Testing the Applicability of Information Manipulation Theory (IMT) in Indian Organizational Context

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ABSTRACT
The study was conducted to test the applicability of Information Manipulation Theory (IMT) in an Indian organizational culture. For the purpose of the study a situation in which subordinate was supposed to share information with superior were framed. The situation was followed by violated messages measuring four dimensions of information manipulation i.e. quantity, quality, relevance and manner. It was presented as stimulus material to faculty of Punjab Agricultural University, Ludhiana to test the claims of the theory. All the violations were perceived to be significantly different than the baseline message. Results suggest that all the violations were perceived as deception although with varying degrees. Hence, the study showed that IMT theory is applicable in Indian organizational context. Quality violation was perceived as most deceptive while quantity violation was perceived as least deceptive form of information manipulation.

Key words: Interpersonal communication, Organizational deception, Information Manipulation Theory, Faculty

Introduction
Manipulation is the behavior that influences someone or controls something in a clever or dishonest way. Manipulation can be done to deceive people regarding a product, person, data or information. The deceitful management of given information by the sender in order to provide a receiver with a perception of that same information believed to be false by the sender is referred to as information manipulation. To capture such manipulations a theory called Information Manipulation Theory (IMT) was formulated by Steven A McCornack (1992) at Michigan State University. IMT explains deception as covert violation of Grice’s conversational Maxims. Based on the work of Paul Grice (1989), the Information Manipulation Theory proposes that in any given conversation there exists a set of basic reasonable assumptions about how transmission of information occurs. According to IMT, in order to make sense of what others say, we need to preserve that sender is communicating cooperatively while exploiting this presumption enables deception. The theory suggests that ‘deceptive messages function deceptively because they covertly violate the principles that govern conversational exchanges’ (McCornack, 1992). According to McCornack, deception is a phenomenon in which speaker exploits listener’s expectations for disclosure, by covertly altering the information that is disclosed in terms of quantity, quality, relevance and/or clarity maxims. Deceptive messages are deceptive in that, although they deviate from the principles underlying conversational norms (Grice, 1989), the departure remain unveiled. Listener is misled by their belief that speakers are behaving in cooperative manner.

