

DETERMINANTS OF EXAMINATION OUTCOME IN MANAGEMENT TRAINEES: FOCUS ON PERSONALITY AND LIFE-STYLE FACTORS

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Abstract *Various factors are known to influence examination outcome. The importance of personality and extra-curricular factors in the success of management career cannot be overlooked. This study intended to find out the influence of personality, current health, and life-style factors on the examination result of management students. The results implied that the factors that could predict examination grades in management students were the performances in past examinations and current quality of life. There was a probability of a negative influence of dysfunctional personality factors on the outcome of examinations in management training. Creative hobbies had significantly positive influence on examination result. It is suggested that replication studies with larger sample are essential considering the findings of this study which have implication for specific assessment and support for management students.*

Keywords: *Determinants, Examination, Life-style, Management, Outcome, Personality.*

Management training programmes endeavour to provide appropriate opportunities to students to become successful and effective managers. They support them to face challenges in various odd and difficult situations. Like many other professions, success in management depends upon various factors including personality traits, creativity, psychological status, emotional intelligence, health issues, sociability etc. Semester examinations during management training which assess skills in various relevant areas is one of the measures that determine objectively the probable outcome. We wanted to study the factors that influence the examination outcome in management trainees.

LITERATURE REVIEW

Literature review suggests that there are many factors which affect examination results. In adult learning scenarios the issue gets influenced by various additional and divergent factors. In the areas of psychological and personality, interesting features have been described. Factors like being conscientious, emotionally stable, socially adept, self-disciplined, practical rather than imaginative, and relaxed rather than anxious (van der Walt & Pickworth, 2007), having maturity and intrinsic motivational structure (Frischenschlager, Haidinger, & Mitterauer, 2005) have been associated with examination success. These are the factors that describe various personality traits. Literature reports debilitating effect of parental psychological control

(Kim & Dembo, 2000); family responsibilities, emotional distress, fatigue, financial, and work burdens (Arathuzik & Aber, 1998); and pressure of progressing in their studies according to a predetermined timetable (Ruohoniemi, Parpala, Lindblom-Ylänne, & Katajavuori, 2010) on the performance on examinations.

Many facilitating factors for examination success have also been described. Fear of failure (Kim & Dembo, 2000); lack of emotional distress, sense of competency in critical thinking, lack of family responsibilities or demands (Arathuzik & Aber, 1998), language of education being same as that used at home (Arathuzik & Aber, 1998; Frischenschlager *et al.*, 2005) and better time management skills (Kim & Dembo, 2000) have been found to be associated with better results. Similarly the experience of having taken the examination previously, different examiners, decreased anxiety, additional studying, less fatigue, and fewer personal problems (Rudy & Kuliecke, 1981); faculty mentoring that facilitates behavioral changes (McGann & Thompson, 2008) have also been reported as facilitating factors. Studies have reported male sex (Frischenschlager *et al.*, 2005) and good performance in secondary school or previous examinations (Frischenschlager *et al.*, 2005; Arathuzik & Aber, 1998) being associated with good grades in examinations. It has been reported that previous examination grade point average (Arathuzik & Aber, 1998) and reading skills comprehension (Stephens, Mirwaldt, & Matusik, 1998) contribute to the examination result. Higher attendance in classes has

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Table 1: Sample Characteristics

Variables	Male		Female		Total	
	n	%	n	%	n	%
Gender	38	61.3	24	38.7	62	100
Socioeconomic status						
• Low	2	5.3	0	0.0	2	3.2
• Middle	34	89.5	22	91.7	56	90.3
• High	2	5.3	2	8.3	4	6.5
In a relationship	12	31.6	11	45.8	23	37.1
Financial problem	16.	42.1	10	41.7	26	41.9
Support from acquaintances	7	18.4	8	33.3	15	24.2
Personal average monthly spend (in thousands)	2.4	1.5	2.5	1.2	2.4	1.4
Reservation	5	13.2	2	8.3	7	11.3
Percentage of marks in high school*	61.2	(11.5)	62.6	(8.2)	61.7	(10.3)
Percentage of marks in +2 level*	53.9	(8.7)	57.9	(8.5)	55.4	(8.8)
Grades in management*	4.5	(0.7)	4.8	(0.68)	4.6	(0.7)
Percentage of marks in management*	56.3	(9.1)	60.9	(8.5)	58.1	(9.1)

