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AUTHOR   Anderson, Craig A.; And Others
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ABSTRACT
         Attribution theory suggests that attributional styles
may contribute to the motivational and performance deficits
frequently observed in depressed and lonely populations. An
Attributional Style Assessment Test (ASAT) was created and
administered to college students, along with the Beck Depression
Inventory and the UCLA Loneliness Scale. Correlational analyses
revealed distinct attributional style differences between the more
lonely and less lonely people, especially when attributions were
assessed for interpersonal failure situations. The more lonely people
attributed these failures more than less lonely people to their
unchangeable character defects (abilities and personality traits),
and less to their changeable behavioral mistakes (effort and strategy
selection). Parallel results were obtained when depression was used
as the criterion variable. A second study using a modified version of
the ASAT with other college students replicated these findings.
Results appear to support the theory linking attributional style to
motivational and performance deficits in lonely and depressed
populations. (Author/NRB)

Attributional Style of the Lonely and the Depressed

Craig A. Anderson

Rice University

Leonard M. Horowitz and Rita deSales French

Stanford University

Running head: Attributional Style of the Lonely and the Depressed

Attributional Style of the Lonely and the Depressed

A person's motivation at a task often depends to a great extent upon personal success expectancies -- how well the person expects to do at the task. For instance, people who expect to do well at an interpersonal persuasion task would be more likely to volunteer to make persuasive telephone appeals for a worthy cause, such as the Red Cross. They would also try harder to be persuasive and persist longer at making calls. As a consequence of this higher motivation, these people would probably be more successful as well.

Often, people with objectively similar abilities and past histories of success and failure have very different expectancies. Different people seem to perceive their successes and failures quite differently. Some may, for instance, attribute initial failures at a telephone persuasion task to their lack of ability. This attribution would imply more future failures for the person, leading to lowered success expectancies, lowered motivation, and poorer performance. Others may attribute their initial failures to use of the wrong persuasive strategy. This attribution implies that improvement is possible in future calls, and thus maintains high success expectancies, motivation, and performance.

Much research has examined the general relationship between a person's attributional style, expectancies, level of motivation, and performance. Research on achievement motivation, for instance, has shown that people low in achievement motivation tend to attribute their failures to a lack of ability, while people high in achievement motivation tend to attribute their failures to a lack of effort.

Researchers in the achievement domain have also shown that experimental manipulation of attributions produces corresponding changes in motivation and performance. (See Weiner, 1972, 1974, 1979 for reviews of much of this literature.)

More recently, a number of theorists have applied attributional models from the achievement motivation literature to the clinical problems of depression (c.f. Abramson, Seligman, & Teasdale, 1978; Weiner, 1979; Weiner & Litman-Adize, 1978) and loneliness (Peplau, Russell, & Heim, 1979). The basic premise of this work has been that a person suffering from such symptoms consistently explains events in a self-defeating fashion, and this attributional style lowers the person's success expectancies, motivation, and performance, thus, sustaining the symptom. One goal of these studies has been to understand this process in order to identify potentially useful clinical interventions. If this premise is valid, then certain implications should follow. First, different levels of loneliness and depression should be associated with differences in attributional style: Second, changing a person's attributional style should produce corresponding changes in success expectancies, motivation, and performance.

The present studies were designed to address the first question -- the existence of different attributional styles as a function of level of depression and loneliness. The second question -- concerning the experimental manipulation of these attributional styles -- is addressed by Anderson (Note 1). Before describing the present studies, a brief review of past research on the attributional styles of depressed and lonely groups is in order.

4

There have been no published empirical reports on the relationship of attribution style to loneliness. However, Peplau, Russell, and Heim (1979) have proposed that lonely people will make more internal and stable attributions for failure, and more external and unstable attributions for success than non-lonely people.

The attributional basis of depression has been investigated more thoroughly, particularly by researchers interested in the "learned helplessness" explanation of depression (Seligman, 1975; Hiroto, 1974; Klein, Fencil-Morse, & Seligman, 1976; Miller & Seligman, 1975). Seligman, Abramson, Semmel, & Von Baeyer (1979) created an attributional style questionnaire consisting of 12 situations. Subjects were to imagine themselves in different situations, write down the one major cause of the outcome, and to rate that cause on internality, stability, globality, and importance. Using only items that were rated as important to the subject, a score on each of the three dimensions was derived; these scores were then correlated with depression as measured by the Beck Depression Inventory. For bad outcomes (failures), depressed subjects reported causes that they rated as more internal, stable, and global than non-depressed subjects; for good outcomes (successes), depressed subjects' attributions were more external and unstable but not more specific than those of non-depressed subjects.

