



ISSN: 0975-833X

RESEARCH ARTICLE

CONFIRMATORY FACTOR ANALYSIS OF FACTORS INFLUENCING ATTITUDE OF UNDERGRADUATE STUDENTS TOWARDS DIFFERENTLY- ABLED INDIVIDUALS

*Malvika Iyer and Dr. S. Raja Samuel

Department of Social Work (Aided), Madras School of Social Work, Chennai

ARTICLE INFO

Article History:

Received 21st July, 2015
Received in revised form
07th August, 2015
Accepted 05th September, 2015
Published online 20th October, 2015

Key words:

Disability, Attitude, Undergraduate Students, Differentlyabled, Confirmatory Factor Analysis.

Copyright © 2015 Malvika Iyer and Raja Samuel. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Malvika Iyer and S. Raja Samuel, 2015. "Confirmatory factor analysis of factors influencing attitude of undergraduate students towards differently-abled individuals", *International Journal of Current Research*, 7, (10), 21421-21428.

ABSTRACT

This research paper aims to explain the findings of the goodness-of-fit of the factors influencing attitude of undergraduate students towards differently-abled individuals. A comprehensive attitude tool was developed with various factors influencing attitude such as inclusion, employment, relationships and marriage, society, positive bias, negative bias and behaviour/ conduct. The 4 points Likert scale questionnaire was distributed to 1000 undergraduate students in Chennai ensuring adequate representation across social science/ arts, science and engineering disciplines. Confirmatory Factor Analysis pertaining to factors influencing attitude of undergraduate students towards differently-abled individuals reveals that all the factors show good fit to the sample data.

INTRODUCTION

I. Disability

Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives.

Types of disabilities include various physical and mental impairments that can hamper or reduce a person's ability to carry out his/ her day to day activities. The major types of disabilities are as follows:

- a) Physical disabilities
- b) Intellectual or learning disabilities
- c) Psychiatric disabilities
- d) Blindness or low vision
- e) Hearing/ speech disabilities
- f) Neurological disabilities

*Corresponding author: Malvika Iyer,
Department of Social Work (Aided), Madras School of Social Work,
Chennai

II. Conceptual perspectives on attitude

The definition of attitudes has been evolving throughout history. However, the following elements have consistently appeared within the various definitions (Antonak & Livneh, 1988): "(a) attitudes are learned; (b) attitudes are complex, multicomponent structures; (c) attitudes are stable (even rigid); (d) attitudes have a social object of reference; (e) attitudes vary in their quality; and (f) attitudes are multifaceted behaviourally."

Attitudes refer to an individual's propensity to evaluate a particular entity with some degree of favourability or non-favourability. Evaluation can be overt or covert and may encompass aspects of beliefs and thoughts (cognitions), feelings and emotions (affects), and intentions and overt behaviour (Eagly & Chaiken, 2007). Thus, attitudes are viewed as consisting of affective, cognitive, and behavioural components (Olson & Zanna, 1993). The cognitive component refers to an individual's ideas, thoughts, perceptions, beliefs, opinions, or mental conceptualizations of the particular entity. The affective component reflects the emotional underpinnings of attitudes (Antonak & Livneh, 1988), that is, the positive or negative feelings that the individual has towards the entity. Finally, the behavioural component relates to an individual's intent or willingness to behave in a certain manner towards the entity, or the actual behavioural response (Cook, 1992). The study of attitudes towards people with disabilities is of extreme

importance, because many of the obstacles encountered by people with disabilities are generated by them (Antonak & Livneh, 2000). Attitudes help us to define how we perceive and think about others, as well as how we behave towards them (Chubon, 1982). Negative attitudes have been related to a lack of knowledge and/or segregation of the person with a disability (Mackelprang & Salsgiver, 1999; Makas, 1991). Attitudes are so significant that they represent more of a barrier to people with disabilities than any functional limitation of the disability (Patterson & Witten, 1987). A negative attitude towards a person with a disability affects his or her ability to settle into mainstream society and perform work well suited to skills and interests (Tam, 1998).

