Reaction of Expectation of Success and Failure Attribution among Indian College Adults

Abstract

The present study is an attempt to investigate reactions to Expected Success followed by Success/Failure feedback (ESS/ESF) in the hypothetical setting. Investigated the effects of personality variable, namely, *self-esteem*, a cognitive variable, namely, *confirmation*(actual success, when success was expected) *and disconfirmation of expected success*, (actual failure, when success was expected), as well as the *sequence* of these two events, on attribution of Success/Failure along with a social variable, namely, working in an *individual or group setting*, on reactions to success/ failure. 129 participants were employed through random sampling. The main dependent variables were (a) Subsequent choice of Individual setting/ Group setting, and (b) Attribution of Success/Failure. Subjects, classified into High / Low on Self-esteem (SE), initially expected success working with Group or Individual condition followed by success / failure. They were then asked to make attributions for their unexpected/expected success/failure, and choose an individual and group condition for the next trial. Findings indicated that after individual/ESF and group/ESS, HSE preferred to remain in the same condition. In contrast LSE preferred both conditions equally likely. There were significant differences between Success and Failure conditions with respect to the Attribution dimensions. This line of results supported the cognitive explanation of attribution.

Key Words- Attribution, Expected success, Success, Failure, Self-esteem,

Introduction

In generalsuccess leads to positive reactions, and failure, to negative reactions, the nature of these reactions also depends on whether the success/failure experience was expected or unexpected. Evidence indicates that subjects are more likely to attribute unexpected success than expected success to good luck, and similarly, are

more likely to attribute unexpected failure rather than expected failure to bad luck. Moreover, expected success rather than unexpected success is attributed more to ability than luck, and expected failure rather than unexpected failure is attributed more to lack of ability than to bad luck (Feather, 1969; Feather & Simon, 1971a, 1971b). Evidence also shows that expected outcomes are likely to be attributed to stable dispositional factors, such as knowledge, whereas unexpected outcomes are likely to be attributed to luck (Simon & Feather, 1973). Partially (but not completely) corroborating these findings, there is evidence (Henning, 1980) that unexpected failure is likely to be attributed to chance rather than low ability, low effort or other factors; but there may be no distinct differences in the responsibility attributed to effort and ability between expected and unexpected success; in this study, this finding contradicted the anticipated effects. Moreover, success/failure attribution is reported to be influenced by an interaction effect between a personality variable such as self-esteem, and expectancy of success, and confirmation or disconfirmation of expectancy (Midkiff& Griffin, 1992). At the same time, not all studies on expectancy show its predicted effects, as reported by Bailey, Helms & Gladstone (1975). There is evidence (Chandler & Spies, 1992) that actual performance, but not expectancy is significantly related to a behavioural reaction to success/ failure, such as changing the strategy of examination preparation. An interesting study comparing the role of expectancy-covariance (success/ failure expectancy and its confirmation), with that of motivational factors such as egotism, in attribution of success/ failure, revealed that egotism had a stronger role – that is, regardless of success/failure expectancy or its confirmation, success was attributed to internal factors and failure, to external factors (W.G. Stephan, Bernstein, C. Stephan, & Davis, 1979). In a modified form of testing the effects of expectancy, Carver &Scheier (1982) examined the role of internal/external attribution as an independent variable, along with outcome expectancy and self-focus. They found interactive effects of these variables on performance, as well affective and evaluative reactions after success/failure.Evidence has been reported on the effect of expectation and expectancy on success/failure and its attribution (W.G. Stephan, Bernstein, C. Stephan & Davis, 1979; Davis & Stephan, 1980; Carver &Scheier, 1982, Marshall & Brown, 2006) and on the role of self-esteem and success expectancies on emotional reactions to success/failure (Midkiff& Griffin, 1992). It appears that these investigations have examined expectancy as a determinant of performance, leading

to success/ failure, or have used expectancy confirmation as an explanatory variable, distinguishing between motivational and cognitive explanations of achievement attribution. Moreover, there is also a lack of evidence on the effect of the *sequence* of confirmation and disconfirmation of expected success, on achievement attribution. Thus, it would be anticipated that whether confirmation of expected success precedes or follows disconfirmation of expected success would influence attribution as well as subsequent performance by the individual.

It was felt that particular context in which a person experienced success and failure might effect reactions to success and failure attribution through aspects such as social comparison and the self-centered bias (Ross &Sicoly, 1979; Ross &Lumsden, 1982), and thereby influence behavioural reactions like subsequent choice of working individually or in a group. It may be noted that there is a paucity of empirical evidence on the role of social factors on reactions to success/failure, but aspects such as social comparison (Mikulincer, Bizman&Aizenberg, 1989; Wood, Gordano-Beech &DuCharme, 1999) have been looked into and shown to have some effect. Therefore it was felt that an individual/group work setting might affect reactions like success /failure attribution

In order to obtain precise information, the present study was to investigate the effects of a personality variable, namely, *self-esteem*, a cognitive variable, namely, *confirmation*(actual success, when success was expected) *and disconfirmation of expected success*, (actual failure, when success was expected), on attribution of Success/Failure along with a social variable, namely, working in an *individual or group setting*, on reactions tosuccess/ failure**.**

On the basis of variables mentioned above, the possible interactive effects was expected -

(i) Attribution ratings would be higher under Success than under Failure condition.

(ii) Success/ Failure and Causal Factors would show a significant interactive effect on Attribution ratings.

(iii) Success/Failure, High/Low SE, and Factors would show a significant interaction. Under Success, High SE subjects would make higher attributions to internal factors (Effort and Ability) and lower attributions to external factors (Task Ease and Task Difficulty); Low SE subjects would make higher attributions to external factors and lower attributions to

internal factors. This expectation was based on the findings reported in the literature. It was expected that when individuals expect success and actually get success (confirmation of expected success) they are likely to make internal attributions. When they expect success but actually fail (disconfirmation of expected success), they are likely to make external attributions for failure. In addition, if they experience different sequences of confirmation/disconfirmation of expected success, their attributions for success and failure are likely to be influenced by whether confirmation of expected success preceded, or followed, disconfirmation of expected success. (a) In addition, whether they worked in an individual or group setting might also influence their reactions to success/failure, and all of these effects may differ between subjects high on Self-esteem and those low on Self-esteem. The basis of this expectation was that subjects experiencing confirmation of Expected Success first and then experiencing disconfirmation of Expected Success would still retain their confidence in the light of their previous Success experience. (b) When an individual performs a task alone, expects success and actually gets success, there is a confirmation of his/her expectation, the outcome is positive, and the person can legitimately take the entire credit personally, and make an internal attribution for his/her success. However, when the person expects success but actually fails in the 'alone' condition, taking the blame personally would be demeaning to the self, making the person resort to external attribution in terms of luck or task characteristics. In a group setting, when an individual expects success and actually gets success, internal attribution may be weaker because the credit has to be shared with group members, thus introducing an external element in the attribution, and diluting the self-serving bias. If the individual expects success but fails, external attribution would seem more justifiable because the blame can be shared with other group members. In addition, task characteristics may be held responsible for failure. Thus self-protection in the case of failure would be easier in a group setting. Attribution for either success or failure in a group performance setting may also contain a self-centered bias (Ross &Sicoly, 1979). Individual subjects may take greater

credit than other members for success, and also greater blame than other members for failure.