Other investigators have also examined the attributional style of depressed people. Kuiper (1978) measured attributions for success or failure on a word-association task. Depressed subjects made more internal attributions (ability and effort) for failures than did non-depressed subjects, but there were no differences along the stability

5

dimension. In a study by Rizley (1978), subjects engaged in a number guessing task, and rated the importance of 4 attributional factors -- ability, task difficulty, effort, and luck -- in producing their outcome. Depressed subjects rated internal causes (effort and ability) to be more important determinants of failure but less important determinants of success. There were no differences, though, in ratings of external causes (luck and task difficulty), stable causes (ability and task difficulty) and unstable causes (luck and effort).

In another study (Janoff-Bulman, 1979), depressed and nondepressed subjects imagined themselves in each of four scenarios containing negative outcomes (e.g., a car accident, a social rejection) and rated how much of the blame was due to the "kind of person you are" (characterological blame), to "what you did" (behavioral blame), to chance, to other people, and to the environment. Depressed subjects rated the charaterological blame higher than did nondepressed subjects.

Finally, Klein, Fencil-Morse, & Seligman (1976) reported a study in which depressed and nondepressed subjects rated the extent to which their outcome on an anagram task was due to ability and task difficulty. On an "internality" index (difference between ratings of ability and task difficulty), the depressed subjects attributed failure more to internal factors than did nondepressed subjects. There were no dignificant differences in the success condition.

Overall, these studies do provide evidence of the existence of a "depressive" attributional style that theoretically could lead to

the motivational and performance deficits frequently observed in
clinical populations. There are, however, several methodological
issues that need clarification. Most of the studies have offered
subjects attributional alternatives that are based on a dimensional
model of attributions for achievement situations. These alternatives
were not originally intended to explain clinical phenomena and
may not span the domain of people's natural explanations for inter-
personal outcomes; they may not even be expressed in the attribu-
tional language of most people. That is, the dimensions of inter-
nality, stability, controllability and globality may be useful from
a theoretical point of view, but before we can create appropriate
clinical interventions, we need to understand the most common ways
that people express their attributions, in everyday life. By im-
posing a theoretical structure on subjects in the initial stages
of a research problem, the theoretician risks missing other critical
attributional factors (cf. Falbo & Beck, 1979).

In addition, the theoretical dimensions of attributions are
generally portrayed as orthogonal to each other, yet in practice
the most commonly used explanations may show a correlation between
underlying dimensions. If the underlying dimensions are not inde-
pendent of each other, there may be no theoretical advantage to
using these labels instead of the subjects' original atributional
vocabulary.

Finally, most previous studies have focused on attributions for
non-interpersonal (usually cognitive) tasks such as solving anagrams
and arithmetic problems. (The Seligman et al., 1979, study was an

7

exception to this trend.) When we try to generalize to clinical situations, however, interpersonal tasks -- like getting along with people, forming and maintaining friendships, being assertive with others -- become especially important. Symptoms like depression and loneliness are, to a large extent, reducible to interpersonal processes (Horowitz & French, 1979; Horowitz, French & Anderson, 1981; Horowitz, French, Lapid, and Weckler, 1981), thus emphasizing the need to examine attributional processes in an interpersonal context. (For more detailed critiques of research in this area, see Anderson & Jennings, 1980; Falbo & Beck, 1979; Wortman & Dintzer, 1978.)

For these reasons we decided to re-examine depressed and lonely people's attributional style using categories that were developed empirically. These categories were formed from the spontaneous attributions of a large sample of subjects. We identified the attributions that occurred naturalistically for a standard set of situations and classified them into 6 categories, without regard to hypothetical underlying dimensions. In that way, we did not impose on the subject dimensions that may not be orthogonal, nor categories that may be stylistically unnatural, nor alternatives that may overlook particular attributions that subjects normally make. Furthermore, we compared situations that are interpersonal with situations that are not interpersonal.

