

Interrelation between Attribution and Emotion in the Framework of Relative Deprivation

Pramthesh Pandey¹ Rashmi Kumar² Priyaranjan Maral²

¹ *Department of Psychology, Munishwar Dutt Post Graduate College, Uttar Pradesh, India*

² *Department of Psychology, University of Allahabad, India*

Abstract

Relative deprivation is a feeling which occurs when we compare ourselves with those who are better off than us. Feeling of relative deprivation has been linked with various types of action tendencies such as protest, participating in riots, juvenile delinquency and so on. The main objective of this study was to understand the relationship between attribution and emotion in the context of relative deprivation. Two separate experimental studies were conducted to investigate the relationship between attribution and emotion which were generated after feeling of relative deprivation. In the first study, sample size of 53 students were taken and conditions of injustice were created experimentally by the researcher with the help of instruction, allocation of marks and justifications given to the participants. In the second study, 120 male students were taken as sample and the condition of relative deprivation was created through construction of two scenarios amongst which one was perceived as fair and other unfair. Likert's five point scale was used to measure Emotions, Attributions and Action. In the analysis, Pearson's correlation was used to find the relationship between the variables and Regression was done to find the predictor variables. In the analysis of study 1, it was found that attribution on Gender discrimination was positively correlated to Anger, Sadness, Jealousy and Discontent and in the regression analysis it was found that these emotions were significantly predicted by attribution on Gender discrimination. In study 2, there was positive significant correlation between Anger and external controllable attribution bias, hopelessness and external controllable attribution bias. Shame was found to be positively correlated to internal uncontrollable attribution error.

Keywords: Attribution, Discrimination, Emotion, Relative Deprivation, Regression

Introduction

In the context of Relative Deprivation, emotion has been a crucial factor and it was assumed that it is the cognitive appraisal of a situation which generates different emotions in us. In other words, the emotion which we feel in a situation depends on one's appraisal of that situation. Although intergroup theorists have by and large concentrated on negative attitude or evaluation as a precursor to discrimination, emotion theorists have typically differentiated both the diversity of feelings that may be directed toward a particular target and the specificity of behavior that can follow from those feelings.

Appraisal theories of emotion (Frijda, 1986; Roseman, 1984; Scherer, 1988; Smith & Ellsworth, 1985), in particular, conceptualize personal emotions as complex reactions to specific situations or events that include quite differentiated cognitions, feelings, and action tendencies. Specific emotions experienced by an individual are triggered by appraisals (cognitions or interpretations) of whether an event appears to favor or harm the individual's goals or desires and whether the individual has the resources to cope or not, for example. Depending on their particular configuration, cognitive appraisals trigger specific emotional experiences (Ellsworth & Smith, 1988; Roseman, Spindel, & Jose, 1990; C. A. Smith & Ellsworth, 1985) and these emotional experiences in turn promote certain behaviors (Frijda, Kuipers, & terSchure, 1989; Roseman, Wiest, & Swartz, 1994). Anger at another individual, for example, is typically conceptualized as resulting from appraisals that the other has harmed the self and that the self is strong. Such anger in turn leads to tendencies to aggress against that other person. Appraisal theory was developed to explain personal emotions experienced by individuals, and this focus was maintained in an important application of it to the intergroup context.

In this study attribution is used instead of appraisal which is like attribution in some sense. Appraisal is a process in which a situation is evaluated in terms of favorability and unfavorability. In attribution we try to infer the causes of observed behavior or events. Process of evaluation also takes place when we infer the causes of a behavior. What emotion a person feels may depend on the attribution process he/she engages in to understand own/ own group's deprived state. Weiner (1986) proposed that appraisal of a situation as positive or negative a causal ascription for the outcome may be sought and a different set of emotion is generated by the chosen attribution. An external attribution may result in anger while an internal attribution may result in shame. These varied emotional reactions are likely to lead to varied behavioral reactions to one's deprived state.

Four types of attribution were identified by Ferree and Miller, based on location of causality (internal vs external) and stability (stable vs. unstable). They proposed that if causes are judged to be internal and stable, the result is an attribution made to some enduring, often congenital, aspect of self. When the cause is internal but unstable, the resulting attribution is to a controllable aspect of self. External, stable causes lead to system-directed attributions; external, unstable causes produce attributions based on chance or fate.

