NOTICE:

The copyright law of the United States (Title 17, United States Code) governs the making of reproductions of copyrighted material. One specified condition is that the reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses a reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

RESTRICTIONS:

This student work may be read, quoted from, cited, and reproduced for purposes of research. It may not be published in full except by permission of the author.

Lycoming College

Running head: ATTRIBUTIONS ABOUT THE ELDERLY

Acknowledgements

I would like to thank the members of my honors committee, Drs. Howard Berthold, John Piper, Kathryn Ryan, and Gene Sprechini, for their interest and contributions. I would also like to thank Catalina Luna for all the time she spent coding attributions, which made it possible to calculate inter-rater reliability estimates. Finally, I would like to once again thank Kathryn Ryan, my honors committee chairperson, for her hours of assistance and numerous contributions to this honors thesis.

Open-ended Attributions for the Performance of the Elderly

For years, people have speculated about attitudes toward the elderly. Questions have arisen as to whether this is ageist society. Most research (e.g., Tuckman & Lorge, 1953; National Council on the Aging, 1975) reveals that individuals negative beliefs about the elderly. hold a variety of Moreover, there is reason to believe that the elderly hold these same sterotypes (National Council on the Aging, 1975). that we negatively judge the elderly? One reason Why is it may lie in our ideas about the underlying causes for their behavior. When an elderly person is cranky or slow, we may expect this behavior is due to his or her age. On the other hand, when elderly persons are competent and forceful, we may expect that they behave this way in spite of their age. We may believe that they are exceptional and may not classify them as "truly" elderly. The circumstances under which we are likely to make "age" and age-related attributions will be explored in the present study. This may help understand why negative stereotypes are sustained in spite of an increasingly active and competent elderly population.

The first research in the area of attitudes toward the elderly was conducted by Jacob Tuckman and Irving Lorge (1953). Their study illustrated a substantial number of misconceptions and stereotypes commonly held about elderly people. They reported that their subjects looked upon old age as a time characterized by economic insecurity, poor

health, loneliness, resistance to change, and failing physical and mental powers.

The acceptance of such negative stereotypes seems to spread across all age groups. Tuckman and Lorge (1953) analyzed their data in terms of age of the subjects. first group consisted of 20-29 year olds, and the second, 30-51 year olds. They found no difference between the groups in the acceptance of age stereotypes. In addition, Seefeldt, Jantz, Galper, and Serock (1977) found that children as young as three to eleven years old hold negative stereotypes of the elderly. The children categorized older persons as sick, tired, and ugly, and stated that they couldn't do anything but sit and rock, go to church, or be pushed in wheelchairs. Moreover, Seefeldt (1984) showed the presence of negative stereotypes among children in a variety of cultures such as Native Alaskan children of the Aleutian Islands, Australian children, and children of Paraguay.

According to a poll conducted by Louis Harris and Associates in 1975 for The National Council on the Aging, persons aged 65 and over also have negative perceptions of "most people over 65." Rodin and Langer (1980) suggest that the negative stereotypes about the elderly held by the elderly have serious detrimental effects on the well-being of older persons. They argue that, since old persons believe the negative stereotypes, it is likely that they will act in a manner consistent with those stereotypes. They used an example of an elderly person's supposedly failing memory to explain how this can occur. With this stereotype in mind,

every time elderly persons make a mistake or forget a thought, they may begin to question their mental abilities. Then, when in a situation in which learning could occur, they will worry about their failing memory and so may actually have greater difficulty learning! Rodin and Langer contend that, if the elderly persons' behaviors and their self-image come to be consistent with the negative stereotypes, their self-esteem will decline. They also explain that when such problems are attributed to aging, they are seen as inevitable and steps which could conteract the problem are not taken.

Rodin and Langer (1980) have also shown that such effects can be corrected through reattribution processes. They studied elderly persons who, the week before entering a nursing home, expressed the belief that physical decline associated with aging had either caused or contributed greatly to some of their problems. These older persons were divided into three groups: one group was untreated, one group was given information arguing against physical decline in aging as the true source of their problems, and the given environmental explanations for their **w**a**s** problems-a reattribution process. Rodin and Langer that those patients in the reattribution treatment group showed greatly improved behavior relative to the other two groups, including increases in active participation sociability, as well as improvements in general health and measures of stress.

It is important to try to change the negative stereotypes and attitudes about the elderly so that older

persons who share such attitudes will not spend their time worrying about aging. In addition, they will not develop a negative self-image, and will thus be free to take steps to overcome any difficulties they may have so that they may remain happy, healthy, and productive members of society.

With such a goal in mind, research has been aimed trying to determine the causes for the negative stereotypes Many researchers began looking into the and attitudes. portrayal of the elderly in the media, however, the question of the presence of the negative stereotype was not answered Shaw (1980) analyzed the by such attempts. Kent and occurrence of ageist stereotypes in the highly read news They found very little age stereotyping. magazine, Time. Specifically, there was no significant difference in the of stereotypes when discussing persons 60 or older persons less than 60. Research has also investigated the portrayal of the elderly on television. From a recent overview of such research (Kubey, 1980), it appears that, while many studies have reported generally negative images of older characters on television, other more recent studies have shown an improvement in the portrayal of the elderly. with proper influence, the image of Perhaps characters on television may continue become to more positive, and perhaps produce some change in the negative attitudes of the general public toward the older population. However, in light of the findings of Louis Harris Associates (1975), too much optimism should not be generated as they found comparable evaluations of persons over 65 by heavy television viewers, moderate viewers, light viewers, and non-television viewers.

Another fact about the portrayal of the elderly television is that they are rarely seen. Kubey (1980) and Waters (1982) found a gross underrepresentation of people over 65 on television, and Waters (1982) suggests that the the belief invisibility of older persons leads viewers to the population of elderly persons is decreasing. Hiemstra, Goodman, Middlemiss, Vasco, and Ziegler reported that, of the 136 commercials they analyzed, only 11 included one or more people believed to be 60 or older, and those elderly characters comprised only 3.1 per cent of the total population of characters. As Kubey (1980) points out, appearance on television indicates importance and status in society and thus the low representation of elderly persons on television suggests to viewers that older persons are not important as younger adults. The absence of elderly persons in most commercials also may imply that older persons have no need for the type of products sold to younger persons. lead to a belief that the elderly have different lifestyles as compared to those of younger and middle-aged persons.

Sherman and Gold (1978) have shown that people do in fact view elderly persons as different than middle-aged persons. They asked college students to rate according to bipolar adjective scales their notions of an elderly person with an ideal life style and an elderly person with a typical life style or a middle-aged person with an ideal life style

and a middle-aged person with a typical life style. They found no significant difference in the ratings of the ideal middle and old aged individual; however, the typical old aged person was seen as less instrumental or effective and more dependent than the typical middle aged person. Thus, people believe that, ideally middle-aged and old aged persons would have similar characteristics, however, typically, older persons are less well off.