Experiment 1

Method

The Attributional Style Assessment Test. Twenty-two items written that described situations familiar to students. Half

were interpersonal, the other half were noninterpersonal, and each could be paired with an outcome describing either a success or a failure. An example of an interpersonal success is: "You have just attended a party for new students and have made some new friends." An example of a noninterpersonal failure is: "You have just failed the midterm test in a class."

Twelve situations were selected at random and presented to a group of 30 pretest subjects; 6 items were presented as successes, 6 as failures. The subjects' task was to imagine themselves in each situation, and to write out the most likely cause for that outcome. Then these open-ended responses were examined independently by three psychologists who identified meaningful categories that included all the reported attributions.

Six categories resulted: (1) the strategy attribution explained the outcome in terms of the person's particular approach, tactic, or method; (2) the ability attribution explained the outcome in terms of the person's competence (or lack of competence), (3) the effort attribution explained the outcome in terms of how hard the person had tried; (4) the personality trait attribution explained the outcome in terms of some pervasive characteristic of the person other than ability; (5) the mood attribution explained the outcome in terms of a transitory mood state; (6) the external circumstances attribution explained the outcome in terms of any remaining external circumstances beyond the person's control.

Ten psychology graduate students, who were unfamiliar with the purpose of the study, were asked to classify the original free

responses into the six categories. A category labeled "none of the above" was added for causes that did not seem to fit the six attributional categories. Less than 2% of the categorizations fell into this category, and they were mainly due to responses that were irrelevant to the situation. The six attributional categories were therefore broad enough to include most of the original free-response attributions of the original free-response attributions. It is interesting to note that the situations of the present study did not seem to elicit luck and task difficulty as common attributions (cf. Weiner, 1972). Furthermore, two different attributions, the ability and trait attributions could both be described as stable and internal; they both emphasize relatively enduring, unchangeable characteristics of the person. Two further attributions, the effort and strategy attributions, could both be described as unstable and internal; they both emphasize changeable, situationally-specific variations in behavior. The distinction between these two types of attributions has also been noted by Janoff-Bulman (1979).

Our prediction of the relationship between attributional style and loneliness and depression can now be further specified. The relatively low success expectancies, moti ation and performance of lonely and depressed people is seen as a result of an attributional style that most likely consists of making more characterological (Ability and Trait) and fewer behavioral (Strategy and Effort) attributions for their failures than non-lonely and non-depressed people.

The next step was to insure that the situations were clearly interpersonal or clearly noninterpersonal. All 22 situations

were presented to 20 new subjects who rated each situation on a 9 point scale anchored at "not at all interpersonal" (1) and "very interpersonal" (9). The mean ratings of the noninterpersonal situations ranged from 1.70 to 4.15, while the mean ratings of interpersonal situations ranged from 6.20 to 8.05. Each of the interpersonal situations was rated significantly more interpersonal than each of the noninterpersonal situations; all $\underline{t}s(19)$ 4.70, $\underline{p}s$ .001. We selected 5 interpersonal and 5 noninterpersonal situations from this pool to include in the questionnaire. Each situation was expressed both as a success and as a failure, yielding a total of 20 items -- 5 interpersonal successes, 5 interpersonal failures, 5 noninterpersonal successes and 5 noninter- personal failures. Along with each item, we provided the six alterna- tive reasons (or attributions) to explain the outcome. Here is an example of an interpersonal failure item:

"You have just attended a party for new students and failed to make any new friends."

    a. I used the wrong strategy to meet people.

    b. I am not good at meeting people at parties.

    c. I did not try very hard to meet new people.

    d. I do not have the personality traits necessary for meeting new people.

    e. I was not in the right mood for meeting new people.

    f. Other circumstances (people, situations, etc.) produced this outcome.

Subjects responding to the questionnaire were asked to imagine themselves in each situation and to consider each possible reason

that might explain why the situation had turned out as it did.

Subjects were asked to circle the one reason that best explained

the outcome, in a forced choice format.[1] The final version of the

Attributional Style Assessment Test can be obtained by writing to

the senior author.

