

A correlative study between NEOFFI and newly constructed MESPA Self Rating Scale along with standardization

SHYNY T. Y & Dr. A Velayudhan

Research Scholar in Psychology
Bharathiar University, Coimbatore, India

DOI: 10.29322/IJSRP.8.5.2018.p7757
<http://dx.doi.org/10.29322/IJSRP.8.5.2018.p7757>

ABSTRACT

There is a need for preparing new rating scale which can measure 5 aspects of human beings like Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation. This rating scale has a great significance in the study of correlating parenting styles with all these 5 dimensions of adolescents and also important in clinical and research settings with children suffering from poor self esteem, mental health disorders and personality problems.

KEY WORDS

Mental health, Emotional intelligence, Self esteem, Personality, Achievement motivation

INTRODUCTION

In this study NEOFFI with 60 item is used for the correlative study with MESPA self rating scale. NEOFFI is used to measure only five factors of personality. Psychometric Properties of the NEO Five-Factor Inventory Costa and McCrae's (1989, 1992) NEO Personality Inventory (NEO PI), Revised NEO Personality Inventory (NEO PI-R). NEO Five-Factor Inventory (NEO FFI) were developed with the aim of assessing the five domains of the FFM: (1) neuroticism (N), the tendency to experience negative emotions and psychological distress in response to stressors; (2) extraversion (E), the degree of sociability, positive emotionality, and general activity; (3) openness to experience (O), levels of curiosity, independent judgment, and conservativeness; (4) agreeableness (A), altruistic, sympathetic, and cooperative tendencies; and (5) conscientiousness. But newly constructed MESPA can measure five dimensions of a person like Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation.

REVIEW OF LITERATURE

Holden & Fekken, (1994) & Parker (1998) have served as a catalyst for studies attempting to resolve these undesirable results. For instance, McCrae and Costa (2004) responded to Egan et al. (2000) by evaluating each NEO FFI item and replacing those that consistently performed poorly in PCA and EFA. Schmitz, Baldini, and Tress's (2001) CFA of the NEO FFI in a sample of German outpatients with psychosomatic complaints found that two-, four-, and five-factor models failed to result in adequate fit (e.g., goodness-of-fit index = .82 to .84, root mean square residual = .12 to .16). Church & Burke (1994) & Parker (1993) criticise about the lack of psychometric support for the NEO FFI. Parker et al., 1993 & McCrae et al. (1996) argued that "there is no theoretical reason why traits should not have meaningful loadings on three, four, or five factors". (Hu & Bentler, 1999) find others have contended that these guidelines may be overly restrictive. Marsh et al. (in press) conclude that traditional CFA models are not appropriate for the NEO FFI and that ESEM should be used in its place to utilize the benefits of confirmatory models (e.g., adjustment for measurement error). Although the findings of Marsh et al.'s (in press) ESEM support the factor

structure of the NEO FFI in normative samples, no study has yet existed for measure Mental health ,Emotional intelligence, Self esteem, Personality and Achievement motivation at a time.

METHOD

64 Participants in this study were of the adolescents between the age group of 12 to 18. Mean age of participants was 15. The gender of the participant was unequal. MESPA Self Rating scale with 45 items were employed here. Reliability for MESPA Self Rating scale is completed. Split half reliability and item analysis is find out by using participants of this study. Validity was examined through a comparison with the NEOFFI. 5 Personal aspects like Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation are embedded here in a random order. 1,4,10,14,19,24,28,32,37,41 are mental health items. 8,17,26,35,44 are items of emotional intelligence. 7,16,25,34,23 included under self esteem. 2,11,20,29,38 are personality extraversion items. 3,12,21,30,39 are personality openness items. 5,13,22,31,40 are personality agreeableness items. 6,15,23,33,42 are personality conscientiousness items. 9,18,27,36,45 are items of achievement motivation