III. Research studies on attitude of undergraduate students towards differently-abled individuals

Loo (2001) identified that there are differences in attitudes between college students' academic majors. Loo's study examined the attitudes of 231 undergraduates with 129 males and 102 females. The study concluded that undergraduate Canadian management majors displayed less favourable attitudes overall towards individuals with disabilities. Shannon, Tansey & Schoen (2009) suggested that social proximity to disability is a major factor affecting how these attitudes manifest themselves as negative perceptions and attitudes towards persons with disabilities persists. A sample of 218 undergraduate students completed the Attitudes Toward Disabled Persons (ATDP) scale. Study findings suggest that representation of persons with disabilities in leadership roles in work, education, and other social settings may promote greater attitudinal shifts towards persons with disabilities. Grames & Leverentz, (2010) conducted a study to investigate attitudes towards different types of disabilities: congenital physical, acquired physical, and psychiatric. Data from 138 students (American and Chinese international college students in the United States) was undertaken. Participants completed the Attitudes Toward Disabled Persons Scale and a Q-sort by ranking nine cards describing individuals with varying disability types and severities according to preference. It was hypothesized that physical disabilities would be perceived more positively than psychiatric disabilities. Significant differences were found among the three disability types. It also was hypothesized that American participants would view persons with disabilities more positively overall than Chinese participants. However, the Chinese reported significantly higher scores on the Attitude Toward Disabled Persons scale, which corresponded with more favourable attitudes towards persons with disabilities.

IV. Current research study on antecedents influencing attitude of undergraduate students towards differently-abled individuals

To understand the attitude of Indian youth towards differently-abled individuals, the researcher conducted a study in Chennai (Tamil Nadu, India) with over 1000 samples of undergraduate college students. The primary objective of the research study was to find out the antecedents influencing the attitude of the undergraduate students towards differently-abled individuals. The study focussed on the interaction between selected

independent variables and the attitude of undergraduate students towards differently-abled individuals.

The first phase of the study included in-depth interviews with 10 individuals with disabilities who had surmounted their disability and become successful persons and also worked for the issue on disability. From their experiences of how societal attitudes towards disability had affected them and from existing attitudinal measures, a set of statements measuring attitude towards disability was formulated. (The items of the scale are listed in the annexure). These were then pre-tested with both differently-abled and non-disabled students. The attitude tool included the following factors:

Inclusion

Inclusion, in terms of the current study, is the feeling of belonging for differently-abled people in any institution. These institutions could be education, neighbourhood, workplace, transportation, etc.

Employment

Differently-abled individuals have to cope with a variety of attitudes at their workplace- starting from their very employability. This study tries to paint a picture from the point-of-view of future employees and employers, on what they think about differently-abled individuals in a workplace.

Relationships and Marriage

While relationships are in general, a complex organism, differently-abled individuals have a unique complexity in the dynamics of their relationships owing to preconceived notions and cultural stereotypes.

Society

Society is the greatest institution developed by humans. This study tries to study the prevalent attitudes about differently-abled individuals, held by the largest young population of any country in the world.

Positive and Negative Bias

Differently-abled individuals are often reduced to their disability. They are treated as someone with a disability, and are oftentimes neglected for what they are apart from their disability. The kind of treatment they receive, can be both positive and negative- depending on the sensibilities of the society/institution/individual who is meting out the treatment.

Behaviour/ Conduct

This part of the study is not about systematic behaviour. Rather, it is about the attitudes that people possess about disability, in scenarios that could be termed "in-passing".

The comprehensive 4 points Likert scale questionnaire including various factors influencing attitudes of undergraduate students towards differently-abled individuals was distributed

to 1000 students at undergraduate level ensuring adequate representation across social science/ arts, science and engineering disciplines. After the mandatory process of data cleansing and coding, the items were put through Confirmatory Factor Analysis using SPSS AMOS version 18.0.

The objective of this research paper is to explain the findings of the goodness-of-fit of the factors influencing attitude of undergraduate students pertaining to the sample data.

V. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a multivariate technique to test (confirm) a predetermined relation between observed variables to their underlying constructs (Anderson & Gerbing, 1988; Hair *et al.*, 1998). This technique is usually used when the measurement models have a well-developed underlying theory for hypothesised patterns of loading (Hair *et al.*, 1998).

The researcher has considered all the factors influencing attitude of undergraduate students towards differently-abled individuals as individual variables. Hence, all the factors that have an impact on attitude of undergraduate students on differently-abled individuals are considered to be single order Confirmatory Factor Analysis.

Since the P value of Q10 was not significant, the item was deleted. The Chi-square value of 2.699 for inclusion with 1 degree of freedom is statistically significant as $p = 0.100$ is greater than 0.05 as the recommended value for fit. The Chi-square test is sensitive to sample size, and in a sample of more than 200 (1000 in this research) it is likely that a significant Chi-square is found (Hair *et al.*, 1998). The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for inclusion is 0.999 which is greater than 0.90 as the recommended value for fit. The Adjusted Goodness-of-Fit Index for inclusion is 0.987 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for inclusion is 0.988 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for inclusion is 0.930 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for inclusion is 0.982 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.041 which is less than 0.08 as the recommended value for fit.

Table 1. Summary of goodness-of-fit indices pertaining to various factors influencing attitude of undergraduate students towards differently-abled individuals

Construct	Chi-Square			GFI	AGFI	CFI	NFI	TLI	RMSEA
	Value	df	p						
Suggested values	p value > 0.05 (Hair <i>et al.</i> , 1998)			> 0.90 (Hair <i>et al.</i> , 2006)	> 0.90 (Hooper <i>et al.</i> , 2008)	> 0.90 (Hu and Bentler, 1999)	≥ 0.90 (Hu and Bentler, 1999)	≥ 0.90 (Hair <i>et al.</i> , 1998)	< 0.08 (Hair <i>et al.</i> , 2006)
Inclusion	2.699	1	0.100	0.999	0.987	0.988	0.982	0.930	0.041
Employment	8.256	5	0.143	0.997	0.990	0.989	0.974	0.979	0.026
Relationships and Marriage	7.537	4	0.110	0.997	0.989	0.995	0.989	0.987	0.030
Society	3.186	4	0.527	0.999	0.995	1.000	0.989	1.008	0.000
Positive Bias	4.130	4	0.389	0.998	0.994	1.000	0.990	0.999	0.006
Negative Bias	17.218	12	0.142	0.996	0.986	0.997	0.991	0.991	0.021
Behaviour/ Conduct	2.572	4	0.632	0.999	0.996	1.000	0.996	1.005	0.000

The overall summary of goodness-of-fit indices of the Confirmatory Factor Analysis is presented in Table 1. All the required parameters are within the recommended value and hence have good fit. The Confirmatory Factor Analysis for each factor is presented below.

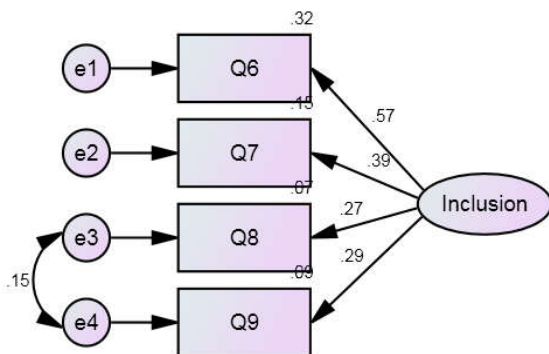


Figure 1. Single order Confirmatory Factor Analysis for Inclusion

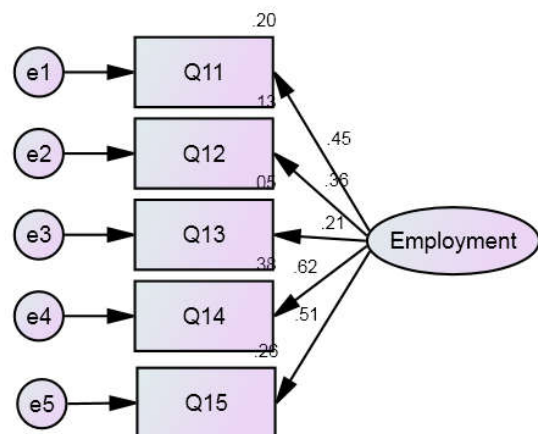


Figure 2. Single order Confirmatory Factor Analysis for Employment

It is evident from the above diagram that no item had to be deleted as goodness-of-fit indices pertaining to Confirmatory

