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THE RELIABILITY AND VALIDITY OF AN INSTRUMENT
DESIGNED TO MEASURE ATTITUDES
TOWARD THE ELDERLY

by
Jane Schultz

A thesis submitted in partial fulfillment
of the requirements for the degree

of
MASTER OF SCIENCE
in
Psychology

UTAH STATE UNIVERSITY
Logan, Utah

1989

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Jane Schultz

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ABSTRACT

The Reliability and Validity of an Instrument
Designed to Measure Attitudes
Toward the Elderly

by

Jane Schultz, Master of Science

Utah State University, 1989

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Department: Psychology

An attitude is a mental state that influences the way an individual responds to relevant objects and situations. Attitudes toward the elderly have a potential impact on all Americans, as the population is growing older. These attitudes constitute an important area of study because their nature is unclear and their impact extensive.

The Kogan Attitudes Toward Old People Scale (OP) was examined to establish reliability and validity estimates. A questionnaire, consisting of this scale and four others, was administered to a sample of adults. Factor analysis of the OP revealed two factors, which were somewhat ambiguous. Internal consistency estimates for these factors and the total OP ranged from .72 to .92. Validity estimates were in the expected direction and ranged from -.13 to .36. Gender, age, education level, and degree of tolerance for others immersed as predictive variables for reported attitudes toward the elderly.

It was concluded that the use of the OP is of questionable utility. If one must use it, the total OP score or only the items from Factors 1 and 2 should be utilized, as long as the discussed weaknesses, such as the sampling and validation procedures, are taken into account.

(103 pages)

CHAPTER I
STATEMENT OF THE PROBLEM

Introduction

The elderly in American society form a minority group that is growing rapidly every year, as people in general are healthier and living longer. In 1900 three million persons were of age 65 or older; by 1985 that number approached 30 million. It is estimated that the older population will continue to grow at this rapid pace into the twenty-first century when more than one person in five (21 percent) will be 65 or older (Barrow, 1986). Although growing, the elderly population still constitutes a minority of the overall population, and like other minority groups, it is associated with diverse attitudes, stereotypes, and misconceptions.

Problem Statement

The perpetuation of inaccurate views of the elderly poses much concern given that the population in the United States is generally growing older. But this problem is not limited to the elderly population. Instead, misperception of the elderly is a problem that extends beyond the aged population and actually deserves attention at the cultural level. The elderly may constitute a minority of the population, but it is one group to which everyone will

eventually belong. Therefore, attitudes toward this group and the possible consequences of such attitudes have important implications for all people, not just those aged 60 and above.

The potential influence of attitudes toward the elderly warrants concern, not only because it could affect many people, but also because the nature of these attitudes is unclear. Current literature shows a discrepancy in findings on the nature of attitudes toward the elderly, with some suggesting a prevalence of positive attitudes (Schonfield, 1982), while others are stating that attitudes are generally negative (Barrow, 1986). One possible reason for these discrepancies may lie in the nature of the attitudinal instruments used. In fact, a major criticism of attitudinal research concerning the elderly is the lack of sound psychometric properties associated with the measures used. According to McTavish (1982, p. 537), "little attention has been given to measurement issues in attitudinal research, especially in terms of reliability and validity information." With a sound attitudinal instrument, the nature of these attitudes could be determined. Knowing the nature of these attitudes is important because negative attitudes could have detrimental effects, not only on elderly individuals, but also on society at large.

The Nature of Attitudes

Attitudes and stereotypes are two words that are often used interchangeably when describing perceptions of people, places, objects, or issues. However, there is a marked difference in the meanings of these words. According to Gordon W. Allport (1967, p. 8),

An attitude is a mental or neural state of readiness that is organized through experience and exerts a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.

In more general terms, it is an evaluation that people hold in regard to themselves and/or other people, objects, and issues. These general evaluations can be founded on behavioral, affective, or cognitive experiences and in turn, may also guide or influence these processes.

Stereotypes, on the other hand, are opinions and presuppositions formed from cultural information, not personal experience, direct exposure, or observation. In fact, exposure to or direct experience with an individual who does not conform to the stereotype is considered an exception to the rule, rather than reason to question the stereotype itself.

This use of stereotypical information leads to the formation of communication barriers. These barriers prevent the acquisition of accurate information about the stereotyped group, which would lead to the formation of an

attitude toward the group based on empirical findings. Instead, stereotypes lead to and perpetuate inaccurate views of the group due to these barriers, possibly resulting in negative attitudes toward members of the given group.

Stereotypes of the Elderly

Three kinds of stereotypes affect individuals' attitudes toward the elderly: negative, reverse, and positive stereotypes.

Negative stereotypes. McTavish (1971) discusses the stereotypes of the elderly found in popular literature during the 1960s. At this time, older people were seen as sick, tired, unproductive, forgetful, self-pitying, and unable to learn new things -- among others. Based on these views of the elderly, old age has been and continues to be associated with negative characteristics, such as crankiness, unattractiveness, frailty, rigidity, and senility (Lubomudrov, 1987). These misperceptions may be at the center of the prejudice that Hendricks and Hendricks (1986) call "ageism." They define this term as a negative perspective toward an old person just because he or she is old. A prejudgment, as such, is shown by acting toward members of a group according to the assumed characteristics of the members, not in accordance to the individual members' actual characteristics. As a result of these negative stereotypes, individuals are reduced to members of a dehumanized group, possessing only those stereotypical

qualities associated with that group, not their own individual characteristics. This dehumanized position may lead to the perpetuation of inaccurate views of the elderly, possibly resulting in the absence of a positive and valued role for the aged in society.

Reverse stereotypes. Reverse stereotyping involves taking the negative stereotype to the opposite extreme (e.g., older characters racing on motorcycles, performing rigorous aerobic routines, or enjoying a prolific sex life). This stereotype subtly perpetuates a negative view of elderly people, reducing them to comical figures as opposed to complex, responsible individuals. A false perception as such leads to a mockery of elderly people and old age alike. This mockery is often seen in media portrayals, such as the recent film Cocoon, in which youthfulness is restored to elderly people. Portrayals as such are intended to be comical because they conflict with commonly held stereotypes of lethargy and libido loss in the aged (Kubey, 1980).

Kubey (1980) suggests that these portrayals, although intended to make one laugh, are no laughing matter. They probably do more harm than good, as the audience understands that these images of the elderly are meant as jokes, possibly reinforcing the true negative stereotype. By making jokes of elderly people, reverse stereotypes mock the value of older people, making old age undesirable. As a result of this mockery, real problems of the elderly may be

ignored, and elderly individuals may be poorly treated. The devaluing of the elderly as a group may lead to individual feelings of worthlessness and isolation from society in older persons.

Positive stereotypes. Not only do people hold negative or unrealistic conceptions of the elderly, but they also tend to positively stereotype older people (Lubomudrov, 1987). This kind of stereotype is very subtle, the portrayal appearing acceptable on the surface. The kind, passive grandparent image is an example. Other examples include all elderly people being economically well off, a potential political force, and able to make friends easily (Lubomudrov, 1987). These portrayals are just as inaccurate as the nasty, cranky, or narrow-minded characteristic of stereotypic views of aging and can be just as damaging to attitudes held toward the elderly, as it may lead to negative attitudes and poor treatment when exceptions are encountered.

Conclusion. Any kind of stereotyping -- negative, reverse, or positive -- is damaging to the status and value of elderly people in society. Through the process of stereotyping, individual differences are ignored, possibly resulting in a mind set that the elderly as a group are not worthy of attention or humane treatment. With this mind set may come the perpetuation of negative attitudes toward the elderly, possibly resulting in poor treatment of them.

Nature of Attitudes Toward the Elderly

These three kinds of stereotypes can lead to negative attitudes toward the elderly, but it is not inevitable. Even though stereotypes are prevalent in society, not all people have negative attitudes toward the elderly. Other factors seem to influence individuals' attitudes, such as age, gender, level of education, residence, personality, and contact with the group.

Age. It is generally accepted that being old is not better than being young, especially in the youth-oriented society of the United States. From this attitude, it would seem to follow that attitudes toward the elderly would be negative for both the young and old alike, possibly becoming more negative as one ages. Research findings on the correlation between age and attitudes toward the elderly are contradictory, however. For example, Nidiffer and Moore (1985) found that university administrators, held negative attitudes toward the elderly. But Glass, Jr. and Knott (1982) found that middle-aged adults, aged 30 to 60, held slightly positive attitudes. Kogan (1961b) also found that older respondents, aged 49 to 92, generally seem to hold less negative attitudes toward the elderly than younger age groups. Thorson (1975) found no significant variation in attitude by respondents' age.

Due to inconsistent results, no firm conclusions or generalizations can be made from studies examining the

correlation between age and attitudes. This correlation has yet to be determined with certainty. It is quite probable that other factors also affect attitudes toward the elderly as one ages.

Gender. Females have traditionally been the primary caregivers in American society, be it for the young or the old. It is possible that with higher levels of nurturance comes more tolerance of others and possibly better attitudes toward the elderly. To support this assumption, Kogan (1961a) found a correlation between scores of individuals who gave responses indicative of positive attitudes toward the elderly and self-reported nurturant personality dispositions. However, he found no significant differences for gender in obtained results. Todd, Rider, and Page-Robin (1986) also found no significant correlation between gender and attitudes toward the elderly.

