APPENDIX

DEO-MOHAN

Achievement Motivation (n-Ach) Scale

Introduction

The study of motivation gained importance since early fifties with the efforts of McClelland and his associates at Wesleyan University, USA. The term motivation refers to any organismic state that mobilizes activity which is in some sense selective or directive. With respect to the environment (Newcomb, 1964) Achievement motivation which is the acquired tendency and is one of the most important social needs, has been defined by McClelland and his associates (1953) and also by Decharms (1968) as a disposition to strive for success in competition with others with some standard of excellence, set by the individual. Motive to achieve requires an act of some norm of excellence, long term involvement and unique accomplishment. These are the criteria set by McClelland and his associates (1953). In fact this is one of the most important manifest and social needs and personality variable enlisted by Murray (1938).

Need to develop the scale

The need to develop the scale was felt mainly for three reasons. Firstly, a projective test generally used for measuring achievement motivation is time consuming in administration and the scoring procedure is somewhat complicated. Quite often, a researcher or a teacher requires a quick scoring tool which can be easily administered and used for research or for studying pupils. Achievement motivation is a variable which is used in many studies in education either as a main or secondary variable or a moderator variable. The purpose in preparing this scale is to provide the researcher with such a tool which will be found to be handy and convenient for administration at d scoring. Secondly, many scales and questionnaires that are available measure achievement motivation in particular field, academic motivation at the high/higher secondary, college on university level. A standard verbal measure which sufficiently measures the achievement motivation in general is desired. The

found to be a very useful and valuable instrument.

Search for items

To prepare the present scale, an effort was made to study factors suitable for measuring the achievement motivation. Apart from the standard of excellence, unique accomplishment and long-term involvement, indicating achievement imagery suggested by McClelland and Atkinson, the following factors were classified as cues of achievement imagery. All these factors were accepted for providing the bases to prepare the items in the scale of achievement motivation.

1. Academic factors

(i) Academic motivation, (ii) Need Achievement, (iii) Academic challenge, (iv) Achievement Anxiety, (v) Importance of grades or marks (vi) Meaningfulness of daily school/college tasks, (vii) Relevance of school/college to students future goals (viii) Attitude towards education (ix) Work methods, (x) Attitude towards teachers (xi) Warmth of interpersonal relations (xii) College concern for the individual, and (xiii) Implementation of educational objectives.

2. Factors of general field of interest: competition in curricular and co-curricular activities

(i) Sports and athletics (curricular and professional), (ii) Fine arts and dramatics, (iii) Dancing, (iv) Music, (v) Painting (curricular as well as professional fields in aesthetics), (vi) Debates and orations etc, (vii) Boating, (viii) Mountaineering/hill climbing or hiking, (ix) Cross-country races, (x) Sports (adventurous tasks involving risk), (xi) Domestic crafts for girls like cooking, embroidery etc, (xii) Reading and writing and (xiii) Experimentation or any act of creation.

3. Social interests

(i) Organizing and participating in social activities (ii) Arranging exhibitions, social functions etc.

To sum up items for the scale were based on (i) Academic factors, (ii) Factors of general interest, and (iii) Factors of social interest.

Criteria for the choice of items in the scale

1. The selected item should evolve the achievement imagery in the respondents.

- 2. It should be related to their achievement experiences based on situations known to them,
 - 3. The item should be comprehensible to the respondents.
- 4. The language of the item should be such that the respondent can immediately identify with the situation expressed in the item.

First draft

With the above criteria, the preliminary draft was prepared which consisted of 115 items. This draft with separate verbal instructions was a 5 point self-rating questionnaire having both positive and negative items. However, no special effort was made to have equal number of positive and negative items. The items in the scale were arranged and distributed factor wise in the following order:

	Factor	No. of items
1.	Academic motivation	9
2.	Need for achievement	11
3.	Academic challenge	5
4.	Achievement Anxiety	4
5.	Importance of grades/marks	5
6.	Meaningfulness of task	6
7.	Relevance of school/college to future goa	ls 5
8.	Attitude towards education	6
9.	Work methods	10
10.	Attitude towards teachers	6
11.	Warmth of interpersonal relations	4
12.	Individual concern	6
13.	General and social interests	9
14.	Mountaineering	3
15.	Boating	3
16.	Dramatics	5
17.	Music	3
18.	Sports	12
19.	Miscellaneous '	3
	Tot	al 115.