Realistically, there are differences between younger and older persons. Persons 65 and over report experiencing poor health, few job opportunities, having too little to do to keep them busy, and having too few friends; however, these problems are not reported to be as encompassing as the public believes them to be (National Council on Aging, 1975). Thus, somewhere along the line, the true problems of the elderly have become exaggerated, and these exaggerated beliefs have turned into a negative stereotype.

It would seem that a lack of sufficient contact with elderly persons may prevent individuals from gaining accurate knowledge of the elderly and thus foster the negative stereotype and the exaggerated beliefs about the aged. Consistent with this hypothesis, Monk and Kaye (1982) reported positive correlations between knowledge level and attitudes toward the elderly. Lack of knowledge of the elderly also seems to effect the attitudes of children. Seefeldt, Jantz, Galper, and Serock (1977) interviewed 180 grammar school children. Of these children, only 39 reported knowing an older person outside of their family and contacts

with elderly relatives were usually limited to one or two visits a year. The children in this study showed negative attitudes and stereotyped beliefs about older persons. Seefeldt et al. (1977) suggest that increasing contact between children and the elderly should be a goal of educational experiences. They explain that such contact would help children see the elderly as diverse individuals rather than persons all fitting into the same stereotype. Making people aware of the individual differences of elderly persons is an important concern. Green (1981) in reviewing past research suggests that, when individuating information about an elderly stimulus person is provided, the older person is rated as positively as a similar younger person.

Many studies have attempted to demonstrate that contact with the elderly makes attitudes toward the elderly more positive. Differing results have been found in this area. Carstensen, Mason, and Caldwell (1982) found that children who took part in a two month reading tutorial program which elderly persons served as the tutors showed positive perceptions of the elderly after the program. Interestingly, 27 per cent of the children when asked replied that the tutors were not old. In addition, Trent, Glass, & Crockett (1979) reported positive changes in adolescents' attitudes toward the elderly after six seminars on aging, in-depth interviews with aged adults, or a combination of the two. Moreover, Olejnik & LaRue (1981) found adolescents' perceptions of the elderly were less negative stereotyped after daily exposure to a group of elderly persons in their school cafeteria. Interestingly, however, the adolescents reported a decreased willingness to interact with the aged after the intergenerational contact.

On the other hand, some studies have shown that the amount of contact with elderly persons has no effect on the attitudes of young children (Miller, Blalock, & Ginsburg, 1984) and the attitudes of adolescents (Ivester & King, 1977). Baggett (1981) reported no change in children's negative attitudes toward the elderly after participating in a program in which elderly volunteers were "special friends" to the children. Furthermore, Auerbach and Levenson (1977) investigated college students' attitudes toward the elderly before and after one semester of classroom interaction with They found that after the elderly students. classroom interaction, the students' attitudes toward the elderly were significantly more negative! The authors suggest that the negative change in attitudes is the result of the subjects viewing the elderly students as unfair competition. younger students complained that the elderly students often took steps to develop closer relationships with instructors, and because they usually took only one course per semester could devote much more time and effort to classwork.

In view of the fact that the negative stereotypes of the elderly consist of exaggerated and invalid beliefs (National Council on Aging, 1975), perhaps stemming from a lack of knowledge of the true nature of the elderly, it would seem that contact with aged persons would decrease or prevent the

development of the negative attitudes, and that the aged themselves, having first-hand knowledge, would not accept the stereotype. As previously noted, however, aged persons do believe the negative stereotype. Also, as noted above, negative attitudes will sometimes persist despite contact.

Shaver (1978) suggests that the stereotype of elderly persists because of the way our expectations influence our attributions about their Attributions describe the ways in which an individual actively attempts to interpret the causes of observed behavior. Shaver explains that the general public does not expect individual differences among elderly persons (National Council on Aging, 1975). As was previously noted, elderly persons are viewed more positively when individuating information about them is provided. Shaver believes that this expectation of the lack of individuality among elderly persons is "self-perpetuating" despite contact, instances which support it (stereotyped behavior on the part of an elderly person) are seen as evidence for the lack of individuality, and instances which contradict the expectation are considered exceptional. As was noted earlier, several children in the Carstensen et al. (1982) study did not view their elderly tutors as being old. Shaver's (1978) theory explains the acceptance of the stereotype by the aged well. The majority of elderly persons do not believe themselves to be elderly (Kastenbaum, 1964). Thus, they see themselves as exceptions and are also free to believe the common stereotype about the elderly.

Shaver (1978) further suggests the necessity of an attributional analysis of the negative perceptions of the aged. He states that the attributional analysis of such perceptions may be more appropriate because, while stereotypes can occur and persist only under conditions of minimal contact and empathy, attributional errors can survive contact and empathy.

Since Shaver's (1978) article, a considerable amount research has investigated the role of attribution theory in perceptions of the elderly. Sherman, Gold, and Sherman (1978) hypothesized that negative evaluations of elderly persons may stem from their failure to live up to the expectations held for them. (Remember Sherman and Gold (1978) found that the elderly were thought to be ideally the same as younger adults, but in reality less well off.) Thus, Sherman, Gold, and Sherman (1978) assumed that active elderly males, who would be successful in living up to the ideal expectations of them, would be rated more positively than inactive elderly males. They used an attribution theory of Jones and Davis (1965) in order to further develop their Jones and Davis state that perceptions hypothesis. persons behaving in ways not typically expected of them will be more extreme than perceptions of persons behaving as expected.

Thus, Sherman et al. (1978) assumed that, if activity on the part of an elderly male is not typically expected, attributions about him will be more extreme and he will be rated more positively than a similarly active younger

male, for whom activity is seen as normative. Sherman et al. (1978) tested this assumption for both achievement and socially-oriented activity. Their subjects rated an elderly man active on both dimensions more positively than an elderly man inactive on both dimensions, suggesting inactivity on the part of the elderly to be a possible reason for negative evaluations. The subjects also rated elderly men active both dimensions, active on the achievement dimension but inactive socially, or active socially and inactive on achievement dimension more positively than younger men with the same activity patterns, suggesting that activity is normally expected of elderly men. However, while there was a significant effect for the social dimension, stimulus figures who were socially active were evaluated more positively than those who were seen as socially inactive, there was effect for the achievement dimension. In fact, for both young and old stimulus persons, those seen as inactive on the achievement dimension but socially active were rated more positively than those with the opposite activity pattern. This suggests possible differences in attributions about the elderly in achievement and social situations. Such a possibility should be explored.