Hence, the aim of the present study was to find the relationship between various Emotions and Attributions which were incorporated in the study from the literature of Relative Deprivation. It was also explored about the Emotions as a significant predictor of various attributions and vice-versa. In the previous studies it was found that Emotions always followed Attribution, but in these studies researchers tried to explore the possibility of predicting Attribution on the basis of Emotions. In this way, present study aims at furthering our understanding of the way in which people's attribution may have bearing on their emotional experience.

Study 1

Methodology

Sample

In this study 53 students (24 male and 29 female), from Allahabad University were taken as sample. Their age range was 17 to 21. The participants were selected using purposive sampling technique using randomization as only those students included in the study who met the “wanting” pre-condition of Relative Deprivation.

Measures

Relative deprivation was manipulated at three levels- a) Egoistic relative deprivation (ERD), b) Fraternalistic relative deprivation (FRD) and c) Double relative deprivation (DRD), by giving instructions, allocating the marks and by giving justifications and its effect on attribution and emotion was measured by using Likert’s five point scale.

Emotion Questionnaire: Eight emotions- anger, sadness, anxiety, jealousy, discontent, shame, proud and happiness. Participants rated their affective state arises due to three different forms of Relative deprivation on 5 – point scales.

Attribution questionnaire –Seven causal categories, i.e. ability, performance, task difficulty, source, luck, chance and sex discrimination were used. The participants rated the contribution of these causes on separate 5 – point scales.

Action Questionnaire- Seven action categories i.e. Accept the result, Self-improvement, Individual protest, Withdrawal from such activities, Collective protest, Individual positive action, Collective positive action were taken and participants rated these behavioral actions on 5 – point scale.

Procedure

There are three experimental conditions in this experiment; their description is as follows Experiment was done in two phases. In the first phase of the experiment students were given false information by their course instructor regarding an issue related to higher education. They were asked that the human resource ministry is going to constitute a council for higher education in place of a university grant commission. The Ministry wants to ensure the participation of teachers, experts from every subject as well as students. So, for this purpose the ministry has given responsibility to the universities to select few students from their campus so that a core group of students selected from different universities can be created and can give their opinion to the council. To become part of the core group, students must have the ability to express their ideas and good comprehension and writing skills. Students who will be selected in this core group will be provided some extra facilities; like students can visit any national library to avail their facilities and they will also get TA and DA for that. Students will also get a chance to meet with members of the council from time to time. After giving this information they are asked whether they want to be part of this core group or not? Out of 60 students only 53 students showed their willingness to be part of the core group. Those who say yes were taken in this experiment. After this they were asked to write an essay on the topic ‘reservation in higher education’. Students were told that they will be selected on the basis of their performance in this essay. They were given 45 minutes to write the essay. A confederate was used in this experiment as representative of the HRD ministry to make the situation real for the subjects. When they finished the essay they were asked that the result of this test will be declared after a week. After this essay was checked and experimental conditions were created on the basis of marks they had obtained. 20 marks was the cut off out of 50 to get selected. In the first condition those subjects were selected who

Interrelation between Attribution and Emotion in the Framework of Relative Deprivation

have obtained 20 marks or more than this and even then they were not selected in the SCG. In the second condition those subjects were placed who have obtained required marks but not get selected. This was the condition of double relative deprivation, because in this condition neither subject was selected nor his membership group was selected. In the third condition those subjects were selected who have obtained required marks for being selected in the core group and were selected in the SCG. Beside this subjects were assigned into two groups on the basis of their gender in each condition. Result of the test was declared after a week as per pre decided schedule subjects were individually told about their result. Subjects in each condition were given justification for their selection and rejection. Feeling of relative deprivation was manipulated by these justifications. After announcing the result, a questionnaire consisting of items related to attribution, emotion and actions were given to them and asked to give their response on it. Confederate was present at the time of declaration of result. When they completed the questionnaire they were debriefed about the experiment, they were told that it was an experiment and they were part of it and they were lauded for their cooperation and participation in the experiment.

