

Investigating the relationship between critical thinking and compensatory strategies among business management students in Mumbai

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Abstract: This study aims to investigate the relationship between critical thinking and compensatory strategies among business management students in Mumbai. Critical thinking is an essential skill for success in the dynamic and complex field of business management. Critical thinking helps in problem-solving. The study chose 60 post graduate students from management institutions affiliated to University of Mumbai. The study applied descriptive statistics. The findings reveal that male students outperformed females where critical thinking is considered. There is a positive correlation between CT ability and compensatory strategies. Mid-critical-thinking group adopts 'code-switching' compensatory strategy.

Key Words: Critical thinking, Communication Strategies, Compensatory strategies.

1. INTRODUCTION – BACKGROUND:

Critical thinking is a crucial skill for success in the dynamic and complex field of business management. In the academic setting, students often encounter challenges that require them to think critically and employ compensatory strategies to overcome obstacles. Understanding the relationship between critical thinking and compensatory strategies among business management students in Mumbai is essential for enhancing educational practices and preparing students for real-world challenges.

Everyone thinks that thinking is natural and all thinking does not refer to critical thinking (CT). In reality, most of our thinking is biased, distorted, and/or prejudiced. In general, it is the kind of thinking that is involved in problem solving, drawing inferences, calculating likelihoods, and decision making (Hashemia, et.al., 2015).

RATIONALE:

While the importance of critical thinking in business education is widely acknowledged, there is limited research on how business management students in Mumbai utilize compensatory strategies in conjunction with critical thinking. This study aims to fill the gap by examining the interplay between critical thinking skills and compensatory strategies among these students.

CRITICAL THINKING:

The importance of critical thinking could be traced back to 1993 by quoting Dewey's statement, "the central purpose of education is helping students to think." Below are some definitions:

Halpem (1998) (as cited by Mahmood Hashemian, 2015) defined critical thinking as purposeful, reasoned, and goal-oriented.

Freely and Steinberg (2000) (as cited by Mahmood Hashemian, 2015) define Critical Thinking as the ability to analyze, criticize and advocate ideas; reason out inductively and deductively in order to arrive at factual or judgmental conclusions based on inferences drawn from unambiguous statements of knowledge or belief.

Moon (2008) (as cited by Mahmood Hashemian, 2015) argued that Critical Thinking influenced higher education and professional career because of its association with problem solving and decision making.

Watson and Glaser (as cited by Mania Nosratinia & et.al. 2014) argued that CT is a combination of individual knowledge, attitude, and performance. They considered deduction, information identification, inference, interpretation,

and evaluation of logical arguments as skills related to critical thinking skills. Further they believed that the ability of CT is processing and evaluating former information with current information and its outcomes. Scriven and Paul (as cited by Mania Nosratinia & et.al. 2014) defined Critical Thinking as any subject, content, or problem in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.

COMPENSATORY STRATEGIES:

It is essential to understand the meaning of communication and communication strategies before compensatory strategies. Keith Davis defined communication as, “a process of passing information and understanding from one person to another.” John Adair stated that communication is the ability of one person to make contact with another and make him/her understood. These definitions distinctly state that the sender has to make the messages comprehensible and clear. The speaker and the receiver employ many strategies to make the message understandable (for example is the speaker is not familiar with the word ferry may use ship: approximation).

Tarone, 1983 (as cited by Mahmood Hashemian) defines communication strategies as, “a mutual attempt of two interlocutors to agree on a meaning in situation where requisite structures do not seem to be shared.”

Faerch and Kasper 1983 (as cited by Mahmood Hashemian) defined communication strategies as, “potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal.” They classified communication strategies into two, viz., i) achievement and ii) avoidance.

Stern (1983) (as cited by Bozena and Horvathova) defined communication strategies as, “techniques of coping with difficulties in communicating in an imperfectly known second language.” The researcher associated three characteristics with it and they are: a) problem-based, b) conscious and c) intentional.

Poulisse (1987) (as cited by Bozena and Horvathova) referred communication strategies to “conceptual” classified them into a) holistic and analytic and b) and linguistic.

It can be summarized that compensation strategies is also referred to as communication strategies. It is classified into achievement and avoidance strategies.

LITERATURE REVIEW:

As cited by Mahmood Hashemian critical thinking has been the focal point for many studies (Barjesteh & Vaseghi, 2012; Nikoopour, Amini Farsani & Nasiri, 2011).

Nosratinia, M., Asiabar, M. G., Sarabchian, E. (2014) conducted a research on the title, “Exploring the relationship between Iranian EFL learners’ language learning strategies and critical thinking.” The study used Pearson’s Product-Moment Correlation coefficient. The study concluded that there existed significant relationship between language learning strategies and critical thinking.

Mall-Amiri, B. & Ahmadi, Z. (2014) conducted a research on the title, “The relationship between EFL Learners’ Critical Thinking and Metacognitive Strategies.” The study explored the relationship among English as a Foreign Language Learners’ critical thinking and metacognitive strategies. The study was conducted at Iran. The instruments in the study included Peter Honey’s (2005) critical thinking questionnaire and metacognitive strategy questionnaires. Pearson’s Product-Moment correlation coefficient and non-parametric Spearman-Brown correlation were applied. The study concluded that significant positive relationship existed between EFL learners’ critical thinking and metacognitive strategies, self-report and metacognitive strategies.