Later studies have investigated the attributions made in regard to the performance of the elderly in an achievement task. As Frieze (1984) explains, the negative attitudes of individuals should influence the types of attributions they make when trying to explain the performance of elderly persons. The majority of the studies investigating the

attributions made about the performance of the elderly have used the model of attribution theory developed by Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum (1971). Weiner et (1971) proposed that individuals use four basic causal al. elements to interpret the outcome of an achievement-related occurrence. These four causal elements are ability, effort, task difficulty, and luck. They further proposed that these four causal elements consist of two basic dimensions. dimensions are the locus of cause (internal or external to the individual) and the degree of causal stability (stable or unstable). Ability is an internal and stable cause, effort is internal and unstable, task difficulty is external and stable, and luck is external and unstable. It has proposed that expected outcomes are usually attributed to stable causes and unexpected outcomes are usually attributed (Weiner et al., 1971). Moreover, the to unstable causes for stability of the cause has implications expectations: with stable causes, we expect similar future performance and with unstable causes we don't know what to expect in future performance.

In fact, some researchers have assumed that attributions to stable causes for failure in the the elderly reflect subjects' expection of failure in the elderly. Reno (1979) had subjects read one of four descriptions of a man who had decided to go back to college. The man was described as either young (25) or old (63), and as either performing very well and receiving a bachelor's degree or performing very poorly and not receiving a bachelor's degree. The subjects

indicate on a 10-point scale the degree to were asked to which each οf six factors caused the man's success The six facors were ability, effort, task failure. difficulty, luck, help from professors, and support family and friends. Reno found, as expected, that the stable attributions of lack of ability and task difficulty were more likely to be cited for the failure of the old stimulus person than for failure of the young stimulus person. Likewise, the young person's failure was attributed more to the unstable cause of lack of effort than was the old person's failure. other hand, Reno found no difference in the On attributions made for the success of young and elderly men.

Locke-Connor and Walsh (1980) also found no difference in explanations for success when they compared attributions for elderly and young job applicants. Their subjects were asked to indicate which of each of six pairs of possible causes they felt to be more important in causing the stimulus person's success or failure. The causal factors were ability, effort, demographic characteristics (which earlier pilot subjects had rated as external and stable), and the number of other applicants for the job (external, unstable). As in Reno's (1979) study, stable causes were given more importance for the unsuccessful elderly applicants than for the younger applicants. For example, demographic characerteristics were seen as more important than all other factors for the failure of the elderly job applicants. demographic characteristics in this should be noted that experiment were most likely to be considered to indicate age.

In addition, Banziger and Drevenstedt (1982) asked subjects to rate the likelihood that each of five factors caused either a young or elderly woman to pass or fail a final examination at a state university. The five causal factors were effort, ability, luck, task difficulty, and age. Banziger and Drevenstedt (1982) found a significant stimulus age by outcome interaction effect only for attributions to age. Age was used more often to account for the older student's than the younger student's failure, whereas age was more often attributed for the younger student's success than the older student's success.

The Banziger and Drevenstedt (1982) results seem to suggest that oucomes consistent with the negative stereotype about the elderly will be attributed to age and the consideration of other possible causes will be minimized. As Banziger and Drevenstedt (1984) have suggested, attributions exclusively to age have negative consequences because the performance deficits are likely to be viewed as inevitable and thereby generalized across situations. Thus nothing will be done to try to counteract the performance problems of the aged.

There is a need, then, to determine whether attributions to age are made spontaneously. In attempting to determine the types of attributions used and the extent to which those attributions are used to explain the successes or failures of elderly persons, previous studies have given subjects specific attributions and asked them to rate the importance of each attribution for a certain outcome. Several authors

have suggested that, whereas such studies have successfully demonstrated that individuals will make different causal attributions on the basis of the age of the actor, they have limited the range of the attributions that could be (Green, 1984; Frieze, 1984). It is not known whether the main causal factors of ability, effort, task difficulty, luck, and age are individuals' true attributions to the performance of the elderly. Previous open-ended attribution research has suggested that, when given the opportunity, subjects will make causal attributions to factors such as mood and interest in doing well, which are not included in the four categories of the Weiner model (Eliq & Frieze, 1975). It is also not known whether failure on the part of the elderly would actually be attributed to age if such an attribution was not provided by the experimenter.

The present study used the suggestion of several attribution theorists and used open-ended attribution measures to investigate the causes attributed to the successes and failures of elderly and young adults, and these attributions were examined for both social and achievement situations. Furthermore, the occurrance of attributions to age and age-related causes (e.g., failing mental and physical capabilities) were also determined.

In summary, the following were examined:

- 1. Differences in attributions made for success and failure in achievement and social situations of younger and older stimulus adults
 - 2. The actual occurrance of age (and age-related)

attributions using an open-ended measure

3. Judgements of stability, locus of causation, and intentionality in the aforementioned conditions

Method

Subjects

Subjects were 141 male and female students enrolled in mathematics classes at Lycoming College. The data from 8 subjects had to be discarded because their forms were not complete. In addition, the data from 24 subjects had to be discarded due to a mistake in their questionnaire. Thus, data from a total of 109 subjects were included in the analyses.

Procedure

Subjects read one of eight scripts which described a man either 35 or 65 years old who had either succeeded or failed in an achievement or social situation (a 2 X 2 X 2 between subjects design). They were then asked to explain why he succeeded or failed, listing as many causes as they desired, and were also asked to rank the causes they listed in order from most to least important. The subjects were then asked to repeat the cause that they ranked as most important, and keeping this attribution in mind, to answer five questions which measured stability, causality, intentionality, and two general expectancies according to a 7-point scale (see Appendix A).

Two sample scripts follow:

Achievement Script

Mr. Richards has been a resident of this community for several years. He is 35(65) years old and has two children, a son and a daughter. He recently decided he would like to take a few courses at the local community college and is currently taking a course in Financial Investments. He is doing particularly well (poorly) in this course.

Social Script

Mr. Richards has been a resident of this community for several years. He is 35(65) years old and has two children, a son and a daughter. He recently decided he would like to attend some community social gatherings. He went to one of the social events last week. He met several people he liked and two of them invited him to their home (but none of them seemed to like him).

Results

As previously stated, this study explored three main questions with regard to attributional use. The first question concerned the type of attributions made for the performance of younger and elderly adults. The second question concerned the more specific use of age and age-related attributions. And, the third question concerned judgements of stability, causality, and intentionality.

Attributions

All of the attributions were coded according to The Coding Scheme of Perceived Causality (CSPC) devised by Elig and Frieze (1975). This coding scheme has been shown to for causal attributions in both academic achievement and social situations (Elig & Frieze, 1974). coding scheme involves 19 possible attributions. attributions are ability, effort, stable effort, intrinsic motives, personality, physical appearance and other physical factors, repeat of outcome, uncodable, ability-task interaction, task difficulty, others' help or hurt, stable help or hurt of a permanent other, luck, motives of others, others' personality, personality interactions, extrinsic motives, and other classes/activities. (See Appendix B for a further description of the coding scheme). A twentieth attributional category, age, was added for the present study. This category was conservatively defined as an attribution directly to the person's age or a statement such as "he is too old."

