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Development and construct validation of Lane's (1989) attitudes toward the elderly scale extending Fazio's process model of attitude-behaviour correspondence

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Development and construct validation of

Lane's (1989) Attitudes Toward the Elderly Scale:

Extending Fazio's process model of attitude - behaviour correspondence

By

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Table of Contents

List of Figures

List of Tables

Acknowledgments

Abstract

The purpose of this study was twofold: to extend Fazio's (1986) model of attitude-behaviour correspondence within the context of attitudes toward the elderly, and to further develop Lane's (1989) Attitudes Toward the Elderly Scale (ATES) and assess its construct validity. In the first phase, 452 introductory students completed a modified version of Lane's (1989) ATES, a measure of experience with the elderly, and Snyder's (1974) Self - Monitoring Scale. During phase 2, six weeks later, participants evaluated a job candidate to investigate how the moderating variables of self - monitoring, salience, direct experience, and situational cues maximized or minimized attitude - behaviour correspondence. A total of 96 high and low self - monitors were randomly assigned to one of four experimental conditions. In three conditions, namely attitude salience, contrary situational cues, and a control group, participants evaluated an elderly job target (age=61). The fourth condition involved a young target (age=31) to serve as a baseline for assessing bias toward the elderly. Participants listened to an audiotape of a job interview and then evaluated the job candidate, who was the target person. The dependent measures of competence, liking, recognition memory, memory bias, and social distance were aggregated. Participants also rated how typical the target person was viewed to be for his age. Factor analysis of the modified ATES resulted in two correlated factors that were combined. As predicted there was a modest overall attitude - behaviour correlation (r=.20, p<.05), a stronger correlation for only low self - monitors (r=.38, p<.05), and a nonsignificant correlation for high self - monitors. As predicted there was substantial attitude - behaviour correspondence in the elderly target control for low (r=.76, p<.05) but not for high self - monitors. Typicality was an important predictor for low but not high self - monitors which suggested a refinement of Fazio's (1986) model. Contrary situational cues resulted in no attitude - behaviour correspondence which provided further support for Fazio's

model. Salience resulted in significant attitude - behaviour correspondence for high ($r=.60$, $p<.05$) but not low self - monitors. Finally, there was no evidence of bias, either favourable or unfavourable, toward the elderly. Results were discussed in terms of both a refinement and extension of Fazio's model; self-monitoring was a crucial moderating variable and the model predicted the conditions under which attitude-behaviour correspondence would occur within the context of attitude toward the elderly. The results demonstrated that the modified ATES was a valid and reliable measure of attitudes toward the elderly.

Introduction

Attitude - Behaviour Correspondence

The correspondence between verbally reported attitudes and overt behaviour has been the focus of a large number of empirical investigations in social psychology. Early conception of the definition of attitude implied a strong correspondence between · erbal attitude and overt behaviour. A direct link between attitude and behaviour was part of Allport's (1935) definition of attitude. However, an attitude may be simply defined as the "categorization of an object along an evaluative dimension" (Fazio and Zanna, 1981, p. 162). The attitude object evokes an evaluative feeling, and this feeling may influence future behaviour toward the object. In an influential review article, Wicker (1969) found that early empirical investigations of attitude - behaviour correspondence rarely resulted in correlations greater than .30. Moreover, Wicker (1969) concluded that verbal attitudes were unrelated or only slightly related to overt behaviour. Recently several authors (e.g., Ajzen, 1987; Fazio, 1986; Fazio and Zanna, 1981; Snyder, 1979) have concluded that meaningful relationships between attitude and behaviour are possible.

Fazio (1986) presents a process model to explain how attitude - behaviour correspondence is either increased or decreased. Zanna and Fazio (1982) reported the first question to be asked was the IS question. Is there an attitude - behaviour relationship? Following the IS question was the WHEN approach. When is there a relationship between attitudes and behaviour? Finally, Fazio's (1986) process model, presented in Figure 1, addresses the HOW question. How do attitudes guide behaviour? In the first step of the model the attitude must be accessed or activated from memory. If the attitude is not accessed during an encounter with the attitude object it cannot influence behaviour toward that object. If, however, the attitude is accessed it will serve as a "filter" through which the object of the attitude is viewed. An "activated" attitude selectively biases perception of the

object and results in an individual's immediate perception of the attitude object. The immediate perceptions of the attitude object are consistent with the attitude, and in conjunction with normative guidelines, or norms, form the definition of the event. Normative guidelines may override previous steps in the model. The definition of the event, the final step before behavioural expression of the attitude, determines behaviour.

Figure 1.

Fazio's process model (1986, p.212)
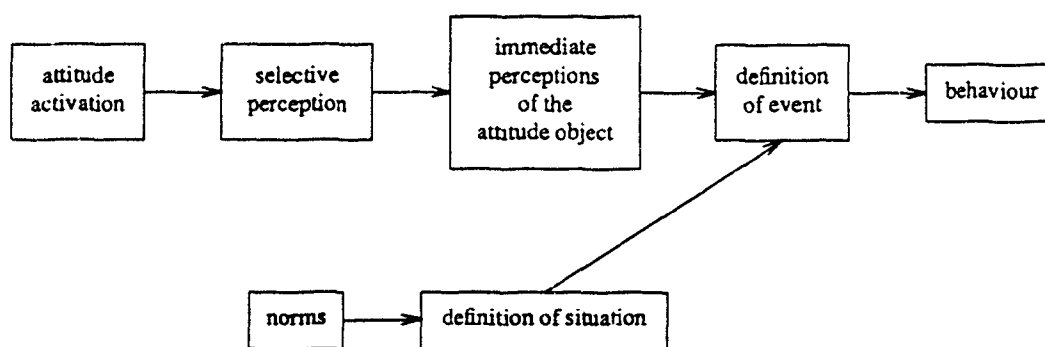
The first step of the process model, attitude activation, is clearly necessary for attitude - behaviour correspondence, but not sufficient. At the very least the attitude object must be categorized as belonging to the general object category. Then the individual's evaluation of that category must be strong enough to prompt activation. Fazio (1986) emphasizes accessibility and suggests that the moderating variables of self - monitoring, salience, and direct experience may increase or decrease the associative strength of the attitude thus increasing or decreasing its accessibility. In detailing support for Fazio's (1986) model one should point out that it has only been examined in a narrow range of social issues (e.g., affirmative action) or physical objects (e.g., puzzles). The present study attempts to extend these findings in an examination of attitude - behaviour correspondence toward a minority group, specifically the elderly.

A variable that Fazio (1986) suggests moderates accessibility is self - monitoring. Snyder (1974, 1979) hypothesizes that individual differences in self-monitoring will moderate attitude-behaviour consistency. Self-monitoring is a construct that is measured by a 25-item scale; based on scores from this scale individuals can be categorized as either low or high on self-monitoring (Snyder, 1974). Snyder (1979) describes individuals who score high on self-monitoring as sensitive to the expression and self - presentation of relevant others in social situations. They use cues from the relevant others as guidelines for regulating and controlling (i.e., monitoring) their own self-presentation. Persons scoring high on self-monitoring behave in this manner out of a concern for situational and interpersonal appropriateness of their social behaviour. On the other hand, persons scoring low on self-monitoring are not as concerned about external demands and hence these people regulate and control their self-presentation from within, that is, by their affective states and attitudes. Fazio (1986) suggests that low self - monitors' attitudes may have more associative strength which in turn increases accessibility.

Snyder and Swann (1976) investigated the self-monitoring construct in relation to attitude-behaviour consistency and in addition, manipulated the salience of the attitudes. Self - monitoring and attitudes toward affirmative action were measured two weeks prior to the experimental session. In a 2 x 2 between - subjects design one half of the participants were told that their partner for a later discussion disagreed with their attitudes, and one half were given no information about their partner. For one half of the participants attitudes were made salient by asking participants to reflect and organize their views on affirmative action. All participants were presented with a sex - discrimination case and were asked to reach a verdict as a behavioural measure of attitude.

When attitudes were made salient there was substantial attitude-behaviour consistency ($r=.58$) when the participants were given no information about their partner. How-

ever, when the participants were facing a disagreeing partner the correlation was not significant ($r=.14$). When attitudes were not salient there was no attitude-behaviour correspondence whether participants were facing a disagreeing partner or not ($r=.06$, $r=.07$ respectively).

When participants were facing a disagreeing partner, whether or not their attitudes were made salient, they adopted what Snyder and Swann (1976) refer to as a moderation strategy. Participants tempered their attitudes and made decisions that favoured neither the plaintiff nor the defendant in anticipation of the upcoming discussion. This moderation strategy resulted in nonsignificant attitude - behaviour correspondence for all participants facing a disagreeing partner.

It does not appear that the authors related self - monitoring with salience or situational cues but only reported attitude - behaviour correlations. High and low self - monitors were determined with a median split on Snyder's (1974) self - monitoring scale. There was a significant attitude-behaviour correlation ($r=.42$) for low self-monitoring participants, and a nonsignificant correlation for high self-monitoring participants ($r=.03$). Snyder and Swann (1976) conclude that in situations that stress the relevance of attitudes, attitude-behaviour correspondence should be substantial. The manipulation of attitude salience with the absence of contrary situational cues successfully produced this outcome. Fazio (1986) comments that increasing the salience makes an attitude more accessible thus increasing attitude - behaviour correspondence.

Fazio and Zanna (1981) reviewed the literature on attitude formation by direct or indirect experience in an examination of the attitude-behaviour consistency problem. Direct experience refers to direct behavioural contact with the attitude object from which the individual can form an attitude. Indirect experience refers to nonbehavioural information about the attitude object, for example reading about it. Fazio (1986) postulated that

direct experience results in a more robust attitude which then increases attitude accessibility.

Regan and Fazio (1977) examined the role of experience in attitude-behaviour consistency with students' attitudes towards an on campus housing shortage. Students who lived in temporary housing (direct experience) were compared to students living in permanent housing but who had heard of the shortage (indirect experience) on behavioural measures such as signing a petition or writing letters about the shortage. The students also completed a seven-item questionnaire dealing with their attitudes toward the housing shortage. There were no differences in attitudes between the two groups with the exception of one-item on the attitude measure. Multiple regression analysis revealed significant attitude - behaviour correspondence for the direct experience group and nonsignificant correspondence for the indirect experience group. The consistency was significantly greater in the direct experience group than in the indirect experience group as predicted by the authors.

Regan and Fazio (1977) manipulated direct/indirect experience in a further examination of attitude formation and subsequent behaviour. One half of the participants were introduced to various puzzles and their solutions, the other half of the participants worked on the puzzles. All of the participants rated how interesting the puzzles were as a measure of attitude. Participants were then given a period of time to work on any puzzles they wished. The behavioural measure was the type of puzzles the participant chose to work on and the time spent on each puzzle. The results indicated greater attitude - behaviour correspondence for the direct experience group ($r=.514$) than the indirect experience group ($r=.224$) for the type of problem attempted. Further, there was significantly greater attitude correspondence for the direct group ($r=.544$) than the indirect group ($r=.199$) for the proportion of each problem attempted.

Fazio and Zanna (1978) investigated the amount of direct experience as a continuous variable instead of a categorical one. The number of psychological studies a participant had taken part in served as a measure of direct experience. Participants' attitudes toward participating in psychological experiments were measured, as well as their willingness to join a subject pool, the behavioural measure. Regression analysis indicated that only direct experience contributed to the prediction of behaviour independently of attitude. The number of experiments the subject had participated in previously was related positively to the number of experiments in which the subject volunteered to participate.

In addition to utilizing moderating variables Ajzen (1987) advocates aggregating behaviours as opposed to using a single behavioural measure. In defining the principle of aggregation, Rushton, Brainerd, and Pressley (1983) state that "the sum of a set of multiple measurements is a more stable and unbiased estimator than any single measurement from the set" (p. 18-19). Ajzen (1987) comments that a sample of one behaviour at one time may not be an accurate reflection of that behaviour and thus not consistent with the attitude. One should, therefore, measure an aggregate of behaviours across time and/or different behaviours. Rushton et al. (1983) state that one sample of behaviour is a poor indicator because of error in measurement; when measurements are combined the error averages out presenting a more representative picture. They also state that it is necessary to aggregate different measures of the same underlying construct to increase consistency. They comment that this procedure is not different from personality or intelligence testing where increasing the number of items on an instrument increases the reliability of that instrument.

Though some studies use aggregation to increase the stability and reliability of their measures, (e.g., Zanna, Olson, & Fazio, 1980) most of those studies do not explicitly examine this technique. Fishbein and Ajzen (1974) is the most commonly cited study that

compares aggregation directly to single - act measures. They investigated differences in predicting behaviour when using single - act criterion or multiple - act criterion. Multiple-act criterion is the sum of single or repeated observation of different behaviours, or an aggregate of behaviours. Participants completed a list of 100 behaviours dealing with religion (e.g., pray before or after meals) that they had performed or that they would perform. Participants also completed five different attitudes toward religion scales. Correlations with the five different attitude scales for the single - act behavioural criterion ranged from .121 to .149 and for the single - act behavioural intention criterion .162 to .202. The attitude - behaviour correlations for the multiple act behavioural criterion ranged from .608 to .714 and for the multiple - act behavioural intention criterion ranged from .604 to .749. Aggregating different behaviours provided a more reliable and stable dependent measure.

Zanna et al. (1980) utilized aggregation in an investigation of self - monitoring and variability of past experience in an examination of attitude - behaviour correspondence. Zanna et al. (1980) predicted that low self - monitors whose past behaviour has been relatively invariant will have greater attitude - behaviour correspondence than either high self - monitors or low self - monitors with inconsistent past behaviour. They theorized that direct experience with the attitude object was only important insofar as past behaviour was consistent because inconsistent past behaviour may not result in a strongly formulated attitude. Participants completed an attitude questionnaire with one item assessing favourability toward religion, Snyder's (1974) Self - Monitoring Scale, and one item assessing how the participants vary from situation to situation in religious behaviour on a seven - point scale. Participants were divided into high and low self - monitors by a median split. In a second session participants completed three measures of religious behaviour: a 90 - item self - report measure of their religious and nonreligious behaviour, time spent praying and attending religious service, and a measure of alcohol and drug use.

Zanna et al. (1980) aggregated the 90 items that were conceptually and empirically related by standardizing and summing the scores. As predicted only low self - monitors with invariant past experience had high correlations on all three behavioural measures ($r=.75$, $r=.52$, and $r=.59$ respectively). Overall, the measure that correlated most highly with attitudes constituted a "multiple act behavioural criterion." Zanna et al. (1980) concluded that attitude - behaviour correspondence will only occur if there is a strong self - perception of attitude already in existence. Past experience with the attitude object was necessary but not sufficient for attitude - behaviour correspondence. This study demonstrated the importance of both self - monitoring as a moderator and also the value of aggregating behaviours.