(iv) With regard to Subsequent choice of Individual/ Group setting, it was expected that High SE subject would show an overall greater likelihood of Subsequent choice of Individual rather than Group setting. Low SE subjects would be more likely to choose the Group rather than the Individual setting. This expectation was based on the assumption that high self-confidence, an enhanced sense of individual achievement among High SE persons (Campbell, 1982) and their wish to take full credit for their achievement would make them prefer an Individual over a Group setting. On the other hand, Low SE subjects would be more likely to make a Subsequent choice of Group setting because they would feel more secure, and more sure about their outcome by affiliating with a group (Kaplan, 1980), and possibly also as an attempt to protect their self-esteem.

(v) It was expected that Consensus rating (regarding Subsequent choice of Individual/ Group setting) would differ depending on the combination of High/Low SE and ESS/ ESF. The overall Consensus rating given by High SE subjects would be lower than that given by Low SE subjects. Under ESS, High SE subjects would give a lower Consensus rating compared to Low SE subjects, whereas under ESF, the former would give a higher Consensus rating than the latter. Moreover, subjects making an Individual choice would report a lower Consensus than those making a Group choice. The rationale underlying these expectations was based on the self-justification hypothesis (Marks, 1984), and also on the reasoning that uniqueness rather than consensus in Subsequent choice would be associated with greater confidence, a feature expected of High SE subjects and those who experience success. The opposite trend would be associated with lower confidence, a feature characterizing Low SE subjects, and those who experience failure. At the same time, findings indicating higher consensus after a success experience compared to a failure experience has also been reported (Deutsch, 1989) : these findings have been explained in terms of a selective exposure effect. Therefore, allowance was also made for the latter possibility.

(vi) At last it was assumed thatParenting Style, Generalized Self-Efficacy and Self-handicapping were expected to be significantly correlated with, and to predict Attribution significantly. In the light of the ambiguous findings on this aspect in the direction of the relationship was not specified.

It would be anticipated that tendencies such as the self-serving bias and the self-centered bias would be stronger among High SE subjects than among Low SE subjects, while the need for self-protection may be stronger among Low SE subjects. On the other hand, all self-related motives may be equally strong among High and Low SE subjects, but expressed in differing ways (for example, differential attribution in terms of various causal Factors).

The main rationale for including confirmation/disconfirmation of expected success, as well as individual or group setting was that more exact evidence is needed with respect to expectancy effects, and the role of social factors in reactions to success/failure. In addition, keeping in mind the limitations and difficulties of studying actual task-performance, the present study involved a scenario that incorporated the variables described above.

In short, present study addressed the following questions:

What would be the difference, if any, with regard to the Subsequent choice of an Individual/Group setting, and Success/Failure attribution,

A) between High and Low Self-esteem subjects,

B) when subjects are informed that they have performed a task in a Prior Individual or Group setting,

C) when subjects are informed that they had expected success and they actually succeeded (Confirmation) versus they actually failed (Disconfirmation),

D) when attribution has to be made in terms of given Causal Factors, namely, Ability, Effort, Luck, Task ease, and Task difficulty, and

E) in the interactive effects of High/Low SE, Prior Individual/Group setting, Confirmation/ Disconfirmation of Expected Success, and Causal Factors ?

Method

Subjects

The initial sample consisted of 129 college undergraduate students (97 males and 32 females). Their ages ranged between 17 and 23 years (Mean age = 19.5 years), and they belonged predominantly to the middle socioeconomic group. Because of classification on one of the independent variables and other reasons, some subjects had to be excluded. The final sample consisted of 113 subjects.

Design

High/Low SE, Individual / Group setting, Confirmation-Disconfirmation of Expected Success (ESS-ESF/ ESF-ESS), and five Causal Factors, were combined into a mixed factorial design. High/Low Self-esteem was a classified variable, Individual / Group setting and ESS-ESF/ ESF-ESS were manipulated between-subject variables, and Causal Factors (Effort, Ability, Luck, Task Ease, and Task Difficulty) was included as a repeated measure. The experiment thus had a 2 x 2 x 2 x 5 design, the last-mentioned variable being a repeated measure

The main dependent variables were (a) Subsequent choice of Individual setting/ Group setting, and (b) Attribution of Success/Failure. The Attribution measure was to be taken at two stages : (1) in the ESS-ESF condition, after the first phase, or ESS (**E**xpected **S**uccess followed by **S**uccess), and (2) after the second phase, or ESF (**E**xpected **S**uccess followed by **F**ailure). Similar Attribution measures were taken in two phases in the ESF-ESS condition.

Additional dependent variables were examined, namely, Reasons for Subsequent Choice of Individual / Group setting, Consensus rating (what percentage of other persons would make the same choice as the subject).

Finally, Parenting style, Generalized Self-efficacy, and Self-handicapping were examined as possible predictors or correlates of attribution. The following questionnaires were used for assessing these three variables, Parenting Authority Scale y (Buri, 1991), Generalized Self-efficacy Scale (Sud, Schwarzer& Jerusalem, 1998) and Self-handicapping Scale (Jones &Rhodewalt, 1982). Self-esteem was assessed with the help of the State Self-Esteem Scale (Heatherton &Polivy, 1995).