Any attribution which implied that the stimulus person's age caused the outcome, but was more directly related to one of the other 19 attributions was coded as that attribution and was labeled age-related. Two persons coded the open-ended attributions, and an inter-rater reliability was calculated using the percentage agreement. There was a 92 percentage agreement for the coding of category, and a 97 percentage agreement for coding of age-related attributions.

Contingency tables were formed for only those

attributional categories which were stated by at least 10 per cent of the subjects at least once. These categories are: effort (16.5 per cent), mood (13.8 per cent), intrinsic motive (25.7 per cent), personality (31.2 per cent), ability-task interaction (58.7 per cent), personality interaction (13.8 per cent), other activities (15.6 per cent), age (15.6 per cent), and age-related attributions (37 per cent) (See Table 1).

Insert Table 1 about here

Chi-squared tests resulting from the G squared likelihood ratio statistic were used to analyze each of the contingency tables. These consisted of 2 (stimulus persons's age) X 2 (social versus achievement situation) X 2 (success versus failure outcome) analyses concerning the number of subjects in each condition who made an attribution to the category at least once. In addition, 2 X 2 X 2 Chi square analyses were performed on subjects' first attributions for each category; however, there were too few attributions per cell to provide for an accurate analysis of these data. Therefore, the first attributions were not analyzed.

For the Chi-square analyses concerning the number of subjects who used a category at least once, there were no condition effects for effort or personality interaction. However, a situation main effect was found for the mood category ($\underline{\chi}^{2}$ (1) = 23.61, \underline{p} < .01), in which mood was used only to explain the outcome of the social situation. From

- Table 1. Attributional categories used by at least 10 per cent of the subjects at least once, and examples taken from the responses of the subjects
- 01 Ability
 He may be smart
- 02 Effort
 He's putting the needed time in the course to do well
- 03 Stable Effort

 Does not spend enough time studying
- 04 Mood, Fatigue, Situational Reactions Got overly drunk; Was rude and obnoxious
- 05 Intrinsic Motives
 He wants to learn and gain knowledge
- 06 Personality
 He's very sociable
- 10 Ability-Task Interaction
 He probably has experience in finances from his home life;
 Knew others in the community well
- 17 Personality Interactions
 Common interests with others
- 19 Other Classes/Activities
 Has too many other things to do
- 20 Age
 His age; Too old
- Age-Related Attributions
 He's been out of college too long and he can't adjust
 to the changes; Been out of social life for a while

the Chi-square analysis concerning the use of intrinsic motive a situation main effect and an outcome main effect were found, in which intrinsic motive was used more often in achievement (68 per cent) than in social (32 per cent) situations (χ^2 (1) = 6.21, p < .05), and to explain success (82 per cent) more than failure (18 per cent) (χ^2 (1) = 17.41,p < .01). Also from the Chi-square analysis on attributions to personality a situation main effect and an outcome main effect were found. As one would expect, personality was used more often in social (82 per cent) than in achievement situations (18 per cent) (χ^2 (1) = 22.56, p < .01). In addition, personality was also used more often to explain success (68 per cent) than failure (32 per cent) (χ^2 (1) = 7.10, p < .01).

On the other hand, Chi-square analyses concerning the use of the ability-task interaction and other activities categories did reflect significant age main effects. Ability-task interaction was used more often to explain the outcome of the 65 year old's performance (59 per cent) than that of the 35 year old (41 per cent) ($\underline{\chi}^3$ (1) = 5.86, \underline{p} < .05). Also, ability-task interaction was used more often in achievement (61 per cent) than in social (39 per cent) situations ($\underline{\chi}^3$ (1) = 9.00, \underline{p} < .01) and more often to explain failure (58 per cent) than success (42 per cent) ($\underline{\chi}^3$ (1) = 4.86, \underline{p} < .05).

There was also an age main effect for the use of the other activities category ($\underline{\chi}^{2}$ (1) = 4.63, p < .05). The other activities attribution was given more often in situations in

which the 35 year old was involved (71 per cent) than in situations where the 65 year old was involved (29 per cent). This attribution was also used only for achievement situations (\mathcal{X}^3 (1) = 29.63, \underline{p} < .01), and more often for failure (82 per cent) than success (18 per cent) (\mathcal{X}^3 (1) = 11.37, p < .01).

Finally, the Chi-square analysis concerning attributions to age yielded an outcome main effect in which attributions were made more often for failure (76 per cent) than for success (24 per cent) ($\underline{\gamma}^3$ (1) = 6.26, \underline{p} = .01). In addition, the Chi-square analysis concerning differences in the percentage of subjects who made age-related attributions yielded a situation main effect and an outcome main effect. More age-related responses were given in the achievement (64 per cent) than in the social situation (36 per cent) (2^{3} (1) = 9.48, \underline{p} < .01), and more age-related responses were given for failure (58 per cent) than for success (42 per cent) (χ^{2} (1) = 3.68, p = .055). Also, the Chi-square analysis showed a marginally significant age main effect ($\chi^{3}(1) = 3.18$, p = .07). Age-related responses were given more often for the performance of the 65 year old (58 per cent) than for that of the 35 year old man (42 per cent).

Dimensions

In addition to coding the attributions according to category, the attributions were also coded along each of three dimensions: stability, locus of causation, and intentionality. Each dimension was coded on a three-point scale to be consistent with the Elig and Frieze schema.

Stability was coded with 1 representing a stable, 2 representing an uncertain, and 3 representing an unstable Locus of causality was coded 1 attribution. with representing an internal, 2 representing a mutual uncertain, and 3 representing an externalattribution. And, intentionality was coded with 1 representing unintentional, 2 representing an uncertain, and representing a mediate or intentional attribution. The inter-rater reliability revealed a 95 percentage agreement for the stability dimension, a 94 percentage agreement for the locus of causation dimension, and a 93 percentage agreement for the intentionality dimension.

The scales for each of the three dimensions were assumed to be interval-ratio, so 2 (age) X 2 (situation) X 2 (outcome) X 2 (order) analyses of variance could be performed on them. This way, the first two attributions could be analyzed, using the second attribution as a repeated measure (order). Twenty-nine subjects did not make three attributions, so there were too few subjects remaining to accurately analyze the use of three or more attributions.