Clearly then, studies examining verbal attitude - overt behaviour correspondence should include the moderating variables of self - monitoring, salience, and direct experience. When situational cues contrary to an attitude are present, high self - monitors' behaviour should not correlate with their attitudes. On the other hand, low self - monitors' behaviour should correlate with their attitudes even when contrary situational cues are present. The importance of self - monitoring can be examined in a control group without any manipulations of salience or situational cues. Self - monitoring can also be measured at the same time the attitude is measured using Snyder's (1974) scale. The researcher may then select high and low self - monitors by using a median split. When measuring behaviour toward the attitude object attitude salience can be manipulated. Participants in a high salience condition could reflect on their attitudes as in Snyder and Swann (1976) or they could complete the attitude questionnaire again. Completing the attitude questionnaire again has the advantage of ensuring participants are indeed focusing on their attitudes as well as providing a measure of test - retest reliability. The amount of direct experience an individual has previously had with the attitude object can be measured at the

same time the attitude is measured.

Aggregating the behavioural indices results in a more stable and reliable measure of behaviour. This can be accomplished by standardizing different measures of behaviour, summing them and taking the mean as Zanna et. al. (1980) did.

To extend the generality of Fazio's (1986) process model to a minority group, attitudes toward the elderly will be examined.

Attitudes Toward the Elderly Scales

To examine verbal attitude - overt behaviour correspondence with attitudes toward the elderly, one must have a valid and reliable measure of verbal attitude. The results reported from attitudes toward the elderly questionnaires vary. In an early review article McTavish (1971) found negative attitudes toward elderly people to predominate. Lutsky (1980) states that although younger persons elicit more positive evaluations than older persons, the older persons tend to be rated as neutral or slightly positive. In another review Green (1981) observed that the elderly were consistently perceived as conservative, set in their ways, passive, weak, dependent on others, had a loss of energy, were inactive, and view the younger generation in negative terms. In a recent review Crockett and Hummert (1987) reported relatively negative perceptions of the elderly when viewed as a group but specific elderly persons were perceived at least as positively as younger people.

These discrepancies in the gerontological literature when attitude questionnaires are employed could be a result of methodological problems. Many authors have stressed the need to differentiate between belief and attitude statements (e.g., Kogan, 1979; Lutsky, 1980; Palmore, 1982). Endorsement of an attitudinal statement implies a positive or negative evaluation; a belief statement on the other hand, may reflect informational accuracy rather than the acceptance of a stereotype. As Kogan (1979) has pointed out, studies

demonstrating 'improved' attitudes toward the elderly as a result of some intervention technique may be very misleading if they combine factual and attitudinal statements.

Crockett and Hummert (1987) suggest a second major concern is the generality of findings regarding people's attitudes toward the elderly due to the limited samples surveyed, typically college students or particular groups of health care professionals.

Perhaps the most serious issue is the dearth of evidence relating to the psychometric adequacy of survey instruments. Green (1981) states that reliability estimates which assess the degree to which an instrument is susceptible to random error have seldom been conducted. If items on a scale are tapping the same underlying construct, they should be highly correlated producing strong reliability (alpha) coefficients. According to Green (1981), no analyses have ever been reported for the widely used Tuckman and Lorge (1953) scale to justify their designation of 13 categories of attitude, nor has the reliability of items within each category been documented. In a study addressing the multidimensional properties of attitudes toward the elderly Kilty and Feld (1976) also point out the inappropriateness of summing items in a category for a total score without demonstrating a congruent factor structure, although they do not provide alpha coefficients for the items of their dimensions either. Finally, and most seriously, the predictive validity or construct validity of the questionnaires has not been established (e.g., Kogan, 1979; Lutsky, 1980). Therefore a secondary purpose of the present study was to further develop Lane's (1989) Attitudes Toward the Elderly Scale (ATES) and assess its construct validity while examining the generality of Fazio's (1986) process model.

The ten - item two - dimensional scale reported by Lane (1989) had evolved from a program of research in which the empirical basis was Kilty and Feld's (1976) delineation of two independent factors reflecting positive and negative reactions toward older people. The majority of the statements in their 45 - item questionnaire were taken from the work

of Tuckman and Lorge (1952, 1953) and Kogan (1961) although they also included an adaptation of Srole's (1956) alienation scale as well as several items of their own. Principal component analysis with varimax rotation of the responses of 471 participants drawn from three rural counties in northern Pennsylvania, revealed four independent dimensions: Factor 1 was labelled an older workers' scale, Factor 2 was the Srole alienation scale although items dealing with aging did not load strongly on this factor, Factor 3 reflected positive reactions about older people, and Factor 4 was the polar opposite of Factor 3, reflecting negative reactions about older people.

Lane's (1989) initial attitude questionnaire consisted of 23 statements which were designed to tap a general domain of personal attributes, a more specific domain of intergenerational interpersonal behaviours and a reaction to older workers dimension. Using a minimum factor loading criterion of .40, Lane selected eleven items from Kilty and Feld's (1976) "negative and positive reactions toward older people" factors as well as the five statements with the highest factor loading on their "older workers factor." Although this latter factor was not of interest to Lane, it was included because it was the most robust factor in Kilty and Feld's analysis. Three additional items were taken from Kogan's (1961) Attitude Toward Old People Scale and four new items were constructed to increase the number of statements reflecting intergenerational behaviours. Individuals responded on a seven - point scale ranging from *strongly agree* to *strongly disagree*.

The participants consisted of three large samples drawn from diverse populations. The first sample consisted of 302 volunteers from a population of 350 full - time staff employees in a small Ontario University. The participants were well distributed in age, occupation, and ethnicity. The second sample consisted primarily of older part - time senior University students registered in summer courses. Of the 282 participants 73% had been employed full time and 47.3% continued to be at the time of the study. The mean age

of this sample was 32. The third sample consisted of 234 introductory psychology students.

Initially Lane (1989) analysed each data set separately to determine whether the similarities in factor structure warranted combining them. Principal components factor analysis was restricted to four factors for each of the three data sets. A dual criterion of a minimum factor loading of .40 on one factor and a maximum factor loading of .30 on the other three factors was established to select appropriate items. Five statements reflecting intergenerational interpersonal behaviours consistently emerged on Factor 1. These items described old people as meddling, critical, making excessive demands for love and reassurance, demanding of the young, and complaining about the behaviour of the younger generations. An additional five statements denoting personal attributes which Lane (1989) described as generally reflecting a contentedness with life, consistently emerged on either Factor 2 or Factor 3. These items described older people as looking forward to the future, making friends easily, loving life, good with children, and relaxing to be with. With respect to the more general domain of personal attributes, the results were somewhat less clear - cut insofar as the pattern of factor weightings for the five relevant statements varied between Factors 2 and 3 which may be reflecting different dimensions of optimism and congeniality or a single dimension of contentedness with life.

Lane (1989) combined the data and conducted a preliminary factor analysis restricted to three factors for the ten consistent items because the statements reflecting personal attributes varied in terms of which of the five items loaded on Factor 2 as opposed to Factor 3. The principal components analysis revealed that although the items constituting Factor 1 remained intact, two of the personal attribute statements loaded on Factor 2, two on Factor 3, and one loaded on both these factors. Furthermore, Factors 2 and 3 were not independent ($r=.18$, $p<.001$) but neither was significantly correlated with

Factor 1.

Principal components analysis restricted to two factors resulted in two very clearly delineated factors in which all items met the dual factor weighting criterion. Cronbach's alpha for Factor 1 was .78 and .64 for Factor 2.

Lane (1989) provides a scale that consists entirely of evaluative statements which have nothing to do with informational accuracy. Second, the fact that a sample of typical Introductory Psychology students, older part - time students, and non - academic employed persons all responded in a similar fashion on the relevant items increases the generality of the instrument. Third, the items constituting the two independent dimensions reveal reasonable reliability coefficients.

A purpose of this study was to further develop Lane's (1989) ATES and assess its construct validity. The scale was modified to include seven additional items and three items were reworded. Two items from Factor 1 were reworded in a positive direction because the five items reflecting intergenerational behaviour were all worded in a negative direction. One item from Factor 2 was reworded and seven new items were added to determine whether the personal attributes dimension constituted two factors of optimism and congeniality or a single factor including those components.

Evaluating a Young Versus an Elderly Target Person

Aside from the problem of an adequate attitude scale, many authors have remarked on the conflicting findings when attitudes and evaluations toward a young and old target person are compared. Crockett and Hummert (1987) direct our attention to the transparency of the purpose of much of this research. They suggest that when age is the only salient characteristic, and within - subjects designs are utilized, stereotyped response will be elicited from cooperative participants. In Kogan's theoretical paper (1979) and Green's

(1981) literature review, both note that stereotypes are elicited upon comparing young and old age groups when a within - subjects design was employed but not with a between - subjects design. Lutsky (1980) points out that within - subjects designs maximize the salience of the age stimuli and increase demand characteristics. Therefore between - subjects designs should be utilized in order to minimize demand characteristics.

Another issue that has been raised when attitudes toward the elderly are measured is the specificity of the attitude object. Green's (1981) review concluded that when participants were asked for their attitude toward elderly people in general the ratings tended to be negative. However, when a specific elderly person was evaluated the ratings tended to be positive. Weinberger and Millham (1975) had participants complete both a general attitude measure (not specified) of a generalized stimulus person and an evaluation of a specific elderly person. The general attitude measure included categories such as general satisfaction, personality characteristics, level of dependence, and adjustment and adaptability. A total of 100 participants were randomly chosen from 607 undergraduates who had completed the attitude questionnaire about both a "representative" 25 year old and a "representative" 70-year-old. These 100 participants read autobiographies of either a 25-year-old woman and a 70-year-old woman or a 25-year-old man and a 70-year-old man. The target persons were then evaluated on eight dimensions such as intellectual capacity, self acceptance, and contribution to society on a five point scale. For a behavioural measure participants were given the choice to either meet the older person and complete another assessment or evaluate a second target person on the basis of an autobiography.

The attitude questionnaire completed by the 607 participants indicated that the older person was perceived as significantly less satisfied, having more negative personality characteristics and fewer positive ones, as more dependent, less well - adjusted and

adaptable than the younger person. On the other hand, the evaluation of the individuals in the autobiographies indicated the 70-year-old was perceived as significantly more self-accepting, more satisfied with life, more psychologically well-adjusted, more adaptable, and more appealing than the 25 year old. Moreover, the behavioural measure indicated the majority (68%) of the participants chose to avoid the elderly person.

The results of this study seem contradictory. When surveyed the students had negative attitudes, yet they evaluated the specific elderly person positively. Contrary to the positive evaluation of the individual elderly person the majority of the participants chose to avoid interaction with him/her. There was no relation between the attitude measure and the evaluations of the specific elderly person. However, a total of seven out of ten dimensions of the attitude measure significantly correlated with the behavioural measure, though they reflected a relatively low degree of interdependence.

Weinberger and Millham (1975) suggest that the participants may be avoiding interaction and not the elderly person; participants were not given the option of interacting with the younger person. Green (1981) comments that persons assessing a generalized elderly person are probably reacting to cultural stereotypes, while persons assessing a specific individual elderly person view that elderly person as violating those stereotypes. Thus the person makes an exception for the "atypical" elderly person. Fazio (1986), in describing his process model, comments that if there is no previous affective association with the attitude object, the attitude object must be identified as a member of a category for which an affective linkage does exist. Fazio (1986) states that this principle may be applied when an individual has a general attitude that is relevant but no attitude toward the specific object. Correspondence between the evaluation of the specific object and the general attitude will occur if the specific object is perceived as typical of the general category.

This, however, does not explain the inconsistency displayed with the avoidance behaviour. In terms of the avoidance behaviour Green (1981) argues that social distance is a good measure of attitude because participants may be positively evaluating an elderly person when they are not in contact with that person, on the other hand, they may avoid interaction with that person. The results of Weinberger and Millham's (1975) study indicate the importance of employing more than one form of outcome measure to validate an attitude scale.

Crockett, Press, and Osterkamp (1979) demonstrated that perceived typicality does have an impact on the evaluation of an elderly target person. They measured attitudes toward the elderly by having participants rate impressions formed of a 36-year-old or 76-year-old widow. Participants were presented with a two page interview of the widow's life and the way she had spent the previous day. Six versions of the day were created such that two were socially desirable and conventional for an older person, two were socially desirable and unconventional for an older person, and two were socially undesirable and consistent with negatively stereotyped behaviour of an older person. Participants were asked to evaluate the widow on liking, positive and negative personality characteristics, and how typical she was for her age. The results indicated that the 76-year-old widow was rated as more likeable, having more positive personality characteristics and fewer negative personality characteristics, and being less typical for her age than the 36-year-old woman. The favourableness of impression did vary with the social desirability of the way she spent her day, but the elderly person was rated more favourably than the younger woman. Crockett et al. (1979) maintain that the elderly person was seen as atypical and so participants viewed her as an exception from the negative stereotype usually found when investigating attitudes toward the elderly. This finding again illustrates the importance of initially categorizing the target person as part of a general category for which the

general attitude is held as Fazio (1986) suggests.

The preceding discussion has focused on the characteristics of target persons, but one could also be concerned about the context in which the target was presented. Connor, Walsh, Litzelman, and Alvarez (1978) utilized the potentially valuable format of a job interview to evaluate attitudes toward a specific elderly person. Participants were presented with written transcripts of an interview with a picture of the candidate, a woman aged 24 or 63, attached. One third of the participants were informed the woman was hired, one third told she was not hired, and one third were not given the outcome. Participants were asked to evaluate the woman's value as a potential employee. There were no clear differences in the assessments of the old or the young woman. The participants reacted to the situation and not the woman's age. There was no relationship with the attitude questionnaire that had been completed by participants one week prior to the experiment. Connor et al. (1978) argue that it may not be age itself that results in negative attitudes but characteristics associated with age such as poor health.

Avolio and Barrett (1987) improved on the Connor et al. (1975) study in terms of control and believability. They also used the job interview as a format to investigate the effects of age stereotyping. Using an audiotape to simulate an actual interview, Avolio and Barrett (1987) created two interviews, one of a 32-year-old man and one of a 59-year-old man. They controlled for nearness to retirement, unemployment status, and differential experience levels. The same male interviewee was used to avoid a confound of voice attractiveness. Based on cognitive information processing theory (e.g., Cantor and Mischel, 1979, as cited by Avolio and Barrett, 1987) the authors expected participants to rely on stereotypes in the absence of clear qualifications. The participants were 156 college students who listened to a 12 minute audiotape of a simulated interview. There were three levels of age (32, 59, and none given) and two levels of job description (job descrip-

tion and job description with personality attributes) in a between-subjects design. The target person was rated on future potential and overall performance. When the candidate was presented with personality attributes the ratings were higher than when the candidate was presented without personality attributes. The ratings of future potential and overall performance were significantly higher for the younger person, whereas the ratings for the older person and the no age condition did not differ. As the mean ratings for the older person were equal to the rating of the no age condition and were above average Avolio and Barrett (1987) think it is unlikely that a negative age bias toward the older person was in operation. Rather the authors contended that a positive age bias for the younger person was operating. Perhaps it was natural for the participants to attribute success to the younger person as the participants may have perceived themselves as more similar to the younger candidate.