Gender and associated characteristics (e.g., degree of nurturance) would seem to affect one's attitudes toward the elderly, but no conclusive evidence has been established.

Personality traits. Besides one's disposition toward nurturance, other personality traits may be indicative of attitudes toward the elderly, such as one's self-concept (Brubaker & Powers, 1976). The way in which one perceives the self affects the way the individual perceives others. Ward (1977) concurs with this

proposition, suggesting that individuals who have a poor self-concept tend to accept negative attitudes toward older people.

In addition to one's self-concept, one's perception of the world affects one's attitudes. For example, individuals who perceive the world in a rigid manner tend to express attitudes that reflect difficulties in dealing with ambiguous situations and reluctance to respond flexibly under changing circumstances (Schaie, 1987). Therefore, these individuals may not accept the changing of society and may continue to perpetuate stereotypes of the sickly, senile elderly.

In summary, the way individuals perceive themselves and others may affect their attitudes toward the elderly.

Level of education. Research findings tend to show that the higher the level of education, the more accepting people tend to be. For example, Nidiffer and Moore (1985) found that the higher an individual's earned degree, the more favorable were the attitudes conveyed. Thorson (1975) achieved similar results, suggesting that attitudes toward the elderly become more positive with the number of years of education one completes.

These findings seem more conclusive than those concerned with other factors, but level of education cannot be singled out from other confounding factors to determine if it alone affects an individual's attitudes.

Area of residence. It is possible that where one lives -- in rural or urban settings -- may affect one's attitudes toward the elderly. In rural areas, the extended family is important and remains intact, whereas in urban areas, individuals are more mobile and may not have close contact with the extended family. Ivester and King (1977) found that adolescents held positive attitudes toward the elderly and attributed these findings possibly to the rural community in which the adolescents lived.

This idea also assumes the notion that contact with the elderly enhances one's attitudes toward them, and a number of studies have examined this notion (Knox, Gekoski, & Johnson, 1986; Murphy-Russell, Die, & Walker, Jr., 1986; Nidiffer & Moore, 1985; Burke, 1982; Seefeldt, Jantz, Galper, & Serock, 1977) Again, research findings are contradictory.

One's residential location and the amount of contact one achieves with the elderly may affect one's attitudes toward the elderly, but there is no clear-cut evidence to support these assumptions.

Conclusion. One's age, gender, level of education, and residence are all factors that may affect the nature of attitudes one holds toward the elderly, but the exact contribution of these factors is unknown. It is important to understand the contributing factors of attitudes toward the elderly, as these attitudes have important implications,

possibly affecting the treatment of the elderly at the individual and societal levels.

Implications for Attitudes
Toward the Elderly

Attitudes are more than just abstractions with ambiguous effects. An attitude may guide and affect an individual's thoughts, feelings, and behavior. But this is just an assumption, according to some social scientists. As a result, the implied relationship between attitudes and behavior remains a controversial topic and is undergoing continuing investigation. In one such investigation, Green (1981) suggests that attitudes toward the elderly influence the way these individuals are treated. This treatment may affect the elderly at the individual and societal levels.

Negative stereotypes of the elderly and the consequent negative attitudes affect individuals' attitudes toward individual aged people. As a result, people may pity these individuals and interact with them from a superior standpoint. Or they may avoid contact with them all together, possibly leading to their seclusion from society. By isolating the elderly from society, they are denied the contact and attention that is vital to human life. Without this supportive contact, it is possible that poor health and a poor self-concept will result in these individuals. The negative influence of attitudes toward the elderly and the possible absence of supportive contact may affect how

members of this group see themselves and treat each other. A poor self-concept may cause these individuals to develop a negative outlook on life and possibly experience a decline in health.

Feeling bad about oneself and one's life may also encourage display of stereotypical negative behaviors. Further, this display may lead to the perpetuation of existing negative attitudes in others. In a cyclical manner, the perpetuation of these attitudes will maintain the negative perceptions and perpetuate isolation and avoidance of older individuals. Caught in this vicious cycle, people will not accept that many of these perceptions are basic negative qualities that could describe anyone. People, regardless of their age, have individual differences -- some good, some not so good. An old cranky person may very well have been a young cranky person.

This negative influence may go beyond individual treatment of older people, also affecting social policies and the types of services available (Glass, Jr. & Knott, 1982). Therefore, negative attitudes could result in societal problems (e.g., types of services available for the elderly, social policies, mental and physical health care received), not just affecting older individuals, but all members of society.

In summary, stereotypes of the elderly and their associated inaccurate perceptions may render detrimental effects on the health and well-being of older individuals

and society at large. Although little research has been conducted to determine the specific consequences of negative attitudes toward older people, the possibility of these adverse effects influencing a rapidly growing number of people warrants further investigation.

Attitudinal Instruments Concerning the Elderly

If the study of attitudes toward the elderly has the extensive implications of influencing behavior, then there should be sound measures with which to study these attitudes. McTavish (1982) reviewed 18 instruments that explore perceptions of old people, such as the Facts on Aging (Palmore, 1977), Opinions About People (Ontario Welfare Council, Section on Aging, 1971), Attitudes Toward the Aged (Rosencranz & McNevin, 1969), Attitudes Toward Old People (Tuckman & Lorge, 1953), and Kogan Attitudes Toward Old People Scale (Kogan, 1961a).

In his review, McTavish (1982) stated that most of the authors of these scales did not specify the concept(s) the instruments are intended to measure. Instead, these measures tend to sample from a very broad domain of features of older people (e.g., mental, physical, context, problems, typical behaviors, etc.), never specifically defining what aspect of the respondents' perceptions of the elderly they are interested in measuring. Lack of definition is also apparent in the treatment of the data obtained from these

instruments. It is treated like there is an underlying conceptualization of perceptions that is ordinal, continuous, and multidimensional. However, these assumptions are rarely addressed, so the data are ambiguous at best. With ambiguous data, analysis and generalization are quite difficult to conduct and determine.

McTavish's major criticism of these scales is the need for information on reliability and validity to determine their utility. But of those instruments reviewed, McTavish (1982, p. 556) said that the OP is "... probably among the better scales for an investigator to select, in part because of the possibility of comparing results obtained with it and earlier work".

Purpose

Because attitudes toward the elderly have potential implications for all people, much research has been conducted on the nature of these attitudes, some revealing positive and others suggesting negative attitudes. But without a sound attitudinal instrument, these results are questionable, and the nature of attitudes toward the elderly remains unknown.

Based on McTavish's (1982) recommendation for an investigation obtaining sound psychometric properties on attitudinal instruments and also on the need to find a reputable attitudinal scale for future research, the purpose

of this investigation was to test the reliability and validity of a widely used instrument in attitudinal research involving the elderly -- the Kogan Attitudes Toward Old People Scale (OP) (Kogan, 1961a). Through this investigation, the appropriate methods and psychometrics were used to estimate the reliability and validity of the OP. Appropriate reliability and validity estimates will allow future research to contribute to the understanding of attitudes held toward the elderly with reasonable confidence that the results obtained really do reflect the respondents' attitudes, not another construct or quality.

Objective

The main objective for this study was to examine the four types of validity of the OP -- construct, concurrent, predictive, and discriminant. Construct validity was assessed using factor analysis procedures. Concurrent validity was obtained by correlating the OP with another attitudinal measure concerning the elderly. Predictive validity was obtained by correlating the OP with two different behavioral outcome scales. Discriminant validity was assessed by correlating the OP responses with a measure of social desirability. Reliability was also assessed to check the previous reported coefficient levels.

CHAPTER II
REVIEW OF LITERATURE

Attitudinal Research Regarding the Elderly

The purpose of the following review is to examine the reliability and validity estimates of the Kogan Attitudes Toward Old People Scale (OP) and the implications of these estimates for current research.

Attitudes Toward Old People Scale

The Attitudes Toward Old People Scale (OP) (Kogan, 1961a) is an instrument designed to measure respondents' attitudes toward the elderly. The OP is a Likert scale consisting of 34 items that presents 17 attitudinal statements, stated once positively and once negatively. These scales can be scored separately or together as a total score. Respondents are asked to agree or disagree with the statements on a scale of 1 to 6 representing responses varying from "strongly disagree" to "strongly agree." With this range of responses, the scale is designed to assess attitudes toward older people with respect to common stereotypes and misconceptions about the elderly.

Kogan (1961a) constructed the OP based on the "theoretical minority group model." Under this premise, it is assumed that the elderly are given minority group status

in society. With this in mind, Kogan adapted ethnic minority items, changing the referent to "old people" for use in his scale. He also created items based on his and others' intuitions regarding stereotypes and feelings about older people in society. No empirical basis was used in the selection of these items. The final item content of the OP includes the following areas: residence, homogeneity, intergenerational relations, dependence, cognitive style, personal appearance, and power.

Reliability and validity estimates of the OP were initially obtained in a study involving college undergraduates as subjects (Kogan, 1961a). The first sample comprised of 128 males, the second of 186 males, and the third of 87 male and 81 female students. The students were asked to complete the OP along with other criteria scales. The two OP scales were scored separately and then correlated with the criteria scales.

Mean scores demonstrated a high degree of consistency of responses among the three samples. Mean scores for the first sample were 56.8 for the OP- and 62.1 for the OP+. For the second sample, mean scores for the OP- were 54.2 and 60.4 for the OP+. Mean scores for the third sample on the OP- were 54.9 and 64.1 on the OP+. Overall, results showed that these college students responded in a slightly more favorable than unfavorable manner toward attitudinal statements about the elderly. However, this

conclusion was based on scores only slightly higher than a neutral response.