RESEARCH HYPOTHESIS

1. There will be consistent personal dimensions across ages as reported by adolescent subjects with age group twelve, fifteen & eighteen.
2. There will be relatively high positive correlation between NEOFFI Extraversion , Openness, Agreeableness, Conscientiousness and MESPA Extraversion , Openness, Agreeableness, Conscientiousness.
3. The Item analysis of Reliability Coefficient will be greater than .70 for the MESPA SELF RANG SCALE

RESULTS

TABLE 1

<i>Reliability-NEW</i>	<i>Cronbach's Alpha</i>	<i>N of Items</i>
MESPA	0.990	45
NEOFFI	0.961	60

TABLE 1 shows reliability is .99 for the MESPA and .96 for NEOFFI. So we can say this newly constructed MESPA Self Rating Scale has very strong internal consistency.

TABLE-2

Means, Standard Deviation and F value for Age- NEOFFI

<i>Variable</i>	<i>Age</i>	<i>N</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>F</i>	<i>p value</i>
Neurotic	12 years	22	24.82	15.09	0.018	0.982
	15 years	22	25.82	18.41		
	18 years	20	25.30	19.11		
Extraversion	12 years	22	38.36	20.96	0.150	0.861
	15 years	22	38.77	21.61		
	18 years	20	41.70	21.36		
Openness	12	22	35.36	21.05		

	years					
	15 years	22	38.09	19.84	0.340	0.713
	18 years	20	40.30	17.07		
Agreeableness	12 years	22	26.05	17.75		
	15 years	22	27.27	18.69	0.176	0.839
	18 years	20	24.15	14.42		
Conscientiousness	12 years	22	26.05	17.76		
	15 years	22	27.36	18.51	0.311	0.734
	18 years	20	23.30	13.98		

TABLE-3

Means, Standard Deviation and F value for Age-MESPA

Variable	Age	N	Mean	Standard Deviation	F	p value
Mental health	12 years	22	16.55	11.04		
	15 years	22	16.77	10.91	0.210	0.811
	18 years	20	18.60	11.55		
Emotional intelligence	12 years	22	8.41	5.59		
	15 years	22	8.50	5.71	0.041	0.960
	18 years	20	8.90	6.36		
Self esteem	12 years	22	8.23	5.73		
	15 years	22	8.77	5.55	0.256	0.775
	18 years	20	9.45	5.30		
Extraversion	12 years	22	7.82	5.95		
	15 years	22	8.59	5.76	0.421	0.658
	18 years	20	9.45	5.52		
Openness	12 years	22	3.91	4.36		
	15 years	22	5.41	5.50	0.981	0.381
	18 years	20	3.45	4.35		
Agreeableness	12 years	22	3.86	5.05		
	15 years	22	5.18	5.76	0.721	0.490
	18 years	20	3.35	4.44		
Conscientiousness	12 years	22	8.27	5.58		

	15 years	22	8.82	5.58	0.261	0.771
	18 years	20	9.55	6.06		
Achievement motivation	12 years	22	16.59	12.04		
	15 years	22	16.36	12.16	0.020	0.980
	18 years	20	17.10	12.38		

In table 2 and table 3 Age group was considered to be the independent variable, which included three age groups as (a) 12 years; (b) 15 years; and (c) 18 year. The results of the ANOVA test depicted in Table 2 reveals that statistical value is greater than 0.05 for all the variables. So we conclude that the mean score of different variables does not differs with age.

TABLE-4

Correlation-TOTAL	Correlation	Lower bound	Upper bound	Z	p
MES-NEO	0.899	0.883	0.915	16.163	<0.001
Age = 12 years	Correlation	Lower bound	Upper bound	Z	p
MES-NEO	0.944	0.928	0.960	12.795	<0.001
Age = 15 years	Correlation	Lower bound	Upper bound	Z	p
MES-NEO	0.908	0.883	0.933	9.692	<0.001
Age = 18 years	Correlation	Lower bound	Upper bound	Z	p
MES-NEO	0.842	0.798	0.886	6.622	<0.001

A positive correlation exist for the variables of new and old scales as in this case the correlation coefficient has value greater than 0.5 and p value less than 0.05.