Procedure. The Attributional Style Assessment Test (ASAT),

the UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978) and

the Beck Depression Inventory (Beck, 1967) were included in a

questionnaire packet given to approximately 600 introductory psy-

chology students at Stanford University. About 400 packets were

returned, and some of these were incomplete. Of these, 298 people

correctly completed both the ASAT and the Loneliness Scale; 304

people correctly completed both the ASAT and the Beck Depresseion

Inventory.[2]

Results and Discussion

Each subject's responses were scored to show the relative

frequency of each type of attribution for each of the four types

of situations. The results are shown in Table 1. It is interesting

to note that effort was the single most common attribution. Also,

the trait attribution was chosen rather infrequently.

Then, for each type of situation, the number of times a person

chose a given attributional category was correlated with his or her

score on the loneliness scale. These correlations are reported in

Table 2. Because of the large number of correlation coefficients,

we adopted a stringent criterion of significance, $\alpha = .01$. Table

2 shows that the loneliness scores correlated significantly with

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Insert Table 1 and Table 2 about here

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the number of ability attributions for failure situations, parti-
cularly for interpersonal failures. Similarly, for interpersonal
failures the relative frequency of trait attributions correlated
significantly with the loneliness scores. Thus, the predicted
attributional style of lonely people emerged for situations des-
cribing interpersonal failures. Lonely people more often attributed
interpersonal failures to unchangeable personal characteristics --
a lack of ability or an inadequacy in some personality trait. Con-
versely, less lonely people more often attributed interpersonal
failures to having used the wrong strategy or having exerted in-
sufficient effort -- short term behavioral causes that a subject
could choose to modify on future occasions. The pattern was
similar for noninterpersonal failures but uniformly lower. These
results are consistent with the conception of loneliness as primarily
an interpersonal problem.

Correlations for successful outcomes were not particularly
noteworthy; except for the correlations involving the frequency
of the attribution "other circumstances." People with higher
loneliness scores more often used this rather vague attribution.
Apparently, for lonely people, successes are explained by vague
factors that are not under the subject's control.

The correlations between the frequency of an attribution and
the scores of depression showed a similar pattern, as reported

in Table 3. Again, the attributional style correlated with the
of depression primarily for situations describing interpersonal

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failures. Highly depressed subjects ascribed their interpersonal
failures to a lack of ability and to an inadequacy in some person-
ality trait -- again, both unchangeable personal characteristics.
Less depressed people tended to attribute interpersonal failures to
having used the wrong strategy or exerting insufficient effort --
both being changeable, behavioral mistakes. Also, as with the
loneliness variable, the degree of depression correlated significantly
with the use of the vague "other circumstances" as an explanation
for interpersonal successes.

It thus seems that lonely and nonlonely people (as well as
depressed and nondepressed people) differ in their attributional
style with respect to interpersonal failures. The finding that the
relationships are weaker for noninterpersonal situations (or not
present at all for successes) may help explain some inconsistencies
in the studies reviewed earlier. These inconsistencies, for the
most part, resulted from assessing attributions for noninterpersonal
tasks   or for successful outcomes. The present results suggest
that interpersonal failure is the most discriminating type of
situation.

Composite measure. As we hypothesized previously, several
attributional categories have direct implications for predicting a
person's motivational and performance levels. For example, suppose

a person attributes a failure to relatively stable (unchangeable) personal defects (like a lack of ability).. The person would then have no reason to try harder on future occasions or to experiment with other strategies. Stable, or permanent, defects of this type could not be changed, so a person who selects such attributions would be more apt to give up hope, resulting in lowered expectancies, lowered motivation, and poorer performance. Thus, people who select ability and trait attributions to explain failures should show an impairment in motivation and performance, while those who select the effort and strategy attributions should show higher levels of motivation and performance.

We therefore devised a single measure that would describe a subject's tendency to ascribe failures to effort and strategy, rather than to ability and trait. For each subject we calculated a score based on the number of strategy plus effort attributions minus the number of ability plus trait attributions. This index can be taken as a measure of the subject's perception of the "apparent changeability" of once-failed situations; it is called the "change-ability index."

This index was calculated separately for each of the four types of situations on the ASAT. For situations of interpersonal failure, the correlation between the changeability index and loneliness was -.440 (p < .001); that between the changeability index and depression was -.350 (p < .001). For noninterpersonal failures, the correlations were -.201 for loneliness and -.202 for depression; both ps < .001. The corresponding correlations for success situations were uniformly weaker and generally non-significant.