Procedure

The study was conducted in a classroom setting, taking groups of 30-35 students at a time. The investigation was described as "an exploration of subjects' views about how people react to success and failure, and the relationship between their views, their family environment and personality". Subjects were given a packet of questionnaires consisting of (1) a general information sheet, including items such as age, gender, and income level, (2) a questionnaire consisting of two scenarios describing a hypothetical task-performance situation : in which Prior Individual/ Group setting as well as Expected Success-Success (ESS) or Expected Success-Failure (ESF) were manipulated. The scenario was followed by the following items/questions intended to measure the dependent variables, (a) Rating of Happiness on receiving the result of task performance (5-point scale), *(b)* Attribution ratings for Success / Failure (5-point scale) on each of five given causes (Factors), namely : Effort, Luck, Ability Task ease and Task difficulty, (d) Rating of one's own contribution towards/ responsibility for success/failure, as well as the contribution/ responsibility of other group members (11-point percentage rating scale) : this item was included only in the Prior Group setting condition, (e) Item related to Subsequent choice of Individual/Group setting: The two settings were presented as options (hypothetical), and the advantages and disadvantages of each option were briefly stated. Subjects then had to respond by choosing (hypothetically) either the Individual setting or the Group setting, (f) Item asking for Reasons for Subsequent choice – this was an open-ended item. All of these tools were administered in Hindi, the native tongue of the subjects.

Manipulations

Subjects were categorized as being High or Low on SE on the basis of a median split on their total scores on the State Self-esteem scale.

Prior Individual setting/Group setting, and ESS-ESF/ ESF-ESS were manipulated through information given in the task-performance scenario.

Subjects were randomly assigned to the four manipulated conditions, namely,

A. Individual setting/ ESS- ESF Sequence, that is, Confirmation – Disconfirmation of Expected Success.

B. Group setting/ ESS-ESF sequence, that is, Confirmation - Disconfirmation of

Expected Success.

C. Individual setting / ESF-ESS Sequence, that is, Disconfirmation-Confirmation of Expected Success. and

D. Group setting/ ESF-ESS Sequence, that is, Disconfirmation - Confirmation of Expected Success.

All settings/conditions included two scenarios first and second, respectively.

Prior Individual/Group setting and ESS-ESF/ESF-ESS were manipulated through information given in the task-performance scenario. That is, depending on the condition, subjects were told that they had worked on some arithmetic problems alone/ in a group (with four other persons) for a specified duration. On commencement of the task they were sure that they would get success (hence they had expected success). After completing the task, they come to know that they had obtained more marks than the stipulated criterion, and that they had actually got success/ they had obtained fairly low marks, and that they have actually failed.

Manipulation check

No manipulation check was required in the case of Prior Individual setting/ Prior Group setting, as this variable was presented in the form of factual description regarding the task performance setting.

In the case of Success/Failure (ESS/ ESF), manipulation effectiveness was verified with the help of a Happiness rating : on a 5-point scale ranging from 1 to 5, the criteria were ratings above 3 under Success, and ratings under 3 under Failure.

The expectations outlined above were examined in the present study, and the following results emerged.

Results

Preceding the main analysis, the following aspects had to be confirmed, namely,

(1) First analysis consisted of reliabilities of the tests (Hindi version) were found to be satisfactory. Subjects were classified into High and Low SE categories, on the basis of a median split. The classification resulted in a High SE group (Mean SE score = 62.19, SD = 5.89, n = 56) and a Low SE group (Mean SE score = 62.19, SD = 7.15),

with meansthat were significantly different (t= 16.256, df = 111, p < .01). Sixteen subjects had to be excluded because their SE scores lay on or close to the median

Success/Failure Manipulation check: Happiness rating

Effectiveness of the Success/Failure manipulation was verified on the basis of a rating of Happiness. Subjects were asked to rated their extent of 'Happiness' (5-point scale) after reading the scenario depicting good results (high marks) or bad results (low marks).The criterion of manipulation effectiveness was a Happiness rating above 3 for Success, and a rating below 3 for Failure was. It was further stipulated that there should be a significant difference between the mean Happiness ratings under the two manipulated conditions.

A comparison of the mean ratings with the help of 't' tests confirmed manipulation effectiveness of Success/ Failure. The mean Happiness rating was significantly higher when the situation described Success, than when it described Failure [first phase Success, that is, ESS 1 (Mean = 4.117, SD= 0.885) compared with first phase Failure, that is, ESF 1 (Mean = 2.528, SD = 1.381) : t = 7.19, df = 111, p < .001 ; second phase Success, that is, ESS 2 (Mean = 4.169, SD = 1.033) compared with second phase Failure, that is, ESF 2 (Mean = 1.817, SD = 0.948) : t = 2.47, df = 111, p < .01].

Success/Failure and Sequence of Confirmation/ Disconfirmation of Expected Success

Preliminary analysis indicated a non-significant difference in the effects of Sequence per se on the major dependent variables, therefore sequence as a between- Ss variable was excluded from analysis.

The main analysis was then carried out in two sections

Section I consisted of the analysis of the two major dependent variables, namely, Subsequent choice of Individual/ Group setting, and Attribution of Success/ Failure, Reasons for Subsequent choice of Individual/Group setting, Consensus rating, and Own/Other members' contribution towards/responsibility for Success/Failure.

Section II consisted of a regression analysis with Parenting Style, GSEf, Self-esteem, and Self-handicapping as the predictor variables and internal/ external attribution of Success/ Failure as the criterion variable.

Section I

Likelihood of Subsequent choice of Individual/ Group setting

High SE Ss in the Prior Individual setting tended to subsequently continue in the Individual setting (61.5%) rather than choose a Group setting, and High SE Ss in the Prior Group setting tended to subsequently continue in the Group setting (60%) rather than to choose an Individual setting.

Corresponding tendency among the Low SE Ss in the Prior Individual setting/ Group setting was much weaker. Overall, subjects were as likely to make a Subsequent choice of Individual setting (51.8%) as a Group setting (48.2%), regardless of whether they were in Prior Individual/ Group setting, whether they were High or Low on SE, and had succeeded (ESS) or failed (ESF). Thus, with regard to this dependent variable, none of the expectations was supported.

Reasons for Subsequent choice of Individual/ Group setting

In the present study, Reasons for Subsequent choice of Individual/Group setting were solicited through an open-ended question. It was anticipated that Reasons would vary between the choice of the two settings, and also between all the conditions (namely between Prior Individual setting and Prior Group setting, High/ Low SE subjects, and between ESS (Success) and ESF(Failure)..

Among Reasons for Subsequent choice of Individual setting, themes such as checking one's own ability, taking full credit for oneself in the case of success, taking responsibility (credit as well as blame) for the outcome, not having to blame anyone in the event offailure, greater satisfaction, succeeding through one's own effort, better work, the likelihood of mistakes in a group setting, difficulty in completing the work in a group because of differences in ideas/opinions, trying out one's ability and luck, self-confidence and belief in oneself (mentioned by some High SE subjects) were highlighted. Among Reasons for Subsequent choice of Group setting, the most commonly mentioned ideas were : equal distribution of credit as well as blame among the group members, more efficient performance, opportunity for discussion with others, unity and joint effort among the members.