TABLE-5

Variables	group	N	Mean	Std. Deviation	z	p value
MES1	Low	16	0.81	0.40	-21.706	<0.001
	High	16	3.00	0.00		
MES2	Low	16	0.75	0.45	-20.125	<0.001
	High	16	3.00	0.00		
MES3	Low	16	0.44	0.51	-20.006	<0.001
	High	16	3.00	0.00		
MES4	Low	16	0.44	0.51	-20.006	<0.001
	High	16	3.00	0.00		
MES5	Low	16	0.00	0.00	-11.662	<0.001
	High	16	2.31	0.79		

MES6	Low	16	0.00	0.00	-	13.024	<0.001
	h Hig	16	2.63	0.81			
MES7	Low	16	0.00	0.00			
	h Hig	16	3.00	0.00			
MES8	Low	16	0.00	0.00			
	h Hig	16	3.00	0.00			
MES9	Low	16	0.00	0.00			
	h Hig	16	3.00	0.00			
MES10	Low	16	0.31	0.48	-	22.456	<0.001
	h Hig	16	3.00	0.00			
MES11	Low	16	0.38	0.50	-	21.000	<0.001
	h Hig	16	3.00	0.00			
MES12	Low	16	0.38	0.50	-	21.000	<0.001
	h Hig	16	3.00	0.00			
MES13	Low	16	0.00	0.00	-	11.783	<0.001
	h Hig	16	2.38	0.81			
MES14	Low	16	0.06	0.25	-	47.000	<0.001
	h Hig	16	3.00	0.00			
MES15	Low	16	0.00	0.00	-	12.247	<0.001
	h Hig	16	2.50	0.82			
MES16	Low	16	0.00	0.00			
	h Hig	16	3.00	0.00			
MES17	Low	16	0.44	0.51	-	20.006	<0.001
	h Hig	16	3.00	0.00			
MES18	Low	16	0.44	0.51	-	20.006	<0.001
	h Hig	16	3.00	0.00			
MES19	Low	16	0.25	0.45	-	24.597	<0.001
	h Hig	16	3.00	0.00			
MES20	Low	16	0.13	0.34	-	33.669	<0.001
	h Hig	16	3.00	0.00			
MES21	Low	16	0.00	0.00			
	h Hig	16	3.00	0.00			
MES22	Low	16	0.00	0.00	-	12.247	<0.001
	h Hig	16	2.50	0.82			
MES23	Low	16	0.06	0.25	-	6.504	<0.001
	h Hig	16	1.81	1.05			
MES24	Low	16	0.00	0.00			

	h	Hig	16	3.00	0.00		
MES25		Low	16	0.25	0.45	- 24.597	<0.001
	h	Hig	16	3.00	0.00		
MES26		Low	16	0.25	0.45	- 24.597	<0.001
	h	Hig	16	3.00	0.00		
MES27		Low	16	0.38	0.50	- 21.000	<0.001
	h	Hig	16	3.00	0.00		
MES28		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES29		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES30		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES31		Low	16	0.00	0.00	- 15.267	<0.001
	h	Hig	16	2.69	0.70		
MES32		Low	16	0.13	0.34	- 33.669	<0.001
	h	Hig	16	3.00	0.00		
MES33		Low	16	0.00	0.00	- 13.693	<0.001
	h	Hig	16	2.50	0.73		
MES34		Low	16	0.13	0.34	- 33.669	<0.001
	h	Hig	16	3.00	0.00		
MES35		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES36		Low	16	0.13	0.34	- 33.669	<0.001
	h	Hig	16	3.00	0.00		
MES37		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES38		Low	16	0.19	0.40	- 27.908	<0.001
	h	Hig	16	3.00	0.00		
MES39		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES40		Low	16	0.00	0.00	- 11.825	<0.001
	h	Hig	16	2.13	0.72		
MES41		Low	16	0.00	0.00		
	h	Hig	16	3.00	0.00		
MES42		Low	16	0.00	0.00	- 12.247	<0.001
		Hig	16	2.50	0.82		

	h					
MES43	Low	16	0.00	0.00		
	Hig	16	3.00	0.00		
MES44	Low	16	0.00	0.00		
	Hig	16	3.00	0.00		
MES45	Low	16	0.06	0.25	-	<0.001
	Hig	16	3.00	0.00		

Table 5 result revealed there is a strong internal consistency, Item discriminative power & validity for each items. P value is less than .05 . Here correlation is Significant at .001 level.