Internal consistency reliability data were obtained by computing Spearman-Brown coefficients for each scale. Across the samples, coefficients for the OP- ranged .73 to .83, and coefficients for the OP+ from .66 to .77.

Construct and criterion-related validity data were obtained by correlating the OP with various criteria scales--measures of constructs hypothesized to be correlates of attitudes toward the elderly. These scales included measures of authoritarianism, antiminority attitudes, disability attitudes, and anomie (personal disorganization resulting in asocial behavior). Correlations between the OP and the related scales, respectively, were .21, .34, .40, and .33. Ideally, these validity estimates could be better. All correlations are purported to be significant ($p < .01$), but due to fairly low correlations, much variance is left unexplained. The strength of these relationships is questionable because of the low correlations.

Additional validity estimates were also obtained using the first and third samples. Each group was given a self-report inventory designed to assess personality dimensions such as autonomy, achievement, nurturance, self-esteem, and misanthropy (a hatred of mankind). Factor analysis procedures were conducted, which resulted in six factors. These factors were then correlated with the OP

scales. Two of the factors resulted in significant correlations. The first factor--a nurturance factor--had correlation coefficients of .14 with the OP+ and .21 with the OP- ($p < .05$ and $p < .01$, respectively). Although a significant factor, the emergence of the nurturance factor may have been biased by the extensive number of these items on the inventory (10 out of 30 items). The third factor--a misanthropic factor--had correlation coefficients of .18 with the OP+ ($p < .01$) and .07 with the OP-.

One noticeable weakness of Kogan's study (1961a) is that no control for socially desirable responding was included. In fact, there is evidence that subjects did respond to the OP in a socially desirable manner. Subjects disagreed with statements commenting adversely on older people more than agreeing with statements praising older people (Kogan, 1961a). Due to this possibility of response set, conclusions based on the results of this study appear questionable.

Further reliability and validity information was obtained in a second study by Kogan (1961b). This study involved a sample consisting of 89 males, aged 54-92, and 115 females, aged 49-86, all being noninstitutionalized, healthy, educated volunteers. The OP and a set of criteria scales were completed by these subjects, and responses were compared to those of a college-aged sample, which consisted of 87 males and 81 females. Results of the OP scales were

then correlated with results of the criteria scales for both samples.

Mean scores were consistent across the groups. Mean scores for the younger sample on the OP- were 54.8 and 64.2 for the OP+. For the older sample, mean scores on the OP- were 56.5 and 57.4. Overall, results suggested that both samples tended to respond in a slightly more favorable than unfavorable manner to attitudinal statements about the elderly.

Reliability and validity estimates were reported for these samples. Internal consistency reliability estimates were obtained by computing Spearman-Brown reliability coefficients for each scale. Correlation coefficients ranged from .74 to .83 for the younger sample and .73 to .84 for the older group. Interscale correlations between the OP+ and the OP- were approximately 0 for the older sample and .5 for the younger sample ($p < .01$).

Validity data were obtained by correlating responses on the OP with responses on measures of authoritarianism and religious conventionalism. Correlations obtained between the OP and the authoritarianism scale ranged from -.04 to .46 (the latter $p < .01$) for the younger sample and -.19 to .46 ($p < .05$ and $p < .01$ respectively) for the older sample. Correlations obtained between the OP and the religious conventionalism items ranged from .00 to .30 (the latter

$p < .01$) for the younger sample and $-.36$ to $.31$ (both $p < .01$) for the older sample.

As with Kogan's previous study (1961a), one critical weakness of this study (Kogan, 1961b) was the lack of control for socially desirable responding. In fact, there is evidence that subjects did respond to the OP in a socially desirable manner (Kogan, 1961b). Older subjects tended to agree with the positive statements about older people more than they disagreed with the negative statements. Due to this possibility of response set, conclusions based on the results of this study are questionable.

In summary, both studies examined the utility of the OP in measuring individuals' attitudes toward the elderly and attempted to establish reliability and validity estimates for the instrument. The results of both studies suggested that individuals -- both young and old, have a tendency toward response set. Therefore, without a control for response set, the utility of the OP may be limited.

Recent Studies Using the OP

In the past 20 years, considerable research has been conducted using the OP (e.g., Murphy-Russell et al., 1986; Patchner, 1986; Todd et al., 1986; Nidiffer & Moore, 1985; Cheren, Patchner, & Cook, 1983; Glass, Jr. & Knott, 1982; Ivester & King, 1977; Gordon & Hallauer, 1976; Thorson, 1975; Thorson, Whatley, & Hancock, 1974; Silverman, 1966;

Kogan, 1961a; Kogan, 1961b). The OP was used to assess the nature of attitudes toward the elderly and means by which to change these attitudes. Studies made strong conclusions based on OP results, but due to the insufficient validity data and consequently little discussion of the OP's limitations, the obtained results are in questionable.

For example, Murphy-Russell et al. (1986) assessed the effectiveness of methods of attitudinal change, such as increasing knowledge/information about aging and the aged, discussion with peers, and direct experience with members of the target group, using the OP with undergraduates. This instrument was used as a pretest, as well as a posttest on two occasions during a one-week workshop. Results of the three OP administrations showed a decrease in the mean scores on the OP, which suggested improvement in attitudes of the participants, regardless of the method for change. No mention was made to the possible bias that may have been introduced into the study by using the same instrument three times within one week, both as a pre- and post-test measure.

In another example, Patchner (1986) examined the effects of films about the elderly on attitudes of college students. Subjects were divided into two experimental groups, one group viewing two positive portrayals of the elderly and the other viewing two negative portrayals. All subjects completed a pre-test, which included the OP, prior to viewing the films. A post-test, comprised of the OP and

another scale, was given following the films. The results of these measures suggested that the viewing of one or two films can influence the viewer's attitudes toward the elderly. But it also suggests that using the OP for both the pre- and post-test may have biased the sample.

Neither study discussed the OP, its reliability or validity data, nor did they address the OP's limitations. For additional information regarding studies using the OP, the reader is encouraged to consult the above references.

In summary, the OP has been used as an attitudinal measure in many recent research studies, sometimes in isolation and other times in addition to other measures. Its popularity, more than 20 years after its development, suggests that the OP is one of the more recognized scales to be used in elderly attitudinal research. However, due to insufficient validity information, the utility of the OP remains questionable. It is not apparent what the instrument is actually measuring or how accurately this measurement is in assessing positive and negative attitudes.

Limitations of Research

Using the OP. Although the OP appears to be a popular attitudinal measurement, it does have its limitations. These problems are of concern in that they may jeopardize results obtained in the studies that use the instrument. Limitations of the OP include the following:

its historical/contextual age, lack of specificity, poor validity, and the development and validation process.

Age of the OP. The OP has been used in much of attitudinal research concerning the elderly over the past 20 years. During this time, American society has changed considerably. Considering that society is ever-changing, it follows that people change and so do their attitudes. This constant flux in the nature of people and their attitudes has important implications for the OP.

In the past 20 years, science and gerontology have also changed considerably. During this time, scientific advances have been made, and gerontology as a discipline has grown and developed tremendously. New research methods and higher standards for their use are now evidenced in scientific research. These scientific changes, in addition to the changing of society, warrants at least an update of the OP for it to have proper utility in today's scientific and cultural society.

Due to different times and different circumstances, whatever the OP measured at the time of its construction may or may not be what it is measuring now. Therefore, an update on the OP is warranted to assess its timeliness and appropriate utility in today's society.

Lack of specificity. In the initial stages of its development, gerontology as a field was atheoretical. As a result, its instruments were not developed with a sound,

empirical basis, but instead on intuition. For example, in the development of the OP, no definitions were given for an attitude or what an attitudinal instrument should be measuring, either in general or, more specifically, in terms of attitudes toward the elderly. Today's research standards demand more rigorous attempts to define constructs, like attitudes, before trying to measure them. Therefore, gerontological research must use theory to develop and define constructs of interest. This specificity is imperative, for without a clear definition and basis for an attitude, how is one to know what constitutes a positive or negative attitude so as to make a clear distinction?

Poor validity. Not only may the OP be invalid for attitudinal research today, based on its age and lack of specificity, but it also is possible that it never was clearly valid at the time of its construction. McTavish (1982) suggests that the primary problem with all measures in attitudinal research with the elderly is their validity. About half of the measures have some kind of validity assessment, but rarely is it rigorous. McTavish explains this, saying that validity is difficult to judge because conceptually it is not clear what attitudinal measures are really trying to identify. He suggests that validity and reliability information for attitudinal measurements needs to be further investigated, and the results need to be published.

Using an instrument with low validity coefficients such as those reported for the OP will very likely lead to inaccurate results. Not one of the published studies (reviewed earlier) using the OP as an instrument addressed these concerns or even the possible effects of using a measure with such low validity. Yet, the investigators made strong conclusions based upon the results. Critical analysis of the validity data suggests strong conclusions are questionable at best.

Development and validation process. Another problem with the OP that may be leading researchers to inaccurate results is the actual validation process. Validity information was obtained by correlating the OP with instruments designed to measure attitudes toward specific special populations (e.g. crippled, blind, deaf), not attitudes toward the elderly. This provides ambiguous and sparse validity data. Correlating the OP with these other measures only gives information about how attitudes toward older persons are correlated with attitudes toward other stigmatized populations. It does not say what the OP is measuring or how it is correlated with other scales that are also designed to assess attitudes toward old people. This is especially a problem in the studies using only the OP as an attitudinal measure (e.g. Murphy-Russell et al., 1986; Nidiffer & Moore, 1985). This sole reliance upon the OP may

not be yielding accurate attitudinal results due to its poor validity.