This questionnaire is of the self-rating type and can be administered in a group with 5 points to rate viz Always, Frequently, Sometimes, Rarely and Never. It has no time-limit. The scoring

device was simple stencil type having a numerical weightage from 4 to 0 for positive in the above order of rating scale and the reverse of it for the negative items.

Item analysis

For item analysis and item-discrimination values, Johnson's U. L. I. method (vide Guilford 1954) was applied, taking 27% upper-lower achievers out of a group of 46 boys and girls. A slightly modified version of the same technique was applied to obtain items-indices on the basis of highest limits of the scale. Accordingly the sum total of the two highest weights of the scale 4 and 3 was taken and analysis was done with the same formula. Values obtained by both these method were subjected to correlation to see the consistency of the two methods. The correlation coefficient obtained was 92 which was highly significant.

Selection of the items

Out-of-the 115 items, those which yielded negative or zero values were rejected outright. Rest of the items were selected on the basis of the high correspondence between item indices obtained through the two above-methods and secondly on the basis of content, so that each factor should be represented in the scale, at least by 2 or 3 items. Finally 50 items were chosen after careful scrutiny having the distribution as follows:

Section of the sectio	Factor	No. of items
1.	Academic motivation	4
2.	Need for achievement	4
3	Academic challenge	4
	Achievement Anxiety	1
5.		2
6.	Meaningfulness of task	4
7.	Relevance of school/ college to future goals	2
8.	In anything the state of the st	4
9.	Work methods	5
10.	Attitude towards teachers	3
11.	Interpersonal relations	4
12.	Individual concern	2
13.	General interests	4
14.	Dramatics	2
15.	Sports etc.	5
		Total 50

rinal form of the scale

After the item analysis some changes were made in the scale. Firstly, the questions were changed to statements form to avoid the feeling of irritation and monotony to the respondents. Secondly Hindi version of the scale was also prepared for the convenience of the respondents. Scoring system remained the same. In the final scale, out of 50 items, 13 are negative and 37 are positive items.

Reliability of the scale

Test-retest method was applied to obtain the reliability coefficient of the scale. Taking different sets of sample; the administration of the scale was repeated on several occasions. The results are given below.

Sample	N	Interval	r	significance level.	
Mixed group	51	4 weeks	.69	.01	
Males	33	5-6 ,,	.67	.01	
Females	50	5-6 ,,	.78	.01	

These coefficients of reliability are sufficiently high and the scale can be considered as reliable for use. Earlier, Entwistle (1968) for 24 items inventory obtained test-retest reliability coefficient of 83 with an interval of $2\frac{1}{2}$ months. Lynn (1969) found that his achievement motivation questionnaire correlated to the extent of 34 with the factor of Cattell's 16 PF, as ·16 with superage and ·21 with surgency. Bending (1964) established the reliability coefficient of ·63 for men and ·62 for women for his factor analytic scale of need-achievement. Costello (1967) obtained a split-half reliability coefficient of ·82 for scale I and ·73 for scale II. Smith (1973) computed a split-half reliability coefficient of ·56 for his 10-items quick measure of achievement motivation. Taking into consideration these results, the present scale reliability coefficients by test-retest method for the total group as well as for the separate male and female groups are very satisfactory and the scale can be taken as quite reliable for use.