When comparing a young to elderly target person Crockett and Hummert (1987) suggest that favourable and unfavourable attitudes toward the elderly will cancel out resulting in a neutral mean. The authors assume there would be neutral evaluations of a young target person. This would result in no differences between the evaluations of the young and elderly target person. In addition there would be more variability in the elderly target group than the young target group and a significant attitude - behaviour correlation in the elderly target group. Such an attitude - behaviour correlation has not been observed in the gerontological literature (e.g. Connor et al. 1978; Weinberger & Millham, 1975).

In studies comparing evaluations of a young target person to an old target person, a between subjects design is recommended by Crockett and Hummert (1987), Green (1981), and Kogan (1979). Furthermore, an audiotape interview format based on Avolio and Barrett (1987) can be utilized for control and believability. Perceived typicality of the target person should be measured to examine if typicality has an impact on the evaluation

of the target person.

Construct Validity

In addition to extending Fazio's (1986) process model to include attitudes toward the elderly, another purpose of this study was to concurrently assess the construct validity of Lane's (1989) modified ATES. Anastasi (1982) states that "The validity of a test concerns *what* the test measures and *how well* it does so" (p. 131). She defines construct validity as the extent to which the test or evaluative measure may be said to measure a theoretical construct or trait. Anastasi (1982) maintains that construct validity of a test can only be established by empirical, objective examination and observation of the construct. Validity may be confirmed by establishing attitude - behaviour correspondence.

There are no behavioural, experimental validations of scales measuring attitudes toward the elderly. Indeed, there are few such studies with respect to any attitude scales in the recent social psychological literature. In searching the literature for potentially useful behavioural measures to incorporate into such a study, works by Buczek (1986) and Snyder and Uranowitz (1978) have some noteworthy features. Buczek (1986) has utilized memory as an alternate approach to attitude scales in evaluating sexism. Participants were 218 students from introductory psychology classes (116 male, 102 female) who listened to one of four audiotapes. Participants were asked to act as counsellors and to perform tasks similar to those performed by counsellors in order to compare how the general public and professional counsellors deal with a person who has a problem. The four audiotapes constructed were scenarios of client patient interviews. Each tape consisted of the same simulated interview with the client complaining of loss of energy, anxiety, and depression. The four conditions consisted of female client - female counsellor, female client - male counsellor, male client - female counsellor, male client - male counsellor. Participants were asked to complete two memory tasks following the audiotape. First,

participants were asked to recall all the facts they remembered from the interview, and then complete true/false questions as a measure of recognition. Participants recalled fewer vocational facts in the female client condition, and more information overall in the male client condition. Buczek (1986) contends that the recall of more information for males demonstrated a negative bias toward women. Thus the memory task reflected the participants' attitudes toward women.

Snyder and Uranowitz (1978) demonstrated the powerful influence of a label on memory. A total of 212 male and female undergraduates read identical life histories of a female target person. The case histories were extensive commencing with birth, childhood, education, choice of profession, early home life, relationships, and social life. The target person was then labeled as lesbian or heterosexual, either immediately or one week later, or no information was given. Participants returned the week following the first session to complete 36 multiple choice questions for factual information both within and outside of the domain of what might be relevant to sexual preference. Sexually stereotyped alternatives were presented as part of the four choices available. The data were then coded in terms of the degree to which answers reflected stereotyped beliefs about sexuality.

The results indicated that participants who learned that the target person was lesbian answered in terms of lesbian stereotypes more than participants who learned that the target person was heterosexual or those in the no label condition. The no label condition was not different from the heterosexual label condition. The results were not affected by the timing of the label. An analysis of the errors again confirmed that the target person labeled as lesbian was viewed as stereotypically lesbian. The results of these analyses indicated that knowledge about sexual orientation influenced answers to factual questions. These errors reflected stereotypes about the target person. This study demonstrated the

powerful effects on memory produced by a label with stereotypic implications. Participants' memory was influenced by their attitudes and stereotypes. One might argue that a multiple choice format for recognition used in this study presents a more controlled method for assessing memory than Buczek's (1986) recall technique as it eliminated any experimenter bias in the coding of recalled information. Further, multiple choice as compared to true/false format reduces the probability of a correct answer due to guessing.

Another potential behavioural indicator reflecting attitude may be liking. Kite and Deaux (1986) utilized both liking and memory in a validation of a scale of attitudes toward homosexuals. Subjects were 144 males selected on their attitudes toward homosexuals based on a 21 - item unidimensional questionnaire. Of the 144 male participants half were chosen from the lower third of the distribution having negative attitudes (intolerant) and half were chosen from the higher third of the distribution having positive attitudes (tolerant). Subjects initially learned, later learned, or did not learn that their partner was homosexual. Subjects were run in pairs, but without meeting or seeing each other. Subjects were given a fictitious self - description of their partners which contained information about background, hobbies, classes, personal information. This self - description was identical for all groups with the exception of sexual orientation which was presumably volunteered in response to a suggested topic of discussion. Subjects immediately completed a liking questionnaire, a request for additional information, and a self - description. The liking measure consisted of four items embedded in a larger questionnaire. The items assessed the overall impression of the other person, the degree he wanted to be friends with the other person, willingness to be in another experiment with him, and willingness to be his neighbor. The second session took place 24 hours later and subjects again completed the liking measure and were also asked to recall any information they remembered about their partner.

The ANOVA for liking at both sessions showed a main effect for group such that subjects informed about their partner's sexuality (informed) rated their partners as less liked than subjects not informed about their partner's sexuality (not informed), and a main effect for tolerance indicating intolerant subjects liked their partners less than tolerant subjects. There was a significant interaction between group and tolerance indicating that informed intolerant subjects rated their partners the most negatively. The information that subjects recalled was counted and coded as either stereotypically heterosexual or homosexual. Intolerant subjects recalled fewer total items, fewer heterosexual items, and fewer homosexual items than did tolerant subjects. Initially informed subjects recalled significantly fewer items than the later informed or control groups. A significant interaction between group and tolerance indicated that initially informed intolerant subjects recalled fewer items than any other subject group. Both liking and memory differentiated between individuals with different attitudes providing strong construct validity for the attitude scale.

Because liking, memory, and attitude are all related (Kite & Deaux, 1986) one might expect that subjects with varying attitudes would demonstrate selective memory for likeable and unlikeable descriptions of a target person. Anderson (1968) had 100 college students rate 555 personality trait words as to their likeability. The words were rated on a seven point likeability scale as well as the awareness of meaning of the word on a four point scale. The words can be useful to manipulate the likeability of a fictitious target person.

Liking is also related to performance appraisal. Cardy and Dobbins (1986) presented evidence that liking is an integral dimension in performance appraisal. Four vignettes describing a hypothetical instructor's behaviour as high or low performance were presented with either positive and neutral, negative and neutral, or neutral adjectives

from Anderson (1968) as a likeability manipulation. The likeable instructor was presented with four likeable adjectives, for example, amusing or courageous, and two neutral adjectives, for example, quiet or ordinary. The unlikeable instructor was accompanied by four unlikeable adjectives, for example, boastful or greedy, and two neutral adjectives. The two neutral instructors were presented with six neutral adjectives. They then combined the above to create sets of four vignettes. In three of the sets liking was constant, and in the other three, liking varied orthogonally to performance rating. These instructors were rated on performance by the participants. Performance was significantly less accurately evaluated when liking was varied than when liking was held constant. This study indicates that liking was an integral dimension in evaluating performance.

A valuable behavioural measure of attitude is social distance which is also related to liking. Green (1981) stated that social distance was a particularly valuable measure when evaluating attitudes toward the elderly. She suggests that an elderly person may be positively evaluated if he/she is viewed in a low intimacy situation, for example, a pen and paper evaluation, but avoided if viewed in a high intimacy situation, such as personal interaction. Although not concerned with attitudes or the elderly Lassiter and Stone (1984) employed a potentially useful social distance measure to measure liking. The participants were 30 male and female students recruited from university summer classes and randomly assigned to one of three conditions. Participants watched a videotape with instruction to tally either fine units, natural units, or gross units of behaviour. After this task participants completed a questionnaire with one liking item embedded and finally, completed the behavioural measure. Participants were informed that one of the things of interest to the study was to compare impressions formed from observation compared to those based on interaction. Participants were led to a room containing two chairs with seats touching. Books were on one chair and the other chair was empty and had rollers.

The participants were told that the stimulus person must have stepped out and to have a seat while the experimenter went to find him. One minute later the experimenter entered the room and measured the distance between the two chairs. The mean distance for the fine unit condition was 47.1 cm, the mean distance for the natural unit condition was 57.8 cm, and the mean distance for the gross unit condition was 71 cm. Trend analysis indicated an almost perfect linear trend as predicted. Lassiter and Stone (1984) contend that because these distances paralleled the liking responses social distance measures liking.

In order to assess the validity of Lane's (1989) modified ATES, attitude - behaviour correspondence should be demonstrated. Measures should include liking, overall memory, memory for the kind of information remembered or memory bias, competence, and social distance. Social distance is defined as the physical distance between the chair of the target person and the chair of the participant.

Purpose

The purpose of the present study was twofold: to extend Fazio's (1986) process model of verbal attitude - overt behaviour correspondence within the context of attitudes toward the elderly, and to further develop Lane's (1989) ATES and assess its construct validity. In the first phase of the study 452 participants completed Lane's (1989) ATES with seven additional items, Snyder's (1974) Self - Monitoring Scale, and a measure of the amount of direct experience with the elderly.

Lane's (1989) ATES was utilized to measure attitude toward the elderly as it was shorter than commonly used attitude toward the elderly scales (e.g., Kogan, 1961), multidimensional, did not confuse attitude with fact, and has established reliability. Seven additional items were added to Lane's (1989) scale to see if it was meaningful to differentiate between the two personal attribute dimensions of optimism and congeniality.

Snyder's (1974) self - monitoring scale was also administered in the first phase of the study so participants could be divided into low and high self - monitors using a median split. Fazio (1986) and Snyder (1974, 1979) hypothesize that self - monitoring moderates attitude - behaviour consistency. Snyder and Swann (1976) found a significant attitude - behaviour correlation for low self - monitors but not for high self - monitors. Snyder and Kendzierski (1982) and Snyder and Tanke (1976) are other examples of atti-tude - behaviour correspondence moderated in this way.

A measure of the amount of experience with the elderly was included in the first phase because Regan and Fazio (1977) and Fazio and Zanna (1981) showed that direct experience with the attitude object increases attitude - behaviour consistency. Fazio and Zanna (1981) and Fazio (1986) postulated that experience with the attitude object increases accessibility of the attitude resulting in increased attitude - behaviour correspon-dence.

In the second phase of the study 46 male and 50 female participants were selected from the first phase on the basis of self - monitoring. The median score was 11.5, with a range of 2 to 19. The 2 x 4 between subjects design consisted of two levels of self - moni-toring (high and low) and four experimental conditions. Three experimental conditions involved evaluating an elderly target person: one with attitudes toward the elderly made salient, one with situational cues contrary to the participant's attitude, and one control. The fourth condition involved a young target person control.

To increase attitude salience, participants in the attitude salient condition completed Lane's (1989) modified ATES before listening to the interview tape. By completing the scale participants would be focusing on their attitudes toward the elderly. Snyder and Swann's (1976) results suggest that attitude salience increases attitude - behaviour corre-spondence. Fazio (1986) theorized that increasing attitude salience increases attitude

activation which in turn increases attitude - behaviour correspondence.

In the situational cues group, participants were informed that other students had rated the target person contrary to the participant's attitude toward the elderly. The participant's attitude was determined from a median split on the first dimension of attitude from the factor analysis of Lane's (1989) modified ATES. Participants that had scored below the median were informed that other students had rated the candidate favourably whereas participants that scored above the median were told that other students had been evaluating the candidate unfavourably. If high self - monitors are sensitive to social situations then they should moderate or temper their attitudes when presented with contrary cues as Snyder and Swann's (1976) participants did when contrary cues were presented which resulted in nonsignificant attitude - behaviour correspondence. On the other hand, low self - monitors are not sensitive to social situations and act in accordance with their attitudes. For low self - monitors there should be significant attitude - behaviour correspondence. Snyder and Swann (1976) presented contrary cues to participants which resulted in nonsignificant attitude - behaviour correspondence. Snyder and Swann (1976) suggested that participants presented with cues moderated their attitudes so that they would appear reasonable in a later discussion, resulting in no correspondence between attitude and behaviour. Though Snyder and Swann (1976) measured self - monitoring, they did not report the correlations for high and low self - monitors separately for each experimental condition. Hence Snyder and Swann's (1976) zero correlation for their contrary cue condition may be a negative correlation for high self - monitors cancelling out a positive correlation for low self - monitors. Fazio's (1986) process model would predict that situational cues would cause selective perception of the attitude object which would result in nonsignificant attitude - behaviour correspondence whether or not the attitude had been activated by self - monitoring.

The elderly target person control group was included to examine attitude - behaviour correspondence without the manipulations of salience or situational cues. Fazio (1986) states the moderating variable self - monitoring affects attitude activation such that attitude - behaviour correspondence is either minimized or maximized. Snyder and Swann (1976) found a significant attitude - behaviour correlation for low self - monitoring participants, and a nonsignificant attitude - behaviour correlation for high self - monitors.

The young target person control condition was included to compare evaluations of the young target person to the elderly target person. The evaluations of the young target person are indices of how people behave on the dependent measures in the same situation as the elderly target person control when old age stereotypes are not being used. Participants were randomly assigned to the different conditions which Crockett and Hummert (1987) suggest results in neutral means in the groups. Crockett and Hummert (1987) predict that a comparison of the mean scores between an elderly and a young control should not result in differences; however, there would be more variability of attitude in the elderly target person control group than the young target person control group.

The participants' task during the experimental phase was to rate the target person after listening to an audiotaped interview modeled after a similar interview used by Avolio and Barrett (1987). Their original interview, which was designed to present a neutral target, was modified to include four likeable, four neutral, and four unlikeable adjectives from Anderson (1969). These adjectives were included so that the target person could be viewed as favourable, neutral, or unfavourable depending upon how the "activated" attitude selectively biased perception of the target person. The interview controlled for differential experience levels, unemployment status, and nearness to retirement. The ages of the target persons were changed to 31 and 61. These ages were chosen to have a 30 year

range between the old and the young target person. Both the young and elderly target persons could then realistically have five years of supervisory experience. Finally, by choosing age 61, the older target person could work for two years and still return to his previous position before retirement at age 65. Nearness to retirement was controlled because participants may evaluate an elderly person unfavourably simply because they could not work for the company for an extended period of time, not because they hold unfavourable attitudes toward the elderly. Avolio and Barrett's (1987) job description and job description with personality attributes were not utilized in the present research because Avolio and Barrett (1987) suggest these conditions may have positively inflated the ratings of the job candidates resulting in a ceiling effect.