Another possible drawback in terms of the validation process of the OP is the lack of control for socially desirable response patterns. The favorable attitudes of the subjects may reflect the tendency to respond in a socially appropriate manner, instead of reflecting truly favorable attitudes. Again, what exactly the OP is measuring and the accuracy of this measurement is unknown.

In conclusion, due to the age of the OP, the lack of specificity in its development, its fairly low reliability and extremely poor validity data, and the methodologically weak validation processes, all of the obtained results in studies using this instrument are questionable until further validity data are obtained. More construct, concurrent, predictive, and discriminative validity data on the OP need to be obtained to determine exactly what it is measuring and the accuracy of this measurement, so that future studies involving this instrument can provide more accurate and useful conclusions.

CHAPTER III

METHOD

Sample

Three hundred households were selected to participate in the study, 150 from Cache Valley, Utah and 150 from Salt Lake City, Utah. From each household, one adult male and one adult female were asked to contribute to the study -- "adult" being defined as 19 years or older. A total of 600 respondents was possible.

The initial samples were selected from the Cache Valley and Salt Lake City telephone books using a random numbers table. First, an equal number of names was chosen from each letter of the alphabet, for a total of 130 participants. A number was randomly chosen from the table to locate the page within those listed under the given letter. Then another number was randomly chosen to locate the name on the given page. This procedure was used to choose each participant. The remaining 20 households were also selected using random numbers. However, names beginning with the letters A through J were chosen to complete the sample because more names were found to begin with these letters than any of the other letters. As before, once the letter was chosen, random numbers were also used to

select the page, and the name to be used. Of the initial names chosen, 20 had moved and/or could not be located. For these cases, new names were chosen, using the same selection process.

After five weeks, 100 more adults from Cache Valley were personally asked to participate in the study. These individuals were primarily service-related employees of Utah State University, factory workers, and local store employees. Potential participants were given a brief description of the study and then were asked to complete the survey. Upon consent, individuals were given a survey with instructions to complete it within several days. These questionnaires were personally collected after the passage of three to seven days.

The final sample was comprised of 277 respondents, 120 males and 152 females (5 respondents did not specify). Of the 277, 131 respondents were from Cache Valley and 84 from Salt Lake City. An additional 62 respondents were obtained in the local survey, conducted after the mailings. The respondents ranged in age from 19 to 83 years old and on the average, had some college experience.

Administration

The questionnaires used for this study were comprised of five different scales -- the Aging Semantic Differential, the Rehfisch Rigidity Scale, the Fey

Acceptance of Others Scale, and a shortened version of the Marlowe-Crowne Social Desirability Scale, in addition to the Kogan Attitudes Toward Old People Scale -- which were compiled into a seven-page booklet. Questionnaires were coded to distinguish between the respondents and the nonrespondents and also their location. Color-coding was used to differentiate between the two Cache Valley samples and Salt Lake City respondents. Numbers were used to differentiate nonrespondents for later follow-ups.

Two questionnaires were mailed to each household, along with a brief description of the study, two return envelopes, and two gift certificates. Certificates for ice cream were sent to participants in Cache Valley and fast food certificates were sent to participants in Salt Lake City. After the description, one adult male and one adult female were asked to complete and return a questionnaire as soon as possible.

One week after the questionnaires were sent, a follow-up postcard was mailed to each household, which thanked those who had participated in the study and asked those who had not to complete the questionnaire and return it as soon as possible. After two weeks, another postcard was mailed to nonrespondents, asking them to complete the questionnaire and return it as soon as possible.

After these follow-ups, more than 60% of the questionnaires were not returned. To check for possible

bias, 10% of the number of nonrespondents from each location were randomly selected for contact by telephone. Twenty households from Salt Lake City and 15 households from Cache Valley were chosen using a random numbers table. These individuals were asked ten questions selected from the OP using a random numbers table. These individuals were contacted by telephone on weeknights to maximize the number of available respondents. When individuals were not available, new numbers were chosen in the same manner until someone could be reached, and the quota eventually met.

These answers were compared with those of an equivalent sample of actual respondents, who were also randomly selected from the overall sample. This comparison was conducted to determine if there was a correlation between answers given by the respondents and nonrespondents. No differences were found between the sets of responses, which suggests that the responding group was not a biased sample.

Instruments

Aging Semantic Differential

The Aging Semantic Differential (ASD) (Rosencranz & McNevin, 1969) was used in this study to measure stereotypical attitudes held toward the elderly and also to determine the content or dimensions of these attitudes. The semantic differential (Osgood, Suci, & Tannenbaum, 1957) is

a technique that provides the respondent with bipolar adjectives to rate the level of intensity of a feeling or attitude toward a given concept. More specifically, the ASD consists of 32 items, which are used to measure attitudes toward individuals in three age categories: 20-30; 40-55; and 60-85. Subjects are asked to rate these categories, using the 32 bipolar adjective scales. For the purpose of this study, respondents were asked to rate only individuals who are 60-85 years or older.

A factor analysis of the original semantic differential yielded three major dimensions -- evaluative, potency, and activity (Osgood, Suci & Tannenbaum, 1957). But Rosencranz and McNevin (1969) conducted a factor analysis that yielded three other major dimensions -- instrumental-ineffective, autonomous-dependent, and personal acceptability-unacceptability.

Spearman-Brown reliability coefficients range from .87-.93 for the semantic differential technique as a measure of attitudes. Validity data was obtained by correlating the semantic differential with the attitude scales of Thurstone (1931). These correlations range from .78-.90.

Rigidity Scale

The Rigidity Scale (RI) (Rehfishch, 1958) was used in this study to measure the tendency of the subjects to respond in a rigid manner and to determine if there is a

relationship between levels of rigidity and attitudes toward the elderly. This scale consists of 39 items used to measure psychological rigidity, which is characterized by the following qualities: constriction and inhibition; conservatism; intolerance of disorder and ambiguity; observational and perseverative tendencies; social introversion; and anxiety and guilt.

Split-half reliability for the RI was .72. In addition, staff members at the Institute for Personality Assessment and Research rated subjects on the Gough Adjective Check List. The adjective composite for the 18 highest and 18 lowest scorers were compared. Adjectives characterizing high scorers include the following: anxious, conscientious, conservative, deliberate, dependent, gentle, inhibited, reserved, serious, shy, submissive, thorough, and withdrawn. Adjectives characterizing low scorers include: active, adaptable, aggressive, argumentative, confident, curious, demanding, independent, organized, outspoken, self-centered, self-confident, sociable, and spontaneous.

Acceptance of Others Scale

The Acceptance of Others Scale (Fey, 1955) was used in this study to measure levels of acceptance toward others and to determine if there was a relationship between these levels of acceptance and attitudes toward older persons. The Acceptance of Others Scale consists of 20 attitudinal

statements. Individuals are asked to respond to each statement using a scale of 1 to 5, responses ranging from "almost always" to "very rarely." Split-half reliability for the Acceptance of Others Scale was .90.

Social Desirability Scale

A shortened version of the Marlowe-Crowne Social Desirability Scale (M-C SDS) was used in the study to measure the tendency of the respondents to complete the OP in a perceived socially desirable manner as opposed to an honest, truthful manner. The original M-C SDS is designed to measure the trend toward choosing the socially desirable response set (Crowne & Marlowe, 1960). Kuder-Richardson formula 20 (K-R 20) reliability coefficients range from .73 to .87 for college males and females. A shorter form of the M-C SDS was developed (M-C 1 [10]) (Strahan & Gerbasi, 1972) and was used in this study. The K-R 20 reliability on the shorter form ranges from .59 to .70 for college males and females.

Establishment of Validity

Construct validity was assessed through the use of factor analysis. A factor analysis was conducted on the responses to the OP to determine if there were related subscales present within the instrument. Oblique rotations

were calculated, and the level of consistency reported for each factor was computed.

Concurrent validity was assessed by correlating the score on the OP with the Aging Semantic Differential (ASD), which also measures attitudes toward the elderly. To establish concurrent validity, the score on the OP correlated positively (to a moderate degree) with the score on the ASD.

Predictive validity was assessed by correlating the scores on the Rigidity Scale and the Acceptance of Others Scale with the score on the OP. It was assumed and confirmed that rigid individuals have more negative attitudes toward the elderly and that accepting individuals have more positive attitudes toward the elderly. In addition, a stepwise regression was conducted to further assess the predictive validity in terms of the respondent's age, gender, educational level, and residential area.

Discriminant validity was assessed by the use of the shortened version of the Marlowe-Crowne Social Desirability Scale (M-C 1 [10]). Discriminant validity shows that two measures are not measuring the same thing. The M-C 1 [10] was correlated with the OP and its factors to indicate whether the OP was measuring socially desirable responses or something other than socially desirable responses.

Establishment of Reliability

Reliability was computed to check previous reliability data. Coefficient alpha was computed to assess internal consistency of the OP items. Split-half reliabilities were also computed to estimate test-retest stability.