Thus, the data suggest that there is a negative attributional style associated with the problems of loneliness and depression. This style primarily operates with respect to interpersonal failures, which the more lonely and depressed subjects attribute to a lack of ability or to a personality defect. Situations describing successes did not yield any systematic attributional style, although there was a tendency for lonely and depressed people to credit their successes to the vague attribution "Other circumstances." These results suggest that studies of lonely and depressed people should examine interpersonal tasks and settings, rather than noninterpersonal ones like those involving anagrams or arithmetic problems. (See Anderson & Jennings, 1980, and Jennings, Note 2, for a discussion of other problems in using simple, noninterpersonal tasks in the study of attributions and motivation.)

To further extend and validate the findings of this study, a conceptual replication was conducted.

Experiment 2

According to the results of Experiment 1, depressed people and lonely people mainly ascribe interpersonal failures to factors that we have called ability, trait, effort, and strategy attributions. Furthermore, as Table 1 showed, trait attributions were relatively uncommon, so the critical list of attributions can be reduced to three. The Attributional Style Assessment Test was therefore simplified by offering only three attributional alternatives for each situation. In Experiment 2, we demonstrated that this simplification does not alter the relationship reported above.

Method

The ASAT was modified in two ways. First, we added enough new items to produce nine items for each type of situation (interpersonal success, interpersonal failure, noninterpersonal success, noninterpersonal failure). Second, only three attributional choices were offered for each situation, namely, those for ability, effort, and strategy alternatives.

The ASAT was administered, along with the UCLA Loneliness Scale and the Beck Depression Inventory, to approximately 200 students in an introductory psychology class at Stanford University. Of the students who returned the ASAT, 121 completed the Beck Depression Inventory and 117 also completed the UCLA Loneliness Scale.

Results

For each subject we computed the relative frequency of each type of attributional choice for each type of situation. The resulting correlations between the relative frequency of each attributional choice, on the one hand, and the scores of loneliness and depression on the other are shown in Table 4. The results in

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Insert Table 4 about here

Table 4 are very similar to those of experiment 1. For situations describing interpersonal failure, the attributional style was related to the subject's degree of loneliness or depression. That is, lonely people and depressed people made significantly more ability attributions to account for their interpersonal failures.

The shortened list of attributional alternatives did not alter the pattern of correlations observed in Experiment 1.[3]

Discussion

An attributional explanation of depression and loneliness contains at least two distinct hypotheses. One is that depressed and lonely people differ in the nature of their attributional style, ascribing interpersonal failures to permanent defects in themselves. Such a self-conception is implied in discussions of helplessness (Abramson et al., 1978), pessimism (Beck, 1967), and lowered self-efficacy (Bandura, 1977). The present study has supported this hypothesis. The results showed that depressed and lonely people ascribe interpersonal failures to relatively permanent (stable) defects in themselves, such as a failure in their ability. Since the trait attribution occurred rather infrequently, a lack of ability was the major attribution used by depressed and lonely people to explain their failures.

An attributional explanation of depression also implies that people who ascribe interpersonal failures to a lack of ability suffer from a lower level of motivation, hence, a lower level of performance. This hypothesis implies that attributions can be altered experimentally so as to raise a depressed person's level of motivation and performance. It may be possible, for example, to persuade depressed subjects that they can successfully exert more effort or adopt better strategies to overcome prior interpersonal failures. Anderson (Note 1) has reported one successful test of this hypothesis, and other experiments are planned.

A question that merits additional consideration concerns why
the characteristic attributional style of depressed and lonely people
mainly occurred for _interpersonal_ situations. It is possible, for
example, that depressed and lonely people do exhibit genuine skills
deficits in interpersonal situations. Gotlib and Asarnow (1979)
examined the ability of depressed and nondepressed people on two
tasks, an impersonal task and an interpersonal task. Their study
showed impaired performance on the interpersonal task but not on
the impersonal one. However, it is still not clear whether the de-
pressed subjects' impairment reflects a genuine skill deficit or
a motivational one. A purely motivational deficit could probably
be altered through persuasive communications, while a skill deficit
would require remedial training. Such issues will be explored
in future research.