Validity of the Scale

As far as the validity of the scale is concerned, in the first instance the item validity established by the high-low discrimination method was accepted as the validity of the whole measure. Besides, this scale was also used for validating the projective test of Achievement Motivation. The coefficient of correlation between the scale and the projective test was observed to be 34 which speaks for the validity of the scale also, the validity being of the concurrent nature.

rmany the scale scores were also correlated with the scores obtained by administering the Aberdeen Academic Motivation Inventory of Entwistle (1968) yielding a coefficient of correlation as .75 for a mixed sample of 93; this correlation is high enough to establish the validity of the scale. Regarding the r of .54 between the scale and the projective test, McClelland (1958) explains that self-descriptive and projective measures are usually not correlating high with each other. Even Carney (1966) observed that questionnaire measures correlated poorly with McClelland's projective measures. These explanations support the results of present scale of achievement motivation to be sufficiently valid for use for measuring achievement motivation

Administration of the scale

The scale can be administered individually as well as in a group of about 25-30 subjects. With the use of microphone and a few assistants to help, even a much larger group can be given the scale at a time. The subjects should be seated comfortably, at some distance from each other and all within such distance that every subject can clearly hear the testee's voice. The tester should make sure that each subject has a pen for marking responses. First the answer sheets should be distributed. one to each subject and the subject should be asked to write down their particulars i.e. name, age, gender and college/school name and address, phone number, residence particulars etc. After ensuring that this is properly done by all the subjects, the tester should distribute the scale booklets giving one to each subject.

The Directions printed in the test booklet should be read loudly and properly explained verbally. If any one has any querries, doubts or questions, these should be properly clarified and explained. The subjects should be told that there is no time-limit but they are expected to work fast and give their honest, frank and first response to each item. Every item is to be answered by every subject. After the subjects finish marking their responses, the test booklets should be collected along with the answersheets. That completes the procedure of administration.

Scoring

Two stencil keys are to be used for scoring, one for positive items and one for negative items. A positive item carries the weights of 4, 3, 2, 1 and 0 respectively for the categories of Always, that are given above. Separate keys for positive and negative are provided. The total score is the summation of all the positive and negative items scores. The minimum score obtained can be 0 (zero) and the maximum can be 20%, other scores ranging in bet-

This is a quick-scoring self-administered scale which is also ween. quick in administration and very easy for use in administration as well as scoring.

Norms and interpretation of the obtained scores

The scores can theoretically range from 0 to 200. Ordinarify, an obtained score will be in between. For the interpretation of the score, Norms are presented in three forms; Frequency distribution with mean and standard deviation, Percentile Norms and T-scores. Norms can be applied according to the need and purpose of the investigation.

Frequency distributions for males and females

	Males	Females f
Scores	/	16
180-194	17	56
165-179	78	94
150-164	90	51
135-149	80	26
120-134	50	14
105-119	32	4
90-104	10	1
75-89	1	1
60-74	1	1
45-59	3	1
45-57	N = 362	N = 264
M	147.22	151·83 21·55
M SD	24.02	

The age-range for the subjects included in the above distribution is from 13 to 20 years but it may be used for other age groups also.

Age	-wise	37 Ta. (40%), 37 Tal or 1880, 45 Talloo.	THE COLUMN STATE OF THE STATE O	nerelectural species. Jest J. Hilbert			gengedostrat, bleverschischele	Overdene, Throptosto
grou	ıp 13	14	15	16	17	18	19	20
N	45	86	82	66	41	28	15	8
M	153.73	149-22	148.80	145.17	150.83	137.86		124.3
SD	26.81	21.73	20.92	20.44	23.68	29.78	25.32	23.30
	Agc-	wise n	ieans a	and SD	s for fe	emale g	group	
Age-wi	S:C				ANTE A SERVICE ANTE	THE RESERVE THE PERSON	-	MARINE FREE FREEDRICK
group	13	14	15	16	17	18	19	20
N	40	59	48	39	40	26	6	6
M		150.37				145.54	136.17	147.6
SD	24.37	24.51	18.86	17.16	16.77	24.86	29.21	17.87
	Freq	uency	distrib	ution f	or the	total g	roup	
,	Score	es	m t Turky telestate, period is visit	f				
	181 - 1	95		26				
	166-1			124				
	151-1	65		192				
	136-1	50		143				
	121 - 1	35		78				
	106 - 1	20		47				
	91-1	05		16				
	76-9	0		3				
	61 - 7	5		2				
	46-6	0		4				
			_	N = 635				
		M = 148		11-055				
8		SD = 22	·85.					
	Age-	wise M	leans a	nd SD	s for to	tal gro	oup	
Age	-wise		***********					
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-	-			105		- 1		4
N	85	145	130	105	S1 51·34 14		21 1	4

SD 25.54 22.83 20.22 19.82 20.44 27.54 25.81 23.63.