CHAPTER IV

RESULTS

This investigation was completed with the purpose of determining reliability and validity estimates for the Kogan Attitudes Toward Old People (OP) Scale. The OP Scale, in addition to four other criteria measures, were given to three groups of adults. Initial construct validity was determined through the use of factor analysis procedures. At the same time, concurrent, predictive, and discriminant validities were also estimated. Estimates of internal consistency (reliability) of the OP were determined using Cronbach alpha. Further, estimates of internal consistency and convergent/divergent validity among criteria measures were undertaken.

Construct Validity

Construct validity was estimated using a standard principle components factor analysis with oblique rotation. Oblique rotations were selected over orthogonal rotation procedures in the belief that any factor within the scale would be correlated with either the total scale score or the remaining factors derived from the OP total score. Convergence was obtained in 41 iterations. The Kaiser-Meyer-Olkin measure of sampling adequacy was "middling,"

according to the SPSS-X Advanced Statistical Guide (1986) and the Bartlett Test of Sphericity was significant at $p < .001$.

Seven factors were extracted from the OP that reached or exceeded an eigenvalue of 1.00. In Table 1 the corresponding eigenvalues, percentage of variance for each factor, and cumulative percentage of variance are reported for the seven factors. Cronbach alphas were computed for each factor and are reported in Table 2. Acceptable estimates of internal consistency were derived for the first two factors and the total scale score.

Further, correlations were evidenced between Factor 1 and 2 and between these factors and the total OP score. The correlation coefficient for Factor 1 and 2 was $r = .58$. The coefficients for Factors 1 and 2 in correlation with the total OP score were .84 and .79, respectively. Correlation coefficients between the other factors and the total OP score ranged from .31 to .56. Therefore, only factors 1 and 2 and the total scale score were used in the remaining analyses.

Table 3 summarizes the factor analyzed pattern matrix for the two factors that hold acceptable levels of internal consistency. All items are scored in the direction

Table 1

Eigenvalues and Variance Accounted For by Each Factor From a Principle Components Analysis With Oblique Rotation of the OP Items

Factor	Eigenvalue	% Variance	
		Individual	Cumulative
1	5.63	16.6	16.6
2	2.37	7.0	23.5
3	2.07	6.1	29.6
4	1.82	5.4	35.0
5	1.61	4.7	39.7
6	1.45	4.3	44.0
7	1.35	4.0	47.9

Table 2

Internal Consistency Reliability Coefficients of OP Items
(N=277)

Items	Item Number	Internal Consistency (Cronbach alpha)
Total	34 items	.92
Factor 1	9 items	.76
Factor 2	8 items	.72

Table 3

Two Factor Loadings From a Principle Components Analysis
With Oblique Rotation of the OP

Item	Factor	
	1	2
Ill at ease	.73	
Very different	.70	
Disagreeable	.59	
Rigid	.57	
Ill at ease	.54	
Too powerful	.52	
Very different	.49	-.49
Inflexible	.46	
Grouchy	.45	
Untidy (home)		-.72
Untidy (appearance)		-.67
Secluded		-.65
Faulty (in character)		-.59
Reminiscent		-.51
Demanding (for love)		-.45
Dependent		-.45

of a negative stereotypic attitude; that is, the higher the score, the more negative the response. The first factor appears to be measuring perceptions that one is ill at ease with the aged, that aging individuals are different and difficult to deal with, and that they possess grouchy dispositions with extremes in rigidity and inflexibility. This factor focuses on the dimensions of uneasiness in interaction with the aged and perceived inflexibility and undesirability in aged personality traits. The second factor focuses on perceived personality traits of the aged regarding untidiness, dependency, exclusion, and a tendency to be overly demanding. This factor appears to be focusing on two dimensions: untidiness and irresponsibility for one's self and the environment and faulty characteristics resulting in dependency and excessive demands.

In summary, the two factors seem to be measuring perceived personality traits of the elderly that reflect stereotypic negative attitudes.

Internal Consistency and Validity of Criteria Measures

Estimates of Reliability

Estimates of internal consistency and convergent/divergent validity were computed on the criteria

measures used for validation of the OP and associated factors. This series of statistical computations were completed to determine reliability and validity estimates of the criteria measures used in the central validation of the OP scale.

Table 4 summarizes the internal consistency (alphas) of the criteria measures. Alphas range from .73 to .98, with a medium of .77. The internal consistency of the criteria measures seemed to be acceptable for purposes of the validation of the OP scale.

Estimates of Convergent/ Divergent Validity

Table 5 summarizes the zero-order correlation coefficients between the four criteria measures. As expected, high scores on the Aging Semantic Differential Scale were negatively correlated with the Social Desirability Scale, positively correlated with rigidity, and uncorrelated with the absence of tolerance of others, as measured by the Acceptance of Others Scale. Further, social desirability scores were unassociated with rigidity scores, while negatively correlated with self-reported acceptance of others.

In summary, these findings suggest that as individuals score higher on a measure of social desirability, they likewise report more tolerance and acceptance of others. Further, rigidity was observed as

Table 4

Internal Consistency Reliability Coefficients of Criteria Scales (N = 277)

Scale	Item Number	Internal Consistency (Cronbach alpha)
ASD	32	.98
SDS	10	.73
RI	39	.81
AOO	20	.95

ASD = Aging Semantic Differential

SDS = Shortened version of the
Marlow-Crowne Social Desirability Scale

RI = Rigidity Scale

AOO = Acceptance of Others Scale

Table 5

Pearson Product-Moment Correlations Among the Scales Used in
the Validation of the OP

Scale	Scale			
	ASD	SDS	RI	AOO
ASD ^b	1.00	-.11*	.16*	.09
SDS ^a		1.00	-.03	-.22*
RI ^a			1.00	.32*
AOO ^c				1.00

ASD = Aging Semantic Differential

SDS = Shortened version of the
Marlow-Crowne Social Desirability Scale

RI = Rigidity Scale

AOO = Acceptance of Others Scale

$a_N = 277$. $b_n = 267$. $c_n = 272$.

* $p < .05$

as being significantly associated with low tolerance or acceptance of others.

Validity Estimates of the OP

Correlations with Criteria Measures

The means and standard deviations for male and female respondents for the OP and criteria measures are provided in Table 6. Nonsubstantial gender differences were noted.

In Table 7, the correlations between the OP total measure, the two reliable factors and the criteria measures are summarized. As expected, Agie Semantic Differential (ASD) scores were significantly and positively correlated with the OP total and its two factor scores. No substantial associations were observed between social desirability tendencies and the OP total and its factors. Rigidity was found to be modestly correlated with these scores, indicating that rigidity is associated with negative stereotyping about the aged. Further, low acceptance or tolerance of others was also correlated with negative stereotypic attitudes.

Collectively, each of these findings provides reasonable validation for the OP total scale score and the two reliable factors as appropriately measuring negative stereotypic attitudes.

Table 6

Descriptive Statistics of the OP and Criteria Scale Scores
for Males^a and Females^b

Scale	Mean		SD	
	Male	Female	Male	Female
OP	93.83	90.64	5.55	15.76
ASD	111.72	113.55	21.59	22.38
SDS	4.35	4.76	2.19	2.09
RI	19.65	19.88	5.35	5.26
AOO	59.57	56.22	7.57	9.30

SD = Standard deviation

ASD = Aging Semantic Differential

SDS = Shortened version of the

Marlow-Crowne Social Desirability Scale

RI = Rigidity Scale

AOO = Acceptance of Others Scale

^aMales $n = 120$, ^bFemales $n = 152$.

Table 7

Pearson Product-Moment Correlations Among Criteria Scales,
the OP Total, and the Two Factor Scores

Scale	OP Total	Factor	
		1	2
ASD ^a	.36*	.36*	.26*
SDS ^b	-.09	-.13*	.01
RI ^b	.15*	.15*	.17*
AOO ^c	.28*	.31*	.26*

ASD = Aging Semantic Differential

SDS = Shortened version of the
Marlow-Crowne Social Desirability Scale

RI = Rigidity Scale

AOO = Acceptance of Others Scale

a_n = 267. b_N = 277. c_n = 272.

* p < .05

Predictive Validity

A final series of analyses were computed using stepwise regression statistics. First, based on previous findings suggesting that gender, age, residence, and educational level can be predictive of negative stereotyping, these factors were entered into a regression statistic for Factors 1 and 2 from the OP scale. The analyses are summarized in Table 8. For Factor 1, both sex and age significantly predicted negative stereotypic responses. Females were less inclined to hold negative attitudes than males, with older individuals being less negative than younger ones. On Factor 2, older individuals reported stronger negative attitudes, while females and more educated individuals were less inclined to report similar negative attitudes regarding perceived undesirable characteristics. Further, as in Factor 1, females reported less negative attitudes than males on this factor.