The dependent measures were aggregated to increase the stability and reliability of the measure. To examine the value of aggregating behaviours the attitude - behaviour correlations for the individual measures can be compared to the aggregate measure to examine any gains made as a result of aggregating and to ensure no information is lost by combining different measures as Carver (1989) suggested. As Ajzen (1987), Fishbein and Ajzen (1974), and Rushton et al. (1983) advocated, the outcome measure was an aggregate of the dependent measures: memory, memory bias, liking, competence, and social distance.

Memory for information about a target person as a measure of attitude has been utilized in recent studies. Buczek (1986) utilized memory to evaluate sexism. She used both the amount of information remembered and the type of information remembered. Snyder and Uranowitz (1978) utilized memory in a study examining the effects of pairing a target person with the stereotyped label of a lesbian. Kite and Deaux (1986) employed a memory measure to examine attitudes toward homosexuals. These studies demonstrated a link between attitudes and memory such that participants with unfavourable attitudes toward a

particular group remembered less about a person from that group. Furthermore, attitudes may influence the type of information remembered possibly indicating a memory bias.

Several studies have demonstrated that liking and competence can be useful as measures of attitude. Kite and Deaux (1986) demonstrated that liking was positively related to attitudes toward homosexuals. Further, Cardy and Dobbins (1986) illustrated that performance appraisal was influenced by the likeability of the target person. Avolio and Barrett (1987) and Connor et al. (1978) used measures of future potential and overall performance to assess the competence of older and younger job candidates. Because these studies demonstrated a relationship between liking and competence, competence was included as a behavioural measure of attitude.

Another important behavioural measure of attitude is social distance. In the present study, social distance was defined as the physical distance between the chair of the participant and the chair of the target person. Green (1981) suggests that a social distance measure is a particularly valuable one when evaluating the elderly because it examines a high intimacy situation, interaction. Lassiter and Stone (1984) utilized a potentially useful measure of social distance when they measured the distance participants sat away from the target person's chair.

Typicality of the target person was measured because Crockett et al. (1979) demonstrated that perceived typicality has an impact on the evaluation of an elderly target person. Fazio (1986) states that correspondence between the evaluation of the specific object and the general attitude will occur only if the specific object is perceived as typical of the general category.

Statement of Hypotheses

1. Factor analysis of Lane's (1989) modified ATES will result in one dimension reflecting intergenerational interpersonal behaviours and either one or two dimensions of personal attributes denoting contentedness with life. It is also anticipated that the addition of new items will increase the reliability of the personality attribute dimension(s).

2. Collapsed across conditions and consistent with Snyder and Swann (1976) it is expected that there will be a significant attitude - behaviour correlation for low self - monitors and a nonsignificant attitude - behaviour correlation for high self - monitors.

3. Within each experimental condition specific predictions can be made. a) A significant attitude - behaviour correlation will appear for low but not for high self - monitors in the elderly target control condition. b) It is expected that the salience condition will result in significant attitude - behaviour relationship for both high and low self-monitors based on Fazio (1986). c) Based on Snyder (1979) low and high self - monitors will respond differentially to situational cues. More specifically, high self - monitors with situational cues contrary to their attitude should use a moderation strategy similar to that used by Snyder and Swann's (1976) participants resulting in nonsignificant attitude - behaviour correspondence. On the other hand, low self - monitors with contrary situational cues should have significant attitude - behaviour correspondence.

4. Attitude score alone as measured by Lane's (1989) modified ATES will significantly predict the aggregate outcome measure in a regression analysis. Consistent with Fazio's (1986) process model each of the moderating variables salience, self - monitoring, typicality, situational cues, and direct experience will make a

significant contribution in accounting for more variance than the attitude score alone. Obviously, attitudes toward the elderly should not be correlated with or predict behaviours toward a young target.

5. In addressing the issue of a possible bias toward elderly persons, significant differences on the aggregate measure are not expected between the elderly target and the young target control groups. However, as Crockett and Hummert (1987) predict Hartley's (Kirk, 1982) test of homogeneity of variance should reveal more variability in the elderly control group.

Method

Participants

A total of 452 introductory psychology students completed Lane's (1989) modified ATES, Snyder's (1974) Self - Monitoring Scale, and a measure of experience with elderly people. The mean age of the sample was 21. Also, 62% of the sample were women and 38% were men. A total of 96 participants with a mean age of 19 were selected based on gender and a median split on Snyder's (1974) Self - Monitoring Scale (median=11.5, range=2-19). A total of 48 participants (24 female, 24 male) were selected as high self - monitors and 48 participants (26 female, 22 male) were selected as low self - monitors.

Design

The study was a 2 x 4 between - subjects design. There were two levels of self - monitoring, high and low and four experimental conditions comprising eight treatment combinations. The first condition consisted of an elderly target person with high attitude salience. The second condition was made up of an elderly target person presented with situational cues contrary to participant's attitude. The third condition was an elderly target person control group. The fourth condition was a young target person control group.

Materials

Attitudes toward the elderly were measured with a modified version of Lane's (1989) ATES. Lane's (1989) ATES consisted of ten items to which participants responded on a seven - point scale ranging from *strongly agree* (+3) to *strongly disagree* (-3). Factor analysis of the ten items resulted in two five - item factors: one reflecting intergenerational interpersonal behaviours and one reflecting contentedness with life. Cronbach's alpha for Factor 1 was .78 and .64 for Factor 2. The modified version consisted of 17 items: Lane's original ten items, three of which were reworded, and seven

additional items. Two items from Lane's first factor reflecting intergenerational behaviour were reworded to a favourable direction because all five items had an unfavourable connotation. For example, "Old people are too demanding of the young" was changed to read "Old people are not too demanding of the young." One item from the personal attributes dimension was reworded because it had loaded on both the optimism and congeniality factors in Lane's (1989) three factor solution. Seven items were created reflecting optimism and congeniality to investigate if the personal attributes dimension consisted of two factors or one general factor reflecting contentedness with life. The modified ATES is shown in Appendix A.

Snyder's (1974) 25 - item Self - Monitoring Scale (SMS) involves a true/false format with a higher score reflecting higher self - monitoring. Snyder (1974) reports a Kuder - Richardson 20 reliability of .70 and a test - retest reliability of .83 at a one month time interval. Snyder (1974) conducted four studies that demonstrated the convergent and discriminant validity of the SMS. Snyder and Gangestad (1986) cited over 25 articles (e.g., Snyder & Kendzierski, 1982) that have provided empirical support for hypotheses about the cognitive, behavioural, and interpersonal consequences of self - monitoring providing further evidence for the validity of the SMS. Factor analysis of the SMS generally results in three factors: expressive self - control, social stage presence, and other - directed self - presentation. Snyder and Gangestad (1986) argue that the three factors tap one latent variable reflecting a general self - monitoring factor. Snyder's (1974) SMS is shown in Appendix A.

The measure of direct experience was adapted from Martin (1988). It consisted of two multiple choice questions tapping the frequency of contact with the elderly. The values from the two questions were summed. This measure is in Appendix A.

The audiotapes created for the present research consisted of two 12 minute interviews modified from Avolio and Barrett (1987). The interview script was constructed to reflect an actual interview one might encounter in industry. The interviewer followed a list of structured questions that cued six supervisory dimensions that relate to supervisory effectiveness. The interview was identical for all experimental conditions except for the age (31 or 61) reported during the first few minutes of the tape. The voice of both target persons was actually generated by one 55 year old man. The target person presented 4 positive, 4 neutral, and 4 negative trait adjectives about himself taken from Anderson (1968). The positive adjectives were rated greater than 500, the neutral were between 275 and 325, and the negative were below 125 on a likeability scale from 0 - 600. The adjectives used in the interview and the adjectives used in the memory measure are given in Table 1. A transcript of the interview is presented in Appendix B.

Avolio and Barrett's (1987) likert - type 7 - point evaluation scales were used to assess the target person's potential for performing the six supervisory functions, the extent to which the target person possessed six requisite supervisory attributes, and the target person's future potential and overall interview performance. Further, the likeability and typicality of the target person was assessed for a total of 22 items. The one item assessing typicality was created for the present study. This questionnaire is in Appendix C

The recognition task consisted of 80 items (informational statements) to which participants responded on a 7 - point scale ranging from *definitely occurred* (7) to *definitely did not occur* (1). A total of 56 of these items were taken from Avolio and Barrett (1987), 28 had occurred in the interview and 28 had not. An additional 24 items were included; 12 were the Anderson (1969) adjectives that had been presented in the interview, 12 were the Anderson (1969) adjectives that were similar on the likeability score but not presented in the interview. The 24 adjectives are given in Table 1. For the total memory measure the 40

Table 1.

Adjectives from Anderson (1969) rated for likeability on a scale of 0 - 600

Adjectives utilized in interview script		Adjectives similar in likeability utilized in memory measure	
likeable adjectives	likeability rating	likeable adjectives	likeability rating
reasonable	500	truthful	545
warm	522	thoughtful	529
understanding	549	interesting	511
open-minded	530	cheerful	504
neutral adjectives	likeability rating	neutral adjectives	likeability rating
outspoken	313	shy	291
conservative	295	blunt	287
methodical	325	forward	318
average	284	discriminating	283
unlikeable adjectives	likeability rating	unlikeable adjectives	likeability rating
self-centered	96	ill-tempered	95
intolerant	98	unforgiving	98
ill-mannered	95	jealous	104
conceited	108	humorless	101

items (informational statements and adjectives) that did not occur were recoded such that the 7 - point scale was reversed. This means a score of 7 was changed to 1, a score of 6 to 2 and so forth; conversely a score of 1 was changed to 7 and so forth. Therefore the sum of the 80 items represented the total memory score with a higher score reflecting a more accurate memory. The memory bias measure was the total score of the likeable adjectives minus the total score of the unlikeable adjectives independent of whether the adjectives were actually presented in the interview. The eight neutral items were excluded. One question asked for the birthday of the target person as a manipulation check for age. This 80 - item measure is available in Appendix C.

The social distance measure consisted of the distance (in cm) the participant moved his / her chair from the empty chair that supposedly belonged to the target person.

Procedure

Phase 1. A total of 452 participants completed Lane's (1989) modified ATES, a measure of direct experience (modified from Martin, 1988), and Snyder's (1974) self - monitoring questionnaire. Participants were approached during introductory psychology classes. They were asked to complete a survey about attitudes toward the elderly, and to answer some questions about how they act in different situations. While participants were completing the questionnaires they were asked to sign up for an additional study (phase 2) to be conducted a few weeks later.

Phase 2. Forty-eight high self - monitors and 48 low self - monitors were selected from the list of students who agreed to participate in a further study. They participated individually in a study purporting to evaluate job candidates by having participants listen to an audiotape of a "job interview." When subjects were initially contacted the participants were told the purpose of the study was to investigate differences between assessments of students and professionals in evaluating a job candidate. The participants were randomly assigned (within the constraint of balancing for sex) to one of four experimental conditions. In the first condition participants' attitudes were made salient by completing Lane's (1989) modified ATES before listening to the audiotape of the elderly target person. In the second group participants were given situational cues contrary to their attitude on the first dimension, before they listened to the audiotape of the elderly target person. Participants were told either their peers had been giving the job candidate favourable or unfavourable evaluations. The third group was the elderly target person control in which participants did nothing before listening to the audiotape. The fourth group was the young target person control in which participants listened to the audiotape of the young target

person.

After the participant had listened to the interview he/she completed 22 items modified from Avolio and Barrett (1987) evaluating the target person's competence. This measure also included a measure of typicality and likeability. Participants also completed an 80 item test of recognition memory, and finally the behavioural social distance measure. For the behavioural measure participants were told that they would now be meeting the target person to see if direct interaction would change the evaluation based on the audiotape interview. They were led to a nearby room in which two chairs were facing each other 12 inches apart. The participants were told that the target person must have stepped out, and they should please have a seat while the experimenter looked for him. One minute later, the experimenter entered the room and measured how far away the participant sat from the wall. Coloured gradients two inches apart were set up along the wall. The experimenter simply glanced at the gradients and noted the colour as the distance measure. This was performed unobtrusively. Participants in all groups but the salience group completed Lane's (1989) modified ATES again to obtain a measure of test - retest reliability. The participant was then debriefed (see Appendix D for all instructions and debriefing).

Results

Factor analysis using the principal components method (SPSS-X, 1986) and restricted to three factors was conducted on Lane's (1989) modified ATES for 452 participants. The scores were recoded such that a high score on all of the items reflected a favourable attitude. Because the statements reflecting personal attributes varied in terms of which of the five items loaded on Factor 2 as opposed to Factor 3 in Lane (1989) the preliminary analysis was restricted to three factors which collectively accounted for 45.3% of the variance. The correlation matrix is given in Table 2. The accumulated communalities for the three factors were iterated and a varimax rotated factor matrix produced which is shown in Appendix E. A dual criterion of a minimum factor loading of .40 on one factor and a maximum factor loading of .30 on either of the other two factors was established to select appropriate items on the dimensions. Three of the four items that met the dual criterion on the first factor were the same as those constituting Lane's (1989) first factor; the fourth, item 5, was a new item. Two of the three items on the second factor were the same as those constituting Lane's (1989) second factor; the third item, item 2, was a new item. The one item on the third factor had previously been on Lane's (1989) first factor, but this item had been reworded. The three factor solution was not considered the optimal one. Seven items met the dual criterion as compared to ten in Lane's (1989)two factor solution. Cronbach's alphas were .72 and .58 for Factor 1 and Factor 2 which were lower than Cronbach's alphas on Lane's (1989) two factors which were .77 and .63 respectively. Also, the third factor had only one item and it had previously weighted on Factor 1 in Lane (1989) and so was conceptually redundant to the first factor.

Consequently the two factor solution as shown in Table 3 was conducted. The two factors accounted for 36.7% of the variance with Factor 1 and 2 accounting for 28.1% and 8.6% of the variance respectively. Three of the five items on Factor 1 (3, 9, and 13) were

Table 2.