DISCUSSION

The objective of this study is to design and construct a new measure MESPA to evaluate like Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation. Review of literature point out the use of the 5 personality dimensions instead of 5 personal dimensions. Adolescents at a particular age group of 12,15,18 is consider for the study. The 5 sub scales of the MESPA show high reliability and validity . The usual limitation of this study was small sample of 64 makes this a pilot study. Some other problem were difference in geographical areas like urban and rural. Another limitation was the Gender difference of the population .

CONCLUSION

The purpose of this study was to provide a five dimensional personal self rating scale to identify their Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation .This rating scale is also important in clinical and research settings with children suffering from poor self esteem , mental health disorders sand personality problems .This study has great important in academic field as well as job selection field to find out students with high achievement motivation , emotional intelligence and good personality . This research examine how these multi personal dimensions relate to adolescents of different age group 12,15 and 18. MESPA RATING SCALE shows very high reliability and validity. Item analysis shows significant correlation with NEOFFI. So we can accept MESPA as a standard tool. MESPA is a valuable gift for teachers, parents, researchers, psychologists, counsellors and psychiatrist to study their students, children, clients and patients.

REFERENCES

1. Costa P.T, & McCrae, R.R. (1992), Normal Personality assessment in clinical practice : The NEO Personality Inventory, Psychological assessment, 4,5-13
2. Mangala,C.V. (2009) Adjustment of students to their Home Environment, Indian journal of Psychometry and Education, 41 (1&2), 1260-63
3. Mc Crae R.R., Costa P.T, Martin T.A (2005). “The NEO-PI 3: “The NEO – PI-3 : A more readable revised NEO Personality inventory”. Journal of Personality assessment 84(3) : 261-270.
4. Mccrae, R.R; & Costa P.T (February 2004), “A contemplated revision of “A revision of the NEO Five factor Inventory”. Personality and Individual differences 36 (3) : 587-596. DOI : 10.1016/S0191-8869 (03) 00118-1.

5. Singh, T. et al. (2011) Inter active Influence of Adjustment and Gender on Academic Achievement. *Psycholinguae*, 41 (2), 318-325
6. Cohen, S., & Edwards, J. R. (in press). Personality characteristics as moderators of the relationship between stress and disorder. In R. W. J. Neufeld (Ed.), *Advances in the investigation of psychological stress*. New York: Wiley.
7. Ahmed, S. M. S., Valliant, P. M., & Swindle, D. (1985). Psychometric properties of the Coopersmith Self-Esteem Inventory. *Perceptual and Motor Skills*, 61, 1235–1241.
8. Amato, P. R., & Keith, B. (1991). Parental divorce and the well-being of children: A meta-analysis. *Psychological Bulletin*, 110, 26–46.
9. Arnett, J. J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist*, 54, 317– 326.
10. Bachman, J. G., Green, S., & Wirtanen, I. D. (1971). *Youth in transition: Vol. 2. Dropping out—Problem or symptom?* Ann Arbor, MI: Institute for Social Research.
11. Bachman, J. G., & O'Malley, P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. *Journal of Personality and Social Psychology*, 35, 365–380.
12. Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103, 5–33.
13. Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, 13,99-125.
14. Cohen, S., & McKay, G. (1983). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J. Singer (Eds.), *Handbook of psychology and health* (Vol. 4, pp. 253- 267).
15. Ryan RM, and Deci EL (2001). On happiness and human potential: a review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
16. Coyne, J. C., & Gotlieb, I. H. (1983). The role of cognition in depression: A critical appraisal. *Psychological Bulletin*, 94, 472-505.
17. Crocker, J. (1982). Biased questions in judgment of covariation studies. *Personality and Social Psychology Bulletin*, 8, 214-220.
18. Cutrona, C. E. (1982). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 291- 309). New York: Wiley.
19. Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84, 261–271.
20. Elliot, A., & Harackiewicz, J. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 70, 968–980.