In the concluding series of analyses, which are summarized in Table 9, the criteria measures were entered as predictor variables in a stepwise regression analysis, using Factor 1 and 2 as dependent variables. For Factor 1, both Aging Semantic Differential and Acceptance of Others scores were predictive of higher self-reported negative stereotypic attitudes. That is, self-reported negative attitudes regarding aging, as measured by the Aging Semantic

Table 8

Stepwise Regression for Factors 1 and 2 Using Gender, Age, Location, and Education Level as Variables

	<u>R</u>	<u>R²</u>	<u>F</u>	<u>p*</u>	<u>R²_I</u>	<u>B</u>	
Factor 1							
	Gender	.15	.02	5.92	.02	.02	-
.15	Age	.20	.04	5.38	.005	.02	-
.13							
Factor 2							
	Age	.24	.06	16.0	.00	.06	
.24							
	Educ	.29	.08	12.0	.00	.03	-
.16							
	Gender	.32	.10	10.0	.00	.02	-
.14							

R = Multiple Correlation Coefficient

R² = Coefficient of Determination

R²_I = R₂ Increment

B = Beta Weights

* All $p < .05$

Table 9

Stepwise Regression for Factors 1 and 2 Using Criteria Scale
Totals as Variables

	MultR	Rsqu	F(Eqn)	SigF	RsqCh	Beta
Factor 1						
	ASDT	.36	.13	40.0	.00	.13
.36	AOOT	.45	.21	34.3	.00	.08
.31						
Factor 2						
	AOOT	.26	.07	19.2	.00	.07
.26	ASDT	.35	.12	18.2	.00	.05
.23						

ASDT = Aging Semantic Differential Total

AOOT = Acceptance of Others Total

R = Multiple Correlation Coefficient

R² = Coefficient of Determination

R²I = R₂ Increment

B = Beta Weights

* All $p < .05$

Differential, and higher scores on the Acceptance of Others Scale, indicating low tolerance and acceptance, predicted more negative stereotypic attitudes. A similar finding was observed for Factor 2 with tolerance for others accounting for more predictive variance than Aging Semantic Differential scores.

These last series of findings provide further evidence for the use of the OP factors for measuring stereotypic attitudes regarding aging. However, several concerns and limitations will be noted in the discussion.

CHAPTER V
DISCUSSION

The purpose of this investigation was to establish reliability and validity estimates for the OP. Procedures followed differed from those used in the original validation process (Kogan, 1961a; Kogan, 1961b) in several ways: sample selection, validation process, and data analysis.

The sample used for this study was randomly selected from populations of individuals in Cache Valley and Salt Lake City, Utah, who were listed in the telephone book. The only criterion necessary to participate was to be age 19 or older. Kogan's samples were either college students or individuals over 42. A general "adult" sample, defined as being 19 years of age or older, was chosen to be more representative of the general population, instead of the previous use of readily available samples (i.e., college students). With a better representation of the general population (in terms of age), generalizability is enhanced.

In addition to the difference in age, participants were also grouped by several other factors, such as gender, area of residence (rural vs. urban), and education level. These additional factors, especially the variance found between males and females on the OP, provided useful

information. Initially, it was thought that women would report more favorable attitudes. However, the mean score for the females indicated slightly less favorable attitudes. Further, the standard deviation for the female scores indicated much greater variance in response to the OP (15.76 as opposed to 5.55 for males). This difference raises a number of questions. Is it that the OP is more reliable for males, as it was initially developed and used with male samples? Or does the difference in responding comment on women's attitudes toward the elderly? It is possible the assumption that women would have more positive attitudes toward the elderly because they are considered to be more caring and nurturing than men isn't really true. Based on this finding, further research needs to be conducted on gender differences, using a sound attitudinal instrument. Gender, in addition to the other factors, was examined for the sake of comparison and generalizability across other samples within the population.

In summary, this study was conducted in such a way as to evaluate and possibly extend Kogan's original findings on the OP (1961a; 1961b).

In the original validation process, Kogan compared the OP to scales measuring attitudes toward stigmatized groups, instead of other aging scales. By comparing it to scales for other stigmatized groups, it is assumed that the elderly necessarily hold the same status. But this

assumption cannot be proven, due to the lack of specificity in the OP's development. From its development, it has been unclear what the scale is actually measuring.

In the present study, the total OP score and the two reliable factors were correlated with the Aging Semantic Differential (ASD), another attitudinal measure concerning the elderly. Validity estimates for this type of measurement are .78 to .90. Specific validity estimates for the ASD were not found. Consequently, without good validity information for either scale, it is probable that the construct/concept being measured may still be unknown. However, it is assumed that both scales are measuring some aspect of attitudes toward the aged, and if significant correlations were obtained, it may be assumed with reasonable confidence that the scales have a similar focus. Validity estimates obtained were significant at $p < .05$. As a result, it is likely that the OP and the two factors are measuring some aspect of attitudes toward the elderly.

In addition to the scales measuring attitudes toward stigmatized groups, Kogan used other scales measuring personality constructs in the original studies (Kogan, 1961a; Kogan, 1961b). Kogan used scales to measure authoritarianism and anomie (1961a). Correlations between these scales and the total OP were .21 and .33. Kogan (1961b) used scales to measure authoritarianism and religious conventionalism. Correlations obtained between

the total OP and the authoritarianism scale for the two samples ranged from $-.04$ to $.46$ (the latter $p < .01$). Correlations obtained between the OP and the religious conventionalism items ranged from $-.36$ to $.31$ (the latter $p < .01$) for the two samples.

In the present study different scales were used to validate the OP -- instruments measuring rigidity and acceptance of others. These personality constructs were chosen based on the nature of attitudes and personality correlates, according to research findings. Correlations between scores on these scales and the total OP and the factors were all significant ($ps < .05$).

In the discussions of Kogan's results (1961a; 1961b), the possibility of response set bias was mentioned. In the present study, a measure of social desirability was used to control for response set. Correlations between it and the OP total and its factors ranged from $-.09$ to $.01$.

In summary, different scales were used to validate the OP and its two reliable factors. These scales produced significant correlations; however, the correlations were no higher than those originally obtained by Kogan (1961a; 1961b). It is possible that the lack of specificity used by Kogan in the OP's development may account for the low validity estimates.

Weaknesses

Although reliability and validity estimates were obtained for the OP and two reliable factors were established, the findings on this instrument remain limited. In particular, limitations are evidenced in the sampling and validation procedures.

Sampling

Due to financial limitations, difficulties in sampling were experienced. Although the sample obtained was randomly selected and varied, it was somewhat small and limited to only one area in Utah. Further, more respondents were obtained from Cache Valley than from Salt Lake City. This rural prominence may have biased the sample. Also, a small number of respondents were obtained in person and the rest by mail, which may also have introduced bias. These biases could have been eliminated with fewer financial limitations. With additional resources, more participants could have been solicited, prior commitment could have been obtained, and an additional follow-up could have been sent to participants. These procedures would have eliminated the need for the additional sample.

Validation Process

It is difficult to validate an instrument without scales with good psychometric properties with which to correlate it. The scales used have limited validity

themselves. As a result, the validity estimates obtained are partially limited. Further, the validity estimates obtained were only slightly better than the original data (Kogan, 1961a; Kogan, 1961b).

In addition to limited psychometric properties, all scales used were self-report measures. To obtain sound validation data, actual measures of behavior should be secured. With actual behavioral data, validation results would be stronger.

Uses of the OP

Since its development, the OP has continued to be a popular instrument in attitudinal research concerning the elderly. According to McTavish (1982), the OP is among the better scales for use in this type of research. It has good face validity, is easy to administer, and easy to understand. It draws information from a variety of areas and gives the respondent a variety of choices to best explain the answer.

However, in spite of its popularity, its use as a sound attitudinal measure is questionable and should be used only with extreme caution. Unlike its current use, future investigations using the OP should recognize and discuss its psychometric limitations in the course of research. Further, based on the factorial procedures, it is suggested that researchers use only the total OP score or possibly

only the items from Factors 1 and 2. By using the scores from these items, results may be stated with better confidence, knowing the dimensions that are being measured. However, these factors are not clear-cut, and ambiguity in measurement still partially exists. It is advised to exercise extreme caution when using any form of the OP. Little conclusive evidence will be obtained because of this ambiguity.

Future Research Directions

For future attitudinal research concerning the elderly, it is strongly suggested that the OP be revised or that a new scale be developed. In either case, the attitudinal measure must be valid, with a clear focus -- a specific definition of an attitude, a clear idea of what attitudes toward the elderly involves, and what criteria are necessary for determining the nature of attitudes toward the elderly.

According to Anastasi (1982, p. 131),

All procedures for determining test validity are concerned with the relationships between performance on the test and other independently observable facts about the behavior characteristics under consideration.

Construct validity is the extent to which a test may be said to measure a theoretical trait or construct, such as an attitude. An attitudinal measure must display construct

validity for it to be of any practical use. If not, who is to say what is really being measured? To be able to measure attitudes with confidence, one must gradually gather relevant information from a variety of sources. By definition (of validity), this information must include both subjective, as well as objective, data on the construct.

Attitudes, by definition, are formed based on three dimensions -- behavior, cognition, and affect. Subsequently, a good attitudinal scale would strive to measure each of these areas, in terms of general response, level of intensity, and also situational differences. Items developed to assess each of these areas should have a theoretical basis.

First, how do attitudes affect behavior and vice versa? Two possible methods to measure the behavioral aspect of attitudes involve the use of vignettes, role playing, and/or observation. For example, respondents could read vignettes about elderly people and then respond to them. The respondents could also be asked to role play situations involving elderly people. Or actual observations could be made on the respondents interacting with elderly people in various contexts. Any of these methods could aid the researcher in examining the relationship between attitudes and behavior. With this kind of examination, more studies could be conducted and replicated so that attitudinal researchers could better understand the link

between attitudes and behavior, possibly clearing up current discrepancies in this area.