* mean (SD)

Table 2: Personality, Health, and Life Style Factors

Factors	Male		Female		Total	
	n	%	n	%	n	%
SAPAS						
1 Difficulty in making and keeping friends	8	21.2	4	16.7	12	19.4
2 Normally describes self as a loner	9	23.7	5	20.8	14	22.6
3 No trust in other people generally	7	18.4	8	33.3	15	24.2
4 Normally loses temper easily	12	31.6	13	54.2	25	40.3
5 Normally an impulsive sort of person	10	26.3	8	33.3	18	29.0
6 Normally a worrier	11	28.9	11	45.8	22	35.5
7 Depends on others a lot generally	6	15.8	8	33.3	14	22.6
8 Generally a perfectionist	21	55.3	12	50.0	33	53.2
SAPAS score 3 or more	12	31.6	12	50.0	24	38.7
GHQ score range						
• 15 or less	29	76.3	22	91.7	51	82.3
• 16-20	7	18.4	0	0.0	7	11.3
• More than 20	2	5.3	2	8.3	4	6.5
Physical exercise	13	34.2	7	29.2	20	32.2
Any physical illnesses*	3	7.9	7	29.2	10	16.1
Smoking*	9	23.7	0	0.0	9	14.5
Drinking*	11	28.9	0	0.0	11	17.7
Drug use	1	2.6	0	0.0	1	1.6
Hobbies						
• Physically active	21	55.3	13	54.2	34	54.8
• Physically passive	27	71.1	21	87.5	48	77.4
• Creative	9	23.7	11	45.8	20	32.3
• Socially active	5	13.2	5	20.8	10	16.1

Quality of life: mean (SD)	6.68	(1.25)	7.04	(1.12)	6.8	(1.2)
Confidence in achieving career goal						
• Not confident	2	5.3	1	4.2	3	4.8
• Unsure	3	7.9	3	12.5	6	9.7
• Confident	29	76.3	19	79.2	48	77.4
• Very confident	4	10.5	1	4.2	5	8.1
• Mean (SD)	3.92	(0.63)	3.83	(0.56)	3.9	(0.6)

* $p < 0.05$

also been reported to be associated with better results in management examinations (Rath & Kar, 2012).

In management courses, like many others, personality profile of the student becomes all the more important not only for current examination results but also for future career successes. It would be interesting to learn whether issues regarding personality would be relevant in examination results at the training phase. The various other factors which would also be relevant to learn are past examination performances, current psychological health status, activities, life-style factors, and situations. There is a dearth of studies in management students in Indian set up. Considering this, we intended to find out the influence of personality, current health, and other factors on the examination result in students of management studies.

METHOD

The study was a cross sectional, questionnaire based survey. It was conducted in a batch of students of Masters in Business Administration (MBA) course in Academy of Management Studies, Bhubaneswar, India. A questionnaire was designed after taking into consideration the various relevant factors associated with the study. We studied age, gender, socio-economic status (SES), and stress factors like financial hardship, relational problem, perceived support from family/acquaintances. We checked the past and current academic achievements in the form of percentage of marks and grades in the examinations. Potential hindrances and facilitating factors according to students were noted. We also assessed the life style, hobbies and creative activities. The hobbies were categorised as physically active or passive, social activities, and creative hobbies.

We evaluated their current overall health status by General Health Questionnaire - 12 (GHQ-12) which has 12 items with 0 to 3 Likert type scoring. While scores about 11-12 are typical; score of more than 15 suggests evidence of distress and score more than 20 suggests severe problems and psychological distress (Goldberg & Williams, 1988). It has been widely used and extensively validated in general and clinical populations worldwide (Werneke, Goldberg, Yalcin, & Ustun, 2000). The quality of life (QOL) was

measured by a 10-point scale from poor to excellent as perceived by the participant (IGDA Workgroup, 2003).