The 2 (age) X 2 (situation) X 2 (outcome) X 2 (order) analysis of variance on the stability dimension revealed a situation main effect. As was found by Elig and Frieze (1974) when testing the CSPC, more stable attributions were made in the academic ($\underline{M} = 1.13$) than in the social ($\underline{M} = 1.91$) situation (\underline{F} (1, 99) = 26.23, \underline{p} < .01). Furthermore, an age X situation X outcome interaction was also found for this dimension (\underline{F} (1, 99) = 5.99, \underline{p} < .05) (See Table 2 and Table

3). This also seems to fit with Elig and Frieze's findings. They found a pronounced stability difference between achievement and social situations for failure outcomes, but not for success outcomes. This was also found in the present study for the 35 year old man. For the 65 year old, however, a trend occurred in the opposite direction: the difference in stability for academic and social situations was more pronounced in the success than the failure conditions. The 2 (age) X 2 (situation) X 2 (outcome) analysis of variance on the stability dimension for subjects' first attributions yielded a situation main effect in the same direction as the one previously mentioned (\underline{F} (1, 101) = 14.39, \underline{p} < .01); however, the three-way interaction was only marginally significant in this analysis (\underline{F} (1, 101) = 3.11, \underline{p} < .08).

Insert Tables 2 and 3 about here

A 2 (age) X 2 (situation) X 2 (outcome) X 2 (order) analysis of variance on the locus of cause dimension revealed a marginally significant outcome main effect (\underline{F} (1, 99) = 3.24, $\underline{p} < .08$), in which more internal attributions were given for success ($\underline{M} = 1.52$) than for failure ($\underline{M} = 1.77$) (See Table 4). In analyzing subjects' first attributions, this main effect was significant (\underline{F} (1, 101) = 8.01, $\underline{p} < .01$). Such a finding, that success is attributed to internal factors more often than failure, is consistent with previous attributional research (Weiner, et al., 1971).

Table 2. Mean stability ratings (1 = stable, 3 = unstable) of subjects' first and second attributions for each of the stimulus age X situation X outcome conditions

	Achievement		<u>Social</u>	
	35	65	35	65
Success	1.21	1.00	1.62	1.86
Failure	1.00	1.29	2.43	1.69

Cable 3. Analysis of Variance of the Stability Ratings

ource	dt	MS	<u>F</u>
ige	1	0.597	0.49
ituation	1	31.907	26.23*
utcome	1	1.717	1.42
s	1	1.068	0.88
10	1	0.762	0.63
0	1	1.110	0.91
so	1	7.284	5.99**
rror	99	1.216	

p .01

*p .05

Insert Table 4 about here

The 2 (age) X 2 (situation) X 2 (outcome) X 2 (order) analysis of variance for the intentionality dimension revealed a situation main effect (\underline{F} (1, 99) = 9.27, \underline{p} < .01), an outcome main effect (\underline{F} (1, 99) = 5.11, \underline{p} < .05), and a situation X outcome interaction (\underline{F} (1, 99) = 4.30, \underline{p} < .05). It appears that more intentional causes were given for achievement successes (\underline{M} = 1.96) than for achievement failures (\underline{M} = 1.44), social successes (\underline{M} = 1.35), and social failure (\underline{M} = 1.33) (See Table 5). The 2 X 2 X 2 analysis of variance on first attributions for this dimension showed no outcome main effect (\underline{F} (1, 101) = 2.42, \underline{p} < .01), but both the situation main effect (\underline{F} (1, 101) = 8.98, \underline{p} < .01) and the situation X outcome interaction (\underline{F} (1, 101) = 6.50, \underline{p} < .05) were present and results paralleled the previously reported findings.

Insert Table 5 about here

Scaled Questions

Three questions were developed to more directly measure subjects' stability, internality, and intentionality judgments. These questions were worded consistent with Weiner et al.'s (1971) proposition that the stability of a cause mediates future expectations, the locus of causation mediates pride or shame, and the intentionality of a cause

Table 4. Analysis of Variance of the Locus of Causation Ratings

Source	<u>df</u>	MS	<u>F</u>
age	1	1.257	1.26
situation	1	0.640	0.64
outcome	1	3.234	3.24
as	1	0.083	0.08
ao	1	1.126	1.13
so	1	1.504	1.51
aso	1	0.264	0.27
error	99	0.997	

^{*}p .01

^{**}p .05

Table 5. Analysis of Variance of the Intentionality Ratings

Source	<u>df</u>	<u>MS</u>	$\underline{\mathbf{F}}$
age	1	0.921	1.25
situation	1	6.822	9.27*
outcome	1	3.763	5.11**
as	1	0.077	0.10
ao	1	0.151	0.20
so	1	3.166	4.30**
aso	1	1.034	1.40
error	99	0.736	

^{*}p .01

^{**}p .05

mediates reward and punishment. Thus, for example, subjects in the success conditions were asked to rate how successful they thought Mr. Richards would be at the next party (or in the next class), how proud he should be of his success, and how much others should compliment him for his success. On the other hand, subjects in the failure condition were asked how unsuccessful they thought Mr. Richards would be at the next party (or in the next class), how ashamed he should be of his failure, and how much others should criticize him for his failure. Thus, comparisons between conditions are not based on expected success, pride, and compliments, but rather on indirect measures of expected stability, locus of cause, and intentionality, as represented by expectations for future success or failure, pride or shame, and expected compliments or criticisms.

A 2 (age) X 2 (situation) X 2 (outcome) analysis of variance for the stability question revealed an outcome main effect, in which success outcomes ($\underline{M} = 5.85$) were expected to be more stable than failure outcomes ($\underline{M} = 4.69$) (\underline{F} (1, 101) = 23.13, $\underline{p} < .01$). Furthermore, an age X situation interaction was also found on this dimension (\underline{F} (1, 101) = 6.17, $\underline{p} < .05$). It appears that, for the 35 year old man, performance in a social situation is expected to be more stable ($\underline{M} = 5.74$) than that in an achievement situation ($\underline{M} = 4.93$). On the other hand, this difference did not appear for the 65 year old man (\underline{M} social = 5.07, \underline{M} achievement = 5.37) (See Table 6). The results of this measure of stability do not seem to be consistent with the results from coding the

stability of the attributions. Nevertheless, upon reflection, this is understandable. This is because the two measures represent two different judgments: One is a measure of causal stability and the other a measure of future expectancies. When we make a stable attribution we expect a similar outcome in the future; however, when we make an unstable attribution future expectations are variable. Thus, we cannot compare the stability of attributions with expectations of future performances.

Insert Table 6 about here

A 2 X 2 X 2 analysis of variance on the locus of cause question showed an outcome main effect, in which success (\underline{M} = 6.02) was thought to be more internal than was failure (\underline{M} = 3.07) (\underline{F} (1, 101) = 130.77, \underline{p} < .01) (See Table 7). This is highly consistent with previous research, and with the previously reported finding for the coded locus of causation dimension in this study. In addition, a 2 X 2 X 2 analysis of variance showed an outcome main effect for the intentionality question, in which success was thought to be more intentional (\underline{M} = 5.27) than failure (\underline{M} = 2.56) (\underline{F} (1, 101) = 88.35, \underline{p} < .01) (See Table 8).