		Percentil	les	
	Percentile	mininto di escolo di remoneri all'unico incidende, per	Curan automa a d'Artino a sacr	Score
	98			188
	95			180
	90			176
	80			168
	70			162
	60			157
	50 (Md.)			152
	40			146
	30			140
	20			131
	10			118
	5			108
**************************************	2	mineralisation (EU Telephon J. Makes an anthropological	Michigan Calabara (1994)	94
		T-Scores.		
	Score			T-Scores
	188			71
	173			61
	158			53
	143			.16
	128			41
	113			36
	98			31
	83			27
	68			26

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SCORES ON AChievement Molivation Test of Runa and Uxban Children. (Developed by Pratible Deo and Dasha Mohan

6.20	Total Scores	6. no.	Total Scores
	RURAL > Fenales		
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. 1.	147	21.	123
٤,	136	22.	150/1
3.	138	+ 23	141
4.	129	24.	118
5.	150	25.	59
G.	164	26.	148
7.	101	27.	13.14
8.	141	28.	130
9.	160	29.	166
10	87	30.	136
11.	147	31.	143
120.	169	32.	135
13 ·	150	33.	83
14.	GO	34.	/33
- 15.	129	35.	145
16.	67	36.	94
17.	144	34.	114
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	9		
5.no.	Total Scores	6.no.	Total Scores:
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		65	127
39.	87	66	161
40	169	67	118
41	142.	68	122
420	143	69	171
43	12.8	70	117
44	11:/	71	86
45	132	72	110
46	145	73	157
47.	1/3	74	113
48.	169	75	116
49.	158	76	118
50	160	77	123
51	133	78	102
52	132	79	134
53	167	80	116
54	126	81	105
56	158	82	174
56	140	83	117
- 57	147	84	150
58	177	85	146
59.	147	86	187
60	121	87	115
61	162	8.8	/36
62	15-9	89	82
63	112	90	90
1164	116	91	179

5.no	Yoral Scores	1 sino	Total Scores.
			*
92	154	11.7	160
93	117	118	122
94	141	119	,154
95	134	120	121
76	144	121	76
97	122	122	138
98	127	123	150
99	138	124	94
100	125	125	157
		126	140
	LIRBAN-FEMALES	127	157
10/	134	128.	131
102	132	129.	17/
103	181	130	146
104	138	131	138
105	123	132	104
106	. 158	133	158
107	138	134	/32
108	135	135	128
109	162	136	168
510	127	137	119
10	164	188	157
\$ 121	142	139	166
113	164	140	165
117	115	141	139
115	102	142	142
116	90	1 43	141

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+	5 mo	Total Sierer	5.no	Total Score.
+	144	160	171	144
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	149	145	176	103
	150	137.	177	96
		WRBAN - MALES	178	139
	151	/33	179	168
	152	166	180	124
	153	150	181	150
	154	149	18 2	17-9
	1 55	129	18 3	167
	1 56	155	184	144
	1 57	140	185	/3.3
	1 58	133	186	125
	159	128	187	162
	160	147	18 8	167
	161	91	189	136
	162	153	190	1/2
	1 63	108	191	151
	1 64	139	92	1.64
	165	135	193	142
	1 66	114	194	155
	167	140	.195	15-9
	/ 68	84	196	161
	169.	131	197	1 24
1	170	127	198	144
-			199	167 154