Finally, we would like to comment on a broader methodological
issue. In the present studies we have shunned the use of prede-
termined attributional factors, categories, or dimensions, and
formalized scales or measures of attributional style. It is our
position that researchers need to determine exactly which attribu-
tions are relevant to their subject population for the particular
type of situation under investigation. These "naive attributions"
are likely to be different in different situations and in different
populations. Once pretesting has shown which attributions are fre-
quently and spontaneously made, the investigator can then adapt
his or her theoretical system to the subjects' perceptions of the
domain. (Imposing one's theories from the outset, though, will

often lead to confirmation of a theory that is, at best only partially correct; at the same time, reliance on one's prior theories reduces the opportunity to make new discoveries.

More to the point, although we developed two versions of the ASAT in the present studies, we do not claim that the attributional factors we discovered are the "best." They were, however, the most appropriate for our population of subjects and situations. Hopefully, others will find this approach to the study of attributions to be a useful one.

Reference Notes

1. Anderson, C.A. <u>Motivational and performance deficits in inter-personal settings: The effect of attributional style</u>. Manuscript submitted for publication, 1981.

2. Jennings, D.L. <u>Effects of attributing failure to ineffective strategies</u>. Unpublished doctoral dissertation, Stanford University, 1979.

References

Abramson, L. Y., Seligman, M.E.P., & Teasdale, J.D. Learned help-
lessness in humans; Critique and reformulation. Journal of
Abnormal Psychology, 1978, 87, 49-74.

Anderson, C.A., & Jennings, D.L. When experiences of failure promote
expectations of success:. The impact of attributing failure to
ineffective strategies. Journal of Personality, 1980, 48,
393-407:.

Bandura, A. Self-efficacy: Toward a unifying theory of behavioral
change. Psychological Review, 1977, 84, 191-215.

Beck, A.T. Depression: New York: Hoeber, 1967.

Falbo, T., & Beck, R.C. Naive psychology and the attributional
model of achievement. Journal of Personality, 1979, 47, 185-195.

Gotlib, I.H., & Asarnow, R.F. Interpersonal and impersonal problem-
solving skills in mildly and clinically depressed university
students. Journal of Consulting and Clinical Psychology, 1979,
47, 86-95.

Hiroto, D.S. Locus of control and learned helplessness. Journal
of Experimental Psychology, 1974, 102, 187-193.

Horowitz, L.M., & French, R. Interpersonal problems of people
who describe themselves as lonely. Journal of Consulting and
Clinical Psychology, 1979, 47, 762-764..

Horowitz, L. M., French, R., &·Anderson, C. A. The prototype of
a lonely person. To appear in L. Peplau & D. Perlman (Eds.),
Loneliness: A sourcebook of current theory, research, and
therapy. New York: Wiley-Interscience, 1981.

Horowitz, L. M., French, R., Lapid, J. S., & Weckler, D. A..
Symptoms and interpersonal problems: The prototype as an
integrating concept. To appear in J. C. Anchin & D. Kiesler
(Eds.), Handbook of interpersonal psychotherapy. Pergamon
Press, 1981.

Janoff-Bulman, R. Characterological versus behavioral self-blame:
Inquires into depression and rape. Journal of Personality and
Social Psychology, 1979, 37, 1798-1809.

Klein, D.C. Fencil-Morse, E., & Seligman, M.E.P. Learned helpless-
ness, depression, and the attribution of failure. Journal of
Personality and Social Psychology, 1976, 33, 508-516.

Kuiper, N.A. Depression and causal attributions for success and
failure. Journal of Personality and Social Psychology, 1978,
36, 236-246.

Miller, W.R., & Seligman, M.E.P. Depression and learned helplessness
in man. Journal of Abnormal Psychology, 1975, 84, 228-238.

Peplau, L.A., Russell, D., & Heim, M. An attributional analysis of
loneliness. To appear in I Frieze, D. Bar-Tal, & J.S. Carroll
(Eds.), New approaches to social problems. San Francisco:
Jossey-Bass, 1979.

Rizley, R. Depression and distortion in the attribution of causality.
Journal of Abnormal Psychology, 1978, 87, 32-48.

Russell, D., Peplau, L.A., & Ferguson, M.L. Developing a measure of
loneliness. Journal of Personality Assessment, 1978, 42, 290-294.

Seligman, M.E.P. Helplessness: On depression, development, and
death. San Francisco: W.H. Freeman & Co., 1975.