Hashemian, M., Mirzaei, A., & Abaszadeh, M. (2015) conducted research on the title, “Relationship between critical thinking and compensatory strategies by Iranian Upper-Intermediate EFL Learners in Oral Communication.” The study explored the relationship between critical thinking and compensatory strategies such as circumlocution and approximation. Spearman correlation was applied to analyze the data. Results indicated that there is a positive correlation between Critical thinking and compensatory strategies such as appeal for help and nonlinguistic signals.

Fatemah Bagheri, (2015) conducted research on the title, “Relationship between Critical Thinking and Language Learning Strategies of EFL Learners.” The study surveyed the effect of receiving critical thinking trainings on degree students through the English for Academic Purpose Program (EAP). The study was conducted at China. A cluster sampling procedure was applied. The results indicated that those students who received EAP training outperformed those who did not receive the training. Compared to general English students the students who received critical thinking training for 17 academic week showed higher scores in their language learning strategy. Further the study concluded that positive correlation existed between English reading and writing and the Learners Learning Strategies. The results further showed positive relationship between critical thinking score of students and their language learning strategies.

Bozena Harvathova, (2020) conducted research on the title, “Developing critical thinking by enhancing compensation strategies in TEFL.” The study used a standard instrument, a strategy inventory for teachers containing 64 items. Foreign language teachers of secondary schools in Slovakia participated. The researcher had two objectives: one to find out

whether secondary school teachers support compensation strategies in perceptive skills (listening and reading) or productive skills (writing and speaking). The study concluded that the TEFL teachers reported a significant support of the itemized L2 based compensation strategies in listening, reading and writing and the study tried to refrain from promoting L1 strategies such as switching to the mother tongue. The research concluded that secondary school teachers focused listening compensation strategies. Further, in listening teachers used compensation strategies to overcome limitations and guessing intelligently. In reading teachers used compensation strategies to guess intelligently.

Ardi., Fauziah Hervi., & Mudjiran (2022) conducted a research on the title, “the validity and reliability questionnaire of students’ critical thinking skills in general biology course.” They used Research and Development (R&D). The validity test revealed that the evaluation tool had 31 valid statements and 5 invalid statements. The reliability value was 0.93 which falls under very high category. The study concluded that questionnaire which measured critical thinking skills in general biology courses were feasible to use.

PROBLEM STATEMENT:

Management Education has undergone many changes. The focus has shifted from rote learning to application based and is evolving constantly to discovering, questioning and applying the concepts learnt during internships.

Critical Thinking has been in the centre of attention for a long time. Its importance in Management Education is due to problem-solving and decision-making. These two skills are essential for students pursuing management education. There exists a gap in the literature about the possible relationship between Critical Thinking and Compensatory Strategies employed by Management Education Students in Mumbai.

The following questions arise:

1. Is there any significant difference between management education students’ gender and their critical thinking ability?
2. Is there any relationship between CT and the types of compensatory strategies among undergraduate students of Management Education in Mumbai?
3. Is there any difference in preference of compensatory strategies among undergraduate students of Management Education in Mumbai?
4. Is there any significant relationship between subcategories of CT and each compensatory strategy among undergraduate students of Management Education in Mumbai?

These questions give rise to the following hypotheses:

Hypothesis 1

H0: There is no significant difference between L2 learners’ gender and their CT ability.

H1: There is significant difference between L2 learners’ gender and their CT ability.

Hypothesis 2

H0: There is no significant correlation between CT and the type of compensatory strategies among L2 learners.

H1: There is significant correlation between CT and the type of compensatory strategies among L2 learners.

Hypothesis 3

H0: There is no significant difference in preference of compensatory strategies among postgraduate management education learners.

H1: There is significant difference in preference of compensatory strategies among postgraduate management learners.

Hypothesis 4

H0: There is no significant relationship between subcategories of CT and each compensatory strategy among postgraduate management education learners.

RESEARCH DESIGN:

SAMPLE:

60 (35 male and 25 female) students of Masters in Management Studies aged between 21 years to 23 years were randomly selected.

DATA:

Both primary and secondary data were used. Secondary data was used for literature review and primary data was collected from 60 postgraduate students. Three questionnaires were set and the students were requested to fill the questionnaire. The students were from Marathi (28), Hindi (22) and English (10) medium.

METHOD:

Online Oxford Placement Test (OOPT) was conducted to avoid intervening factor and homogenize the language proficiency. The researcher used Watson-Glaser Critical Thinking Appraisal (CTA) was applied to test the critical

thinking ability. Reliability test was calculated using Cronbach’s Alpha (0.85). Researcher based questionnaire was utilised to find out the preferred types of compensatory strategies adopted by the management students.