- ।. यृटि में कुछ दिन कक्षा में न जाऊ तो मुझे बहुत खुशी होगी।
- 2. में कथा में होने वाली गतिविधियों पर पूरा ध्यान देता हूं।
- यदि मैं क का मैं देर ते पहुँचू तो मुझे बहुत दुःख होता है।
- 4. में आन प्राप्त करने के लिए ज्यादा ते ज्यादा पदना पतंद करहर हूँ।
- 5. मे थोड़ी ती पाठ्य पुस्तकों के बदले एक निजी पुस्तकालय रखना पतंद करता हूँ।
- 6. में स्वयं अपने लिए लक्ष्य निर्धारित करता हूँ, फिर उसे पाने के लिए कठिन प्रयास करता हूँ।
- 7. मैं अपने तीचे हुए विती एक ही क्षेत्र में आगे बद्कर प्रथम स्थान प्राप्त करना चाहता.हूँ।
- 8. मैं नई-नई बाते खोजकर तथा उनका प्योग करके लोगों को आश्चर्य चिकत करना पतंद करता हूँ।
- 9. मैं अपने काम में तपलता प्राप्त करने के लिए ध्यटी मेहनत करता हूँ।
- ा०. जिन तमस्याओं को लोग हल न कर पार उन्हे पूरा करने की मेरी
 पृष्टित है।
- ।।. मैं तभी शिक्षिक रूपधांत्रों में सर्वश्रिष्ठ स्थान प्राप्त करना चाहता हूँ।
- 12. मैं किती भी कार्य को अधूरा छोड़कर दूसरा नया कार्य करने के लिए तैयार रहता हूँ।
- 13. यदि परीक्षा पृथन-पत्र में एक या दो पृथन पाठ्यक्रम के बाहर ते आ जाते हैं तो में परेशान हो जाता हूं।
- 14. मैं अगले हम्ताह होने वाली परीक्षाओं की तथारी करने के बदले पार्टी में जाना परांद करुगाँ।
- 15. जब मुझे कम अंक प्राप्त होते है तो मुझे निराशा होती है, तथा अगली बार अच्छे अंक प्राप्त करने के लिए कड़ी मेहनत करने का निश्चय करता हूँ।
- 16. मैं सोचता ूँ कि मेरे पाठ रूचिकर तथा अर्थपूर्ण हैं।
- 17. पढ़ते तमय भेरा मन किताब ते हट कर इधर-उधर भटकने लगता है तब मैं कुछ भी तौचने लगता हूँ।
- 18. में तोचता हूँ कि कक्षा में उपस्थित रहने के बजाय के न्टीन में जाकर गणशण करना अच्छा है।
- 19. जब कक्षा में शिक्षक पढ़ा रहे होते है तब मैं कहानी, उपन्यात और कॉमि पढ़ना अथवा कॉर्टून बनाना पतंद करता हूँ।