Seligman, M.E.P., Abramson, L.Y., Semmel, A., & bon Baeyer, C.
Depressive attributional style. Journal of Abnormal Psychology,
1979, 88, 242-247.

Weiner, B. A theory of motivation for some classroom experiences.
Journal of Educational Psychology, 1979, 71, 3-25.

Weiner, B. (Ed.) Achievement motivation and attribution theory.
Morristown, NJ: General Learning Press, 1974.

Weiner, B. Theories of motivation: From mechanism to cognition.
Chicago: Rand McNally, 1972.

Weiner, B., & Litman-Adizes, T. An attributional, expectancy-
value analysis of learned helplessness and depression. In J.
Garber & M.E.P. Seligman (Eds.), Human helplessness: Theory and
applications. New York: Academic Press, 1978.

Footnotes

1. In addition, subjects were asked to rate each reason to show how much, in their experience, it would have contributed toward the outcome if it had happened to them. The ratings were based on a 7-point rating scale, with "1" indicating that the reason contributed little to the outcome, "7" indicating that the reason contributed much to the outcome. Results from the analyses of these importance ratings were very similar to those reported for the forced choice data, and lead to the same conclusions. Since the forced choice format yields very similar results, and is a more useful methodological tool (it is easier for the subject to complete, and is more easily scored only the data from this forced choice format) are reported.

2. The overall correlation between UCLA Loneliness Scale scores and Beck Depression Inventory scores, as expected, was fairly strong, $r = .588$, $p < .001$, n = 297.

3. In a paper on the effects of strategy attributions on success expectancies following initial failure, Anderson & Jennings (1980) alluded to a study by Anderson, French, and Horowitz showing no significant correlation between effort attributions and loneliness, depression, and shyness. Those results were obtained in the first study of this series, but did not replicate in the two present experiments. We suspect that the failure to find differences in effort attributions in that initial study was due to sampling error combined with a relatively small sample size of approximately 55. For this reason, the results of that study will not be further reported.

Table 1. Relative Frequency of Attribution Choices by Situation Type.

Situation Type.

Attributional Category	Interpersonal Failure	Noninterpersonal Failure	Interpersonal Success	Noninterpersonal Success	Overall
Strategy	.20	.21	.14	.16	.18
Ability	.13	.28	.13	.25	.20
Effort	.23	.24	.28	.39	.29
Trait	.04	.01	.06	.01	.03
Mood	.23	.14	.26	.12	.19
External Circumstances	.15	.13	.12	.07	.12

Table 2. Correlations between Forced Choice Attributions and Loneliness by Situation Type (N = 298).

Attributional Category	Interpersonal Failure	Situation Type Noninterpersonal Failure	Interpersonal Success	Noninterpersonal Success
Strategy	-.169**	-.156*	-.109	-.129
Ability	.452**	.157**	-.147	.089
Effort	-.156*	-.069	-.063	-.135
Trait	.296**	.084	-.091	-.022
Mood	-.121	.024	-.009	.032
External Circumstances	-.124	.027	.348**	.243**

* p < .01
**p < .001

28   29

Table 3   Correlations between Forced Choice Attributions
and Depression by Situation Type (N = 304).

Situation Type

Attributional Category	Interpersonal Failure	Noninterpersonal Failure	Interpersonal Success	Noninterpersonal Success
Strategy	-.172**	-.107	-.124	-.109
Ability	.304**	.154*	-.079	-.013
Effort	-.156*	-.111	-.031	.013
Trait	.204**	.115	-.019	-.029
Mood	-.037	.046	-.013	.095
External Circumstances	-.014	-.001	.245**	.093

30

31

Table 4. Correlations between Forced Choice Attributions and Loneliness and Depression by Situation Type.

| | Situation Type | | | |
	Interpersonal Failure	Noninterpersonal Failure	Interpersonal Success	Noninterpersonal Success
Loneliness (N=117)				
Strategy	-.250**	-.153	-.063	-.059
Ability	.424**	.144	.171	-.079
Effort	-.222*	.019	.223*	.145
Depression (N=121)				
Strategy	-.133	-.118	-.039	-.045
Ability	.372**	.272**	-.029	.027
Effort	-.284**	-.160	.071	.015

* p < .01
**p < .001