IMT provides a powerful conceptual framework for addressing the observable variation in deceptive message design. McCornack et al (1992) conducted first empirical test of Information Manipulation Theory. Different deception provoking situations were generated and examples of deceptive messages were produced and analyzed. Results show that manipulation of all four dimensions of IMT influence perception of message honesty and competence. Though manipulation of quality resulted in the ‘most deceptive’ messages, manipulation of quantity, clarity and relevance were also perceived as significantly deceptive as compared to baseline message. Several subsequent studies followed McCornack et al original study to test the claims of the theory in different parts of the world. Murai (1998) tested some of the IMT’s predictions in Japan. Consistent with IMT, he found that violation of manner was rated as more deceptive than control Messages. Also consistent with IMT, he did not find the differences between messages violating multiple maxims and messages involving a single violation.
in terms of rating of Message deceptiveness. Yeung et al (1999) attempted to replicate IMT findings in Hong Kong in China, outside the western cultures. Hong Kong was chosen to represent the collectivist perspective while US is regarded as individual perspective. They found that messages violating quality and relevance were rated as deceptive while violation of manner and quantity were not. The results of the research were different from original study of McCornack, perhaps because collectivists don’t perceive violation along manner and quantity as deception. However, ratings of all four violations were correlated with ratings of honesty leading them to conclude that messages that were seen as violations were rated as deceptive. IMT theory has also been investigated from an intercultural perspective. Lapinski (1995) examined the effect of self construal and self and other’s benefit on ratings of the message honesty. The result indicated that independent individuals tend to see lies as less deceptive, while interdependent tend to see relevance violations as more honest. Violation of quantity and manner were seen as more deceptive when self-serving rather than for other’s benefit. Although all of these studies conducted support IMT theory but cultural differences have been observed. Now, the question arises ‘if verbal deception is prevalent in all types of communication processes, is it also prevalent at workplace communication? Most of the research on deception has examined lie detection (often with children and in romantic relationships) rather than perceptual and situational factors associated with deception in the workplace (Gordon and Miller 2000, Seiter et al 2002). Several researchers supported that like other social interactions deception at workplace is common and natural occurrence. Lindsey et al (2008) in his study on power and deception at work place revealed that approximately 45% of employees reported that they use deception at work place. Specifically 51.28% of subordinates reported deceiving their superiors and 37% of supervisors reported deceiving their subordinates. The data appears to indicate that subordinates are more likely to deceive their supervisors rather than vice versa, however the difference was not statistically different. Various other research studies also supports that in organizations, most of the time it is subordinate that lie to the supervisor. Barrick and Mount (1996), Deluga (1991) indicated that subordinates and less powerful people have motivation to lie to their superiors. Both the studies indicated that subordinates often use deception to manage their supervisor’s impressions. In the same line, McCornack and Levine, 1990 concludes that deception on the part of less powerful individuals appears to be a common occurrence but differential power might place subordinates in a dangerous position if their deception is detected (e.g., an employee would get fired for lying to the boss). The result might be an anxiety-inducing situation in which deception detection is most likely. DePaulo et al (1991) revealed that mostly lies go undetected, but if the lie told to authority is detected, future of repercussions can be serious. On the other hand some researchers argue that superiors always have benefit of power, to deceive their subordinates. Lindsey et al (2008) debates that power is an important situational and relational variable in the work place and has important implications for the study of deception. Dunbar’s (2004) dyadic power theory suggests that power is desired both from the access to resources and legitimate authority to use those resources. In the work place superiors have an advantage in both areas. These power differences are translated in difference in their use of deceptive messages as well. Whereas, superiors reported using their power to create their deceptive messages and make their lies believable (using their own power as an authority, removing the power distance by acting as a friend rather than a boss, or relying on their own credibility), subordinates did not have access to those resources and thus relied most heavily on their ability to manipulate their own nonverbal behavior, emotional displays and storytelling. However, De Paulo et al (1991) argued that superiors cannot put their credibility to risk by deception. He argued that leaders incur large risks because with every lie told they gamble their future credibility. Deception is dangerous; leaders perceived as deceptive will carry with them an unethical reputation and lose their ability to lead. On the other hand, subordinates who use deception might be placing themselves in a dangerous situation, as well, if lie is detected (For example, being fired, demoted, punished). The study also adds that manipulative ability is the foundation of social power and ability to lie successfully is an important skill linked to personal and professional success. Aquino and Becker (2005) summarized that the workplace is a unique context because most people see lying in business negotiations as highly unethical, although they might be willing to do so if they have a
specific goal or do not foresee any harm that will result from their deception. Hence the various studies conclude that deception is also prevalent at workplace.

Hubbell et al (2005) applied IMT to measure organizational deception and the results show that each deceptive message violating Grice’s conversational maxims (1989) are used in organizations and that at least three of the messages accurately represent the expected dimensions. To achieve this, IMT theory was applied to previously conducted organization deception research and results support the theory. Results indicate that deceptive messages violating Grice’s conversational maxims are used in organizations and each deceptive message type was considered plausible in the organizational context. They also identified quantity violation i.e. withholding as the most acceptable while quality violation i.e. distorting as the least acceptable form in organizational deception. The findings provide support for use of this approach and its continued development in the study of organizational deception to provide a more comprehensive approach from which organization deception could be studied. They further suggested that by using this new approach, seemingly disparate perspectives on deception can be brought together, and once united represent a large literature base upon which to base future research. Similarly, Dunleavy et al (2010) in support of Information Manipulation Theory concluded that deception is always frowned upon in the workplace. Coworkers who fail to offer up complete information (Quantity violation) are seen as more competent & possessing more character than those who distort the information (Quality violation). So, in organizations too, it was suggested that distorting information is most deceptive whereas omitting information is perceived as less deceptive form of Information manipulation and also used as a useful strategy in organizational discourse.