Factor Analysis showed appropriate cut-off values as suggested by various researchers. The Chi-square value of 8.256 for employment with 5 degrees of freedom is statistically significant as $p = 0.143$ is greater than 0.05 as the recommended value for fit. The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for employment is 0.997 which is greater than 0.90 as the recommended value for fit. The Adjusted Goodness-of-Fit Index for employment is 0.990 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for employment is 0.989 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for employment is 0.979 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for employment is 0.974 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.026 which is less than 0.08 as the recommend value for fit.

degrees of freedom is statistically significant as $p = 0.527$ is greater than 0.05 as the recommended value for fit. The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for society is 0.999 which is greater than 0.90 as the recommended value for fit.

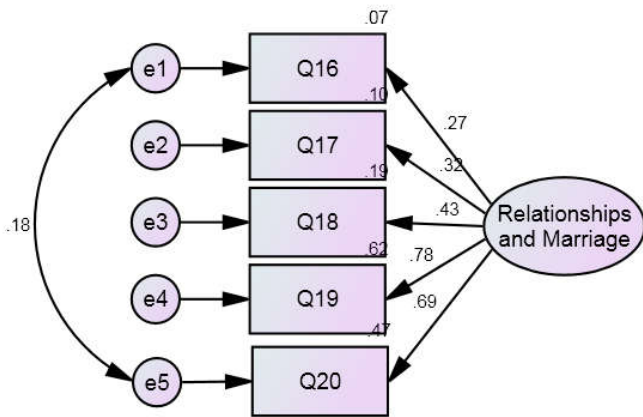


Figure 3. Single order Confirmatory Factor Analysis for Relationships and Marriage

It is evident from the above diagram that no item had to be deleted as goodness-of-fit indices pertaining to Confirmatory Factor Analysis showed appropriate cut-off values as suggested by various researchers. The Chi-square value of 7.537 for relationships and marriage with 4 degrees of freedom is statistically significant as $p = 0.110$ is greater than 0.05 as the recommended value for fit. The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for relationships and marriage is 0.997 which is greater than 0.90 as the recommended value for fit. The Adjusted Goodness-of-Fit Index for relationships and marriage is 0.989 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for relationships and marriage is 0.995 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for relationships and marriage is 0.987 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for relationships and marriage is 0.989 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.030 which is less than 0.08 as the recommended value for fit.

Since the P value of Q22 was not significant, the item was deleted. The Chi-square value of 3.186 for society with 4

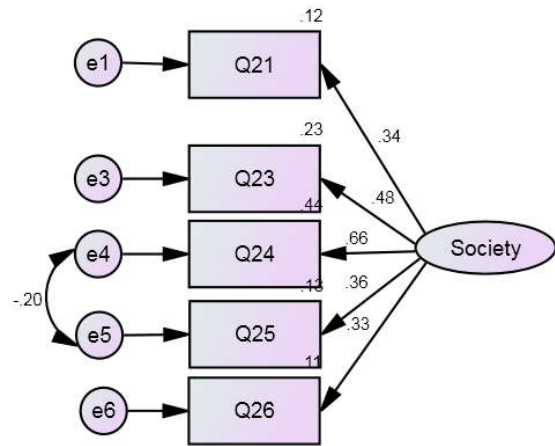


Figure 4. Single order Confirmatory Factor Analysis for Society

The Adjusted Goodness-of-Fit Index for society is 0.995 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for society is 1.000 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for society is 1.008 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for society is 0.989 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.000 which is less than 0.08 as the recommended value for fit.