We used the Standardised Assessment of Personality – Abbreviated Scale (SAPAS) which is a validated brief screening questionnaire for personality disorder (Moran, Leese, Lee, Walters, & Thornicroft, 2003). It consists of eight dichotomously rated items; and a score of 3 indicates the presence of personality disorder in 90% of participants. The sensitivity and specificity were 0.94 and 0.85 respectively.

The project was considered as a non-interventional survey by the institutional ethics committee of the Quality of Life Research and Development Foundation. The informed consent was obtained from the participants. Data that betrays the identity of the individuals were not collected. The confidentiality of the information collected was assured to the participants.

RESULTS

There were 62 participants (38 male and 24 female with a mean age of 23.8 ± 2.2 and 22.8 ± 1.1 respectively; $p < 0.05$). Sample characteristics are presented in table 1. Personality factors, general health status, life-style, hobbies, and quality of life are mentioned in table 2. There were 24 (38.7%) students with SAPAS score 3 or more (SAPAS positive). GHQ scores (average: 10.7 ± 5.9) were not different between males (11.1 ± 6.1) and females (10.1 ± 5.6); it may be highlighted that 7 (11.3%) students had evidence of distress and 4 (6.5%) students with severe problems and psychological distress based on GHQ scores.

Many facilitating factors and hindrances for the examination successes were mentioned. Facilitating factors were parental support (32.3%), study atmosphere (19.4%), cooperative staff (11.3%), and competitive atmosphere (9.7%). Reported major hindrances were personal problems (40.2%) and lack of previous knowledge in commerce subjects (19.4%). Examples of personal problems as quoted by the students were financial problem, homesickness, laziness, lack of concentration, getting emotional, lack of enthusiasm, and an unfriendly atmosphere. Students from science and arts background reported difficulty in coping with certain subjects like production and operation management and

accounting. There were few concerns regarding rules and regulations in the college and assignments (4.8%) which were perceived as restrictive. Lack of efficiency in English (3.2%) and computer skills (3.2%) were also reported.

Students who were SAPAS positive (score 3 or more) had no difference in their results in management grades, marks, or +2 marks. However in high school those who were SAPAS positive had significantly less marks ($t: 2.15, df: 60, p < 0.05$). There was no difference in examination results (mean grades or marks) of students with GHQ positive or negative status. There was no difference in grade points (or marks) in students with or without exercise, illness, smoking, drinking, or drugs.

Students with physically active hobbies had no difference in marks except that in high school, those with physically active hobbies had significantly less marks (58.7 ± 11.3) than those without (65.3 ± 7.9) ($t: -2.8, df: 60, p < 0.05$). There was no difference in management grades or marks in students with or without physically passive hobbies; however those with these hobbies had more marks in high school and +2 examinations than those without. Presence of creative hobbies suggested interesting results in management students. Students with creative hobbies scored significantly ($p < 0.05$) more grade points (and marks) compared to those without it. There was no difference of marks in relation to presence of socially active hobbies.

There was negative correlation between SAPAS total score with all the examination results; it was at a significant level for the high school and +2 examinations; but it did not reach significance level for management grades or marks. GHQ score or current confidence level did not correlate with any of the examination marks studied. QOL positively correlated with the management grade and marks. There was no correlation between current QOL and marks in high school or +2 examinations. Grade points and marks in management were positively correlated with the marks in high school and +2 examinations.

The variables which significantly predicted the grade points in management were marks in high school ($p < 0.005$) and +2 examinations ($p < 0.005$), and QOL score ($p < 0.05$). GHQ and SAPAS did not predict the grade points. Similar result was obtained for prediction of the marks in management examination, marks in high school ($p < 0.005$) and +2 examinations ($p < 0.005$) and QOL ($p < 0.05$) predicted it significantly. GHQ and SAPAS did not predict the grade points.