Second, what people think or what they tell themselves may affect their attitudes toward a given situation, group, or even an individual. Like the behavioral assessment, cognitions could be assessed using vignettes and observations. The respondents could read the vignettes and then respond to them, based on what they were thinking or telling themselves about the given individual(s) and situation. Observations of actual interactions with elderly people with a subsequent interview focusing on the respondent's cognitions could also provide useful data. These assessment tools could aid in the examination of the relationship between attitudes and cognition.

Third, how people feel about a given situation, group of people, or individuals may also affect their attitudes. Again, vignettes or role playing would be two possible methods for assessing respondents' affective states.

These three areas--behavior, cognition, and affect--are essential components of attitudes and must be assessed individually to determine their actual impact on an individual's attitudes. The aforementioned methods of assessment could be used both in the development of the scale and also within the scale itself. The initial assessment involved in the scale development should be

conducted with a wide variety of individuals in a wide variety of settings/contexts.

Once the concept of an attitude is defined in terms of the behavioral, cognitive, and affective dimensions, further questions need to be addressed, such as what constitutes positive and negative attitudes toward the elderly? Again, these attitudinal poles could be assessed on the three dimensions, as explained above. This information could provide a sound basis for the development of an attitudinal scale.

Because the display of attitudes can be a highly social phenomena, a measure of social desirability must also be used in the development phase to determine items for use in the final attitudinal scale.

To complete the development phase, a personality inventory should be given to all respondents involved in the process. The inventory to be used should be well-researched with good norms, such as the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1985). This information would aid in the examination of the role that personality traits or constructs play in the reported attitudes toward the elderly.

Upon the completion of the entire assessment, a series of items would be chosen for the final product, based on empirical findings and also theory, not just mere

intuition. A specific, concrete focus will have been established and maintained throughout the development process. By following these stringent procedures in test construction, the finished product should measure attitudes with some degree of confidence.

But this confidence should not be taken at face value. A thorough validation process must next be conducted to ensure confidence in the newly-developed instrument. This process should include the following: (1) a comparison of the scale to another attitudinal instrument, such as the Aging Semantic Differential; (2) a comparison with a measure of social desirability, such as the Social Desirability Scale; (3) a comparison of the nature of the responses on the scale with an actual observation of the respondent's behavior toward elderly people; (4) a comparison of the nature of the item responses with verbal responses to a series of vignettes; and (5) a comparison of the nature of item responses with responses on a valid measure of personality constructs, such as the MMPI (Hathaway & McKinley, 1985). At this time, internal consistency would also be established.

This development and validation process would be complex, time-consuming, and probably costly, but it could render an attitudinal instrument with excellent utility. An attitudinal measure with appropriate reliability and validity estimates would allow vast improvements in

attitudinal research concerning the elderly, allowing researchers to make conclusions based on concrete evidence, instead of mere intuition.

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APPENDIXES

Appendix A
Criteria Measures

Kogan Attitudes Toward Old People Scale

Circle the letter that you think best reflects your opinion.

1. Most old people are constantly complaining about the behavior of the younger generation.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
2. Most old people need no more love and reassurance than anyone else.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
3. Most old people seem to be quite clean and neat in their personal appearance.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
4. There is something different about most old people: it's hard to figure out what makes them tick.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
5. Most old people tend to keep to themselves and give advice only when asked.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
6. Most old people are cheerful, agreeable, and good humored.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
7. Most old people are really no different than anybody else: they're as easy to understand as younger people.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
8. Most old people are very relaxing to be with.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE
9. One seldom hears old people complaining about the behavior of the younger generation.
A. STRONGLY DISAGREE D. SLIGHTLY AGREE
B. DISAGREE E. AGREE
C. SLIGHTLY DISAGREE F. STRONGLY AGREE

10. If old people expect to be liked, their first step is to try to get rid of their irritating faults.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
11. Most old people make one feel ill at ease.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
12. Most old people can generally be counted on to maintain a clean, attractive home.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
13. It would probably be better if most old people lived in residential units that also housed younger people.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
14. There are a few exceptions, but in general, most old people are pretty much alike.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
15. When you think about it, old people have the same faults as anybody else.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
16. You can count on finding a nice residential neighborhood when there is a sizeable number of old people living in it.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
17. Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
18. Most old people are irritable, grouchy, and unpleasant.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE
19. Most old people would prefer to quit work as soon as pensions or their children can support them.
- A. STRONGLY DISAGREE D. SLIGHTLY AGREE
 B. DISAGREE E. AGREE
 C. SLIGHTLY DISAGREE F. STRONGLY AGREE

20. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
21. It is evident that most old people are very different from one another.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
22. People grow wiser with the coming of old age.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
23. Most old people should be more concerned with their personal appearance; they're too untidy.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
24. Old people have too much power in business and politics.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
25. One of the most interesting and entertaining qualities of most old people is their accounts of their past experiences.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
26. Most old people are capable of new adjustments when the situation demands it.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
27. It would probably be better if most old people lived in residential units with people of their own age.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
28. It is foolish to claim that wisdom comes with old age.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE
29. Most old people spend too much time prying into the affairs of others and giving unsought advice.
- A. STRONGLY DISAGREE
 - B. DISAGREE
 - C. SLIGHTLY DISAGREE
 - D. SLIGHTLY AGREE
 - E. AGREE
 - F. STRONGLY AGREE

30. Old people should have more power in business and politics.
- | | |
|----------------------|-------------------|
| A. STRONGLY DISAGREE | D. SLIGHTLY AGREE |
| B. DISAGREE | E. AGREE |
| C. SLIGHTLY DISAGREE | F. STRONGLY AGREE |
31. Most old people bore others by their insistence on talking about the "good old days."
- | | |
|----------------------|-------------------|
| A. STRONGLY DISAGREE | D. SLIGHTLY AGREE |
| B. DISAGREE | E. AGREE |
| C. SLIGHTLY DISAGREE | F. STRONGLY AGREE |
32. Most old people tend to let their homes become shabby and unattractive.
- | | |
|----------------------|-------------------|
| A. STRONGLY DISAGREE | D. SLIGHTLY AGREE |
| B. DISAGREE | E. AGREE |
| C. SLIGHTLY DISAGREE | F. STRONGLY AGREE |
33. Most old people make excessive demands for love and reassurance.
- | | |
|----------------------|-------------------|
| A. STRONGLY DISAGREE | D. SLIGHTLY AGREE |
| B. DISAGREE | E. AGREE |
| C. SLIGHTLY DISAGREE | F. STRONGLY AGREE |
34. Most old people get set in their ways and are unable to change.
- | | |
|----------------------|-------------------|
| A. STRONGLY DISAGREE | D. SLIGHTLY AGREE |
| B. DISAGREE | E. AGREE |
| C. SLIGHTLY DISAGREE | F. STRONGLY AGREE |

Aging Semantic Differential

Rigidity Scale

1. I usually don't like to talk much unless I am with people I know very well.
 - A. TRUE
 - B. FALSE
2. I like to talk before groups of people.
 - A. TRUE
 - B. FALSE
3. It is hard for me to start a conversation with strangers.
 - A. TRUE
 - B. FALSE
4. I would like to be an actor on the stage or in the movies.
 - A. TRUE
 - B. FALSE
5. It is hard for me to act natural when I am with new people.
 - A. TRUE
 - B. FALSE
6. I feel nervous if I have to meet a lot of new people.
 - A. TRUE
 - B. FALSE
7. I usually feel nervous and ill at ease at a formal dance or party.
 - A. TRUE
 - B. FALSE
8. When I work on a committee I like to take charge of things.
 - A. TRUE
 - B. FALSE
9. I usually take an active part in the entertainment at parties.
 - A. TRUE
 - B. FALSE
10. I am a better talker than listener.
 - A. TRUE
 - B. FALSE
11. I try to remember good stories to pass on to other people.
 - A. TRUE
 - B. FALSE
12. I am embarrassed with people I do not know well.
 - A. TRUE
 - B. FALSE
13. A strong person doesn't show his/her emotions and feelings.
 - A. TRUE
 - B. FALSE

14. I must admit that it makes me angry when other people interfere with my daily activity.
 - A. TRUE
 - B. FALSE
15. I find that a well-ordered mode of life with regular hours is congenial to my temperament.
 - A. TRUE
 - B. FALSE
16. It bothers me when something unexpected interrupts my daily routine.
 - A. TRUE
 - B. FALSE
17. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.
 - A. TRUE
 - B. FALSE
18. I find it hard to set aside a task that I have undertaken, even for a short time.
 - A. TRUE
 - B. FALSE
19. I don't like things to be uncertain and unpredictable.
 - A. TRUE
 - B. FALSE
20. I am very slow in making up my mind.
 - A. TRUE
 - B. FALSE
21. At times I feel that I can make up my mind with unusually great ease.
 - A. TRUE
 - B. FALSE
22. I must admit I try to see what others think before I take a stand.
 - A. TRUE
 - B. FALSE
23. I do not like to see women smoke.
 - A. TRUE
 - B. FALSE
24. I would be uncomfortable in anything other than fairly conventional dress.
 - A. TRUE
 - B. FALSE
25. I keep out of trouble at all costs.
 - A. TRUE
 - B. FALSE
26. It wouldn't make me nervous if any members of my family got into trouble with the law.
 - A. TRUE
 - B. FALSE

