

Association of Socio-Demographic Factors with Performance of Recruits in a Military Training Center of Bangladesh

Rahman MR¹, Harun AA², Islam MA³

DOI: <https://doi.org/10.3329/jafmc.v17i2.58366>

Abstract

Introduction: Military training of future soldiers of Bangladesh Army is highly significant and dependent on many factors they are associated with. Military training is not only associated with physical considerations but also related to mental faculty of individuals.

Objective: To assess the Association of socio demographic factors with performance of recruits in a military training center of Bangladesh.

Materials and Methods: This cross sectional study was conducted among 180 respondents from January to June 2019. Sampling was done by dividing 600 recruits into 06 strata and selecting 180 respondents by applying simple random sampling from each of the strata.

Results: Average age of the respondents' father was 67 years with minimum 60 years and maximum of 90 years. About 53.9% of respondents' father was farmer. Average self-income of the respondents' father was 14044.1 taka, only 40 had pacca house and most of the respondents' living houses were either semi pacca (43) or tin shed (76). 167 had water source from tube well and 151 had pacca toilet. Most of the respondents (166) are coping with training hardship, 173 were happy with food supplied and accommodation (146) and 169 were missing their families. Among them 160 were very good in physical section, 46 were good in educational section and 125 were good in basic soldering section. A number of association were drawn between the respondents' fathers' income, their living condition, food habit, mothers' education, adaptation with training hardship, self-assessment and performance in different test or exams.

Conclusion: Family's economic condition, parents education, food habit, socio economic status, recruits performance, Military training.

Key-words: Recruits, Family income, Physical performance, Education status, Basic soldiering performance.

Introduction

Bangladesh Army through its journey of five decades and in the changing process has continued to adapt the contemporary needs of national and international event. Off late to keep its members up-to-date and to keep the pace with emerging external and internal environment, Bangladesh army has undergone a transformation in the perspective of training system¹. Many new ideas, system, aids, methodologies have been incorporated in the system of training specially recruit training. Such development necessitated the development of individual communication skill, qualitative changes in customs and etiquette, behavior and conduct and improvement in leadership practices. Increased exposure to overseas assignment, induction of hi tech military apparatus, continuous changing pattern of fighting and service pattern further compounded the need of modern training system. The training doctrine employed by Army Medical Services is based on collective thinking of Army about how it intends to fight, train, equip and modernize². Necessity of training as a pursuit of perfection and precision can hardly be over emphasized. The guiding principle of training is to prepare the members of the corps in terms of professional excellence for accomplishment of organizational goal both in peace and war through performance oriented skill and expertise³.

To cope up with demand of accomplishing training requirement, recruits were given maximum attention and efforts by all level of training staffs and instructors. Even after all the endeavors there are distinct differences in their outcome of their performance. The quality of programs is ultimately assessed by the ability of the learner to carry out their expected roles and responsibility in society. This requires the programs to have clear statements of the learning outcomes to be achieved by the learner. The program learning outcomes must be according to the level of study based on the following Qualification Framework (QF) learning outcomes domains: a) Knowledge, b) Practice skills, c) Social skills and responsibility, d) Ethics, professionalism and humanities e) Command, leadership and team skills f) Lifelong learning and information management skills. This study is an endeavor to find out how training outcomes are related to the socio demographic factors of the recruits⁴.

1. Lt Col Md Rofiqur Rahman, MBBS, MPH, DTM&H (Thailand), MPhil, Chief Instructor, AMCC&S, (E-mail: rofiq849@gmail.com) 2. Brig Gen Md Abdullah-Al-Harun, MBBS, MPH, MMed, FCGP, FRSH (UK), Commandant, AMCC&S 3. Capt Md Ashrafur Islam, MBBS, Adjutant (Training), AMCC&S