Intercorrelations of 17 attitudes toward the elderly items for 452 participants

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1																	
2	-264																
3	-095	124															
4	170	-244	-082														
5	-257	276	337	100													
6	-268	377	219	-143	372												
7	176	-142	-224	308	-236	-172											
8	-190	294	270	-225	364	344	-271										
9	-194	224	410	-117	402	328	-309	414									
10	138	-134	-297	078	-224	-142	212	-148	-306								
11	-202	277	236	-131	393	340	-250	349	401	-104							
12	446	-255	-169	234	-301	-357	249	-250	-293	213	-272						
13	-163	232	467	-132	435	228	-244	313	448	-254	348	-171					
14	036	-003	-141	074	-096	-020	127	-013	-080	251	-037	103	-165				
15	239	-043	-148	222	-166	-155	229	-142	-201	205	-177	313	-138	341			
16	-218	194	283	-146	395	281	-309	255	409	-190	307	-314	383	-175	-344		
17	204	-148	-131	212	-176	-185	245	-180	-223	159	-251	291	-138	021	296	-254	

Note: Scores have not been reversed for this table;
decimals have been removed.
The mean correlation for items on factor 1 was .36;
the mean correlation on factor 2 was .26.
$r > .093, p < .05$
$r > .121, p < .01$

consistent with Lane (1989). These three items were the same as those in the three factor

solution discussed above. The two items from Lane (1989) that did not meet the criterion

in the present study had been reworded. The other two items that met the criterion on the

first factor "Most old people have a cynical outlook on life" and "Most old people are not

good listeners" were conceptually congruent with Lane's (1989) first factor reflecting

interpersonal intergenerational behaviours. Factor 2 combined the personal attributes

dimensions in that four of the five items (1, 4, 12, and 17) were the same as those on

Lane's (1989) second factor reflecting contentedness with life. An additional item "Old

people are confident with their ability to cope" also met the dual criterion and was conceptually congruent with this factor. It should be noted that the personal attribute items loaded on the second factor in both the two and three factor solutions in this study. The two factor solution utilized more items (12 as compared to 7) and had greater reliability on the second factor (.63 as compared to .58) than the three factor solution.

Factors 1 and 2 were not independent ($r=.36$, $p<.001$) and so they were combined. Furthermore, Snyder and Gangestad (1986) argue that if the majority of items load positively at .15 or greater on the first factor on the unrotated factor matrix and have bipolar weightings on the other factors then the factors could be combined. They also argue that if the factors are not orthogonal they may be combined. All of the items in the present study weighted positively greater than .15 on the first factor in the unrotated factor matrix and weightings on the second factor were bipolar. In fact all relevant items loaded at greater than .40 on the first factor of the unrotated factor matrix, with the exception of one item that loaded at .32, with a mean factor loading of .51.

The factor coefficients were derived from the scores of 452 participants. Included were the 10 items that met the dual criterion in addition to two items (11 and 16) that had been previously excluded because they were weighted on both factors: these items were summed. Cronbach's alpha for the 12 items was .81. The analyses which follow utilized this summary score as the measure of attitudes toward the elderly. Test - retest reliability for the combined factor by condition and overall is presented in Table 4. Lane's (1989) modified ATES was readministered at the end of the session, except in the salience condition. Note that 12 participants did not complete the ATES the second time due to time constraints.

Item 7 on the 80 - item memory test required participants to recognize the target person's birthday, which was included as an age manipulation check. The mean score on

Table 3.

Principal components 2 factor analysis of 17 attitudes toward the elderly items

variables		varimax rotated factor matrix	
		I	II
1.	Older people look forward to the future as much as any other people.(L)	.12	.52*
2.	Old people are not interested in socializing with other people.(N)	.27	.34
3.	Old people are critical of the younger generation.(L)	.60*	.06
4.	Older persons are good with children.(L)	.09	.40*
5.	Most old people have a cynical outlook on life.(N)	.58*	.25
6.	Most older people do not have a broad scope of interests.(N)	.35	.39
7.	Most old people are very relaxing to be with.(L)	.31	.36
8.	Most old people are not good listeners.(N)	.45*	.30
9.	Old people meddle in other people's affairs.(L)	.65*	.25
10.	Old people are not too demanding of the young.(LR)	.39	.19
11.	Older people are typically distrustful of others.(N)	.46	.31
12.	Older people love life.(L)	.18	.65*
13.	Most older people are constantly complaining about the behaviour of the younger generations.(L)	.70*	.08
14.	Most old people do not make excessive demands for love and reassurance.(LR)	.15	.13
15.	Old people are confident with their ability to cope.(N)	.15	.45*
16.	Old people expect the worst to happen.(N)	.46	.36
17.	Most old people have close friendships.(LR)	.16	.43*
	% total variance	28.10	8.60
	Cronbach's alpha	.72	.63

Note: (L)=Lane (1989) item, (LR)= Lane(1989) reworded, (N)=new item
N=452
*met dual criterion

Table 4.

Test-retest reliability

	salience	situational cues	elderly control	young control
high self-monitors	734* (12)	482 (9)	753* (9)	503 (11)
low self-monitors	840* (12)	648* (11)	817* (9)	939* (11)

overall	high self-monitors	low self-monitors
708* (84)	582* (41)	800* (43)

Note. The number of participants per cell is in parentheses;
decimals have been removed.
*p<.05

this item was 5.7 indicating that the participants recognized the target's birthday and thus the age manipulation was successful.

The dependent measures of liking, competence, total recognition memory, memory bias, and social distance were converted to standard scores using the mean and standard deviations derived from 96 participants. These different scales were converted to standard scores so they could be added. The aggregate measure, the dependent variable in all of the following analyses, was the mean of these standard scores. As predicted there was a modest overall attitude - behaviour correlation ($r=.203$, $p<.05$). As predicted the correlation for high self - monitors ($r=-.007$) was not significant and the correlation for low self - monitors ($r=.377$, $p<.05$) was significant. The difference between the two correlations was significant ($p<.05$). The correlation coefficients between attitude and the aggregate measure for each of the eight conditions are shown in Table 5.

Table 5.

Attitude - behaviour correspondence by condition

	salience	situational cues	elderly control	young control
high self-monitors	.600**	-.062	-.072	-.354
low self-monitors	-.438	.334	.761*	.060

Note: Two outlyers that were greater than 2 standard deviations beyond
the predicted score were removed from the high self-monitoring salience group;
there were no outlyers in the other conditions.
n=12 per condition
* $p<.05$
** $p<.05$, ($r=.489$, when the outlyers were included).

As predicted there was a significant attitude - behaviour correlation for high self -
monitors in the salience group only. On the other hand, the pattern of results for low self -
monitors was not always consistent with predicted outcomes. As expected, however, there
was a substantial, significant attitude - behaviour correspondence in the elderly control
group and no correspondence in the young control group. Attitude - behaviour correspon-
dence was not significant in the salience or situational cues condition; indeed although not
significant the correlation in the salience condition was in the wrong direction.

A comparison of high self - monitors to low self - monitors in the four groups
revealed, as predicted, no attitude - behaviour correspondence for the high self - monitors
as compared to substantial attitude - behaviour correspondence for the low self - monitors
in the elderly target control group. The high and low self - monitors in the situational cues
group had nonsignificant attitude - behaviour correspondence. Significant attitude -
behaviour correspondence was expected for both high and low self - monitors in the
salience condition, but it only occurred with the high self monitors. As expected there was
no attitude - behaviour correspondence for high or low self - monitors in the young target

control groups.

To investigate potential sex differences a between - subjects ANOVA with two levels of sex, two levels of self - monitoring, and four levels of group was conducted. This analysis revealed no significant interactions and no main effect for sex. Also, a hierarchical regression analysis with attitude entered on the first step and sex entered on the second step yielded no significant effects. Hence the following analyses were collapsed over sex.

In order to assess the impact of the moderating variables in conjunction with attitude a preliminary hierarchical, two step, multiple regression analysis was conducted. The criterion variable was the aggregate behavioural measure. The predictor variables were: attitude score entered on the first step and the continuous variables of self - monitoring, typicality, direct experience and the categorical variable of group (salience, situational cues, and elderly control) entered on the second step. When attitude score was entered on the first step the model was not significant. As shown in Appendix F the overall model was significant after the second step ($F(6,65)=4.39$, $p<.001$) accounting for 29% of the variance. The two predictor variables typicality and group type (salience) were significant regardless of the order of entry.

It should be remembered that if self - monitoring is an important moderating variable, the model should be nonsignificant for high self - monitors but significant for low self - monitors because attitude is activated for low self - monitors but not for high self - monitors. Hence, the same analysis was repeated separately for high and low self - monitors. Indeed, the regression analysis using only high self - monitors yielded a nonsignificant model accounting for 20% of the variance with salience ($t=2.52$, $p<.05$) the only variable making a significant contribution. On the other hand the regression analysis for low self - monitors revealed a significant overall model after the first step with only attitude entered, ($F(1,34)=5.64$, $p<.05$) which accounted for 14% of the variance. The model

was also significant after the second step ($F(5,30)=5.61$, $p<.001$) which accounted for 48% of the variance. The increase in variance accounted for was significant ($F=4.95$, $p<.01$). The correlation matrix for the variables is given in Table 6. In addition, as can be seen in Table 7 the predictor variables attitude and typicality were significant.

Table 6.

Correlation matrix for variables in the regression analysis for low self-monitors

	aggregate	attitude	group (salience)	group (cues)	typicality
attitude	.377*				
group (salience)	.339*	.030			
group (cues)	-.280*	-.153	-.500*		
typicality	.529*	.024	.214	-.395*	
direct experience	.045	.098	-.379*	.131	-.008

*$p<.05$

Table 7.

Regression analysis for low self-monitors

independent variables		unstandardized coefficients	standard error	t-value
attitude		.110	.041	2.703*
typicality		.155	.044	3.478**
direct experience		.044	.052	.850
group type:	salience	.377	.187	2.016
	cues	.139	.188	.739

*$p<.05$

Additional separate regression analyses on both high and low self - monitors examined attitude by group type interactions. Hierarchical regression analyses with attitude entered on the first step, group type entered on the second step, and attitude by group interactions entered on the third step were carried out. Again, for the high self - monitors the model was not significant with salience the only contributor after the second step

(t=2.51, p<.05). The analysis on the low self - monitors resulted in a significant overall model after the first step with only attitude entered (F(1,34)=5.64, p<.05) accounting for 14% of the variance. The model was also significant after the second step (F(3,32)=3.65, p<.05) accounting for 25% of the variance. Attitude was the only significant predictor (t=2.30, p<.05) after the second step. The increase in the variance from step 1 to step 2 was not significant. After the third step the overall model was significant (F(5,30)=4.27, p<.01) which accounted for 32% of the variance. The increase in the variance was significant (F= 4.13, p<.05) indicating the groups differentially affected attitude - behaviour correspondence for low self - monitors, as indicated in Figure 2. As indicated in Table 8 attitude, salience, and the attitude by salience interaction were significant.

To determine if the mean aggregate score differed across the eight conditions a between-subjects analysis of variance with four levels of group type (salience, situational cues, elderly control, and young control) and two levels of self - monitoring (high and low) was conducted. It resulted in a significant main effect for group type (F(3,91)=3.75, p<.01). There was no main effect of self - monitoring and no self - monitoring by group interaction. A planned comparison on the aggregate measure revealed no differences between the elderly control group and the young control group. Further, Hartley's test for the homogeneity of variance (Kirk, 1982) also indicated no differences between the two groups. Post hoc analysis using Fisher's LSD test (Kirk, 1982) indicated that the mean of the aggregate measure for the salience group was significantly greater (p<.05) than the means for the situational cues, elderly control, and young control groups as shown in Table 9. This indicates that participants demonstrated a positive bias toward the elderly in the salience condition.

Figure 2.

Group by attitude interactions from regression analysis for low self-monitors
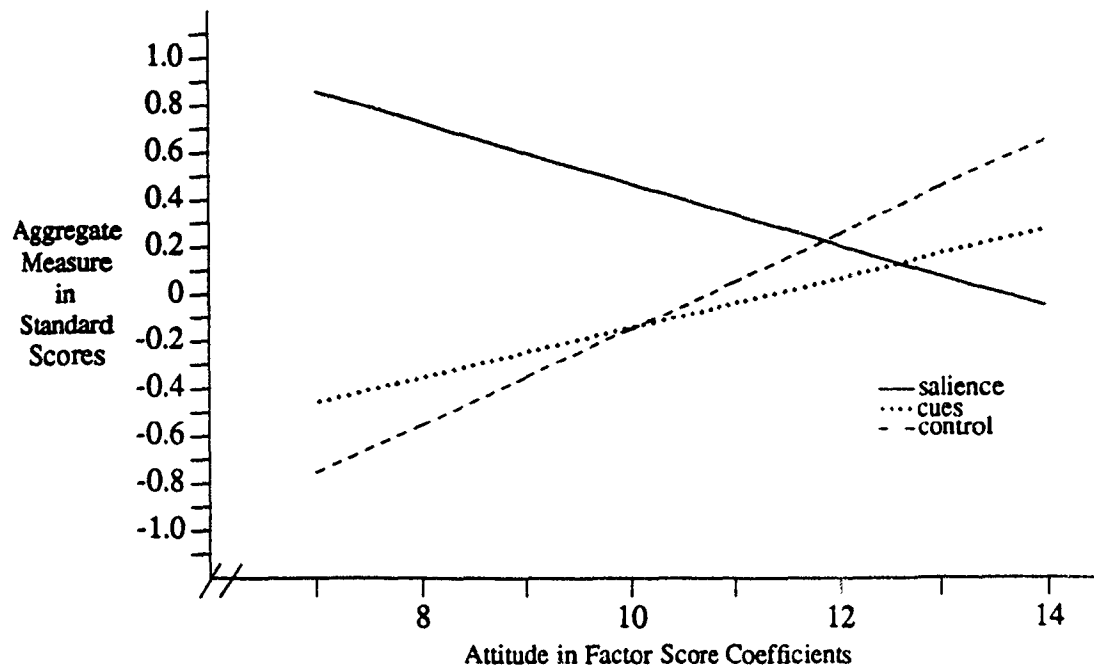
Table 8.

Regression analysis for low self-monitors with interactions

independent variables	unstandardized coefficients	standard error	t-value
attitude	.202	.061	3.321**
salience	3.930	1.265	3.105**
cues	.968	1.063	.911
attitude by salience	-.331	.115	-2.874**
attitude by cues	-.096	.099	-.976

**p<.01

Table 9.

Means for group type for aggregate measure (standard scores)

	n	salience	situational cues	elderly control	young control
overall	96	.32	-.09	-.11	-.12
high self-monitors	48	.27	-.07	-.27	-.03
low self-monitors	48	.37	-.11	.05	-.21

Discussion

One purpose of the present study was to extend Fazio's (1986) process model of attitude - behaviour correspondence within the context of attitudes toward the elderly. Figure 3 shows Fazio's (1986) model in uppercase, with the moderating variables from the present study in parentheses. Fazio (1986) advocates the use of moderating variables to maximize or minimize attitude - behaviour correspondence.

Figure 3.