Overall, no unusual feature emerged in the Reasons given for Subsequent choice of Individual/ Group setting. A few differences could be identified between High and Low SE subjects, the basic themes in the Reasons were very similar

Consensus rating

Ratings were sought from subjects in response to the item asking what percentage of people would make the same Subsequent choice (Individual/ Group setting) as the subjects themselves (Consensus ratings). Yet some interesting trends (non-significant) deserve mention. Out of the three highest mean Consensus ratings, two were given by High SE subjects, (1) under Prior Group setting/ ESS (Success)/ Subsequent Individual setting choice (77.0%), and (2) under Prior Group setting/ ESF (Failure)/ Subsequent Individual setting choice (75.0%). The third one was given by Low SE subjects under Prior Individual setting/ ESF (Failure)/ Subsequent Individual setting choice (75.0%). The lowest mean Consensus rating (58.24%) was given by High SE subjects under Prior Individual setting/ ESF (Failure) / Subsequent Individual choice. However, these tendencies did not fully support the expectations that High SE subjects, or subjects under Success would give lower Consensus ratings than Low SE subjects, or subjects under Failure. Nor could the mean Consensus ratings be interpreted as indicating Uniqueness.

Attribution ratings, considering ESS1 - ESF 2

A mixed-design ANOVA, with Prior Individual /Group and High/Low SE as between-Ss variables, and Expected success-Success (ESS)/ Expected Success-Failure (ESF), and attribution Factors as the repeated measures, revealed four statistically significant results, namely, a significant main effect of ESS 1/ESF 2 ($F_{1,56}$ = 27.733, $p<$ .001; η^2=0.319), a significant interaction between Prior Individual / Group setting and Factor ($F_{4,224}$ = 6.108, $p<$ .001; η^2=0.0904), a significant interaction between ESS 1/ ESF 2 and Factor ($F_{4,224}$ = 13.076 $p<$ .000; η^2=0.178), as well as a 3-way interaction between Prior Individual / Group setting, ESS 1/ESF2, and Factor ($F_{4,224}$ =2.672 $p<$ 0.033; η^2=0.036). High/ Low SE had neither a significant main effect nor any significant interaction with any of the other variables.

The ESS1/ESF2 main effect indicated that the Attribution rating by ESS1 (Success) subjects was significantly higher (Mean=3.593, SD=2.74) than that by ESF2 (Failure) subjects (Mean = 3.040 SD =2.96). This finding was supported the expectation.

Thesignificant 2-way interaction between Prior Individual/ Group setting and Factor revealed the following pattern. Under Prior Individual setting, the highest mean Attribution rating was given to Luck, followed in decreasing order by Ability, Task Ease and Effort: the latter three means differed non-significantly from each other. The lowest rating was given to Task difficulty. Almost reversing this pattern, under Prior Group setting, the highest Attribution rating was given to Effort and significantly lower ratings were given to the remaining Factors, namely, Task Difficulty, Ability , Luck and Task Easy: the last four means were non-significantly different from each other. In general, this interaction was relatively weak.

The means in the interaction between Prior Individual/Group and Factors (in the case of attribution ratings under both ESS1 and ESF2) are summarized in Table 1and displayed in Figure 1. The figure clearly exhibits the reversal in the bow-shaped trends under Prior Individual setting and Prior Group setting.

Insert Table 1and Figure 1 about here

In thesignificant interaction between ESS 1/ ESF2 and Factor indicated that the highest Attribution rating was found in the case of High Effort under ESS1, and the lowest, in the case of Low Effort under ESF 2. Table 2 and Figure 2 exhibit the means of the interaction between ESS1/ ESF2 and Factor In the case of Attribution ratings.

Insert Table 2 and Figure 2 about here

As can be seen from Figure 2, the most striking features of the ESS1/ ESF2 by-Factor interaction were that (1) Effort and Ability mean Attribution ratings seemed to show divergent trends between ESS1 and ESF2, but actually indicated the same direction of attribution in the two conditions : Success subjects rated High Effort and High Ability as important causes for their success, and Failure subjects gave *low* attribution ratings to *Low* Effort and *Low* Ability as causes for their failure (absence of low internal attribution, implying high internal attribution). While this internal attribution was in the expected direction in the case of ESS

(Success), it contradicted the expectation regarding ESF (Failure) expectations;. (2) Luck, Task Ease and Task Difficulty – all external Factors - were given similar Attribution ratings under ESS (Success) and ESF (Failure). The fact that these ratings,
that is, Good Luck, Task Ease and Task Difficulty ratings under Success were lower than those of Effort and Ability supported the expectations. However, the fact that these ratings, that is, Bad Luck, Task Ease and Task Difficulty ratings under Failure were also lower than the Effort and Ability ratings was inconsistent with anticipated effects.

With regard to thesignificant 3-way interaction between ESS1/ ESF2, Prior Individual/Group setting, and attribution Factor, it was observed that the highest Attribution ratings were given to Group/Effort and Individual/ Effort, these two means were non-significantly different from each other. In the case of thesignificant interaction between Individual ESF/ Group ESF and Dimension, the highest Attribution ratings were given to Group/Task Difficulty, Individual/ Bad Luck, and Group/Low Effort; these three means were non-significantly different from each other. The means relevant to this interaction are displayed in Figure 3.

Insert Figure 3 about here

The pattern of Attribution ratings under ESS1 (Success) in the Prior Individual setting and Prior Group setting was similar. As expected, High Effort, and High Ability were given significantly higher ratings than Good Luck, Task Ease and Task Difficulty in both settings. However, under ESF2 (Failure) the setting made a difference in the pattern of Attribution ratings. In the Prior Individual setting, Low Effort was given a significantly lower rating (implying a high rating of Effort as a Factor) than Low Ability, Bad Luck, Task Ease and Task Difficulty. The latter four means were non-significantly different both from each other, and from the corresponding means under Success. On the other hand, in the Prior Group setting, Low Effort, Bad Luck and Task Difficulty were given higher ratings (non-significantly different from each other) than Low Ability and Task Ease. It should be remembered that in the case of the Prior Group setting, Effort, Ability and Luck were rated with reference to the group.