Rationale of the study

The literature shows that majority of the studies to test the claims of IMT theory have been conducted in western cultures where individual culture prevails. However to accept the theory it is important to see whether the theory is applicable in various non-western cultures where collective culture which stress upon the importance of cohesion within the social groups prevails. India is a major non western country in the world where individuals are supposed to set aside personal goals for the good of whole. In organizational situations also interdependent teams are said to be the top priority for them. Researchers were interested to find out whether IMT claims regarding relationship between the alteration of information and deception are true in India or not. Since, no such study to test the applicability of the IMT theory have been conducted in India, so far, hence present study was an attempt to study the claims of the theory in Indian organizational situations.

Research Questions

RQ1: whether violated messages (along quantity, quality, relevance and manner dimension) were perceived as significantly different from honest message along its respective violation dimension or not.

RQ2: Are there significant differences in terms of perceived message deceptiveness between various forms of information manipulation and baseline message.

RQ3: There are significant differences amongst the various forms of information manipulation in terms of perceived messages deceptiveness

Material and Methods

The study was purposively conducted at Punjab Agricultural University, Ludhiana, as researchers being faculty members were well versed with the prevailing culture of the organization. The faculty was purposively selected because being academia they could judge the messages in a better way as compared to any other community. From the complete list of 542 faculty members (N = 542), two separate lists of male and female faculty members were prepared purposively to get equal representation of both in the sample. The separate lists consisted of 320 male faculty members and 200 female faculty members. A total sample of 100 faculty members (n = 100) was selected through systematic random sampling technique to collect the data. All the subjects were approached personally and told the purpose of the study and none denied being subject of the study. The data was collected personally by the researcher using interview schedule.
Preparation of stimulus material
Stimulus material which consisted of a hypothetical organizational situation was prepared and McCornack et al (1992) semantic differential scale was used to evaluate the messages to test the applicability of Information Manipulation Theory. It proceeded through following stages:

Stage I: Formulation of situation and message examples
A deception provoking hypothetical organizational situation was generated based on Information Manipulation Theory (McCornack, 1992). The situation in which subordinate was to share the information with superior was followed by five types of messages viz: baseline message (true message), quantity wise violated message, quality wise violated message, relevance wise violated message and manner (clarity) wise violated message. Three message examples for each type of violation as well as for true message were framed. Thus, there were 15 messages in all which were used as stimulus material.

Stage II: Selection of messages
Out of the 15 messages, only 10 messages were to be selected for administration to the faculty. For this, the messages were rated by six experts from the disciplines of ‘Home Science Extension and Communication Management’ and ‘Agricultural Journalism, Languages and Culture’ (who worked in two groups each with three experts). The six experts whose specialization was in interpersonal communication researches were purposely selected. A session was held to appraise them with IMT theory and its conditions. They rated each message against four semantic differential scales using five point response pattern along the respective dimension of information manipulation i.e. Quantity, Quality, Relevance and Manner as specified by Information Manipulation Theory (McCornack, 1992). Coding was accomplished with five point Semantic Differential scale, where score one (1) was assigned for no violation, three (3) for moderate violation and five (5) for an extreme violation. The value for which, both the groups of experts reached a consensus for each rated message was calculated. Finally, the individual values assigned to each message example were calculated by averaging the scores given by the two groups of experts. Out of three message examples for each type, the two messages showing better degree of violation along the respective dimension were selected, thereby discarding one message example of each message type. In case of true message, messages showing better degree of truthfulness were selected. Thus, 10 different message examples (i.e. two examples from each of the five message types) were selected for the final analysis.