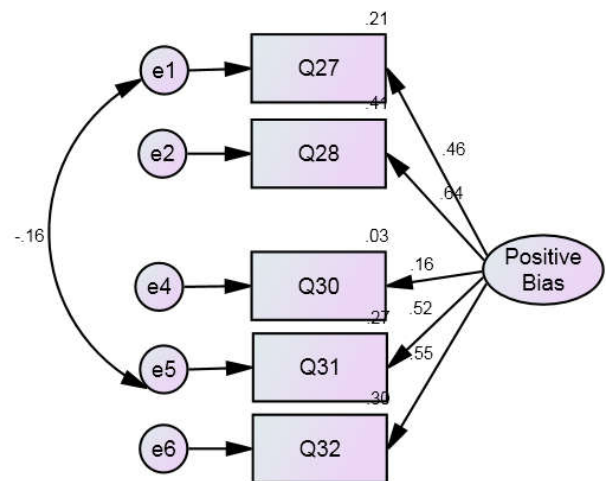


Figure 5. Single order Confirmatory Factor Analysis for Positive Bias

Since the P value of Q29 and Q33 was not significant, the items were deleted. The Chi-square value of 4.130 for positive bias with 4 degrees of freedom is statistically significant as $p = 0.389$ which is greater than 0.05 as the recommended value for fit. The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for positive bias is 0.998 which is

greater than 0.90 as the recommended value for fit. The Adjusted Goodness-of-Fit Index for positive bias is 0.994 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for positive bias is 1.000 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for positive bias is 0.999 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for positive bias is 0.990 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.006 which is less than 0.08 as the recommended value for fit.

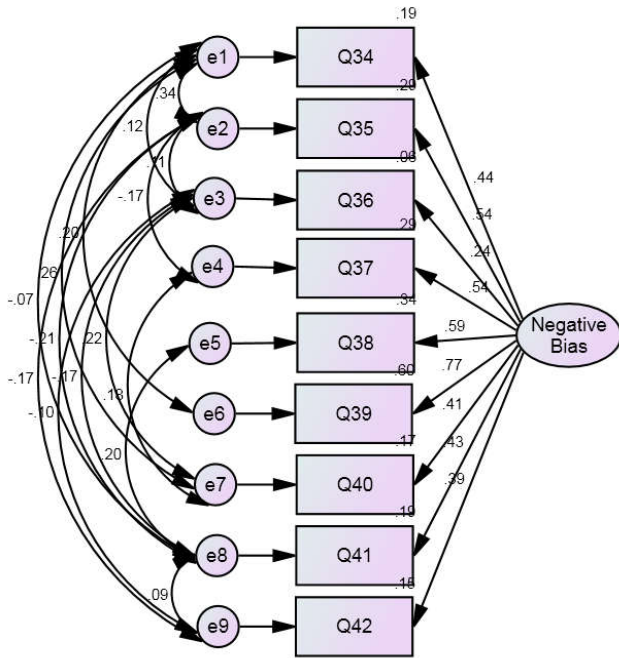


Figure 6. Single order Confirmatory Factor Analysis for Negative Bias

It is evident from the above diagram that no item had to be deleted as goodness-of-fit indices pertaining to Confirmatory Factor Analysis showed appropriate cut-off values as suggested by various researchers. The Chi-square value of 17.218 for negative bias with 12 degrees of freedom is statistically significant as $p = 0.142$ is greater than 0.05. The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for negative bias is 0.996 which is greater than 0.90 as the recommended value for fit. The Adjusted Goodness-of-Fit Index for negative bias is 0.986 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for negative bias is 0.997 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for negative bias is 0.991 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for negative bias is 0.991 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.021 which is less than 0.08 as the recommended value for fit.

It is evident from the above diagram that no item had to be deleted as goodness-of-fit indices pertaining to Confirmatory Factor Analysis showed appropriate cut-off values as suggested by various researchers.