Attribution ratings, considering ESF1- ESS2

A mixed 4-way ANOVA involving High/Low SE, Prior Individual/Group setting, ESF1 (Failure) / ESS2 (Success) and attribution Factors as the independent variables was carried out. As in the case of the preceding Attribution rating analysis, High/Low SE (classified variable) and Prior Individual/ Group setting were included as between –Ss variables, whereas Failure/ Success and Factors were included as repeated measures. The analysis

revealed a significant main effect of ESF1 (Failure) / ESS2 (Success) ($F_{1,49}$ = 45.294, p< .000; η^2=0.4707), a main effect of Factor ($F_{4,196}$ = 4.901, p< .001; η^2=0.087), and a significant interaction between ESF1/ ESS2 and Factor ($F_{4,196}$ = 9.356 p< .000; η^2=0.153). As in the case of the first analysis of Attribution ratings, in this case also, Self-esteem had neither a significant main effect, nor a significant interaction with ESF1/ESS 2 or attribution Factor. Nor did Prior Individual/Group setting show a significant main effect, or interaction effect with the other variables.

The ESF/ESS main effect showed a higher mean Attribution rating under ESS2 (Mean=3.554, SD=2.92) than under ESF1 (Mean =2.916 SD =2.95).This finding corroborated the Success/ Failure effect found in the first Attribution analysis.

With regard to the Factor main effect, a pair-wise comparison of means indicated that higher Attribution ratings were given to Effort, Luck and Ability, in decreasing order (these three means were non-significantly different from each other), and then to Task Difficulty and Task Ease .There was no significant difference between the last two means.

With regard to the significant two-way interaction between ESF1/ESS2 and attribution Factor, the following pattern was discernible. Under the ESF1 condition, higher ratings were given to Task Difficulty, Low Effort, Bad Luck, and Task Ease; these four means differed non-significantly from each other. A lower rating was given to Low Ability

Under ESS2 condition, the highest rating was given to Effort, lower ratings to Ability and Luck and the lowest ratings were given to Task Ease and Task Difficulty. Overall, the highest attribution rating was found in the case of ESS2 (Success)/ Effort, and the lowest, in the case of ESF1 (Failure)/ Low Ability.

Thus there was a systematic high internal attribution and low external attribution under Success. Under Failure, attribution ratings to external Factors were higher than those given to internal Factors, but the former were *lower* than in the case of success. Similarly, the attribution made to Low Effort and Low Ability were lower than in the case of success and signified low importance being given to the absence of effort and ability as causes of failure. In other words, the attribution for success was consistent with the findings on achievement attribution reported in the literature, but they did not conform to the expectations in the present study. The attribution for failure, on the other hand, was closer to the expectations in the present study, but they differed in terms of the extent of attribution made to the various Factors.

Table 3 and Figure 4 display the Attribution mean ratings relevant to the interaction.

Insert Table 3 and Figure 4 about here

Individual and Group Responsibility for Success/ Failure

In one of the items related to the task-performance scenarios, in the Prior Group setting, subjects were asked to rate the extent of responsibility (percentage ratings) on two aspects, one referring to their *own* responsibility as an individual (*Self*), and the other referring to the responsibility of *other group members (Others)*. An ANOVA incorporating High/Low SE, ESS/ESF and Self / Other members' responsibility demonstrated an absence of main effects as well as interactions.

Comparing High and Low SE groups, it was observed that High SE subjects tended to give less credit to Self than to Other members, whereas Low SE subjects showed the opposite tendency. However, in the matter of blame, High SE subjects tended to place less blame on Self than on Other members, whereas, again, Low SE subjects tended to do the opposite. The overall credit for Success (under ESS) tended to be higher for both Self and Other members, than the overall blame for Failure (under ESF) for both Self and Other members. To repeat, the differences between the means were non-significant, except for a small difference between credit to Self under ESS (M= 58.73, SD=23.49) and blame on Self under ESF (Mean=49.27, SD=49.27), t (108) = 1.915, p< .05

Section II

Regression and Correlation Analysis

The most important aspect to be examined here was the role of Parenting style, Generalized Self-Efficacy, State Self-Esteem scores, and Self-Handicapping as possible predictors of Success/Failure attribution In the present study, it was decided to define Attribution (for the purpose of regression/correlation analysis) in terms of *interna*l and *external* attribution, instead of considering the attribution Factors separately '. 'Internal' attribution scores were computed by adding together the Attribution ratings on Effort and Ability (internal Factors) and 'External' attribution scores were computed by adding together the Attribution ratings on Luck, Task Ease and Task Difficulty (external Factors). These two Attribution scores were computed separately for Success and Failure.

Multiple regression analysis using the 'Enter' method indicated significant F-ratios only in two cases, namely, ESS (Success) / External attribution, and ESF (Failure) / External attribution.

In the case of Failure/ External attribution, Generalized Self-efficacy, Permissive Parenting Style and Authoritarian Parenting Style explained a 13.7% of the variance ($F_{9, 128}$ = 2.098, p< .03 l R^2 =.0.137; β=.099, p <.006, β= .102, p <.02 and β = -.103, p<.007, respectively, in the case of the three variables).

An inspection of the bivariate correlations revealed that although most correlations were small in magnitude and reflected only weak relationships, several of them were significant. Moreover, one correlation was in the expected direction, namely, that between Generalized self-efficacy and Failure/ External attribution (r= .187 p<.02) and Self-handicapping and Failure/Internal attribution (r = -.208, p<.009). On the other hand, many of the correlations contradicted the expectations. Notable among these were : the negative correlations between Total State Self-Esteem and Success/ Internal attribution (r= -.155, p<.04), Social Self-Esteem and Success/ Internal attribution (r= -.146, p<.05), between Self-Handicapping, Permissive Parenting Style, and Authoritarian Parenting Style, on one hand, and Failure/ Internal attribution, on the other (r = -.208, p <.009), (r = -.167, p <.03) and (r = -.169, p <.03, respectively), and the positive correlations between Appearance Self-Esteem (ASSE) and Success/ External attribution (r = .185, p<.02), between Self-handicapping and Success/ Internal attribution and (r = .152, p<.04), and between Permissive Parenting style and Failure/External (r=.147, p<.04) In all these cases, conceptually, the opposite relationship would be expected.

Apart from these many of the other significant correlations that did not involve Internal/ External Attribution ratings, indicated either what was conceptually predicted and reported in earlier investigations, or added psychometric information. The three positive and high correlations between the subscales of State Self-Esteem Scale scores, on one hand, and the Total SSES score, on the other, provided further evidence of the validity of the SSES version used in the present study.