Hence, out of 15 message examples, 10 message examples i.e. 1 x 5 x 2 (1 situation x 5 message types x 2 message examples) were finally selected for introducing as stimulus material to the respondents. The judges were also requested to check the situations and responses with regard to the ambiguity, clarity of language, instructions and appropriateness of the response. Based on the judgment and suggestions of the experts, the necessary changes were incorporated.

Stage III: Evaluation of messages
For Evaluation of 10 selected messages by respondents, two sets each having one example from five different message types were prepared. These two sets were randomly assigned to 50 respondents each. The respondents were told to assess the plausibility of messages and rate the extent to which the given response represents the four dimensions and message honesty on 5 point Semantic Differential Scale developed by McCornack et al (1992).

Test of Research Questions
Dimension wise manipulation checks to compare differently violated messages against the true message
The Information Manipulation Theory says that messages which covertly violate Grice’s Conversational Maxims are said to be deceptive. Before testing the theory i.e. checking whether the violated messages were perceived as deceptive or not, first it was necessary to find out whether respondents perceive the violated messages as significantly different from honest message or not. Hence, manipulation checks were employed. A series of tests were performed to determine if the message examples coded as representative of the different forms of information manipulation (violations) were perceived in the similar fashion by the respondents. To test this, respondents’ evaluation of information within the manipulated messages was compared with respondents’
evaluation of the information within the completely disclosive baseline messages (true message). Results of the study show that in all the cases, violated messages were significantly different from true message and hence, all violations were successful. Table 1(see annexure) shows that in both of the sets, messages involving manipulation of ‘quantity’ (mean = 3.85 and 3.25 respectively) were perceived to be significantly different from mean values of baseline ‘honest’ messages (mean = 1.24 and 1.15 respectively) in terms of informativeness. Mann Whitney U test was applied to check the significance level of the difference. The z values for both comparisons were worked out to be 8.54 and 8.78 respectively, all of which were highly significantly different at one per cent level of significance. In the same way, messages involving manipulation of ‘quality’ with average mean value of 4.81 and 4.89 respectively in both sets were perceived as significantly different from respective mean values of baseline/ honest messages (mean = 1.20 and 1.09) in terms of distortion of information. Mann Whitney u test again showed that z values (8.84 and 9.15) were significantly different at one per cent level of significance.

Similarly, messages involving manipulations of ‘relevance’ (mean = 4.63 and 4.89 respectively) were perceived as significantly different from the respective mean values of baseline messages (1.29 and 1.13) in terms of relevance of information to preceding discourse. Here, z values were found to be 8.92 and 9.17 respectively which was found highly significantly different at one per cent level of significance.

Finally, messages involving manipulation of ‘manner’ in both cases (mean = 4.66 and 3.32 respectively) were perceived as significantly different from mean values of messages (1.28 and 1.14) along the clarity dimension of the messages. Mann Whitney U test showed that z values for both comparisons (8.02 and 8.80) were significantly different at one per cent level of significance. Hence all the manipulation checks were successful. The results were similar to McCormack et al (1992) and Yeung et al (1999) where all manipulations were found to be statistically different than baseline/honest message at one percent level of significance.

**Perceived message deceptiveness of differently violated messages**

Information Manipulation Theory claims that messages are said to be deceptive if these covertly violate Grice’s Conversational Maxims. Data in Table 1 (see annexure) clearly indicated that messages violated along all the four dimensions were perceived as violations along that particular violation. But it is not necessary that violated message is deceptive, too. Hence, to accept or reject the IMT theory, it was necessary to find out whether such violations were perceived to be deceptive or not. If the message violations are perceived as manipulations along respective dimensions but respondents don’t consider them as deceptive, we can’t accept the hypothesis that “there are significant differences between various forms of information manipulation and the baseline/honest messages in terms of perceived message deceptiveness” as per Information Manipulation Theory. To test this hypothesis all the violated messages were compared with the baseline message for its honesty. The results show that in all the four example sets, violated messages were perceived as significantly different from true message in terms of deceptiveness. Mann Whitney U test was worked out to see whether there is significant difference between perceived honesty of baseline message and violated messages.