27. I must admit that I would find it hard to have for a close friend a person whose manners or appearance made him/her somewhat repulsive, no matter how brilliant or kind he/she might be.
A. TRUE
B. FALSE
28. I would certainly enjoy beating a crook at his/her own game.
A. TRUE
B. FALSE
29. I would like the job of a foreign correspondent for a newspaper.
A. TRUE
B. FALSE
30. I get very tense and anxious when I think other people are disapproving of me.
A. TRUE
B. FALSE
31. I am certainly lacking in self-confidence.
A. TRUE
B. FALSE
32. Criticism or scolding makes me very uncomfortable.
A. TRUE
B. FALSE
33. Most people inwardly dislike putting themselves out to help other people.
A. TRUE
B. FALSE
34. I am against giving money to beggars.
A. TRUE
B. FALSE
35. Many of the people I knew in college went out with a boy/girl only for what they could get out of him/her.
A. TRUE
B. FALSE
36. I always follow the rule: business before pleasure.
A. TRUE
B. FALSE
37. I get disgusted with myself when I can't understand some problem in my field, or when I can't seem to make any progress on a research problem.
A. TRUE
B. FALSE
38. I have never been made especially nervous over trouble that any members of my family have gotten into.
A. TRUE
B. FALSE
39. I have no fear of spiders.
A. TRUE
B. FALSE

Acceptance of Others Scale

1. People are too easily led.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

2. I like people I get to know.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

3. People these days have pretty low moral standards.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

4. Most people are pretty smug about themselves, never really facing their bad points.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

5. I can be comfortable with nearly all kinds of people.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

6. All people can talk about these days, it seems, is movies, TV, and foolishness like that.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

7. People get ahead by using "pull," and not because of what they know.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

8. If you once start doing favors for people, they'll just walk all over you.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

9. People are too self-centered.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

10. People are always dissatisfied and hunting for something new.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

11. With many people you don't know how you stand.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

12. You've probably got to hurt someone if you're going to make something out of yourself.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

13. People really need a strong, smart leader.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

14. I enjoy myself most when I am alone, away from people.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

15. I wish people would be more honest with you.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

16. I enjoy going with a crowd.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

17. In my experience, people are pretty stubborn and unreasonable.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

18. I can enjoy being with people whose values are very different from mine.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

19. Everybody tries to be nice.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

20. The average person is not very well satisfied with himself.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

The Shortened Social Desirability Scale

1. I'm always willing to admit it when I make a mistake.
 - A. TRUE
 - B. FALSE
 2. I always try to practice what I preach.
 - A. TRUE
 - B. FALSE
 3. I never resent being asked to return a favor.
 - A. TRUE
 - B. FALSE
 4. I have never been irked when people expressed ideas very different from my own.
 - A. TRUE
 - B. FALSE
 5. I have never deliberately said something that hurt someone's feelings.
 - A. TRUE
 - B. FALSE
-
1. I like to gossip at times.
 - A. TRUE
 - B. FALSE
 2. There have been occasions when I took advantage of someone.
 - A. TRUE
 - B. FALSE
 3. I sometimes try to get even rather than forgive and forget.
 - A. TRUE
 - B. FALSE
 4. At times I have really insisted on having things my own way.
 - A. TRUE
 - B. FALSE
 5. There have been occasions when I felt like smashing things.
 - A. TRUE
 - B. FALSE

Appendix B
Permission Requests

June 30, 1988
Jane Schultz
86 North 500 East
Logan, UT 84321
(801) 752-2767

Dear Dr. Rehfish,

I am in the process of preparing my thesis in the Psychology Department at Utah State University. I hope to complete in the Fall of 1988.

I am requesting your permission to use the Rigidity Scale in my data collection, as shown. I will include acknowledgements and/or appropriate citations to your work as shown and copyright and reprint rights information in a special appendix. The bibliographical citation will appear at the end of the manuscript as shown.

Please indicate your approval of this request by signing in the space provided, attaching any other form or instruction necessary to confirm permission. If you charge a reprint fee for use of your material, please indicate that as well. If you have any question, please call me at the number above.

I hope you will be able to reply immediately. If you are not the copyright holder, please forward my request to the appropriate person or institution.

Thank you for your cooperation.

I hereby give permission to Jane Schultz to reprint and use the following material in her thesis.

Fee

Signed

1. I usually don't like to talk much unless I am with people I know very well.
 - A. TRUE
 - B. FALSE
2. I like to talk before groups of people.
 - A. TRUE
 - B. FALSE
3. It is hard for me to start a conversation with strangers.
 - A. TRUE
 - B. FALSE
4. I would like to be an actor on the stage or in the movies.
 - A. TRUE
 - B. FALSE
5. It is hard for me to act natural when I am with new people.
 - A. TRUE
 - B. FALSE
6. I feel nervous if I have to meet a lot of new people.
 - A. TRUE
 - B. FALSE
7. I usually feel nervous and ill at ease at a formal dance or party.
 - A. TRUE
 - B. FALSE
8. When I work on a committee I like to take charge of things.
 - A. TRUE
 - B. FALSE
9. I usually take an active part in the entertainment at parties.
 - A. TRUE
 - B. FALSE
10. I am a better talker than listener.
 - A. TRUE
 - B. FALSE
11. I try to remember good stories to pass on to other people.
 - A. TRUE
 - B. FALSE
12. I am embarrassed with people I do not know well.
 - A. TRUE
 - B. FALSE
13. A strong person doesn't show his/her emotions and feelings.
 - A. TRUE
 - B. FALSE

14. I must admit that it makes me angry when other people interfere with my daily activity.
 - A. TRUE
 - B. FALSE
15. I find that a well-ordered mode of life with regular hours is congenial to my temperament.
 - A. TRUE
 - B. FALSE
16. It bothers me when something unexpected interrupts my daily routine.
 - A. TRUE
 - B. FALSE
17. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.
 - A. TRUE
 - B. FALSE
18. I find it hard to set aside a task that I have undertaken, even for a short time.
 - A. TRUE
 - B. FALSE
19. I don't like things to be uncertain and unpredictable.
 - A. TRUE
 - B. FALSE
20. I am very slow in making up my mind.
 - A. TRUE
 - B. FALSE
21. At times I feel that I can make up my mind with unusually great ease.
 - A. TRUE
 - B. FALSE
22. I must admit I try to see what others think before I take a stand.
 - A. TRUE
 - B. FALSE
23. I do not like to see women smoke.
 - A. TRUE
 - B. FALSE
24. I would be uncomfortable in anything other than fairly conventional dress.
 - A. TRUE
 - B. FALSE
25. I keep out of trouble at all costs.
 - A. TRUE
 - B. FALSE
26. It wouldn't make me nervous if any members of my family got into trouble with the law.
 - A. TRUE
 - B. FALSE

27. I must admit that I would find it hard to have for a close friend a person whose manners or appearance made him/her somewhat repulsive, no matter how brilliant or kind he/she might be.
A. TRUE
B. FALSE
28. I would certainly enjoy beating a crook at his/her own game.
A. TRUE
B. FALSE
29. I would like the job of a foreign correspondent for a newspaper.
A. TRUE
B. FALSE
30. I get very tense and anxious when I think other people are disapproving of me.
A. TRUE
B. FALSE
31. I am certainly lacking in self-confidence.
A. TRUE
B. FALSE
32. Criticism or scolding makes me very uncomfortable.
A. TRUE
B. FALSE
33. Most people inwardly dislike putting themselves out to help other people.
A. TRUE
B. FALSE
34. I am against giving money to beggars.
A. TRUE
B. FALSE
35. Many of the people I knew in college went out with a boy/girl only for what they could get out of him/her.
A. TRUE
B. FALSE
36. I always follow the rule: business before pleasure.
A. TRUE
B. FALSE
37. I get disgusted with myself when I can't understand some problem in my field, or when I can't seem to make any progress on a research problem.
A. TRUE
B. FALSE
38. I have never been made especially nervous over trouble that any members of my family have gotten into.
A. TRUE
B. FALSE
39. I have no fear of spiders.
A. TRUE
B. FALSE

June 30, 1988
Jane Schultz
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Dear Dr. Fey,

I am in the process of preparing my thesis in the Psychology Department at Utah State University. I hope to complete in the Fall of 1988.

I am requesting your permission to use the Acceptance of Others Scale in my data collection, as shown. I will include acknowledgements and/or appropriate citations to your work as shown and copyright and reprint rights information in a special appendix. The bibliographical citation will appear at the end of the manuscript as shown.

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Thank you for your cooperation.

I hereby give permission to Jane Schultz to reprint and use the following material in her thesis.

Fee

Signed

1. People are too easily led.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

2. I like people I get to know.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

3. People these days have pretty low moral standards.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

4. Most people are pretty smug about themselves, never really facing their bad points.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

5. I can be comfortable with nearly all kinds of people.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

6. All people can talk about these days, it seems, is movies, TV, and foolishness like that.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

7. People get ahead by using "pull," and not because of what they know.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

8. If you once start doing favors for people, they'll just walk all over you.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

9. People are too self-centered.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

10. People are always dissatisfied and hunting for something new.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

11. With many people you don't know how you stand.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

12. You've probably got to hurt someone if you're going to make something out of yourself.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

13. People really need a strong, smart leader.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

14. I enjoy myself most when I am alone, away from people.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

15. I wish people would be more honest with you.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

16. I enjoy going with a crowd.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

17. In my experience, people are pretty stubborn and unreasonable.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

18. I can enjoy being with people whose values are very different from mine.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

19. Everybody tries to be nice.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY

20. The average person is not very well satisfied with himself.

ALMOST ALWAYS 1 2 3 4 5 VERY RARELY