Discussion and conclusion

All of the questions raised in the present study were answered with the help of scenarios. While some of the findings deviated from the expectations, there were other results that supported the hypotheses. The non-significant effects of High/Low SE, went against some of the reported findings in the existing literature. Nor was there support for self-related motivations, such as self-enhancement and self-presentation among High SE subjects, self-protection and a self-defeating attributional style among Low SE subjects, and a self-handicapping tendency among both, reported by several investigators (Cohen, 1959;

Brockner& Hutton, 1978; Janoff-Bulman, 1979; Dinner, Lewkowitz& Cooper 1972; Kolditz&Arkin, 1982 ; Sinha& Gupta, 2006). The finding was difficult to explain, except by suggesting the possibility that self-esteem effects should perhaps be predicted in the case of *actual* rather than *stated* behaviour, and in attribution based on real rather than hypothetical outcomes.

Likelihood of Subsequent choice of Individual/Group setting

With regard to Subsequent choice of Individual/ Group setting showed non-significant effects of all three independent variables, namely, High/Low SE, Prior Individual/Group setting, and Confirmation/Disconfirmation of Expected Success (ESS/ESF). This dependent variable was selected as a likely behavioural reaction to Success/Failure because of its social component as contrasted with the performance component of a behaviour such as the subsequent choice of an easy or difficult task. Since there was equal likelihood of Subsequent choice of Individual and Group settings among both High and Low SE subjects, clearly, Self-esteem cannot be used to explain the finding.

A possible interpretation of this result is that the subjects did not give importance to the social aspect of the setting as such, both because the setting was described as a task setting and because it was hypothetical (and did not involve actual task performance). As a result, the *performance* aspect might have been perceived to be more important than the social component. . Moreover, even if subjects had perceived that the social nature of the setting might influence task performance, they might still have chosen an individual or group setting out of practical convenience rather than only social considerations. However, all of these possible explanations require further empirical testing.

The Reasons did not contain any unusual theme that would help in the explanation of non-significant differences in Subsequent choice as a dependent variable. Thus, deviating from expectations, the findings on Subsequent choice as well as the Reasons for the choice provided no support for the hypothesized bases of such a choice. For example, the Reasons did not provide any evidence of an Individual setting choice among High SE subjects because of a sense of individual achievement, as suggested by Cohen (1959),Dinner, Lewkowitz and Cooper (1972), Campbell (1982) and other investigators, orfor Group setting choice among Low SE subjects because the group would give them a greater feeling of social security, as suggested by Kaplan (1980). Nor was there any indication that subjects attempted to protect their self-esteem by making an Individual or Group setting choice. In a sense, the absence of differences in Reasons strengthens the explanation given in the case of likelihood of Subsequent choice, namely, that subjects were indifferent

to the social nature of the setting because they gave greater importance to the performance aspects, even in a hypothetical situation.

Own/ Other members' Responsibility(Contributions towards Success/ Blame for Failure). Responses to the item soliciting a rating of Own (Individual member's) and Other members' responsibility for the outcome (Success/Failure) were obtained only in the Prior Group setting. It was felt that possibly this aspect would be reflected in the Attribution ratings as well. In addition, the ratings would provide information regarding a possible self-centered bias (Ross &Sicoly, 1979), whereby individual members in a group setting tend to take more personal credit for success as well as more personal blame for failure, than other group members. Variations were expected between High/Low SE subjects, and between Success/Failure conditions. However, the ratings showed non-significant differences with regard to both variables. Comparing the High and Low SE groups, a tendency towards the self-centered bias was exhibited in the Low SE group rather than the High SE group. This finding deviated from the self-centered bias reported by several investigators (Schlenker& Miller, 1977b; Forsyth, Berger & Mitchell, 1981; Miller &Schlenker, 1985).

Another interesting observation was that the blame assigned (to oneself as well others) tended to be *less* than the credit taken. This feature could be an expression of self-presentation on the part of subjects, and/or an expression of positive interpersonal relationships by diluting the blame on others for failure. However, the ratings of responsibility for the outcome did not seem to be related in any way to the Attribution ratings.

Attribution Ratings

The mean Attribution rating was significantly higher under Success than under Failure. The difference in Attribution rating between Success and Failure can be explained in terms of the greater confidence in one's causal judgment, arising out of a 'warm glow' after a success experience (Reis et al., 1981)than after a failure experience, especially when the success confirms a success expectation, and the failure disconfirms a success expectation. It also implies that under Failure, the given causal factors were held less responsible for the failure. The Success/Failure main effect accounted for the maximum variance in Attribution ratings.

. An additional aspect to be kept in mind is that in the present study, Success and Failure were incorporated as a *confirmation* and *disconfirmation,* respectively, of expected success, introducing a cognitive element into the motivational component that is assumed to dominate achievement attribution. Confirmation corresponded to Success, and Disconfirmation, to Failure. Therefore, in the main effect just described, the Confirmation/ Disconfirmation aspect per se (in cognitive terms) could not be assessed separately. This may be considered

to be a form of confounding. However, it may be counter-argued that information regarding 'expected success' preceding actual success or actual failure might be redundant information for the subjects : this is because expectation of success is normal, and most people tend to expect positive rather than negative outcomes, often referred to as the 'positivity bias' (Frieze & Weiner, 1971). Thus, the final outcome (Success or Failure) might have become salient, and the attribution might have been made for the outcome rather than for Confirmation or Disconfirmation. On the other hand, the effect of the cognitive component can be easily examined separately, by comparing subjects in conditions of Confirmation/ Disconfirmation of Expected Success, with those in conditions of Success/Failure without an expectation component. This could be a question for later investigation. The existing literature contains evidence highlighting the role of expectancy as a cognitive variable in achievement attribution (Midkiff& Griffin, 1992; Davis & Stephan, 1980), with expectancy being examined with varying perspectives, but rarely as a determinant or antecedent of success/failure attribution. The present finding thus provides some information but also generates some questions for further exploration.

The explanation for the interactive effect can be given as follows. Under Success, especially because of confirmation of expected success, subjects were justified in expressing egotistical or self-enhancing attribution, or the self-serving bias, as has been shown in a large number of investigations (for example, Rosenfeld, 1990; Varma& Krishnan, 1986). In the Confirmation condition, the expectation of success itself must have been based on a positive self-image, and actual success further boosted this self-image, thus bringing out self-enhancing attribution. On the other hand, in the Disconfirmation condition, although the expectation of success must have been based on a positive self-image, actual Failure was likely to damage this self-image, and would arouse self-protective mechanisms in attribution. Evidence for self-protective attribution under failure has been cited by some authors (Miller & Ross, 1975, Bradley, 1978; Sinha& Gupta, 2006). Possibly, in the present study, this self-protecting tendency got sharpened because of the expected success preceding the actual failure.