The average mean scores on honesty dimension for all the message examples were pooled in Table 2 (see annexure). Then mean for honesty of violated messages were compared with mean of baseline message. The data show that in both the sets, messages involving manipulation of information were perceived as significantly different from ‘Baseline (honest) message in terms of honesty. It is evident from Table 2 that in Set I, messages involving manipulation of ‘Quantity’, (mean = 2.63, Z value = 7.80), ‘Quality’ (4.68, Z value = 8.80), ‘Relevance’ (mean = 3.81, Z value = 8.79) and ‘Manner’ (mean = 4.14, Z = 8.63) were highly significantly different than baseline ‘honest’ message (mean = 1.13). Amongst all if we rank the deception mean values of different violations, manipulation of ‘Quality’ i.e. complete distortion of information was ranked as first in terms of deceptiveness. While ‘Quantity’ violation i.e. withholding some information is perceived last on deceptiveness rating and hence perceived as least deceptive form of information manipulation. Violation on ‘Manner’ dimension (lack of clarity) and ‘Relevance’ violation i.e. changing the subject were perceived as second and third, respectively as shown by their respective mean values. Overall, we can say that complete lying is
perceived as most deceptive than other violations and least honest form of information manipulation. It may be because complete lying by virtue of ethics is considered least acceptable behavior in Indian culture.

In example set II, manipulation of ‘Quantity’ (mean = 2.32, Z value = 8.33), ‘Quality’ (mean = 4.78, Z value = 9.11), ‘Relevance’ (mean = 4.23, Z value = 8.98) and ‘Manner’ (mean = 3.32, Z = 9.00) were perceived as significantly different from ‘Baseline’ (honest) message (mean = 1.08) in terms of deceptiveness. Similar to example Set I, manipulation of ‘Quality’ i.e. complete distortion of information is perceived as first on deceptiveness parameter which means falsifying is perceived as most deceptive form of information manipulation. ‘Quantity’ violation i.e. withholding some crucial information is perceived as last on deceptiveness rating. It means sharing half information is perceived as comparatively least deceptive form of information manipulation. ‘Relevance’ i.e. changing the subject and violation on ‘Manner’ dimension (lack of clarity) were perceived as second and third, respectively on deceptiveness scale. Interestingly it was vice versa in another example set.

If we compare the two sets, in both the sets quantity and quality violation are perceived as least deceptive and most deceptive forms of information manipulation amongst all forms of information manipulation while relevance and manner deceptiveness rating varied depending upon the messages. It shows that collective cultures don’t find difference in deceptiveness in terms of manner and relevance violation. Perhaps they considered both similar on deceptiveness parameter.

To calculate the overall violation in both sets for each dimension, mean scores of message violations along their respective dimension were calculated. Message involving manipulation of ‘Quantity’ (mean = 2.47, Z value = 15.68), ‘Quality’ (4.73, Z value = 18.02), ‘Relevance’ (mean = 4.64, Z value = 17.46) and ‘Manner’ (mean = 3.73, Z = 17.52) were perceived as highly significantly different from baseline ‘honest’ message (Mean= 1.15). Because all violations in both the situations were found to be significantly deceptive, hence, we accept the hypothesis that “there are significant differences between the various forms of information manipulation and the baseline messages (true message) in terms of perceived message deceptiveness”. Since all the violated messages were perceived as deceptive messages, hence, the study shows that “Information Manipulation Theory” is applicable in Indian organizational cultural context.