Insert Tables 7 and 8 about here

Person-Group Differentiation

The last two questions explored Shaver's (1978) idea

able 6. Analysis of Variance of the Stability Question

ource	<u>df</u>	MS	<u>F</u>
ge	1	0.475	0.28
ituation	1	1.584	0.95
utcome	1	38.617	23.13*
s	1	10.306	6.17**
o	1	0.065	0.04
o	1	0.510	0.31
so	1	3.047	1.82
rror	101	1.67	

p .01

^{*}p .05

Table 7. Analysis of Variance of the locus of causation question

Source	<u>df</u>	<u>MS</u>	<u>F</u>
age	1	5.402	2.98
situation	1	2.230	1.23
outcome	1	236.955	130.77*
as	1	0.201	0.11
ao	1	3.669	2.02
so	1	2.967	1.64
aso	1	1.146	0.63
error	101	1.812	

^{*}p .01

^{**}p .05

Table 8. Analysis of Variance of the Intentionality Question

Source	<u>df</u>	<u>MS</u>	<u>F</u>
age	1	0.680	0.30
situation	1	0.426	0.19
outcome	1	203.277	88.35*
as	1	2.508	1.09
ao	1	0.204	0.09
so	1	1.051	0.46
aso	1	0.825	0.36
error	101	2.301	

^{*}p .01

^{**}p .05

that older persons who behave contrary to that which is expected of the elderly will be viewed as exceptional rather than as evidence against stereotyped views, and thus will be evaluated differently than "average elderly persons." Thus, the last two questions compared subjects' perceptions of the performance of the stimulus person in the script with their expectations for an "average" person of that age group.

The questions were worded so as to be consistent the wording of the first three questions. So the questions were different for each of the four situation-outcome conditions. Unfortunately, this means that the questions could be compared only for age effects within each of conditions (i.e., achievement success, achievement failure, social success, and social failure). Thus (person-group) repeated measures analyses 2 variance were performed to determine whether subjects viewed the performance of the stimulus person as exceptional, rather an average group member. as typical of The two questions were treated as a repeated measure.

The results from the social situation did confirm expectation that the successful 65 year old would be seen as an exception for his age group. The 2 Х 2 (age) (person-group) repeated measures analysis of variance in the social success condition showed an age Х person-group interaction (F (1, 26) = 9.03, p < .01) (See Table 9). appears that average 65 year old men were expected to be less successful at the party than was the 65 year old presented in the senario. However, this difference does not

appear to exist for the judgments about the 35 year old men.

Insert Table 9 about here

The 2 (age) X 2 (person-group) repeated measures analysis of variance in the social failure condition revealed an age X person-group interaction (\underline{F} (1, 25) = 5.01 , \underline{p} < .05) (See Table 10). It appears that an average 65 year old man was expected to be more unsuccessful at the party than was the 65 year old man in the senario. On the other hand, the 35 year old man in the senario was thought to have been more unsuccessful at the party than would be expected of an average 35 year old man.

Insert Table 10 about here

The 2 (age) X 2 (person-group) repeated measures analysis of variance in the achievement success condition revealed a person-group main effect. For both age groups, it was expected that an average man ($\underline{M} = 5.04$) would be less successful in a financial investments course than was the man given in the senario ($\underline{M} = 6.07$) ($\underline{F}(1, 25) = 27.22$, $\underline{p} < .01$).

The 2 (age) X 2 (person-group) repeated measures analysis of variance in the achievement failure outcome revealed an age main effect (\underline{F} (1,25) = 10.50, \underline{p} < .01). Sixty-five year old men (\underline{M} = 4.86) were expected to do more poorly in a financial investment class than were 35 year old men (\underline{M} = 3.85).

Table 9. Means for the perceived success of the stimulus man and expected success of an average man, for the social success condition (1 = Not At All Successful,

7 = Very Successful)

	∴≜ge		
Man	35	6 <u>5</u>	
Stimulus	5.38	5.67	
Average	5.31	4.07	

Table 10. Means for the perceived failure of the stimulus man and expected failure of an average man, for the social failure outcome (1 = Not At All Unsuccessful 7 = Very Unsuccessful)

	Age		
Man	3 5	6.5	
Stimulus	4.43	3.38	
Average	3.36	4.31	

Discussion

Previous studies have explored whether a variety of attributions, including age, would be used to explain the performance of elderly persons. These attributions always were made available to subjects who were asked to indicate which of the attributions were most likely to have caused the outcome of an elderly or younger person's performance. studies have suggested that stable attributions are made more frequently for the failure of an older person than for failure of a younger person (e.g., Reno, 1979; Locke-Connor & Walsh, 1980; Banziger & Drevenstedt, 1982). For example, Reno (1979) found that the attributions of lack of ability and task difficulty were cited more often for the older person's than for the younger person's failure. In addition, Locke-Connor and Walsh (1980) and Banziger and Drevenstedt (1982) have suggested that age is considered an important cause for the failures of elderly persons.

However, it is not known whether subjects would make similarly stable attributions and age attributions if they were not given a list of attributions from which to choose. Previous open-ended attribution research has suggested that subjects will make a variety of attributions not present in theoretical models when given the chance (Elig & Frieze, 1975). The present study investigated the spontaneous attributions people make about the performances of elderly and younger men. In support of previous open-ended research, it was found that a variety of attributions are made for

success and failure in social and achievement situations for both elderly and younger persons. These included attributions to such causes as the person's mood or internal motivation, interactions between the person's ability and the task, and the person's having too many other activities.

Nevertheless, in the present study, statistically significant age differences were found for only two of the attribution categories: other activities and ability-task is likely due to the fact that we used interactions. This open-ended responses which produce valuable descriptive data analyze via inferential statistics. that are difficult to Attributions to other activities (e.g., his job takes up a lot of his study time, he has too other many responsibilities) were used more often to explain the performance of the 35 year old than the 65 year old man. This may be because 35 year old men are more likely to establishing themselves in a job and to have younger children than are 65 year old men. This reflects a subtle form of ageism, as people are more readily accepting the idea that likely to men are more have demanding responsibilities than are older men, which provides external attribution for their failure.

On the other hand, ability-task interaction attributions (e.g., he's been a member of the community for a long time, he's not used to the new math) were more often used to explain the performance of the 65 year old than the 35 year old man. Previous research (i.e., Reno, 1979) showed that task and ability attributions were used more frequently to

explain the failure of an elderly person than that of a younger adult. This study showed that individuals prefer utilize a combination of these two attributions to explain the performance of elderly adults. In fact, when explaining the performance of the 65 year old man, attributions solely to ability or task were made by fewer than 5 per cent of the subjects in the present study, whereas ability-task interaction attributions were made by 69 percent of subjects at least once. Thus, it appears that an interaction between the ability of the person and the difficulty of the task is considered to be important to the performance of elderly. In light of the fact that other activities and ability-task interaction attributions ascribed were differently for the performance of younger and older adults, and that ability-task interactions were considered to be important to the performance of the elderly, future research must also include these categories as potential attributional statements.