Results

Table 1: Correlation between Emotion and Attribution

Attribution/ Emotion	Ability	Performance	Task Difficulty	Gender Discrimination	Source	Luck	Chance
Anger	-0.026	-0.106	-0.01	0.645**	-0.101	-0.02	0.16
Sadness	0.243	-0.140	-0.059	0.501**	-0.221	-0.129	-0.01
Anxiety	0.054	-0.159	0.031	0.072	-0.077	0.054	0.043
Jealousy	0.107	0.164	-0.084	0.639**	-0.038	-0.158	-0.022
Discontent	-0.124	-0.107	-0.131	0.561**	0.006	0.006	0.20
Shame	-0.375*	-0.362*	0.202	0.260	0.00	-0.216	-0.181
Proud	-0.133	0.234	0.031	-0.278	0.036	-0.008	0.095
Happiness	0.086	0.231	0.147	-0.347*	0.154	0.080	0.112

* $p < 0.05$, ** $p < 0.01$

In table no. I correlation between emotion and attribution is revealed and it can be seen that there is significant positive correlation between *Anger and Gender Discrimination* ($r = 0.645$, $p < 0.01$), *sadness and Gender Discrimination* ($r = 0.501$, $p < 0.01$), *Jealousy and Gender discrimination* ($r = 0.639$, $p < 0.01$) and *discontent and gender discrimination* ($r = 0.561$, $p < 0.01$), significant negative correlation between *happiness and gender discrimination* ($r = -0.347$, $p < 0.05$). It is also observed from the table that there is a significant correlation between *shame and ability*, *shame and performance* ($r = -0.375$ and $r = -0.362$, $p < 0.05$). It is also evident from the table that there is no correlation between *shame and source i.e. zero*.

Table 2: Various Emotions as predictor of Attribution

Emotion/ Attribution	Happiness	Jealousy	Sadness	Discontent	Anger	Shame	R ²	F	Sig.
Gender Discrimination	-0.041	0.354	0.006	0.036	0.343	-	0.485	6.033	0.00

Attribution On ability	-	-	-	-	-	0.375*	0.141	6.059	0.19
Performance	-	-	-	-	-	-0.362*	0.131	5.581	.024

* $p < 0.05$, ** $p < 0.01$

Note: Cell values are Beta coefficients, except for columns of R^2 and F

Table No. II shows that emotion of *Shame* was found to be a significant predictor of *Attribution on ability* (Beta = 0.375, $p < 0.05$) which indicates that if a person feels shame because of the deprivation then he will do attribution on ability. 14.1 percent of variance was explained in the case of Attribution on ability by shame. *Shame* was also found to be a negative significant predictor of *attribution on performance* (Beta = -0.362, $p < 0.05$). It means that if a person feels shame on being relatively deprived, he will attribute less on performance. Variance explained was 13.1% for attribution on performance by shame. Maximum variance of 48.5% was explained by the emotions of *Happiness, Jealousy, Sadness, Discontent and Anger* in the case of *Attribution on Gender discrimination* but none of them was found to be significant predictor

Table 3: Various Emotions as predictor of Attribution

Attribution/ Emotion	Chance	Performance	Task Difficult y	Gender Discrimination	Source	Ability	Luck	R^2	F	Sig
Shame	-0.132	-0.188	0.234	0.466**	-.012	-.508**	-.198	.486	3.92	.004
Discontent	.170	-0.146	-0.114	0.605***	-.037	-.193	-.174	.431	3.13	.001
Anger	0.381	-0.225	0.141	0.678***	-.339*	-.093	-.327	.586	5.86	.000
Sadness	0.136	-0.222	0.054	0.642***	-.348*	-.291	-.172	.527	4.61	.001
Jealousy	-0.063	0.168	-0.082	0.696***	-.055	-.186	-.224	.500	4.14	.003
Happiness	0.337	0.396	0.157	-0.548**	.210	-.055	-.187	.364	2.37	.048

* $p < 0.05$, ** $p < 0.01$, *** < 0.001

Note: Cell values are Beta coefficients, except for columns of R^2 and F

This table shows that amongst all the attributions, *Gender Discrimination* is significant predictor of all the Emotions *Shame, discontent, Anger, Sadness, Jealousy, Happiness*. For all the emotions, prediction was positive except Happiness. (Beta =0.466, $p < 0.01$; Beta = 0.605, 0.678, 0.642, 0.696, $p < 0.001$; Beta = -0.548, $p < 0.01$) respectively. It was also observed that attribution on *Source* was the negative predictor of all the emotions except *Happiness* but amongst all the prediction was significant only for the emotion of *Anger and sadness* (Beta = -0.339, -0.348, $p < 0.05$) respectively. *Attribution on ability* was found to be a significant predictor only for the emotion of *Shame* (Beta = -0.508, $p < 0.01$). From the table it can be clearly seen that attribution on *Luck* predicted all the emotions negatively but none of the beta values were significant. Similarly attribution on *chance, performance and task difficulty* also were not the significant predictors. All the variables of Attributions together explained the variance of 48.6% in the case of *Shame*, 43.1% in the case of *Discontent*, 58.6% for *Anger*, 52.7% in the case of *Sadness*, 50% in the case of *Jealousy* and 36.4% in the case of *Happiness*.