Materials and Methods

This study was conducted among 180 recruits in a military training center of Bangladesh following the study design of cross sectional type from January to June 2019. Study population was Recruits of 2019/2 batch of Army Medical Corps Centre and School, at Shaheed Salahuddin Cantonment, Ghatail Tangail. Sampling method was by dividing the recruits in 6 strata of 100 recruits and then selected by simple random sampling from each strata. Research instrument was semi structured questionnaire for face to face interview. Data analysis was done by SPSS 17.0. Before collection of data necessary permission was taken from appropriate authority. Before interview, informed consent was obtained from every respondent by informing the purpose and procedure, expected duration, nature and anticipated physical and psychological risks and benefits of participation. Confidentiality of data and privacy of the respondents were maintained strictly.

Results

Out of the respondents 120 were from the families where father's income is less than 10,000 Taka per month, 37 had income between 10000- 15000 Taka, only 9 had 15000 – 20000 Taka income per month. Maximum (126) had family members between 3-5, a major portion were living in tin shed (42.2%), but most of them were using tube-well water (167, 92.8%) and 151 (83.9%) using pucca toilet. Most of the respondents were from families whos' eating habit is meat or fish only once in a week. About 166 (92.2 %) have adapted with the training hardship, 173 (96.1%) liking the food supplied in the training centre, 146 (81.1%) are comfortable with the accommodation facilities but most of them missing their attachment with family. Most of the respondents (88.9%) are doing good in the physical item test, but showing average result in academic part.

Table-I: Frequency distribution of socio-demographic variables (n=180).

Socio demographic Variables		Frequency	%
Fathers' age (years)	60-70	293	75.5
	70-80	67	17.3
	80-90	28	7.2
	Mean ± SD	66.9±7.5	
Fathers' occupation	Farmer	97	53.9
	Labor	12	6.7
	Business	22	12.2
	Service	23	12.8
	Deceased	11	6.1
	Others	15	8.3
Mothers' occupation	Housewife	174	96.7
	Teacher	1	0.6
	Deceased	5	2.8
Monthly family income (Taka)	<10,000/-	120	33.7
	>10,000/--15,000/-	37	20.6
	>15,000/--20,000/-	9	5.0
	>20,000/-	4	2.2
	Nil	10	5.6
	Mean ± SD	14044.1±1.0	
Number of family members	< 3	14	7.8
	>3-5	126	70
	> 5	40	22.2
Type of house	Building	40	22.2
	Half building	43	23.6
	Ten shed	76	42.2
	Ground house	21	11.7
Source of drinking water	Tubewell	167	92.8
	Supply	9	5
	Pond/river	4	2.2
Type of toilet	Pucca toilet	151	83.9
	Open toilet	28	15.6
	Nil	1	0.6

Socio demographic Variables		Frequency	%
Eating habit at home	Meat/fish daily	9	5
	Meat/fish weekly	137	76.1
	Meat/fish monthly	32	17.8
	No meat/fish	2	1.1
Assessment about recruit training	Adapted very well	166	92.2
	Adapted average	14	7.8
Assessment about food	Very good	173	96.1
	Good	7	3.9
Assessment about accommodation	Very much comfortable	146	81.1
	Comfortable	34	18.9
Missing the family	Yes	169	93.9
	No	11	6.1
Physical item result	Very good	160	88.9
	Good	16	8.9
	Average	4	2.2
Academic result	Good	46	25.6
	Average	134	74.4
Basic soldiering	Very good	4	2.2
	Good	125	69.4
	Average	51	28.3

Table-II: Association between father's income and eating habit at home (n = 180)

		Eating habit at home (Meat/Fish)				Total	Statistics
		Daily	Weekly	Monthly	No		
Fathers' income (Taka)	< 10000	3	90	25	2	120	$\chi^2=16.56$ df =121 p >0.05
	10000-15000	3	32	2	0	37	
	15000-20000	1	7	1	0	9	
	> 20000	1	3	0	0	4	
	nil	1	5	4	0	10	
Total		9	137	32	2	180	

Table-III: Association between adaptations of recruits training with physical result (n = 180)

