ಸಮಯ ಹಾಳು ಮಾಡುತ್ತೇನೆ.
31. ನನಗೆ ಯಾವಾಗಲೋ ಒಮ್ಮೆ ಭಯ ಅಥವಾ ಖಿನ್ನತೆ ಅನಿಸುತ್ತದೆ.
32. ನಾನು ಯಾವಾಗಲೂ ಅತಿಯಾದ ಉತ್ಸಾಹವನ್ನು ಅನುಭವಿಸುತ್ತಿದ್ದೇನೆ ಎಂದು ಅನಿಸುತ್ತದೆ.
33. ಬೇರೆ ಬೇರೆ ವಾತಾವರಣದಿಂದ ಬೇರೆ ಬೇರೆ ಮನಸ್ಥಿತಿ ಉಂಟಾಗುವುದು ಎಂದು ನನಗೆ ಅನಿಸುವುದಿಲ್ಲ.
34. ನನ್ನ ಪರಿಚಯವಿರುವ ಹೆಚ್ಚು ಜನ ನನ್ನನ್ನು ಇಷ್ಟ ಪಡುತ್ತಾರೆ ಎಂದು ನನಗೆ ಗೊತ್ತಿದೆ.
35. ನಾನು ನನ್ನ ಗುರಿ ಸೇರಲು ಕಷ್ಟಪಟ್ಟು ಕೆಲಸಮಾಡುತ್ತೇನೆ.

36. ಜನ ನನ್ನನೊಂದಿಗೆ ವರ್ತಿಸುವ ರೀತಿಯಿಂದ ಸಾಮಾನ್ಯವಾಗಿ ನನಗೆ ಕೋಪ ಬರುತ್ತದೆ.
37. ನಾನು ಹೆಚ್ಚು ಉತ್ಸಾಹ ಹೊಂದಿದ ವ್ಯಕ್ತಿಯಾಗಿದ್ದೇನೆ.
38. ನನ್ನ ನಂಬಿಕೆ ಪ್ರಕಾರ ಕೆಲವು ನೈತಿಕ ವಿಚಾರಗಳ ನಿರ್ಧಾರ ತೆಗೆದುಕೊಳ್ಳುವಾಗ ಧಾರ್ಮಿಕ ವಿಚಾರಗಳನ್ನು ಅವಲಂಬಿಸಬೇಕು.
39. ಕೆಲವು ಜನ ನನ್ನ ಬಗ್ಗೆ ನಾನು ಲೆಕ್ಕಾಚಾರದ ವ್ಯಕ್ತಿ ಎಂದು ಯೋಚಿಸುತ್ತಾರೆ.
40. ನಾನು ಯಾವುದೇ ಒಂದು ನಿರ್ಧಾರ ಕೈಗೊಂಡಾಗ ಅದಕ್ಕೆ ಬದ್ಧನಾಗಿರಲು ಯಾವಾಗಲೂ ಪ್ರಯತ್ನಿಸುತ್ತೇನೆ.
41. ಕೆಲಸಗಳು ಹೆಚ್ಚು ಕಡಿಮೆ ತಪ್ಪಾದಾಗ ನನಗೆ ಬೇಜಾರು ಅನಿಸುತ್ತದೆ ಮತ್ತು ಅದನ್ನು ಬಿಟ್ಟು ಬಿಡಬೇಕೆಂದು ಅನಿಸುತ್ತದೆ.
42. ನಾನೊಬ್ಬ ಉತ್ಸಾಹಿ ಆಶಾವಾದಿ ಅಲ್ಲ.
43. ನಾನು ಕೆಲವೊಮ್ಮೆ ಕವನ ಓದುವಾಗ ಅಥವಾ ಕಲೆಯ ಒಂದು ಕೃತಿ ನೋಡುವಾಗ ಒಂದು ರೀತಿಯ ಉತ್ಸಾಹದ ಒಂದು ತಂಪಾದ ಅಲೆ ಬಿಸಿದಂತೆ ಅನಿಸುತ್ತದೆ.
44. ನಾನು ಸ್ವಭಾವದಲ್ಲಿ ತಲೆತಿರುಕ ಮತ್ತು ತಿರಷ್ಣ.
45. ಕೆಲವೊಮ್ಮೆ ನಾನು ಇರಬೇಕಾದಷ್ಟು ಅವಲಂಬನೆ ಮತ್ತು ನಂಬಲು ಅನರ್ಹ ವ್ಯಕ್ತಿಯಾಗಿದ್ದೇನೆ.
46. ನನಗೆ ಕೆಲವೊಮ್ಮೆ ಖಿನ್ನತೆ ಮತ್ತು ದುಃಖವಿಲ್ಲದಿರುವಿಕೆ ಅನಿಸುತ್ತದೆ.
47. ನನ್ನ ಜೀವನ ತೀರ್ಪುಗತಿಯಲ್ಲಿದೆ.
48. ನಾನು ಪ್ರಪಂಚದ ಬಗ್ಗೆ ಹಾಗೂ ಮಾನವರ ಸ್ಥಿತಿಗಳ ಬಗ್ಗೆ ಒಂದು ಸ್ವಲ್ಪ ಕೂಡ ಆಸಕ್ತಿಯಿಲ್ಲದ ವ್ಯಕ್ತಿಯಾಗಿರುತ್ತೇನೆ.
49. ನಾನು ಸಾಮಾನ್ಯವಾಗಿ ವಿಚಾರವಂತಿಕೆಗಳ ಪರಿಗಣಿತ ವ್ಯಕ್ತಿಯಾಗಲು ಪ್ರಯತ್ನಿಸುತ್ತೇನೆ.
50. ನಾನು ಯಾವಾಗಲೂ ಕೆಲಸ ಮಾಡಿಸಿಕೊಳ್ಳುವ ಸ್ವಭಾವವುಳ್ಳ ವ್ಯಕ್ತಿಯಾಗಿದ್ದೇನೆ.
51. ಕೆಲವೊಮ್ಮೆ ನಾನು ಅಸಹಾಯಕತೆ ಅನುಭವಿಸಿ ನನ್ನ ಸಮಸ್ಯೆಗಳನ್ನು ಪರಿಹರಿಸಲು ಬೇರೊಬ್ಬರ ಸಹಾಯ ಬೇಕಾಗುತ್ತದೆ.
52. ನಾನು ಸದಾ ಚಟುವಟಿಕೆಯಿಂದ ಕೂಡಿರುವ ವ್ಯಕ್ತಿ.
53. ನಾನು ಮಾನಸಿಕವಾಗಿ ಜ್ಞಾನ ಹೆಚ್ಚಿಸಿಕೊಳ್ಳಲು ಬಯಸುವ ವ್ಯಕ್ತಿಯಾಗಿದ್ದೇನೆ.
54. ನನಗೆ ಯಾರಾದರೂ ಇಷ್ಟವಾಗದಿದ್ದಲ್ಲಿ ನಾನು ಅದನ್ನು ಅವರ ಅರಿವಿಗೆ ತರುತ್ತೇನೆ.
55. ನಾನು ವ್ಯವಸ್ಥಿತವಾಗಿ ಇರಬಲ್ಲೆ ಎಂದು ನನಗೆ ಅನಿಸುವುದಿಲ್ಲ.
56. ಕೆಲವೊಮ್ಮೆ ನನಗೆ ಅಸಹ್ಯ ಅನಿಸಿದಾಗ ನಾನು ಹೊರಗೆ ಬರಬಾರದು ಎಂದು ನನಗೆ ಅನಿಸುತ್ತದೆ.
57. ನಾನು ನನಗೆ ತಿಳಿದಂತೆ ನಡೆಯುವವನಾಗಿದ್ದು ನಾನು ಬೇರೆಯವರಿಗೆ ಮುಖಂಡನಾಗಿ ಇರಲು ಬಯಸುವುದಿಲ್ಲ.
58. ನಾನು ಸಿದ್ಧಾಂತಗಳಿಗೆ ಮತ್ತು ಕಾಣದಂತಹ ಭಾವನೆಗಳಿಗೆ ಉತ್ಸಾಹ ಹೊಂದಿದ ವ್ಯಕ್ತಿಯಾಗಿದ್ದೇನೆ.
59. ಅಗತ್ಯವಿದ್ದಲ್ಲಿ ನಾನು ಬೇರೆಯವರನ್ನು ನನ್ನತ್ತ ಆಕರ್ಷಿಸಿಕೊಳ್ಳುವ ವ್ಯಕ್ತಿಯಾಗಿದ್ದೇನೆ.
60. ನಾನು ಮಾಡುವ ಎಲ್ಲಾ ಕೆಲಸಗಳ ಶ್ರೇಷ್ಠತೆಗಾಗಿ ನಾನು ಶ್ರಮಿಸುತ್ತೇನೆ