Study 2:

Methodology

Sample

The subjects were 120 males ranged between 18 to 30 years of age. Equal number of subjects were randomly assigned into two conditions such as biased and unbiased decision conditions.

Measures

Anticipated Emotions: Anger, hopelessness, sadness, and shame were the anticipated emotions to be measured. These emotions were adapted from the Review of Literature. Participants responded to these emotions on a 5 point scale.

Attribution: Four kinds of Attributions were asked to the subjects who they had to rate on a 5 point scale. They were internal controllable (performance), internal uncontrollable (luck), external controllable (biased decision), and external uncontrollable (human error).

Actions Intentions: Participants rated the extent to which they endorsed their actions on a 5 point scale. Actions measured were Aggressive behavior, complaint prayer, practice and demand for advanced technology.

Procedure

Two scenarios were constructed for the study. Scenarios were related to a cricket match in which the Indian team lost its semifinal match which was very crucial for them to go into the finals. In the first scenario it was shown that the team was due to human error and in the second scenario it was shown that the defeat was due to the biased decision by the umpire. In other words, decisions by the authority were manipulated in the study. Along with these scenarios a list of some emotions, actions and attribution was given to the participants. Emotions were selected on the basis of literature review. Internal controllable-uncontrollable and external controllable-uncontrollable causes were used for the attribution in the study.

Results

Table 4: Correlation between Emotions and Attributions.

Emotions	Internal Controllable attribution performance	External controllable attribution decision bias	External uncontrollable attribution human error	Internal uncontrollable attribution error
Anger	-0.001	0.186*	-0.096	-0.066
Hopelessness	0.189*	0.193*	0.061	0.158
Sadness	0.156	0.051	0.006	-0.058
Shame	0.230*	-0.078	0.116	0.215*

* $p < 0.05$, ** $p < 0.01$

In table no. 4 positive significant correlation was noticed between *Anger* and *external controllable attribution bias* ($r = 0.186, p < 0.05$), *hopelessness* and *external controllable attribution bias* ($r = 0.193, p < 0.05$). *Shame* was found to be positively correlated to *Internal uncontrollable attribution error* ($r = 0.215, p < 0.05$).

Table 5: Emotions as predictor of Attributions.

Attributions	Shame	Hopelessness	Anger	R ²	F	Sig.
Internal controllable attribution (Performance)	0.218*	0.175*		0.083	5.301	0.006
External controllable attribution (Bias decision)		0.172	0.163	0.063	3.966	0.022
Internal uncontrollable attribution team luck	0.215*			0.046	5.703	0.019

* $p < 0.05$, ** $p < 0.01$

Note: Cell values are Beta coefficients, except for columns of R² and F

This table shows that shame was found to be predicting Internal controllable attribution performance and Internal uncontrollable attribution team luck (Beta = 0.218, 0.215 & $p < 0.05$). Hopelessness was also found to be contributing significantly in predicting Internal controllable attribution performance (Beta = 0.175, $p < 0.05$). The explained variances in both the cases were 8.3% & 4.6% respectively. It can be perceived from the data that when shame was felt more then, the attribution was done more on the team's luck and Performance.

Table 6: Attribution as a predictor of Emotion

Attribution/ Emotion	Internal Controllable Attribution Performance	External Controllable Attribution Bias Decision	External Uncontrollable Attribution Human error	Internal Uncontrollable Attribution Team Luck	R ²	F	Sig
Anger	0.028	0.186*	-.84	-.044	.045	1.36	.25
Hopelessness	0.202*	0.231*	.059	.119	.105	3.37	.012
Sadness	0.193*	0.072	.045	-.103	.04	1.20	.31
Shame	0.202*	-.038	.107	.148	.094	2.96	.022

* $p < 0.05$, ** $p < 0.01$

Note: Cell values are Beta coefficients, except for columns of R² and F

Interrelation between Attribution and Emotion in the Framework of Relative Deprivation

This table gives information about the attributions which are significant predictors of various emotions and after observing Beta values it can be said that *Internal Controllable Attribution Performance* is the significant predictor of *Hopelessness and Shame* (Beta = 0.202; 0.193, $p < 0.05$). In the similar manner it can be seen that *External Controllable Attribution Bias Decision* is the significant predictor of *Anger and Hopelessness* (Beta = 0.186; 0.231, $p < 0.05$). After studying R square it can be said that Explained variance for *Anger, Hopelessness, sadness and shame* was 4.5%, 10%, 4% and 9% respectively by all the attribution methods together.