The present study has also found that, when given the opportunity, individuals will make age attributions. Sixteen per cent of the subjects attributed the outcome directly to the stimulus person's age at least once, even when a conservative measure of age which required such statements as "his age" or "he is too old" was used. As would be expected, age was used more often to explain failure than success. Since failure due to age suggests inevitable failure, such an attribution is likely to lead to discrimination. On the other hand, age was not used more often to explain the

failure of the 65 year old than that of the 35 year old man, as was found in previous research! Perhaps by eliciting age judgments, previous researchers may have inadvertently stimulated ageist attributions for elderly stimulus persons.

In the current study, the occurrance of age-related attributions was even greater than attributions to age. Over twice as many of the subjects (37 per cent) made at least one age-related attribution compared to those making at least one age attribution (16 per cent). It appears that subjects are more willing to imply age-related conditions as a causal factor than to say age was solely responsible for the outcome. This leads one to believe that ageism may be more subtle than previously expected, which is consistent with the literature exploring other forms of prejudice (e.g., Baron & Byrne, 1984). It is also interesting to note that 65 per cent of the age-related attributions were categorized as ability-task interactions. This again supports the contention that ability-task combinations are seen as importantly related to age.

Thus, the present study found that people are not as likely to make ability, task, and age attributions for the failure of the elderly as was suggested by previous studies. Rather, people seem to believe that the failure of elderly persons is caused by a complex combination of these three factors, and attribute failure to age-related ability-task interactions.

Previous research (i.e., Reno, 1979) has also suggested that ageism is present because people are more likely to make

stable attributions for the failure of older than younger adults. However, such claims were made on the basis of whether subjects selected a stable or an unstable attribution list of presented alternatives. The present study used an open-ended measure of attributions and coded stability of each attribution independently of the attributional category used. doing this, it Ιn discovered that, in an academic situation, subjects were not more likely to make stable attributions for the failure of older than younger adults, as was found by Reno (1979). However, the younger adult in the present study was 35, whereas the younger adult in the Reno study was 25. It is possible that college students perceive a 35 year old man an academic situation as being relatively old and expect an equivalent amount of stability for his failure as for that of a 65 year old.

On the other hand, in support of the hypothesis that more stable attributions are made for the failure of older than younger adults, there appeared to be a difference in the stability of the attributions given for the social failure of the younger and older man. The attributions made for the social failure of the 65 year old tended to be more stable than those for the 35 year old. In addition, as was found in previous research (e.g., Reno, 1979), there was no difference in the stability of attributions made for the success of the 35 and the 65 year old man.

Finally, some support for the belief that successful elderly persons are seen as exceptional was found in the

expectancy data in the social situation. Results showed that, despite reading about the social success of a 65 year old, subjects did not expect an average 65 year old to be as successful. On the other hand, in the achievement success condition subjects expected both an average 35 and an average 65 year old man to be less successful than were the 35 and 65 year old men in the senario. Thus, it appears that both the successful 35 and the successful 65 year old men were seen as exceptional. This is further support for the possibility that college students perceive 35 year old men in an academic situation as being relatively old and expect them to fail.

In summary, the present study found that spontaneously make attributions to a variety of causes, including age, to explain the performance of adults. addition, subjects make numerous age-related attributions, the majority of which involve ability-task interactions. Furthermore, both age and age-related attributions are used more often to explain failure than success. Nevertheless, age was not used more often to explain the failure of a 65 year old than a year old, although age-related 35 appears that there is a more attributions were. Thus, it subtle ageism present in the use of attributions previously expected.

References

- Auerbach, D. N., & Levenson, R. L. (1977). Second
 Impressions: Attitude change in college students
 toward the elderly. The Gerontologist,
 17(4), 362-366.
- Baggett, S. (1981). Attitudinal consequences of older adult volunteers in the public school setting. Educational Gerontology, 7, 21-31.
- Banziger, G. & Drevenstedt, J. (1982). Achievement attributions by young and old judges as a function of perceived age of stimulus person. <u>Journal of</u>
 Gerontology, 37(4), 468-474.
- Banziger, G. & Drevenstedt, J. (1984). Age as a variable in achievement attributions: The Weiner model and beyond.

 Basic and Applied Social Psychology, 5(2), 97-104.
- Baron, R., & Byrne, B. (1984). Social psycholgy:

 Understanding human interaction (pp. 172-179).

 Boston: Allyn and Bacon, Inc.
- Carstensen, L., Mason, S. E., & Caldwell, E. C. (1982).

 Children's attitudes toward the elderly: An

 intergenerational technique for change. Educational

 Gerontology, 8, 291-301.
- Elig, T. W., & Frieze, I. H. (1974). A multi-dimensional scheme for coding and interpreting perceived causality for success and failure events: The coding scheme of perceived causality (CSPC). JSAS Catalog of Selected Documents in Psychology, 5, 313.
- Frieze, I. H. (1984). Causal attributions for the

- performances of the elderly: Comments from an attributional theorist. Basic and Applied Social Psychology, 5(2), 127-130.
- Green, S. K. (1981). Attitudes and perceptions about the elderly: Current and future perspectives. International
 Journal of Aging and Human Development, 13(2), 99-119.
- Green, S. K. (1984). Senility versus wisdom: The meaning of old age as a cause for behavior. Basic and Applied Social Psychology, 5(2), 105-110.
- Hiemstra, R., Goodman, M., Middlemiss, M.A., Vosco, R., & Ziegler, N. (1983). How older persons are portrayed in television advertising: Implications for educators.

 Educational Gerontology, 9, 111-122.
- Ivester, C., & King, K. (1977). Attitudes of adolescents toward the aged. The Gerontologist, 17(1), 85-89.
- Jones, E. E. & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perception. Advances in Experimental Social Psychology, 2, 219-226.
- Kastenbaum, R. (Ed.). (1964). New Thoughts on Old Age.

 New York: Springer Publishing Company, Inc.
- Kent, K. E. M. & Shaw, P. (1980). Age in <u>Time</u>: A study of sterotyping. The Gerontologist, 20(5), 598-601.
- Kubey, R. W. (1980). Television and aging: Past, present, and future. <u>The Gerontologist</u>, <u>20(1)</u>, 16-35.
- Locke-Connor, D. & Walsh, R. P. (1980). Attitudes toward the older job applicant: Just as competent, but more likely to fail. Journal of Gerontology, 35(6), 920-927.