Fazio's process model (1986, p.212) indicating the moderating variables in parentheses
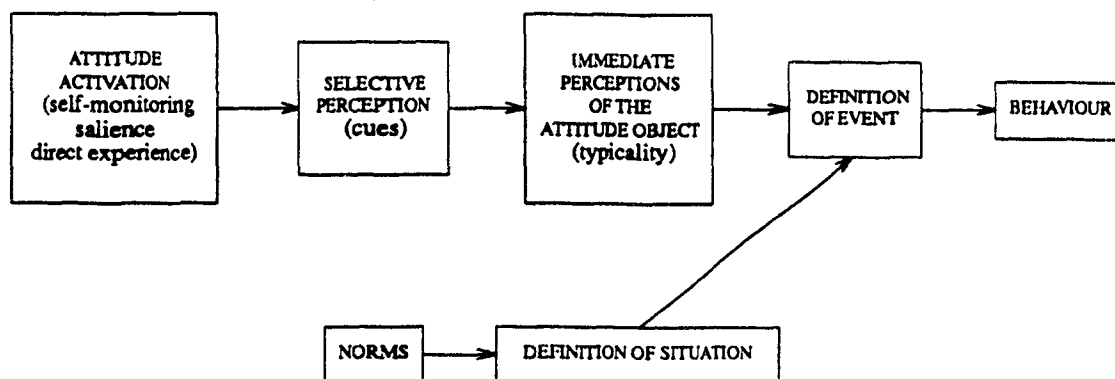
It was hypothesized that there would be significant but low attitude - behaviour correspondence before considering moderating variables. Furthermore, consistent with Fazio's (1986) model, the moderating variables self - monitoring, typicality, situational cues, direct experience, and salience were all expected to make a significant contribution in accounting for more variance than the attitude score alone. There was significant but low attitude - behaviour correspondence overall and the moderating variables increase the variance accounted for, but only for low self - monitors. The following discussion examines the moderating variables in turn and their contribution in predicting behaviour.

Fazio (1986) states that the moderating variable self - monitoring, may relate to attitude - behaviour correspondence by influencing attitude activation. Snyder (1979) describes individuals who are high in self - monitoring as sensitive to others in social situations. They use cues from others as guidelines to regulate and control their own social behaviour. Low self - monitors, however, regulate and control their behaviour from within, that is, by their affective states and attitudes. Fazio (1986) explains that given the greater functional value of attitude for low self - monitors, their attitudes are more easily and quickly activated than is typical for high self - monitors. A comparison of the data for high and low self - monitors in the elderly target control group is crucial in an examination of this point. A comparison of the correlations for high and low self - monitors in the elderly target control group reveals, as predicted, no attitude - behaviour correspondence for the high self - monitors and substantial attitude behaviour - correspondence for low self - monitors. Though there was a small overall attitude - behaviour correlation, Snyder and Swann's (1976) finding that the overall attitude - behaviour correlation was significant for low self - monitors and not significant for high self - monitors was replicated.

Another interesting difference between high and low self - monitors was that low self - monitors demonstrated a significantly greater ($p<.05$) test - retest reliability of .80 than high self - monitors who had a test - retest reliability of .58. It may be that high self - monitors do not demonstrate attitude - behaviour correspondence because they are less reliable. Furthermore, by differentiating participants on the basis of self - monitoring the other moderating variables enhanced attitude - behaviour correspondence for low self - monitors but not high self - monitors. Moreover, for low but not high self - monitors, attitude by group interactions in the regression analyses significantly increased the variance accounted for which indicated that for low self - monitors the experimental conditions affected attitude - behaviour correspondence. Although attitude by group interactions

were not significant for high self-monitors, there is some evidence that attitude - behaviour correspondence was different across the experimental conditions for high self-monitors. These results support Fazio's (1986) belief that low self - monitors have their attitudes activated more easily than high self - monitors. This study demonstrates how critical self - monitoring is for attitude - behaviour correspondence which, in turn, has implications for past studies and reviews (e.g., Weinberger and Millham, 1975; Wicker, 1969) that suggested little or no relation between attitude and subsequent behaviour.

Another significant predictor variable for low self - monitors in the present study was typicality. This result was consistent with Crockett et al. (1979) who found typicality was an important variable in attitude - behaviour correspondence. Fazio (1986) states that the target person must be perceived as belonging to the attitude category before attitudes can be activated. In the present study, however, typicality was only an important predictor for low self - monitors. This suggests a refinement of Fazio's (1986) model such that categorization becomes important after the activation step. For high self - monitors, whose attitudes were presumably not activated as indicated in the above discussion, categorizing the target person as a typical or an atypical elderly person was not important because there was no attitude - behaviour correspondence. For low self - monitors, who presumably activated their attitudes, typicality was an important predictor of the aggregate measure. This indicates that categorization becomes important after activation and categorization itself is not sufficient to activate attitude. Perhaps categorization becomes important at the "immediate perceptions of the attitude object" step. Consistent with Fazio's (1986) model typicality is an important part of attitude - behaviour correspondence, but it appears only to be important after the attitude is activated.

Situational cues contrary to participants' attitudes were presented to investigate both Snyder's (1979) self - monitoring construct and the "selective perception" step in

Fazio's (1986) process model. Based on Snyder and Swann (1976) high self - monitors with situational cues contrary to their attitude should have nonsignificant attitude - behaviour correspondence because participants temper their attitudes whereas the low self - monitors with contrary situational cues should have significant attitude - behaviour correspondence. Fazio's (1986) process model, on the other hand, would predict that contrary cues should result in selective perceptions of the attitude object regardless of attitude activation. There was no attitude - behaviour correspondence for either high or low self - monitors in the situational cue condition. This, therefore, supports Fazio's (1986) view that situational cues cause selective perception of the attitude object, and thus, as in the present study, would minimize attitude - behaviour correspondence. There is an alternative interpretation of these data. Similar to typicality, situational cues may be irrelevant to high self - monitors because attitude was not activated. The correlations tor high self - monitors in the situational cues group and the elderly target control were both nonsignificant. The correlation for high self - monitors in the cues group may have been nonsignificant regardless of the contrary cues presented.

Fazio (1986) and Fazio and Zanna (1981) postulated that direct experience with the attitude object would increase attitude - behaviour correspondence because attitudes based on direct experience would be more accessible. This, however, was not supported in the present study. This could be because consistency of past experience was not measured as Zanna et al. (1980) suggest. Direct experience was not a significant predictor possibly due to the sample of participants. There was low variability of experience with the elderly; almost 80% of the sample scored between 6 and 8 on this measure ($M=6.7$, $sd=1.5$). Participants in Regan and Fazio's (1977) two studies had either direct experience or no experience with the attitude object. Furthermore, Fazio and Zanna (1978) state that their sample was intentionally chosen as one that would display a distribution concerning the

number of past direct experiences. Clearly the results in the present study could be attributed to the lack of variability and range on this measure.

Snyder and Swann's (1976) findings and Fazio's (1986) discussion led us to expect that the salience manipulation would directly activate attitude thus producing significant attitude - behaviour correspondence for both high and low self - monitors. In this condition only, consistent with Snyder and Swann (1976), and as predicted, there was a significant attitude - behaviour correlation for high self - monitors. Contrary to predictions, there was a nonsignificant correlation for low self - monitors in the salience condition. Though this result is puzzling, a difference in the salience manipulation itself between this study and Snyder and Swann (1976) may have produced this outcome. Snyder and Swann (1976) had participants reflect and organize their thoughts on affirmative action whereas participants in the present study completed the ATES a second time. Perhaps having attitudes measured such that they could have been used for a later comparison as opposed to thinking about them caused different responses on the dependent measure. Because participants' attitudes toward the elderly were measured immediately before they evaluated the elderly target person, low self - monitoring participants may have reacted to the demand characteristics of the situation by tempering their evaluations in an attempt to appear objective. High self - monitors, on the other hand, may have reacted to the demand characteristics of the situation by increasing their attitude - behaviour consistency. The low self - monitors try to follow their attitudes and believe in them but also believe in fairness. Because they want to follow their attitudes and yet be fair the low self - monitors were placed in a dilemma. As a result these participants overcompensated in their evaluations in an attempt to be fair resulting in no attitude - behaviour correspondence. This explanation was also offered by Snyder (1989) in a personal communication. It should also be noted that the mean aggregate score was significantly higher in the salience group

for both high and low self - monitors as compared to the other three groups. Perhaps participants thought they were in an age discrimination study which resulted in the positive bias. In gerontological studies Kogan (1979) and Lutsky (1980) advocated between subjects design when comparing an old target to a young target to minimize age salience which may result in biases toward the elderly. When age was made salient in this study, favourable biases toward the elderly were observed.

To replicate the salience condition an additional eight low self - monitors participants completed the experiment. Once again, a modest nonsignificant negative correlation (r=-.36) was observed. After these participants were debriefed they were asked what they thought the purpose of the study was and if the knowledge of the purpose affected their answers. A total of six of the eight participants thought the study was examing attitudes toward the elderly; they also said that their answers were not affected by this knowledge. This latter statement could be interpreted to suggest that participants "bent over backwards" trying to be fair or unbiased.

The present study has clearly demonstrated that Fazio's (1986) attitude - to - behaviour process model can be extended to include attitudes toward the elderly. The data indicated that self - monitoring affects activation. Salience also affected activation for high self - monitors, but the low self - monitors may have been caught in a dilemma of following their attitudes and being fair to the target person. Though direct experience did not contribute, this could be due to a lack of variability on this measure. Providing participants with cues contrary to their attitudes minimized attitude - behaviour correspondence which may have been caused by selective perception of the target person as Fazio (1986) suggests. Finally, a refinement of Fazio's (1986) model is suggested. Though typicality is an important predictor variable categorizing the attitude object as typical alone does not activate attitude. This is evidenced by the fact that typicality is not a significant predictor

for high self - monitors but was a significant predictor for low self - monitors. Thus typicality becomes important once attitude is activated, perhaps at the immediate perceptions of the attitude object stage.

Ajzen (1987) and Rushton et al. (1983) recommend aggregating behaviours to get a more stable and unbiased estimator of behaviour. Fishbein and Ajzen (1974) found that correlations for multiple - act behavioural measures were clearly better than correlations for single - act behavioural measures. Carver (1989) discusses combining distinct single act behavioural measures to reach a latent variable. He states that by assessing these manifestations additively they would be more likely to be tapping into the latent variable. Carver (1989) recommends testing the components separately as well as the composite index.

To examine the value of aggregating behaviours in this study the dependent measures were first correlated with each other and with the aggregate measure as given in Table 10. It was observed that only three of the measures, liking, competence, and memory bias were significantly and positively correlated with each other. A partial aggregate was created which utilized these three measures. Though the pattern of attitude - behaviour correspondence in the eight conditions for the partial aggregate was similar to the complete aggregate, the complete aggregate was more consistent with predictions and the attitude - behaviour correspondence was greater.

To further examine the value of aggregation in the present study, the attitude - behaviour correlations for the individual criterion variables as well as the aggregate measure for the eight conditions are given in Table 11. All correlations that met the predicted outcome in each of the eight conditions are presented in bold type. In discussing the relative value of individual outcome measures it should be emphasized that all correlations designated under column A should indicate positive, significant, attitude - behaviour

Table 10.

Intercorrelations of the aggregate measure and the dependent measures

	aggregate	liking	competence	memory	bias
liking	.67*				
competence	.77*	.69*			
memory	.44*	.02	.17		
bias	.56*	.28*	.36*	-.10	
social distance	.33*	-.13	-.09	.13	.01

N=96
*p<.05

correspondence whereas all correlations designated under column B should be nonsignificant. The aggregate measure provided a pattern of results more consistent with predictions. Further, the correlations were of greater magnitude for the aggregate measure. By aggregating the measure information was not lost from the individual measures. Overall, the aggregate measure provided a more consistent pattern of results. In this particular data set aggregation was a useful technique.

Another purpose of the present study was to further develop Lane's (1989) ATES and assess its construct validity. The scale was modified to include seven additional items to determine whether the two personal attribute dimensions constituted one or two factors. Further, the addition of new items should result in increased reliability.

Anastasi (1982) suggests assessing the construct validity of an attitude scale by demonstrating attitude - behaviour correspondence. The attitude - behaviour correlation in the low self - monitoring elderly target control condition clearly support the construct validity of Lanes' (10980) modified ATES.

Factor 1 in the present study consisted of five items: critical of the younger generation, cynical outlook, not good listeners, meddle, and constantly complaining about the younger generation which reflect intergenerational interpersonal behaviour. Despite the

Table 11.

Attitude - behaviour correspondence using aggregate and individual measures broken down by self - monitoring and group

	salience	situational cues	elderly control	young control
	high self-monitors			
	column A[a]	column B	column B	column B
aggregate	.60*	-.06	-.07	-.35
evaluation	.35	-.18	-.35	-.31
memory	-.05	.01	.15	-.01
social distance	-.07	.39	-.32	-.15
like	.44	-.32	.15	-.35
bias	.43	.02	.17	-.19
	low self-monitors			
	column A	column A	column A	column B
aggregate	-.44	.33	.76*	.06
evaluation	-.43	-.22	.56*	.31
memory	.12	.60*	.17	.11
social distance	.31	.24	.57*	-.55*
like	-.26	-.23	.24	.31
bias	-.86*	.39	.82*	-.38

column A - Predict positive attitude - behaviour correspondence.
column B - Predict no attitude - behaviour correspondence.
column A[a] - Two outlyers were removed from this group.
* $p<.05$

fact that Factor 1 was so consistent in Lane (1989) with the same five items meeting the dual criterion for the separate samples and the combined analysis, only three of these five items met the dual criterion in the present study. The two items that did not meet the criterion had been reworded. These reworded items, however, may have been confusing for participants to agree or disagree with because the meaning of the statement conveys a double negative (i.e., "not unfavourable"), for example, "Old people are not too demanding of the young," and "Old people do not make excessive demands for love and reassurance." The two new items on the first factor were "Most old people are not good listeners" and "Most old people have a cynical outlook on life." Both were conceptually

consistent with Lane's (1989) first factor of intergenerational behaviour.

The second factor in the present study also consisted of five items: look forward to the future, good with children, love life, confident with ability to cope, and have close friendships. Both the two factor and three factor solutions resulted in one personal attribute dimension which combined items reflecting both optimism and congeniality. Lane (1989) had found that the pattern of items constituting her second and third factors had varied across her three samples. The results of the present study provide independent evidence resolving the issue in support of one personal attribute dimension reflecting contentedness with life.

Contrary to Lane (1989) the Factors 1 and 2 were correlated and thus combined to constitute a 12 - item scale. Snyder and Gangestad (1986) advocate combining factors if the separate factors are all similarly associated with the criterion variable and the combined factor provides equal or more information. Carver (1989) urges researchers to test components separately to investigate if they are necessary and important. In the present study the factors were tested both individually and combined for the attitude - behaviour correlations and the regression analyses. Though the individual factors yielded results similar to the combined factor the composite index overall accounted for more variance than did any of the components. Another advantage of combining the dimensions was increased reliability for the combined factor (Cronbach's alpha = .81) than observed for the separate factors (Cronbach's alpha = .72 and .63 respectively).

The issue of bias, be it favourable or unfavourable, toward the elderly has given rise to a number of conflicting findings. Studies by Weinberger and Millham (1975) and Crockett et al. (1979) found a positive bias when evaluating a specific target person. Connor et al. (1978) found no clear differences between the ratings of the young and the elderly target person, whereas Avolio and Barret (1987) found the young target rated

more favourably than the elderly target. Recent reviews by Crockett and Hummert (1987), Green (1981), Kogan (1979), and Lutsky (1980) found conflicting results and concluded there was no evidence of negative stereotypes toward the elderly.