ನಿಮ್ಮ ಪ್ರತಿಕ್ರಿಯೆಗಳನ್ನು ಇಲ್ಲಿ ನಮೂದಿಸಿ - ಸಾಲುಗಳಾದ್ಯಂತ ಪ್ರತಿಕ್ರಿಯೆಗಳನ್ನು ನಮೂದಿಸಲು ಮರೆಯದಿರಿ. ಎಸ್.ಡಿ = ತೀವ್ರವಾಗಿ ಅಸಮೃತ್ತಿ; ಡಿ = ಅಸಮೃತ್ತಿ; ಎನ್ = ತಟಸ್ಥ; ಎ = ಒಪ್ಪುತ್ತೇನೆ; ಎಸ್.ಎ = ದೃಢವಾಗಿ ಒಪ್ಪಿಕೊಳ್ಳು

ಎಲ್ಲಾ ಹೇಳಿಕೆಗಳಿಗೆ ನೀವು ಪ್ರತಿಕ್ರಿಯೆ ನೀಡಿದ್ದೀರಾ? ಹೌದು - ಇಲ್ಲ
 ಸರಿಯಾದ ಪೆಟ್ಟಿಗೆಯಲ್ಲಿ ನಿಮ್ಮ ಉತ್ತರಗಳನ್ನು ನೀವು ನಮೂದಿಸಿದ್ದೀರಾ? ಹೌದು - ಇಲ್ಲ
 ನೀವು ನಿಖರವಾಗಿ ಮತ್ತು ಪ್ರಾಮಾಣಿಕವಾಗಿ ಉತ್ತರ ಪ್ರತಿಕ್ರಿಯಿಸಿದ್ದೀರಾ? ಹೌದು - ಇಲ್ಲ