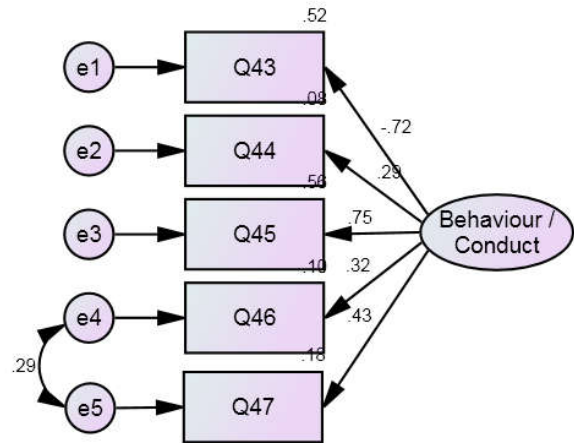


Figure 7. Single order Confirmatory Factor Analysis for Behaviour/Conduct

The Chi-square value of 2.572 for behaviour/conduct with 4 degrees of freedom is statistically significant as $p = 0.632$ is greater than 0.05 as the recommended value for fit. The other fit indices suggested that the model is acceptable. The Goodness-of-Fit Index for behaviour/ conduct is 0.999 which is greater than 0.90 as the recommended value for fit. The Adjusted Goodness-of-Fit Index for behaviour/ conduct is 0.996 which is greater than 0.90 as the recommended value for fit. The Comparative Fit Index for behaviour/ conduct is 1.000 which is greater than 0.90 as the recommended value for fit. The Non-normed Fit Index or Tucker Lewis Index for behaviour/ conduct is 1.005 which is greater than 0.90 as the recommended value for fit. The Normed Fit Index for behaviour/ conduct is 0.996 which is greater than 0.90 as the recommended value for fit. The Root Mean Square Error of Approximation is 0.000 which is less than 0.08 as the recommended value for fit.

VI. Conclusion

Confirmatory Factor Analysis pertaining to factors influencing attitude of undergraduate students towards differently-abled individuals reveals that all the factors show good fit to the sample data. The attitude tool can be confidently used to measure attitude of youth towards differently-abled individuals.

REFERENCES

Anderson, J.C., & Gerbing, D.W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
 Antonak, R. F., & Livneh, H. 1988. *The measurement of attitudes toward people with disabilities: Methods, psychometric and scales*. Springfield, IL: Charles C Thomas.
 Antonak, R. F., & Livneh, H. 2000. Measurement of attitudes toward persons with disabilities. *Disability and Rehabilitation*, 22, 211-224.

- Chubon, R.A. 1982. An analysis of research dealing with the attitudes of professionals toward disability. *Journal of Rehabilitation*, 48(1), 25-29.
- Cook, D. 1992. Psychological impact of disability. In R. M. Parker & E. M. Szymanski (Eds.), *Rehabilitation counseling basics and beyond* (pp. 249–272). Austin, TX: PRO-ED.
- Eagly, A. H., & Chaiken, S. 2007. The advantages of an inclusive definition of attitude. *Social Cognition*, 25, 582–602.
- Grames, Molly, & Leverentz, Cortney, 2010. Attitudes Toward Persons with Disabilities: A Comparison of Chinese and American Students. *UW-L Journal of Undergraduate Research*, 13.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. 2006. *Multivariate data analysis* (6th ed.). Uppersaddle River, N.J.: Pearson Education, Inc.
- Hair, J.F., Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. 1998. *Multivariate data analysis*. Uppersaddle River, N.J.: Pearson Prentice Hall.
- Hooper, D., Coughlan, J., Mullen, M. 2008. Structural Equation Modelling: Guidelines for Determining Model Fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Hu, L-T., & Bentler, P. M. 1999. Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling* 6, 1-55.
- Loo, R. 2001. Attitudes of management undergraduates toward persons with disabilities: A need for change. *Rehabilitation Psychology*, 46, 288-295.
- Mackelprang, R.W., & Salsgiver, R.O. 1999. *Disability: A diversity model approach in human service practice*. Pacific Grove, CA: Brooks/Cole Pub.
- Makas, Elaine 1991. In the MIDST: Modified issues in disability scale testing. The Social Organization of Disability Experiences, Salem, OR: *The Society for Disability Studies and Willamette University*, 109- 114.
- Olson, J. M., & Zanna, M. P. 1993. Attitudes and attitude change. *Annual Review of Psychology*, 44, 117–154.
- Patterson, J.B., & Witten, B. 1987. Myths concerning people with disabilities. *Journal of Applied Rehabilitation Counseling*, 18 (3), 42-44.
- Shannon, C. D., Schoen, B., & Tansey, T. N. 2009. The Effect of Contact, Context, and Social Power on Undergraduate Attitudes Toward Persons with Disabilities. *Journal of Rehabilitation*, 75 (4), 11-18.
- Tam, S. 1998. Comparing the self concepts of persons with and without disabilities. *The Journal of Psychology*, 132 (1), 78-87.
- World Health Organization. (n.d.). Disabilities. Retrieved September 1, 2015, from <http://www.who.int/topics/disabilities/en/>
- Q7. Differently-abled people should be included in mainstream education.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q8. Differently-abled students may hinder the progress of other students in a school/college setting.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q9. Differently-abled people should be given separate residential place.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q10. Differently-abled people should be accepted by their family, relatives, friends and members of society.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Employment