The discrepancies in the literature may be due to the methodological flaws in most of the research. Crockett and Hummert (1987) point out the transparency of the purpose of studies that ask participants to evaluate a target when the only salient characteristic is the target's age. Furthermore, Kogan (1979) points out that the demand characteristics are further magnified when a within - subjects design is employed. These procedures emphasize the salience of age, alerting the participants to the researcher's interest in age comparisons. Green (1980), Kogan (1979), and Palmore (1982) also comment that the psychometric properties of many of the questionnaires is unknown which limits the generality of the results. Another problem in the current research is the perceived typicality of the elderly target person. In Crockett et al.'s (1979) study the elderly target person was rated more positively than the young target person but was viewed as atypical. Specific targets may be viewed as exceptions to stereotypes.

Crockett and Hummert (1987) predict no differences on the comparison of the evaluations of a young target and old target because the favourable and unfavourable views expressed toward the elderly would cancel out resulting in an overall neutral mean, which would be no different from the evaluations of the young target. There would be, however, more variability in the elderly target group with a correlation between general attitude and the evaluations of the target. This, however, has not been observed in the literature (e.g., Weinberger and Millham, 1975). The present study utilized a between subjects design, a valid and reliable attitude scale, and moderating variables. In addition we aggregated the criterion variables for a more stable and reliable measure as suggested by Ajzen (1987), and measured the perceived typicality of the target person. The data in the present study

indicated no differences between the elderly and the young target condition on the aggregate measure or in variability. Furthermore, there was significant attitude - behaviour correspondence observed in the elderly control group for low self - monitors. It should be noted that in the salience condition there was a positive bias toward the elderly consistent with those found in studies using a within subjects design as reported by Crockett and Hummert (1987). It was also observed that typicality was an important predictor variable consistent with Crockett et al. (1979). The results of this study provide no evidence for any biases, favourable or unfavourable, toward the elderly.

The present study had several limitations. The target person in the present study was male which limits the generality of the findings. Likewise, the sample of participants consisted of first year university students. The sample size, per condition, was small (n=12). The salience condition may have created demand characteristics. Because their attitudes were measured immediately before evaluating the target person, participants may have been aware of the purpose of the study. This could have resulted in the significant correlation for high self - monitors and the nonsignificant correlation for low self - monitors.

This study made several theoretical, methodological, and content contributions. Theoretically, Fazio's (1986) model has been extended from social issues and physical objects to include attitudes toward the elderly, a minority group. Fazio's (1986) model has been refined such that typicality, or categorizing the attitude object, seems to be important after attitude activation, not before. The methodological contributions include demonstrating the value of aggregating behaviours to increase attitude - behaviour correspondence. Also the two factors of attitude were combined resulting in a better measure of attitude than the two separate factors. There were also several content contributions. The present research demonstrated the importance of moderating variables. Self - monitoring

in particular was a critical moderating variable which has implications for future research examining attitude - behaviour correspondence. Lane's (1989) modified ATES was a valid and reliable measure of attitude. Furthermore, the personal attribute dimensions of optimism and congeniality were combined on one factor. Finally, the present research found no evidence of bias, either favourable or unfavourable, toward the elderly and at the same time a significant attitude - behaviour relationship was apparent. Hence, it seems reasonable to suggest that research in gerontology should be incorporating social psychological theory when examining social psychological phenomena, such as attitude - behaviour correspondence.

Future research could focus on several different components of Fazio's (1986) model. Situational cues that are consistent with participant's attitudes could be presented to further investigate the selective perception step in Fazio's (1986) model. This could isolate whether situational cues are important after activation, or if activation is necessary. If high self - monitors had a positive attitude - behaviour correlation with the presentation of consistent cues then activation of attitudes is not necessary for situational cues to be effective. If high self - monitors had no attitude - behaviour correspondence with the presentation of consistent cues then activation is important for situational cues to be effective. To further investigate the differences between high and low self - monitors when attitudes are made salient participants could be asked to reflect on their attitudes prior to the presentation of the target person. If the actual measurement of attitudes caused the demand characteristics that resulted in no attitude - behaviour correspondence for low self - monitors, positive attitude - behaviour correspondence should be observed with the change in the manipulation. To assess the generality of the present study a female target could be presented. Also samples from different populations that have experience with the elderly persons could be included. Furthermore, Fazio's (1986) model could be further

extended to include other minority groups such as homosexuals or the mentally and/or physically handicapped. Direct experience could be manipulated, by giving students placements with the elderly, to assess its impact on activation to examine if indeed the lack of variability of experience with the elderly accounted for direct experience not being a predictor in this study. To examine the impact of typicality, the typicality of the target person could be manipulated. A target with stereotyped characteristics and a target with atypical characteristics could be presented for evaluation. If typicality is important for attitude - behaviour correspondence then there should be positive attitude - behaviour correlation for the "typical" target and not the "atypical" target person. Finally, it is important that future research examining attitude - behaviour correspondence include moderating variables, particularly self - monitoring.

References

Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *Handbook of Social Psychology* (pp. 798-844). Worcester, MA: Clark University Press.

Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behaviour in personality and social psychology. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (vol. 20, pp. 1 - 63). New York: Academic Press.

Anastasi, A. (1982). *Psychological Testing*. New York: Macmillan Publishing Co., Inc.

Anderson, N. H. (1968). Likeableness ratings of 555 personality - trait words. *Journal of Personality and Social Psychology, 9*, 272 - 279.

Avolio, B. J. & Barrett, G. V. (1987). Effects of age stereotyping in a simulated interview. *Psychology and Aging, 2*, 56 -63.

Buczek, T. A. (1986). A promising measure of sex bias: The incidental memory task. *Psychology of Women Quarterly, 10*, 127 - 140.

Cardy, R. L. & Dobbins, G. H. (1986). Affect and appraisal accuracy: Liking as an integral dimension in evaluating performance. *Journal of Applied Psychology, 71*, 672 - 678.

Carver, C. S. (1989). How should multifaceted personality constructs be tested? Issues illustrated by self - monitoring, attributional style, and hardiness. *Journal of Personality and Social Psychology, 56* (4), 577 - 585.

Cheek, J. M. (1982). Aggregation, moderator variables, and the validity of personality tests: A peer - rating study. *Journal of Personality and Social Psychology, 43*, 1254 - 1269.

Connor, C. L., Walsh, R. P., Litzelman, D. K., & Alvarez, M. G. (1978). Evaluation of job applicants: The effects of age versus success. *Journal of Gerontology, 33*, 246 -252.

Crockett, W. H. & Hummert, M. L. (1987). Perceptions of aging and the elderly. *Annual Review of Gerontology, 7*, 217 - 241.

Crockett, W. H., Press, A. N., & Osterkamp, M. (1979). The effect of deviations from stereotyped expectations upon attitudes toward older persons. *Journal of Gerontology, 34*, 368 - 374.

Fazio, R. H. (1986). How do attitudes guide behavior? In R. M. Sorrentino and E. T. Higgins (Eds.), *Handbook of Motivation and Cognition* (pp. 204 - 243). New York: The Guilford Press.

Fazio, R. H., & Zanna, M. P. (1978). Attitudinal qualities relating to the strength of the attitude - behavior relationship. *Journal of Experimental Social Psychology, 14*, 398 - 408.

Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude - behavior consistency. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 14, pp. 161 - 202). New York: Academic Press.

Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review, 81*, 59-74.

Green, S. K. (1981). Attitudes and perceptions about the elderly: current and future perspectives. *International Journal of Aging and Human Development*, **13**, 99 - 119.

Kilty, K. M. & Feld, A. (1976). Attitudes toward aging and toward the needs of older people. *Journal of Gerontology*, **31**, 586 - 594.

Kirk, R. E. (1982). *Experimental Design. Procedures for the Behavioral Sciences*. (2nd ed.). Monterey, California: Brooks/Cole Publishing Company.

Kite, M. E. & Deaux, K. (1986). Attitudes toward homosexuality: Assessment and behavioral consequences. *Basic and Applied Social Psychology*, **7**, 137 - 162.

Kogan, N. (1961). Attitudes toward old people: The development of a scale and an examination of correlates. *Journal of Abnormal and Social Psychology*, **62**, 44-54.

Kogan, N. (1979). Beliefs, attitudes, and stereotypes about old people, a new look at some old issues. *Research on Aging*, **1**, 12 -36.

Lane, M. K. (1989). Dimensions of attitude toward the elderly: A comparison of factor structures across three populations. Unpublished Manuscript.

Lassiter, G. D. & Stone, J. I. (1984). Affective consequences of variation in behavior perception: When liking is in the level of analysis. *Personality and Social Psychology Bulletin*, **10**, 253 - 259.

Lord, C. G., Lepper, M. R., & Mackie, D. (1984). Attitude prototypes as determinants of attitude - behaviour consistency. *Journal of Personality and Social Psychology*, **46**, 1254 - 1266.

Lutsky, N. S. (1980). Attitudes toward old age and elderly persons. In C. Eisdorfer, R.W. Besdine, J.E. Barren, B. Cristofalo, M.P. Lawton, & G.L. Maddox (Eds.), *Annual Review of Gerontology and Geriatrics* (pp. 287 - 335). New York: Springer Publishing.

Martin, D. M. (1988). Early and current experience as predictors of positive and negative attitudes toward the elderly. Unpublished Manuscript.

Maxwell, G. M., Cook, M. W., & Burr, R. (1985). The encoding and decoding of liking from behavioral cues in both auditory and visual channels. *Journal of Nonverbal Behavior*, **9**, 239 - 263.

McTavish, D.G. (1971). Perceptions of old people: a review of research methodologies and findings. *Gerontologist*, **11**, 90 - 101.

Palmore, E. B. (1982). Attitudes toward the aged: what we know and need to know. *Research on Aging*, **4**, 333 - 348.

Pedhazur, E. J. (1982). *Multiple Regression in Behavioral Research*. (2nd ed.). New York: CBS College Publishing.

Regan, D. T., & Fazio, R. H. (1977). On the consistency between attitudes and behavior: Look to the method of attitude formation. *Journal of Experimental Social Psychology*, **13**, 38 - 45.

Rushton, J. P., Brainer, C. J., & Pressley, M. (1983). Behavioral development and construct validity: The principle of aggregation. *Psychological Bulletin*, **94**, 18 - 38.

Snyder, M. (1974). The self - monitoring of expressive behavior. *Journal of Personality and Social Psychology*, **30**, 526 - 537.

Snyder, M. (1979). Self - monitoring processes. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 12, pp. 85 - 128). New York: Academic Press.

Snyder, M. (1989). A discussion about self-monitoring. Personal Communication.

Snyder, M. & Gangestad, S. (1986). On the nature of self - monitoring: Matters of assessment, matters of validity. *Journal of Personality and Social Psychology*, **51**, 125 -139.

Snyder, M. & Kendzierski, D. (1982). Acting on one's attitudes: Procedures for linking attitude and behavior. *Journal of Experimental Social Psychology*, **18**, 165 - 183.

Snyder, M. & Swann, W. B. Jr. (1976). When actions reflect attitudes: The politics of impression management. *Journal of Personality and Social Psychology*, **34**, 1034 - 1042.

Snyder, M. & Tanke, E. D. (1976). Behavior and attitude: Some people are more consistent than other. *Journal of Personality*, **44**, 510 - 517.

Snyder, M. & Uranowitz, S. W. (1978). Reconstructing the past: Some cognitive consequences of person perception. *Journal of Personality and Social Psychology*, **36**, 941 -950.

SPSS-X (1986). *User's Guide*, Toronto: McGraw Hill Book Company.

Tuckman, J. & Lorge, I. (1952). Attitudes toward older workers. *Journal of Applied Psychology*, **36**, 149 - 153.

Tuckman, J. & Lorge, I. (1953). Attitudes toward old people. *Journal of Social Psychology*, **37**, 249 - 260.

Weinberger, L. E. & Millham, J. (1975). A multi - dimensional, multiple method analysis of attitudes toward the elderly. *Journal of Gerontology*, **30**, 343 - 348.

Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. *Journal of Social Issues*, **25**, 41 - 78.

Zanna, M. P., & Fazio, R. H. (1982). The attitude - behavior relation: Moving toward a third generation of research. In M. P. Zanna, E. T. Higgins, & C.P. Herman (Eds.), *Consistency in Social Behavior: The Ontario Symposium* (Vol. 2, pp. 283-301). Hillsdale, NJ: Erlbaum.

Zanna, M. P., Olson, J. M., & Fazio, R. H. (1980). Attitude - behavior consistency: An individual difference perspective. *Journal of Personality and Social Psychology*, **38**, 432 -440.

APPENDIX A

Questionnaire package used to survey 452

Introductory Psychology Students

including Lane's (1989) modified ATES, Snyder's (1974) SMS, and

the direct experience measure.

PLEASE DO NOT SIGN YOUR NAME

This study is concerned with two issues: what people think and feel about elderly people and people's reactions to certain situations. The study is divided into four parts labeled 1, 2, 3, and 4.

Your attention to each item would be appreciated although you may omit a question if you find it objectionable. Of course you may stop at any time and you are not required to hand in the package if you do not want to. Please read all instructions carefully.

FOR THE PURPOSES OF THE STUDY, ELDERLY OR OLD PERSONS ARE DEFINED AS THOSE OVER AGE 65.

Part 1

Demographic Information

1. age _____

2. male _____   female _____

Part 2

The best answer to each statement below is your own **personal opinion.** We have tried to cover many different points of view; you may find yourself strongly agreeing with some of the statements and strongly disagreeing with other statements. There are no "right" or "wrong" answers. This is a study of personal opinion only.

Check the box marked +3 if you **strongly agree** with the statement.

Check the box marked +2 if you **moderately agree** with the statement.

Check the box marked +1 if you **slightly agree** with the statement.

Check the box marked 0 if you are **uncertain** about the statement.

Check the box marked -1 if you **slightly disagree** with the statement.

Check the box marked -2 if you **moderately disagree** with the statement.

Check the box marked -3 if you **strongly disagree** with the statement.