Discussion

The aim of this study was to find the relationship between Attribution and Emotion and another purpose was to test the literature which suggests that Emotion is followed by the cognitive appraisal i.e. attribution of events. Another point of this research was that these Attributions and Emotions were generated in the participants after feeling relatively deprived because of the experimentally created situations by the researcher. It is also notable in this study that not only negative emotions are included but positive emotions are also there.

In first study, it was found that attribution on Gender Discrimination was found to be positively correlated to emotions of Anger, Sadness, Jealousy, and Discontent and negatively correlated to Happiness. It was also clear in table no.1 that Emotion of Shame is negatively correlated to attribution on ability and performance. So, the result shows that there is a relationship between these emotions and attributions made but the direction of the relationship was determined with the help of regression analysis. Table no.2 shows emotions as a predictor of attributions and it can be seen that emotion of Shame was significant predictor of attribution on ability and also of attribution on performance but negative i.e. if a person felt shame after feeling relatively deprived he attributed on his group's or his own lack of ability of doing things and less performance. In literature also it is seen that amongst students, failure's perception due to self responsibility and low ability have been associated with shame (Weiner, 1985; Smith & Ellsworth, 1985). Brown & Weiner (1984), Covington & Omelich (1984) and Jagacinski & Nicholas (1984) also reported that shame related emotions are linked with failure due to low ability.

In table no.3 when Attributions were seen as a predictor of Emotions as Weiner (1985) noted that attributions are related to affective outcomes. It was found that attribution on Gender Discrimination was significant predictor of Anger, sadness, jealousy and discontent. Therefore, it can be said that when a person thinks that if he/she or his/hers' group is at disadvantageous position because of Gender discrimination they will feel these emotions. Relationship between attribution on ability and emotion of shame was reconfirmed as attribution on ability was found to be predicting emotion of shame negatively and significantly too. Another noted caveat of the interpretation is that attribution on source (i.e. other person or group is at advantageous position because of someone's influence) was a negative significant predictor of Anger and sadness. This result suggests that when a person feels that he or his group is relatively deprived because of someone's support to out – group they felt less angry and sad.

In study 2 where relative deprivation was created on the basis of perceived fairness and unfairness and attribution was done on the basis of internal & external and stable & unstable. It was observed in the result that there was positive and significant correlation between Anger and External controllable attribution i.e. Bias decision of umpire, Hopelessness and bias decision. In various studies of cognitive antecedents of various emotions, a strong relationship between anger and appraisal of unfairness was found (Roseman

et.al., 1994). Attribution theorists also found that the attributional antecedent for anger is an ascription of negative, self related outcome or event to factor controllable by others (Weiner, 1985, 1980a,b.; Weiner et.al. 1982, Weiner et.al. 1979). Hopelessness was also positively related to performance of the cricket team which was internal controllable attribution. Emotion of shame was positively correlated to External uncontrollable attribution i.e. Human error.

When Regression analysis was done to see emotions as a predictor attribution it was observed that when a person felt shame because of the feeling of Relative deprivation of his team not going into the final he attributed cause being Team's performance and team's luck i.e. emotion of shame was a positive and significant predictor or attribution on performance and team's luck. Table no. 5 also shows that emotion of hopelessness was a significant positive predictor of attribution on performance.

Table no.6 in which emotions were predicted on the basis of Attribution, it was seen that attribution on a team's performance led to the feeling of hopelessness, sadness and shame whereas, attribution on Bias decision aroused the feeling of Anger and hopelessness. Hopelessness is the emotion which gets generated as a result of the anticipation of non-attainment of goal and is likely to be influenced by causal stability (Weiner et.al., 1978, 1979) whereas anger and shame was related to controllability dimension of attribution (Weiner, 1982; Weiner & Graham, 1984). It was also suggested that if a person makes internal attribution he might experience shame and if attribution is done externally then experienced emotion could be anger (Weiner, 1985). Similar argument was given by Gundlack, Douglas and Mackinko (2003) where it was said that attribution of control in response to the negative outcome are likely to trigger emotions such as anger and resentment.