**Difference between the means of various forms of information manipulation in terms of their perceived message deceptiveness.**

The discussions above explain that all violations are perceived to be deceptive but any sound theory of deception must recognize perceived differences of deceptiveness/ honesty along various dimensions of manipulation. In order to determine significance of difference between means of deceptive messages, the Kruskal Wallis test was applied. ‘Quantity” violation differed significantly from ‘Quality’, ‘Relevance’ and ‘Manner’ dimension for deceptiveness at 5 per cent level of significance (Z value = 2.12, 2.31, 2.31). Similarly ‘Quality” violation differed significantly from ‘Relevance’ and ‘Manner’ dimension for its perceived deceptiveness at 5 per cent level of significance (Zvalue = 2.12, 2.31). However, the difference between ‘Manner” and ‘Relevance’ was not found to be statistically significant (Z= 1.06). Hence, the hypothesis that, there are significant differences between the various forms of information manipulation in terms of perceived messages deceptiveness is partially accepted. Because our study could not find out statistically significant difference between perceived deceptiveness of Manner and Relevance dimension, so further studies are needed to be conducted to verify the difference between the two, by including larger sample of respondents. The results show that at least three dimensions of information manipulation are plausible in Indian Organizational context.

**Discussion**

The study showed that all messages violating Grice’s conversational maxims were perceived to be significantly deceptive as compared to honest message. In other words we can conclude that the current findings suggest that manipulation of information along any of the dimensions of IMT influenced message deceptiveness. If we compare the deceptiveness along various types of manipulations, then it is apparent from the tables that in both sets, manipulation of ‘Quality’ i.e. complete distortion of information is most deceptive form of information manipulation. Telling
complete lies or falsifying information was perceived to be most deceptive form of manipulation. This is in conformity with other studies i.e. McCornack et al (1992) and Yeung et al (1999) which concluded that ‘Quality’ violation consistently embodies the intended manipulation very effectively. Contrary to quality violation, quantity violation i.e. withholding some information is perceived as least deceptive form of Information Manipulation. This could be due to the reason that in quantity violation communicator, shares atleast some part of the honest information. Although quantity violation is also deceptive if violation is not made apparent to the listener. In one example set violation of relevance was perceived more deceptive than manner while vice versa in another set. Further, the two types of violation were not found significantly different. It may be due to the reason that collectivist perceive manner violation and relevance violation equally deceptive. The results suggest further investigation in this direction because study done by Yeung et al (1999) in China shows that collectivists donot perceive manner and quantity violation as deception. It is possible that there are cultural differences even within the non western cultures. The variation may be even because of different interpersonal relationships. However in India, too quantity and manner were perceived to be less deceptive than quality and relevance violation when rating for both sets were pooled. Overall, violation on manner dimension (lack of clarity/ambiguity while exchanging information) was perceived as second on honesty parameter. This may be owing to the fact that many people in organizations feel that ambiguity can be used as a strategy for smooth functioning in organizations. Eisenberg (2013) writes that ambiguity can be used as a strategy in the organizational communication to get the things going smoothly. He identifies four functions of strategic ambiguity i.e. its capability to promote unified diversity, to preserve privileged positions, to foster deniability and to facilitate organizational change. It is perhaps due to these reasons that ambiguity was not perceived as the more deceptive form of information manipulation. ‘Relevance’ violation i.e. changing the subject was perceived as more deceptive as compared to ‘Manner’ and ‘Quantity’ violations but less deceptive than Quality violation.

Overall, it can be concluded that the current research supports that Information Manipulation Theory is applicable in Indian Organizational context. Each deceptive message type of IMT theory was considered plausible in the organizational context of PAU. The academicians do consider any kind of covert violation along IMT dimensions to be a deceptive communication. The findings were consistent with the previous studies conducted in western and non western countries on IMT theory. Among all, ‘Quality violation’ was perceived as most deceptive form of information manipulation, although, manipulation on other three parameters of ‘Relevance’, ‘Manner’ and ‘Quantity’ was also perceived to be significantly deceptive in that descending order. It can be inferred that academicians considered that telling half truth i.e. giving incomplete information is better than giving ambiguous information. Further, academicians believed that it is better to give ambiguous information rather than telling irrelevant tales.

References