- 20. मुझे रुकूल जाना अच्छा नहीं लगता और मैं उसे जलदी छोड़ देना चाहता हूँ।
- 21. यदि मुझे विधालय में कुछ अतिरिक्त कालखण्ड के लिए रूकना पड़े तो यह बात मुझे बहुत परेशान करती है।
- 22. में विद्यालय में पट्ना चाहता हूं क्यों कि वहाँ जीवन को आनंदपूर्वक बिताने के बहुत अधिक मौके हैं।
- 23. में सोचता हूँ कि पढ़ाई के साथ-साथ खेलकूद तथा अन्य गतिविध्याँ चल सकती हैं।
- 24. मैं मानता हूँ कि मेरी वर्तमान पढ़ाई भावी जीवन को सफल बनाने में सहायक होगा।
- 25. यदि मुझे अपने सतन्द के क्षेत्रों में भाग लेने का मीका न मिले तो में बहुत अधिक निराश हो जाता हूं।
- 26. मैंकक्षा में नियमित लप ते नोट्स बनाता हूँ तथा गृहकार्य भी पूर्ण करता हूँ।
- 27. में ताल भर पढ़ाई करते हुए तावधानी ते ऐती घोजना बनाता हूँ कि मुझे तभी विषयों की परीक्षाओं में अच्छे अंक प्राप्त हो ।
- 28. भैं पहले कांग, करने और फिर खेलने में विश्वास रखता हूँ।
- 29. अगले दिन कक्षा में होने वाली पढ़ाई के लिए में घर पर अच्छी तैयारी करता हूं।
- 30. मैं पुरतक में बिन ग्राफ चार्ट्स इत्यादि के उत्तर जाने बिना आगे बढ़ने के स्थान पर पृथन करना पसंद करता हूँ।
- 31. मैं तोचता हूँ कि मेरे शिक्षक अपने कार्य में योग्य है।
- 32. मुझे कक्षा में परेशनियाँ खड़ी करके शिक्ष्क को ते। करना अच्छा लगताहै।
- 33. में बहुत अधिक प्रयत्न करता हूँ कि मेरे शिक्षक मेरे कार्य ते प्रतन्न हो न कि चापलूसी करने ते।
- 34. मेरे मित्र मुझे भंदबुद्धि वाला और कमजीर समझते है ।
- 35. यह त्य है कि मेरे शिक्षक मुझे लगनशील तथा मेहनती छात्र समझते हैं।
- 36. यदि अभिमातक, शिक्षक एवं मित्र मेरी आलोचना करते है तो मुझे दुःख होता है और मैं अपनी कमजोरियों को सुधारने की कोशिशकरता हूँ।
- 37. मेरे अभिभावक मुझे सलाह देते हैं कि जीवन को आराम से बिताएंत था पढ़ाई और भविषय के लिए बहुतअधिक चिंता करने की अरुरत नहीं है।
- 38. बहुतअधिक आलोचना के बाद भी में अपने कार्य को आगे बढ़ाना चाहता हूँ।

- 39. में जीवन के बारे में सोचता हूं कि यह एक बौद्धिक चुनौती है।
- 40. मुझे तमूह टीम, कक्षा एक तमिति की गतिविधियों को आयोजित करने में रूपि है।
- 41. मैं यह को शिषा करता हूँ कि मेरी पसंद के क्षेत्र के ब्हे लोगों से मेरा संबंध बने।
- 42. में अपने खाली समय में कुछ साहिं सिक कार्य करना पतंद करता हूं।
- 43. मेरी इच्छा है किमें किसी परीक्षक का आपरेशन होते देखूँ
- 44. मैं नाटक में भाग तेना पसंद करता हूं।
- 45. में तोचता हूं कि छात्रों के लिए गायन और नृत्य अच्छे शौक हैं।
- 46. मेरी यह ती ब इच्छा है कि मैं किसी भी खेल में विजयी हो ऊँ।
- 47. मैंने अपनी शाला की खेलकूद टीम में शामिल होने का प्यास किया है ताकि अप राज्यों एवं देशों में अपनी टीम भाग ले सकें।
- 48. मेरा विश्वास है कि खेलों से नेतृत्व और अनुशासन का विकास होता है।
- 49. उँची छलांग लगाना एवं पर्वतारोहण एक स्वागत योग्य को मैं चुनौती के रूप में स्वीकार करता हूँ।
- 50. मैं छुद्टी के दिन घर पर खाली बैठने के बजार साई किल चलाना, तैरना या नौकाविहार पर जाना पसंद करता/करती हूँ।

व्यक्तिगत बायोडाटा

1.		छात्र का नाम	- कुं रामसीदा बेगम
2.	,	शाला का नाम	पूर्व माठ गाठ चन्द्रतियाँ
3.		कक्षा	आहवी 8
4.	,	पिताःजी का व्यवताय	- लकडीका काम वर्ड
5.		मातिक आयं	
6.	•	पिताजी की शिक्षा	5-al
7.	4	माँ १्यदि कोई काम करती	}
8.		माँ का शिक्षा स्तर	
9.		भाई बहिन की तंख्या	
			भाई - द्वी
10.		छात्र को यदि घर का कोई	- घर के काम मेहाप बरात है
		काम करना पड़ता है	

TOBS 18

ANSWER / RESPONSE SHEET

DEO-MOHAN: ACHIEVEMENT MOTIVATION (n-ach) SCALE [DMAMS]

fill in the following particulars:-						***		
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