The significant interaction between Prior Individual/Group setting and attribution Factors was not a specifically predicted effect, yet it was found to be significant. The only Factor on which there was a divergence between Prior Individual and Prior Group setting was Effort : whereas in the Prior Group setting, subjects gave a high Attribution rating to Effort as a cause of their success, in the Prior Individual setting, Effort received one of the lowest ratings. This finding was counter-intuitive at first glance, because it would be expected that Effort would be given greater importance in the Individual setting

With regard to the interaction between Prior Individual/Group setting, Success/Failure and attribution Factors, there was a greater distinction between Success and Failure attribution in

the Prior Individual setting, than in the Prior Group setting. The most obvious explanation for this interactive effect seems to be in terms of the greater salience of self-related motives in the Individual setting than in the Group setting. Attributions were made in the Individual setting so as to ensure self-enhancement and self-protection under both Success and Failure because there was no other member with whom the credit for success and blame for failure could be shared: this made the individual more sensitive to responsibility for the outcome. In the Group setting, on the other hand, the need for ensuring these self motives was less salient, as both the credit and blame could be shared by all members, allowing for internal attribution under Success and external attribution under Failure. Viewed in a modified perspective, it may be stated that the difference between the extent of importance given to the five causal (attribution) Factors in the Prior Individual setting, and that in the Prior Group setting, exhibited one form of self-serving or group-serving bias.

Consensus rating

The main purpose of this item was to see whether a perceived consensus or norm would be a basis for subjects choosing a Subsequent Individual or Group setting. Alongside this aspect, the item would provide information regarding any attributional bias similar or related to perceived consensus, such a False Consensus or False Uniqueness effect (Ross, Greene & House, 1977; Sherman, Presson&Chassin, 1984; McFarland & Miller, 1990). However, contrary to expectations, the findings did not demonstrate unequivocal consensus or uniqueness effects. The ratings tended to be in the direction of majority, suggesting a kind of consensus effect, but did not show the anticipated differences between High and Low SE subjects, Prior Individual/ Group setting, and Success/ Failure.

Relationship between Parenting Style, Self-Esteem, Generalized Self-Efficacy, Self-Handicapping, and Internal/External Attribution for Success and Failure

Multiple regression analysis involving Parenting style, State Self-Esteem, GSEf and Self-Handicapping as the predictor variables, and Internal/External attribution scores as the criterion variables revealed that Permissive and Authoritarian Parenting style, along with GSEf significantly predicted a small proportion of variance in Failure/ External attribution.
Several bivariate correlations were significant, but most of them were contrary to predictions.

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Figures

Figure 1.

Mean Attribution Ratings under Confirmation-Disconfirmation Sequence (ESS1 - ESF2): Prior individual / Group X Factor interaction (Study 2)

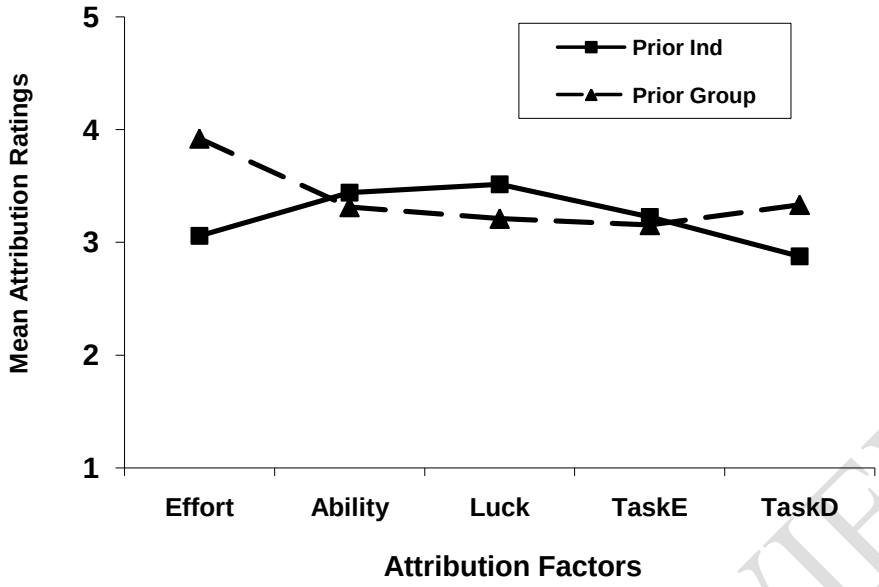


Figure 2

Mean Attribution Ratings under Confirmation-Disconfirmation Sequence (ESS1 - ESF2): ESS 1/ESF 2 x Factor interaction (Study 2)

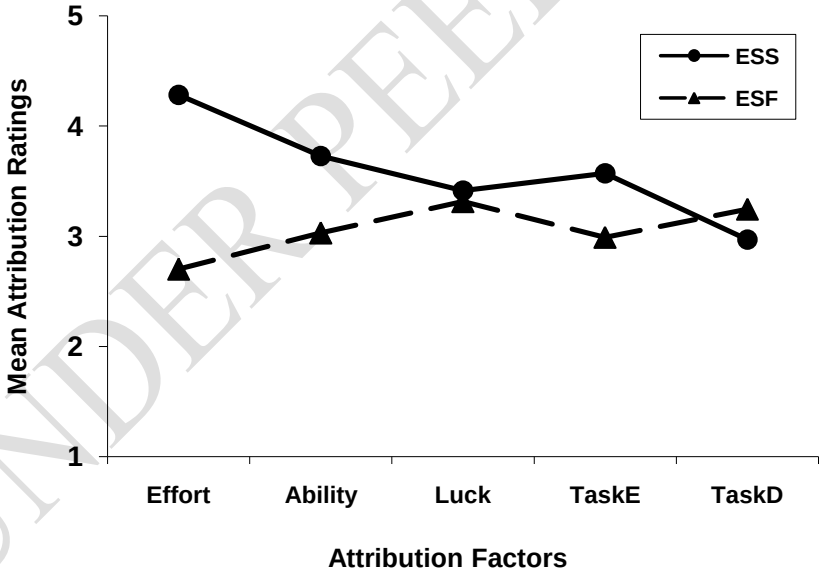


Figure 3

Mean Attribution Ratings under Confirmation-Disconfirmation Sequence (ESS1 - ESF2): ESS 1/ESF 2 x Prior Individual/ Group setting x Factor interaction (Study 2)