21. Darley, J. M., & Fazio, R. H. (1980). Expectancy confirmation processes arising in the social interaction sequence. *American Psychologist*, 35, 867-881. deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.
22. Diener, C. I., & Dweck, C.S.(1980).An analysis of learned helplessness: II. The processing of success. *Journal of Personality and Social Psychology*, 39, 940-952.

MESPA – SELF RATING SCALE

(Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation Self Rating Scale)

By

SHYNY, T. Y& Dr. A Velayudhan

Research Scholar in Psychology

Bharathiar University, Coimbatore,India

Name: Age: Sex: M/F.....

Instructions:Read each statement carefully and indicate your single response by putting a “tick” mark against it in an appropriate box.

Sl No	Statements	Not true at all	Just a little true	Often true	Very much true
1	Anxiety and tension				
2	Laughing easily				
3	Trying new and foreign food				
4	Sad and depressed				
5	Courteous				
6	Keeping Surroundings clean and neat				
7	Feeling of confidence with many good qualities				
8	Knowing others from their non verbal messages like voice tone, facial expression etc.				
9	Enjoying Challenging tasks and competition				
10	Disturbed sleep				
11	Enjoying gatherings				
12	Fond of art and nature				

13	Co-operative				
14	Feeling of helplessness and need for others help				
15	Perform assigned task on time				
16	Ability to do things as others				
17	Experiencing others emotions just by looking their face.				
18	Starting new work just after finishing the present one.				
19	Feeling of inferior to others				
20	Active and cheerful				
21	Intellectual curiosity				
22	Thoughtful and considerate				
23	Working hard to achieve a goal in an orderly fashion.				
24	Feeling of loneliness and helplessness				
25	Feeling of self respect and proud				
26	Complimenting others and helping them for positive thinking.				
27	Doing things indifferent from others by using unique skills				
28	Digestive problem and acidity.				
29	Light hearted				
30	Abstract thinking				
31	Harmonious with family members and co-workers				
32	Asthma or other allergy problems.				
33	Striving for excellence of a work.				
34	Feeling of worthiness and optimism				
35	Facing all life obstacles easily from previous experiences.				
36	Concentrating on own task by avoiding criticism.				
37	Easily frustrated.				

38	Ability to lead others				
39	Interesting to know human nature and conditions.				
40	Being helpful to others.				
41	Hiding from unfavourable conditions				
42	Trying to fulfil a commitment				
43	Dealings with problems well				
44	Aware of own emotions as it experience.				
45	Feeling of proud after finishing a new job.				

MESPA – SELF RATING SCALE

(Mental health, Emotional intelligence, Self esteem, Personality and Achievement motivation Self Rating Scale)

Answer Sheet

Score	3	2	1	0	Score	0	1	2	3	Score	0	1	2	3	Score	0	1	2	3	Score	0	1	2	3				
Q	Not true at all	Just a little true	Often true	Very much true	Q	Not true at all	Just a little true	Often true	Very much true	Q	Not true at all	Just a little true	Often true	Very much true	Q	Not true at all	Just a little true	Often true	Very much true	Q	Not true at all	Just a little true	Often true	Very much true				
1					8					7					2					9								
4					17					16					11					18								
10					26					25					20					27								
14					35					34					29					36								
19					44					43					38					45								
24															Extraversion=.....													
28															3													
32															12													
37															21													
41															30													
															39													
															Openness=.....													
															5													
															13													
															22													
															31													
															40													
															Agreeableness=.....													
															6													
															15													
															23													
															33													
															42													
															Conscientiousness=.....													

M=.....; E=.....; S=.....; P=.....; A=.....

Activate Windows

(M=Mental health, E=Emotional intelligence, S=Self esteem, P=Personality, A=Achievement motivation)

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

Name: Age: Sex: M/F.....