DISCUSSION

This cross sectional study tried to find out the influence of past performances in examinations, personality factors, current health, and other factors e.g., life styles and type of

hobbies on the examination result of management students through a survey. Various factors influence the examination outcome. Some factors like attendance in classes which has positive correlation with examination result (Rath & Kar, 2012) can be easily ascertained; however there are many underlying interacting factors that can influence the ultimate outcome. Personality factors are all the more important in business management where various personal qualities of the individual can influence the group work, team spirit, and ultimately success of the projects. Study of personality in management is not new. However these areas are not so commonly studied in management students as reflected by the dearth of information in literature. Identifying the personality profiles and especially those that can help or hinder in the process of business management is expected to be a worthwhile exercise. This is especially so, considering a probable scope of modifying those personality factors that may hinder progress and encouraging those that can help improving the efficiency of the students in management.

The study results suggested probable negative influence of personality factors on examination results. While it was obvious in the examinations taken in teenage years (high school and +2 examinations), later influences (in management examinations) were not prominent. However this needs a further study in larger sample. Importance can be given to factors in personality that can be intervened for better result in management, for example interpersonal skills, dependence on others, disabling anxiety traits, impulse control, effective management of emotions, identifying and managing social cognitions, which will improve the chance for success as a management professional. So a routine use of a personality measure in management courses can be suggested.

Expectedly, the marks of high school and +2 predicted the grade points and marks in management examinations. Good performance in secondary school or previous examinations has been reported to be associated with good grades in examinations (Arathuzik & Aber, 1998; Frischenschlager et al, 2005). This is interesting as these can give some indication regarding outcome. However more importantly, students who need additional input may be identified and supported from the beginning.

Results related to various types of hobbies brought to the fore the relation of creative hobbies and the examination results. Students with creative hobbies had significantly ($p < 0.05$) more grade points (and marks) in management examinations; though there was no influence in high school or +2 examinations. This is an interesting observation which is worthy of further replication studies. Creativity can help in problem solving in an innovative way and may be very useful for success in management career.

Quality of life of the students correlated positively with grade points (and marks) and predicted the examination

outcome. It is probable that better QOL will lead to higher achievements. Multiple factors influence the QOL and it may be difficult to ascertain their interactions in a particular person; however these can be assessed and the deficient ones can be addressed. Efforts to improve the QOL of students may be helpful in improving degree of success. Students mentioned various facilitating factors and hindrances and many of them can be easily addressed. Students from arts and science faculties joining MBA could have opportunity for additional support regarding the core commerce subjects they are not familiar with in their previous college courses.

It needs to be emphasized that trainees should not be discriminated for their past performances, personality make up or any such factors; rather they should be supported in the areas that can be improved. There should be scope for relevant assessment and need-based support. The observations suggested dysfunctional personality traits and psychological distress in the proportion of trainees. For concerns regarding psychological factors institutional counselling opportunities may be immensely helpful. Both formal and informal peer support can bring in practical help easing the anxiety and stress in the campus; and opportunities for such should be created. Mentoring services can weed out many teeming problems and guide the trainees in right direction at the right time. The authorities should also take steps to improve the QOL in the campus, and this has been found to be an important factor for the outcome.

The study has a few limitations on virtue of being cross-sectional. It has taken into account only one examination result. A longitudinal study taking into account the overall result in the whole MBA course and a larger sample size would be helpful. In addition, assessment of personality factors can be more detailed and made more relevant towards the issues in management. As the study results indicate some areas are worthy of further research. Further studies are needed to see if these results can be replicated.

CONCLUSION

While hard work remains one of the most robust influencing factors for success, there are many ancillary factors that are relevant in examination outcomes. Factors that can predict examination grades in management students are the past examination performances and current quality of life. The study implies a probability of a negative influence of dysfunctional personality factors on the outcome of examinations in management training. Creative hobbies having positive influence on examination result need special attention. These observations of various modifiable factors influencing examination result can be addressed to improve the degree of success. This is an area that is worthy of further exploration.

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