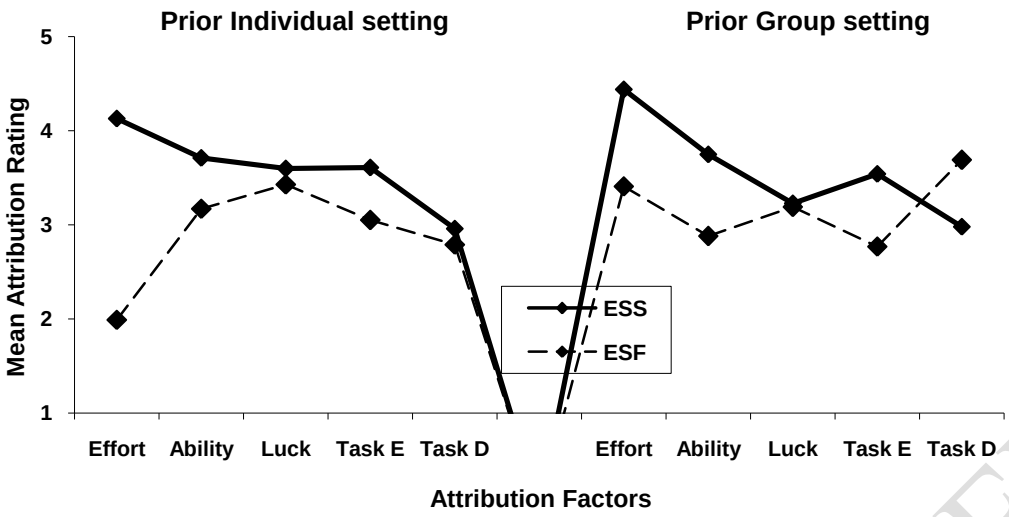
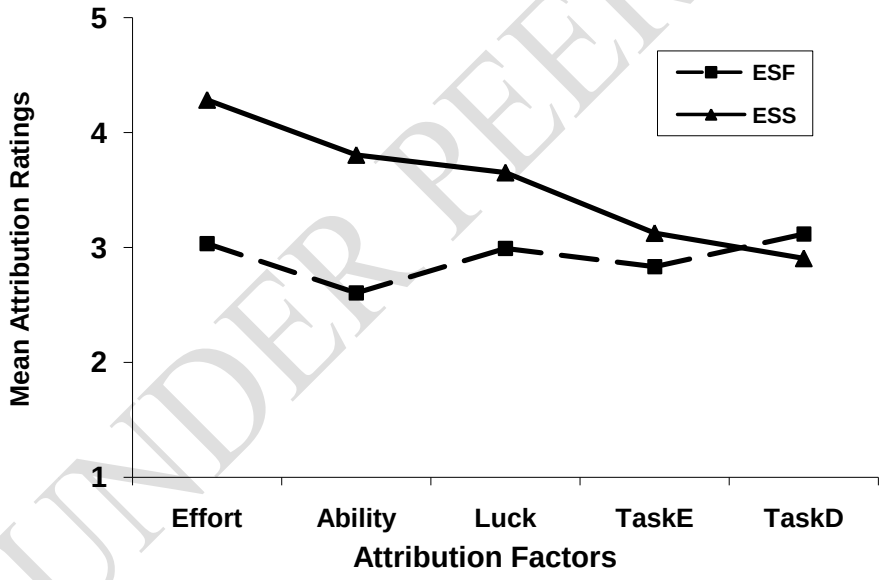


Figure 4

Mean Attribution Ratings under Disconfirmation- Confirmation Sequence (ESF1 - ESS2):
ESF1/ESS2 x Factor interaction (Study 2)



Tables

Table 1

Mean Attribution Ratings under Confirmation-Disconfirmation Sequence (ESS1 - ESF2): Prior individual / Group Setting x Factor interaction

		Effort	Ability	Luck	Task E	Task D
Prior Individual Setting:	Mean:	3.060_{c}	3.442_{b}	3.518_{a}	3.326_{b}	2.879_{c}
	SD:	1.483	1.320	1.242	1.066	1.121
Prior Group Setting:	Mean:	3.924_{a}	3.315_{b}	3.212_{b}	3.156_{b}	3.335_{b}
	SD:	1.094	1.228	0.940	1.205	1.248
Overall-	Mean:	3.492	3.378	3.365	3. 241	3.107
	SD:	1.366	1.271	1.107	1.136	1.206

* Means with dissimilar subscripts differ significantly from each other; those with similar subscripts are non-significantly different from each other

Table 2

Mean Attribution Ratings under Confirmation-Disconfirmation Sequence (ESS1 - ESF2): ESS 1/ESF 2 x Factor interaction

		Effort	Ability	Luck	Task E	Task D
ESS:	Mean:	4.283_{a}	3.728_{b}	$3.415_{b\,c}$	$3.57_{b\,c}$	2.969_{c}
	SD:	0.078	1.059	1.109	1.095	1.112
ESF:	Mean:	2.701_{d}	3.029_{c}	$3.315_{b\,c}$	2.911_{c}	3.246_{c}
	SD:	1.369	1.383	1.112	1.085	1.287
Overall-	Mean:	3.492	3.378	3.365	3. 241	3.107
	SD:	1.366	1.271	1.107	1.136	1.206

* Means with dissimilar subscripts differ significantly from each other; those with similar subscripts are non-significantly different from each other

Table 3

Mean Attribution Ratings under Disconfirmation- Confirmation Sequence (ESF1 - ESS2): ESF1/ESS2 x Factor interaction

		Effort	Ability	Luck	Task E	Task D
ESF1:	Mean:	3.033_{cd}	2.604_{d}	$2.992_{c,d}$	$2.832_{c,d}$	3.117_{c}
	SD:	1.379	1.257	1.208	1.345	1.183
ESS2:	Mean:	4.285_{a}	3.805_{b}	3.652_{b}	3.126_{c}	2.904_{cd}
	SD:	0.728	0.982	1.116	1.148	1.174
Overall-	Mean:	3.659	3.205	3.322	2.979	3.010
	SD:	1.268	1.267	1.207	1.249	1.181

* Means with dissimilar subscripts differ significantly from each other; those with similar subscripts are non-significantly different from each other