- Q11. Differently-abled candidate possessing the required qualifications should not be denied a job on the grounds of their disability.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q12. Differently-abled people need special arrangements to work effectively.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q13. Differently-abled people would be better off in sheltered employment with dedicated support.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q14. Employers should not be allowed to fire differently-abled employees without genuine reasons.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

- Q15. Products from differently-abled people should be purchased to encourage employment.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Relationships and Marriage

- Q16. Differently-abled people can date/marry people who are not differently-abled.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
- Q17. Differently-abled people are incapable of sustained relationships or marriage with people who are not differently-abled.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Annexure

Factors influencing attitude of undergraduate students towards differently-abled individuals

Inclusion

- Q6. Differently-abled people should be included in the society.
1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q18. Differently-abled people consider themselves to be attractive.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q19. Differently-abled people are incapable of nurturing a child.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q20. Parents with a disability are incapable of financially supporting their family.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Society

Q21. Differently-abled people have equal rights as compared to people without disability.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q22. Differently-abled people are vulnerable to abuse.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q23. Sign language should be taught in school/college.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q24. All books should be available in Braille format in school/college libraries.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q25. Differently-abled people have fewer opportunities in terms of public access and facilities.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q26. Differently-abled people can be independent if their environment is accessible.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Positive Bias

Q27. Differently-abled people do not get discouraged easily.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q28. Differently-abled people can contribute to the progress of the society.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q29. Differently-abled people are inspiring.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q30. Differently-abled people are kind-hearted.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q31. Differently-abled people are easier to *get along* than people without disability.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q32. Differently-abled people have certain unique talents owing to their disability.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q33. Differently-abled people cannot be expected to meet the same standards as people without disability.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Negative Bias

Q34. Differently-abled people do not keep their environment clean.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q35. I associate disability with poverty. For example, most of the differently-abled I have come across have been the ones seeking aid on the streets.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q36. People with psychiatric disabilities can cause harm to others.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q37. Differently-abled people are a burden to the society.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q38. Differently-abled people indulge in self-pity.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q39. Differently-abled people seek sympathy.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q40. Differently-abled people tend to keep to themselves.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q41. Differently-abled people seek preferential treatment.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q42. Differently-abled people require physical assistance all the time.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Behaviour/ Conduct

Q43. My first response towards a differently- abled person is an offer of assistance/ help.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q44. I involuntarily stare at a differently- abled person.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q45. I feel uncomfortable around a differently- abled person.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q46. Differently- abled people are sensitive and therefore you have to be careful of what you say.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree

Q47. If I am communicating with a person on a wheel chair, he/she will definitely have an eye-level problem. So, I sit down and talk to them.

1) Strongly agree 2) Agree 3) Disagree 4) Strongly disagree