The questionnaire was based on 5-point Likert scale made up of five parts containing 6 questions. The participants were provided with certain situations in which they were expected to speak to their friends in English while their L1 was either Marathi or Hindi. The medium of instruction was not considered. The questionnaire was answered under the surveillance of Communication for Effective Management teacher. Circumlocution, approximation, code-switching, appeal for help and non-linguistic signals were tested.

Reliability test was conducted through Cronbach’s Alpha whose value was found to be 0.75 and validity was tested using Kaiser-Mayer-Okin and whose value was found to be 0.71.

FINDINGS AND DISCUSSION:

Descriptive statistics was applied. On obtaining the results from Watson-Glaser CTA, the respondents were divided into three groups: a. those who scored less than 35 formed low critical-thinking group b. those who scored between 36 and 55 were grouped as mid-critical-thinking. c. those whose score was between 56 and 80 were grouped into high-critical-thinking-group.

Mean scores of high-critical-thinking, mid-critical-thinking, and low-critical-thinking were from 1 to 10.50; 2 to 11.17 and 3 to 14.17 respectively. The minimum and maximum scores for each type of compensatory strategies for high, mid and low were 6 to 25; 6 to 30 and 6 to 24. The scores revealed that both high and mid-critical-thinking used code-switching. Non-linguistic signal was used by low-critical-thinking group. The CT ability scores of both male and female students are displayed below:

Table 1: Mean scores obtained by boys and girls

Groups	Mean	Standard Deviation
Boys	2.17	0.69
Girls	1.98	0.63

The above table reveals that male students outperformed female students. T-test was applied to compare these two means. The result revealed that statistically significant difference between male and female did not exist (sig = 0.66). Hence, boys are better critical thinkers cannot be assumed.

Table 2: Correlation between overall CT ability and Compensatory Strategies

CT	Types of compensatory strategies	Spearman’s Rho	Sig (2-tailed)
High	Circumlocution	1.00	
	Approximation	0.75	0.08
	Code-switching	0.49	0.32
	Non-linguistic signals	0.8	0.86
	Appeal for help	0.26	0.61
Mid	Circumlocution	1.00	
	Approximation	0.26	0.28
	Code-switching	0.03	0.87
	Non-linguistic signals	0.25	0.30
	Appeal for help	0.34	0.02
Low	Circumlocution	1.00	
	Approximation	0.64	0.16
	Code-switching	0.03	0.95
	Non-linguistic signals	0.89	0.01
	Appeal for help	0.33	0.51

Note: $\rho < 0.05$

The results indicated that high-critical-thinking group used ‘code-switching’; mid-critical-thinking group used ‘appeal for help’ and low-critical-thinking group used ‘non-linguistic signals.’

Pearson’s Product-Moment Correlation was employed to find out the correlation between sub-categories of CT and each strategy. The results are shown below:

Table 3: Correlation between Sub-categories of CT and Compensatory Strategies

CT Components	Compensatory Strategies	Correlation Coefficient	Sig (2-tailed)
Inference	Circumlocution	0.20	

	Approximation	*0.51	
	Code-switching	*0.17	
	Appeal for help	0.14	
	Non-linguistic signals	*0.26	
Recognition assumption of	Circumlocution	0.12	
	Approximation	0.00	
	Code-switching	*0.20	
	Appeal for help	0.24	
	Non-linguistic signals	0.28	
Deduction	Circumlocution	0.58	
	Approximation	0.03	
	Code-switching	0.24	
	Appeal for help	0.08	
	Non-linguistic signals	*0.40	
Interpretation	Circumlocution	0.14	
	Approximation	*0.10	
	Code-switching	0.12	
	Appeal for help	*0.06	
	Non-linguistic signals	*0.01	
Evaluation arguments of	Circumlocution	*0.11	
	Approximation	*0.01	
	Code-switching	*0.00	
	Appeal for help	0.39	
	Non-linguistic signals	0.04	

***Correlation is significant at the 0.05 level (2-tailed)**

CONCLUSION:

The objective of this study was to investigate the relationship between Critical Thinking and the preferred type of compensatory strategies among the post-graduate management students. The CT ability between male and female students were studied. The study concluded that there is no fixed claim that males outperformed females in CT ability. Therefore, null hypothesis is rejected.

The study revealed that high and mid-critical-thinking used code-switching and low-critical-thinking used appeal for help as their compensatory strategy. A significant positive correlation existed between the mid-CT group scores and appeal for help and significant positive correlation existed between the low-CT group scores and non-linguistic signals. Hence the second null hypothesis is rejected.

Critical Thinking and problem-solving ability are closely related and studies state that people with high-critical-thinking enjoy problem-solving more. The statistical results imply that high and mid-critical-thinking use 'code switching' low-critical-thinking students use 'non-linguistic signals' which is against the view of the high-critical-thinking abilities of students. This may possibly due to the fact that it is quick and easy to use. Hence, the third null-hypothesis is rejected.

Evaluation of arguments consists of awareness of points of view, purpose, and audience. Further, it is closely related to deduction ability. Therefore it can be deducted that the higher ability of deduction and evaluation of arguments can lead to the same use of strategies. The findings of this study also align with it. Hence, the fourth null hypothesis is rejected.

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