		Physical result			Total	Statistics
		Very good	Good	Average		
Adaptation with recruit training	Adapted very well	147	15	4	166	$\chi^2 = 0.416$ df = 3 p > 0.05
	Adapted average	13	1	0	14	
Total		160	16	4	180	

Table-IV: Association between adaptation with recruit training and education result (n = 180)

		Basic soldiering result			Total	Statistics
		Very good	Good	Average		
Adaptation with recruit training	Adapted very well	4	112	50	166	$\chi^2 = 3.992$ df = 2 p > 0.05
	Adapted average	0	13	1	14	
Total		4	125	51	180	

Discussion

Socio-economic factors that have been revealed in this study were the features of lower middle class society.

About 166 (92.2%) have adapted with the training hardship which was very encouraging. A study⁵ of Institute of Medicine of the national academies, the national academic press, Washington, DCon monitoring Metabolic status, Predicting Decrements in Physiological and Cognitive Performance, reveals that the US Military's concern about the individual combat service member's ability to adapt to training system and ability to avoid degradation in performance mostly related to maintaining of good food supply during training period. Another study⁶ demonstrated that military training needs a greater variation in training stimulus to induce more effective training adaptations, especially, when considering the development of maximal or explosive strength and maximal aerobic capacity.

In this study, it is found that almost all 173 (96.1%) respondents accepted well the food and accommodation (81.1%), in another study⁷ it is found that mental health problems can affect energy levels, concentration levels as well as motivation and judgment, which are required for successful performance in military occupations. This study reveals that less than 50% felt sick at least once during training period, which has some similarity with another study⁸ which reveals that regular physical activity reduces the risk of developing chronic diseases. In this study most of the respondents cut very good figure in (88.9%) physical section, but average figure in academic subjects (79.4%) and good (69.4%) figure in basic soldiering section. A number of cross tabulation were drawn to see relationship of father's economic status with house they are living, water source they are using for drinking, toilet they are using and tendency to fall sick. Association was also seen between adaptation with training system and physical item result, academic result and result of basic soldiering.

Conclusion

Through a thorough analysis of the factors affecting the performance of recruits in their military training, it was discovered that most of the variability in total performance could be explained by their economic background, social status, demographic linkage and so many influences that have some impression. The findings of the study reveals that environment in the center, food, accommodation, other facilities and mostly aspiration for a bright future made them motivated to do better in their training. There were variations in their socio demographic background, but most of the recruits from a very poor background put their best to stand the hardships of training and show better performance. There were challenges of the boys from poor background due to unsatisfactory nutritional uptake but they have shown improvement in all the faculties like academic, physical and basic soldiering sectors.

References

1. Manual of qualification- 2016 (Revised). Army Training and Doctrine Command, revised issue 2016, AMC Qualification, Chapter 1:1-11.
2. Formation Training system. Army Medical corps and Dental corps; 1:1.Manuals of training in the Field, Chapter 1:1-2.
3. DMS TRG INSTR -1/2018; AHQ AG'S BR (MED DTE) ; Intoduction:1:1-1.
4. AMC Training Centre and school, Training manuals 2014; Rect Trg - Women sldrs , AMMCC&S:Chapter 6:5-11.
5. Institute of Medicine (US). Monitoring Metabolic Status: Predicting Decrements in Physiological and Cognitive Performance. Washington (DC): National Academies Press (US); 2004.
6. Sargent C, Gebruers C and O'Mahony J. A review of the physiological and psychological health and wellbeing of naval service personnel and the modalities used for monitoring. Military Medical Research 2017; 4(1):1-28.
7. Brocherie F, Girard O and Millet GP. Emerging Environmental and Weather Challenges in Outdoor Sports. Climate 2015; 3(3):492-521.
8. Kyröläinen H, Pihlainen K, Vaara JP et al. Optimising training adaptations and performance in military environment. J Sci Med Sport. 2018; 21(11):1131-8.