There is a caution in interpreting the result as there is a possibility that not in every case these attributions will lead to the same emotions. In the literature as per researcher's knowledge not much was found to support emotions as predictors of attributions. This aspect of research needs to be further explored in detail.

Conclusion

The main objective of both these studies was to understand how emotions and attributions are related to each other, when one feels relatively deprived. The result of these experiments show that the nature of emotion decides what causes will be attributed to our failure while achieving a goal or task. Result also shows that Relative Deprivation comprises affective and cognitive components. Hence, in order to understand and predict the behavioural consequences of relative deprivation, we need to understand the relationship between different emotions and attribution. This study reveals that a particular emotion is linked with a specific causal attribution. For example, emotions like anger and discontent, drive us to make external attributions while emotions such as sadness and guilt, guide us in making internal attributions. On the basis of this study we can plan a future study to understand how attribution and emotional relationship mediates the responses to relative deprivation.

References

1. Brown, J. and Weiner, B., 1984. Affective consequences of ability versus effort ascriptions: Controversies, resolutions, and quandaries. *Journal of Educational Psychology*, 76(1), pp.146-158.

2. Covington, M. and Omelich, C., 1984. An empirical examination of Weiner's critique of attribution research. *Journal of Educational Psychology*, 76(6), pp.1214-1225.
3. Frijda, N., 1993. The place of appraisal in emotion. *Cognition & Emotion*, 7(3-4), pp.357-387.
4. Gundlach, M., Douglas, S. and Martinko, M., 2003. The Decision to Blow the Whistle: A Social Information Processing Framework. *Academy of Management Review*, 28(1), pp.107-123.
5. Harvey, P., Dasborough, M.T. (2006). Consequences of employee attribution in the workplace : the role of emotional intelligence. *Psicothema*, vol. 18 suppl., pp., 145 – 151.
6. Heider, F. (1958). *The Psychology of Interpersonal Relations*. Wiley, New York.
7. Jagacinski, C. M., & Nicholls, J. G. (1984). Conception of ability and related affects in task involvement and ego involvement. *Journal of Educational Psychology*, 76, 909-919.
8. Perrewe, P.L. & Zellars, K.L. (1999). An examination of attribution and emotions in the transactional approach to the organizational stress process. *Journal of Organizational Behavior*, 20, 739 – 752.
9. Roseman, I. J., Spindel, M. S., & Jose, P. E. (1990). Appraisals of emotion eliciting events: Testing a theory of discrete emotions. *Journal of Personality and Social Psychology*, 59, 899–915.
10. Roseman, I. J., Weist, C. and Swartz, T. S. (1994). Phenomenology, behaviours, and goals differentiate discrete emotions'. *Journal of Personality and Social Psychology*, 67, 206- 221.
11. Smith, C. A. and Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion'. *Journal of Personality and Social Psychology*, 48, 813-838.
12. Smith, C. A. and Ellsworth, P. C. (1987). Patterns of appraisal and emotion related to taking an exam. *Journal of Personality and Social Psychology*, 52, 475-488.
13. Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71, 3-25.
14. Weiner, B. (1980a). A cognitive (attribution)-emotion-action model of motivational behavior: an analysis of judgments of help-giving. *Journal of Personality and Social Psychology*, 39, 186-200.
15. Weiner, B. (1980b). May I borrow your class notes? An attributional analysis of judgments of help-giving in an achievement related context. *Journal of Educational Psychology*, 72, 676-681.
16. Weiner, B. (1983). Some methodological pitfalls in attributional research. *Journal of Educational Psychology*, 75, 530-543.
17. Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
18. Weiner, B. (1986). *An Attribution Theory of Motivation and Emotion*. Springer-Verlag, New York.
19. Weiner, B. (1987). The social psychology of emotion: applications of a naive psychology. *Journal of Social and Clinical Psychology*, 5, 405-419.
20. Weiner, B., Graham, S. and Chandler, C. (1982). Causal antecedents of pity, anger, and guilt. *Personality and Social Psychology Bulletin*, 8, 226-232.
21. Weiner, B., Russell, D. and Lerman, D. (1979). The cognition-emotion process in achievement-related contexts. *Journal of Personality and Social Psychology*, 37, 1211-1220.