- Children and the aged: Attitudes, contact, and discriminative ability. International Journal of Aging and Human Development, 19(1), 47-53.
- fonk, A. & Kaye, L. W. (1982). Gerontological knowledge and
 attitudes of students of religion. Educational
 Gerontology, 8, 435-445.
- Reality of Aging in America, conducted by Louis Harris and Associates, Inc., Washington, D.C.
- perceptions of the aged: The effects of intergenerational contact. Educational Gerontology, 6, 339-351.
- Reno, R. (1979). Attribution for success and failure as a function of perceived age. <u>Journal of Gerontology</u>, 34(5), 709-715.
- Rodin, J. & Langer, E. (1980). Aging labels: The decline of control and the fall of self-esteem. <u>Journal of Social</u>
 Issues, 36(2), 12-29.
- A cross-cultural comparison. <u>International Journal of</u>

 Aging and Human Development, 19(4), 319-328.
- Seefeldt, C., Jantz, R. K., Galper, A., & Serock, K. (1977).

 Children's attitudes toward the elderly: Educational implications. Educational Gerontology: An International Quarterly, 2, 301-310.
- Shaver, K. G. (1978). Attributional error and attitudes toward aging: A view of the NCOA National Attitude

- Survey. <u>International Journal of Aging and Human</u> Development, 9(2), 101-113.
- Sherman, N. C. & Gold, J. A. (1978). Perceptions of ideal and typical middle and old age. <u>International Journal of</u>
 Aging and Human Development, 9(10), 67-73.
- Sherman, N. C., Gold, J. A., & Sherman, M. F. (1978).

 Attribution theory and evaluations of older men among college students, their parents, and grandparents.

 Personality and Social Psychology Bulletin, 4(3), 440-442.
- Trent, C., Glass, J. D., & Crockett, J. (1979). Changing adolescent 4-H club members' attitudes toward the aged. Educational Gerontology, 4,33-48.
- Tuckman, J. & Lorge, L. (1953). Attitudes toward old people.

 The Journal of Social Psychology, 37, 249-260.
- Waters, H. F. (1982). Life according to TV. Newsweek,

 December 6, 136-140.
- Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, F. M. (1971). Perceiving the causes of success and failure. In E. E. Jones, D. D. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), Attribution: Perceiving-the-causes-of-behavior (pp. 95-120). New Jersey: General Learning Press.
- Weiner, B. & Kukla, A. (1970). An attributional analysis of achievement motivation. In B. Weiner (Ed.), <u>Achievement motivation and attribution theory</u> (pp. 125-132).

 New Jersey: General Learning Press.

5

Very Much

6

7

performance in this course?

3

4

2

ot at all

1

Attributions about the Elderly 51 How successful (unsuccessful) do you think Mr. Richards was at this social event? orHow well (poorly) do you think Mr. Richards did in this course? at all 5 2 3 4 1 How successful (unsuccessful) would you expect an average 35 (65) year old man to be at this social event? at all 5 2 3 4 1

How well (poorly) would you expect an average 35 (65) year old man to do in this course?

or

Appendix & Examples of Categories

The following examples were either drawn from the responses of subjects or generated by the researcher. It is hoped that they will make concrete what has been discussed in abtract terms. This list is not meant to be definitive.

The Achievement Situation

- Ol Ability
 The child is superior intellectually; could be too difficult for him; good verbal repertoire; poor comprehension of material; didn't understand material.
- 02 Erfort
 Didn't prepare for assignment; tried hard to study for this task.
- 03 Stable Effort Student always tries hard; he is lazy.
- O4 Mood, Fatigue, Situational Reactions
 May have other things occupying his thoughts; he didn't feel well;
 he was upset or angry about something; her frame of mind that day;
 reaction to something that happened that day.
- Of Intrinsic Motives And American Mental.

 He is interested in doing well; student's pleasure of progress; wants to please; may be uninterested in the content; lack of interest; likes what he is reading about; poor attitude toward assignment.
- O6 Personality
 Student is sure of himself; no self-esteem; self-confidence; fear of failure.
- 07 Persons' Physical Appearance and Other Physical Factors
 Possibly the student has hearing trouble; he/she can't see very well.

 The rived in Studie (Studie)
- 10 Ability-Task Interaction Knew the material.
- 11 Task Difficulty
 Textbook too hard for the class; a task that was too difficult; the
 assignment was not challenging enough; material on a suitable level.
- 12 Others' Situational Help or Hurt and Effort
 He was poorly prepared by the teacher; poorly presented; poor directions.
- 13 Stable Help or Hurt and Stable Effort of a Permanent Other T.a teacher always helps the students; parents helping.
- 14 Luck Student was lucky on this test.

- 15 Notives of Others
 Teacher interested in having student succeed.
- 16 Others' Personality
 Mis 'eacher is a warm friendly person; the teacher is the type of
 person who puts students at ease.
- 17 Personality Interactions
 Bidn't get along with the teacher; thinking along same line as teacher.
- 18 Extrinsic Motives
 Parents threatened to cut money if I didn't start doing better; it was a required class and I had to get an A; teachers rewards; interesting material.
- 19 Other Classes/Activities
 I was very busy with extra activities; my attention may have been divided among too many courses.

The Social Situation

- 62 Effor (to impress or get along with others)
 I may not have presented myself likeably; came on too strong; tried too hard to relate.
- 03 Stable Effort
 I try too hard to be friendly; I always have tried to be friendly.
- O4 Hood, Fatigue, Situational Reactions

 May have had other things occupying my thoughts; I didn't feel well;

 conversation guarded because of what others have said; time when I

 was uncommunicative; preoccupied and thus not free to relate.
- 05 Intrinsic Motives My obvious interest in them; I like associating with people; I want to please.
- O6 Personality, Sociability Good conversationalist; I am a likeable person; apparently my personality is such that people are attracted to it; ability to be at ease; able to relate and project in a pleasing way.
- O7 Person's Physical Appearance and Other Physical Factors
 I tried to look good for the party; maybe I didn't shave well enough;
 maturally attractive person; I always take care of my appearance; I
 have good personal hygiene.
- 11 Task Difficulty
 Meeting new people at a party is difficult.

- 12 Others' Situational Help of Burt and Unstable Effort
 They tried to meet me on common ground; they drow me into the convermetion.
- 13 Stable Help or Murt and Stable Effort of a Permanent Other People are always nice; my husband breaks the ice when meeting people.
- 14 Luck
 It could even be one thing I said that happened to interest them;
 they happened to be people who like me; different people—different
 tastes.
- 15 Others Motives
 They wanted to be friendly; they had th. 'r own clique and weren't
 interested in others; they thought I might help them in their studies.
- 16 Others' Personality, Background, Interests
 Their background; they may be extroverts; their interests.
- 17 Personality Interaction Personalities are compatible; personality clash; interests are conpatiblo; we had dissimilar interests.
- 18 s 'nsic Motives bople like you to be friendly.

4 Univalently
source recombite he had been sout much
ne has a family