1. Older people look forward to the future as much as any other people.

+3	+2	+1	0	-1	-2	-3

2. Old people are not interested in socializing with other people.

+3	+2	+1	0	-1	-2	-3

3. Old people are critical of the younger generation.

+3	+2	+1	0	-1	-2	-3

4. Older persons are good with children.

+3	+2	+1	0	-1	-2	-3

5. Most old people have a cynical outlook on life.

+3	+2	+1	0	-1	-2	-3

6. Most older people do not have a broad scope of interests.

+3	+2	+1	0	-1	-2	-3

7. Most old people are very relaxing to be with.

+3	+2	+1	0	-1	-2	-3

8. Most old people are not good listeners.

+3	+2	+1	0	-1	-2	-3

9. Old people meddle in other people's affairs.

+3	+2	+1	0	-1	-2	-3

10. Old people are not too demanding of the young.

+3	+2	+1	0	-1	-2	-3

11. Older people are typically distrustful of others.

+3	+2	+1	0	-1	-2	-3

12. Older people love life.

+3	+2	+1	0	-1	-2	-3

13. Most older people are constantly complaining about the behaviour of the younger generations.

+3	+2	+1	0	-1	-2	-3

14. Most old people do not make excessive demands for love and reassurance.

+3	+2	+1	0	-1	-2	-3

15. Old people are confident with their ability to cope.

+3	+2	+1	0	-1	-2	-3

16. Old people expect the worst to happen.

+3	+2	+1	0	-1	-2	-3

17. Most old people have close friendships.

+3	+2	+1	0	-1	-2	-3

With how many persons age 65 or over do you have regular contact?

none_____ 1-5_____ 6-10_____ 11-15_____ 16+_____

Approximately how many times do you visit, phone, or write elderly people?

_____ once a week or more

_____ once or twice a month

_____ once every two or three months

_____ once or twice a year

_____ once a year or less

_____ never

when alone.

☐ ☐   12. In a group of people I am rarely the center of attention.

☐ ☐   13. In different situations and with different people,
I often act like very different persons.

☐ ☐   14. I am not particularly good at making other people
like me.

☐ ☐   15. Even if I am not enjoying myself, I often pretend to
be having a good time.

☐ ☐   16. I'm not always the person I appear to be.

☐ ☐   17. I would not change my opinions (or the way I do things)
in order to please someone else or win their favour.

☐ ☐   18. I have considered being an entertainer.

☐ ☐   19. In order to get along and be liked, I tend to be
what people expect me to be rather than anything else.

☐ ☐   20. I have never been good at games like charades or
improvisational acting.

☐ ☐   21. I have trouble changing my behaviour to suit
different people and different situations.

☐ ☐   22. At a party I let others keep the jokes and stories
going.

☐ ☐   23. i feel a bit awkward in company and do not show up
quite so well as I should.

☐ ☐   24. I can look anyone in the eye and tell a lie with
a straight face (if for a right end).

☐ ☐   25. I may deceive people by being friendly when I
really dislike them.

Part 4

The statements on the following pages concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is **true** or **mostly true** as applied to you, blacken the box under true. If a statement is **false** or **mostly false** as applied to you, blacken the box under false.

true false

☐ ☐   1. I find it hard to imitate the behaviour of other people.

☐ ☐   2. My behaviour is usually an expression of my true inner feelings, attitudes, and beliefs.

☐ ☐   3. At parties and social gatherings, I do not attempt to do or say things that others will like.

☐ ☐   4. I can only argue for ideas which I already believe.

☐ ☐   5. I can make impromptu speeches even on topics about which I have almost no information.

☐ ☐   6. I guess I put on a show to impress or entertain people.

☐ ☐   7. When I am uncertain how to act in a social situation, I look to the behaviour of others for cues.

☐ ☐   8. I would probably make a good actor.

☐ ☐   9. I rarely need the advice of my friends to choose movies, books, or music.

☐ ☐   10. I sometimes appear to others to be experiencing deeper emotions than I actually am.

☐ ☐   11. I laugh more when I watch a comedy with others than

APPENDIX B

Transcript of Interview

Interview Script

Background
information

Interviewer: Good morning. Why don't you have a seat while I get my things together. (Pause). Okay, my name is Frank Bradley. I see here from your job application that your's is John C. Peters

Interviewee: Yes, that's correct.

Interviewer: I have some other background information of yours that I'd like to check over before we begin. For instance, you are applying for a first level supervisory position. Correct?

Interviewee: Yes, that's correct.

Interviewer: Now, are you interested in a temporary full time position?

Interviewee: Yes, I am

Interviewer: It seems from what you have indicated on our application form that you are temporarily layed - off.

Interviewee: I would say an extended temporary lay - off. You see my employer or previous employer has decided to relocate my plant. You might say that they weren't doing very well here..... You know the costs always rising in Toronto and all of that ... well anyway when I was layed - off they told me to try and find another job because by the time they relocated and became operational it could be two years.

Interviewer: I see. Okay, that makes things a bit clearer.

Interviewee: You do know of some temporary supervisory positions in the area?

Interviewer: Yes, there are several possible opportunities we can look into, but first let me check some of this other information about your background.

Interviewee: Fine.

Interviewer: Okay, now let me see, you were born in Oshawa on February 17 (1928 or 1958), which makes you (pause) (61) or (31).

Interviewee: Yes.

Interviewer: You're currently married and living at 605 Morrison Street. Is that correct?

Interviewee: Yes, I have been living there several years.

Interviewer: Very good. I see you have received a Bachelor of Commerce in Business Administration from Carlton University.

Interviewee: Well, I actually had a dual major for awhile, but my degree was in Business Administration.

Transition into Interview Proper

Interviewer: Uh, I mentioned a few minutes ago some possibilities for temporary openings. Now, all those positions require at least five years experience supervising five to ten people. Does that cause any problems for you?

Experience

Interviewee: No not at all. As a matter of fact in my old company I had 15 employees directly responsible to me. And yes, I do have five years experience.

Test Score

Interviewer: Good. (Pause) Before I start asking some questions about your job experience I'd like to tell you how you performed on our exam last week. (Pause) Our test department has indicated that your performance was satisfactory and in the acceptable range.

Interviewee: Yea, I was pleased after taking the exam because I felt like I really knew a lot.

Interviewer: I'm glad to hear that. Well, if you have no questions regarding the exam I'd like to find out more about you.

Interviewee: Okay, I really don't have any specific questions.

Interview begins covering job dimensions and proto-types

Interviewer: Good. (Pause) Let me start by saying that the questions I have prepared hopefully will tap what you know about a supervisor's job. If I miss anything that you think is important please tell me.

Interviewee: Yes, if I think of anything I sure will.

Beginning Introduction to interview

Interviewer: Good. (Pause) What I specifically need to know today is how you as a supervisor dealt with certain situations. What some of the do's and don'ts in the job are and what you have found works best. Is that sort of clear?

Interviewee: yes I think I understand.

Interviewer: Oh, if you don't mind I'm going to jot down some notes on what you say. It helps me to remember exactly what you've told me.

Interviewee: That's fine with me.

Interviewer: Now, Mr. Peters there is a number of things important for supervisors to know no matter where they work. What I need to know is your reactions, feelings, or impressions regarding some of those things. Let me give you an example. (Pause) For instance, what do you

Dimension 1
ability to
plan
think makes a supervisor an effective planner on the job?

Interviewee: Hmmm. Well, I think there are a number of things that go into planning; especially effective planning. For example, I found that you have to be able to adjust to changing job conditions, otherwise you'll NEVER obtain your goals. Probably along with that is being flexible. What I mean is plan ahead and be flexible cause you never know what's going to come up... However, on the other side of the coin you better set your priorities (short pause) and stick to them even when other departments affect your planning, which they often do. I guess

unlikeable
adjective
I'm *self - centered*. Let's say realistically you look ahead, but I'll tell you I would rather plan for immediate problems because I get so into my own work that I forget to worry about everybody elses.

Interviewer: Would you say that is a bit risky? I mean sticking to immediate problems.

Prototype 2
Interviewee: Oh sure, I guess what I was saying was the things that typically happened. Actually, I'm considered pretty reserved, cautious person about plans and such and I always try and look ahead.

Interviewer: Can you think of anything else a planner should know?

Interviewee: Not off hand.

Dimension 2
ability to
communicate
Interviewer: I would guess that in any job one must be able to communicate with their co - workers. What I'd like to know is what you think makes an effective communicator. You can make your response specifically for the supervisory position, if you want.

Interviewee: Yea, that would make it a bit easier. I

guess for me, as a supervisor, it was important to tell
employees what they should or should not be doing. But you
shouldn't sy, "Do this because I say so". I think the
best way is to explain your reasons and the company's
reasons for policies and procedures and I try to be

likeable   *reasonable* about it. Because if they know why,
adjective   then there really is no reason for them to
                  screw up. Now, you can't do this once a
                  week and expect things to go their merry way.
                  You better communicate with them everyday both verbally
                  and by your actions. Also, communication is not just
                  downward to subordinates, you also need to sit down and
                  talk with your boss, developing period reports, planning
                  your strategies and I guess just to get some feedback on
                  where you're going.

Interviewer: Do you mean for annual reports also?

Interviewee: Sure annual reports, weekly reports and
even sometimes daily reports. All your reports can use
some suggestions to make them complete and more clearer.
I may even ask my boss for too much information sometimes,
but I'd rather be sure. You know.

Interviewer: From what your saying it doesn't seem that
you'd have any problems communicating in a company?

Interviewee: Yea, for the most part, but to be honest
I do hand my reports in late sometimes, especially when
we were geared up on a project.

Interviewer: I see. But overall communication does seem
to be pretty important for supervisors at least from your
description. Another thing that may be important is enjoying
the people on the job you work with especially interacting
with them. Do you think a supervisor has to enjoy the people
they work with especially interacting with them. Do you
think a supervisor has to enjoy the people they work with
to communicate with them?

Prototypes   Interviewee: Certainly, personally people on the job are
6 & 8   usually my friends and I like being with them a lot ...
                  I even spend a lot of time visiting them outside of work.
likeable   I'm a *warm* person. but there are limits and they should
adjective   respect you as their boss regardless of your personal feelings.
                  Do you understand what I mean?

Dimension 3   Interviewer: Yes, But one thing I would worry about is could
Administering   you administer policies and / or rules fairly and
Policy and   consistently?
Procedures

Interviewee: Yes, without any doubt in my mind.

Interviewer: Could you be more specific?

Interviewee: I think so? (Pause) Let me back track a bit. For instance, a supervisor has to know what the hell he's doing and that means knowing the policies and procedures of the company. I ALWAYS try to ask myself if my interpretations are consistent with company policy. Frankly, sometimes I know what they want but I'll use my own judgment if I think that's the best way to do things. But overall I'll follow the rules to the letter and I just don't always waste time explaining them over and over. (Pause) I would say the best way to handle policies is to set an example and try not to break any of the rules

unlikeable
adjective

you expect people to follow. I'm *intolerant* when someone breaks the rules. Let's say overall, people find me consistent and real quick on taking care of things when someone has screwed up.

Interviewer: It seems to me that maybe you would be a little uncomfortable about enforcing rules with ALL of your friends on the job. And that's understandable isn't it?

Prototypes
1 & 9

Interviewee: Yea it's understandable and I do like to be part of the group, but I also consider it important to be held in high esteem and if I was unfair I would loose out altogether.

Interviewer: I see. Then being able to separate your friendships from your woking relationships is an important part of any supervisor's job?

Interviewee: Yes, very much so.

Dimension 4
Member of
Management

Interviewer: Apart from that, are there other things that set a supervisor or manger apart from their employees?

Interviewee: Sure, there are a few things which are really important. One thing is giving orders. If you say what the company wants you've lost all authority. You got to support your orders but in giving them it's you that has to back them up. You know, I have found some situations where I couldn't support the company. Especially, in a situation where I really need to convince an employee to do something for their own good. That's just reality. Another thing that I consider important is telling management what your objectives are.

neutral

I'm *outspoken*. This can include

adjective	things that you feel will at some point slow down or even speed - up operations. What I mean to say is, a good supervisor does question policy and procedure.

Interviewer: In what way should you question policy?

Interviewee: Well, in terms of the intent of policy. Because you and I know that all situations are not black and white and to be effective you have to understand what you're doing.

Interviewer: If I had one of your employees here and asked them what they thought separated you or made you an effective supervisor what might they say?

Prototypes 7 & 10 neutral adjective	Interviewee: Hummm. (Pause) That's a hard one. Well, I would say that the guys at work see me as maybe more serious and reserved than everybody else, more *conservative* (Pause) Yea, they're always kidding me because I like quiet small get togethers versus big, loud parties. I think that's what they would say.

Interviewer: Okay, are there any other things that your workers might say about you in general? Maybe even people who might be a little closer to you.

Prototypes 12 & 13 unlikeable adjective	Interviewee: Yea, I think Frank or John, who are two guys that worked for me and were pretty close, would say that I probably do my best work when people are giving me some encouragement. I like to be encouraged and think it's important. I also know they would say that I like compliments, and probably say I'm *conceited*.
Dimension 5 ability to train	Interviewer: Sure. You seem to know your subordinates pretty well.

Interviewee: I guess so.

Interviewer: Do you think that helps you to be a good teacher or trainer?

Interviewee: Absolutely! But there are a lot of other things that go into it.

Interviewer: Why don't you go into them a little.

Interviewee: Okay. First of all I see training and employee development as both being important, so the first thing I'll do is sit down and clarify the performance I expect from EACH employee. You know, in terms of amount

standards and the company's overall objectives. Of course, the company's objectives are important too in terms of the worker knowing how they fit into the overall process. So I sit down with them and explain it. What it really takes is being there when they need you, I'm *understanding*, but sometimes I'm so busy that I just forget or can't be there to teach them everything. Maybe the most important thing to do is allow them to learn as much as they can so they can develop themselves.

likeable adjective

Prototype 11

Interviewer: Is it also important to YOU to be able to grow and develop in your job or in other words to learn new things?

Interviewee: Yes, I enjoy learning for learning sake and can't think of anything I wouldn't enjoy learning about. I try to be *open - minded.*

likeable adjective

Dimension 6 Departmental Administration

Interviewer: I see. Well it's nice to have a job you can continually explore new things, but realistically there are things you have to do day in and day out to keep things going smoothly. Can you tell me what are some of those "nuts & bolts" aspects?

Interviewee: Hmm. Okay, keeping a close eye on things that are going to cost you money and especially affect your annual budget. Along with that, you have to control your cost as best you can, even when things are really bad - off. companies usually have cost performance goals so you have to try and stick as close to them as possible, but I have said that it is easier to deal with the day to day problems. Of course, good paper work helps things go smoothly, but I'll get so wrapped up down on the floor that I let my paper work slide sometimes. I get *ill - mannered.* (Pause) Let's see, well I think an effective supervisor uses their head when they see that budgets have to be changed for the good of the department. (Short pause). I think that covers the important things I need to do.

unlikeable adjective

Interviewer: Mr. Peters, a little ways back you said you liked to learn about things. Could you add to that a little to help me clarify my notes?

Prototype 4

Interviewee: Yes. Let's say that people have always seen me as a curious type of person one who always wanted to find out new things about everything. I'm always asking questions, I guess.

Interviewer: Thank you. One other thing you mentioned regarding your attitude toward doing things, I think in

terms of planning?

Interviewee: Oh yea, uh I guess what I meant to say was that I'm the type of person who rarely does any thing reckless. You know step by step, inch by inch before I do something.

Interviewer: How would you describe yourself in a few words?

2 neutral
adjectives

Interviewee: I guess I would say *methodical* and just *average.*

Interviewer: I see. (Pause) Well, I think that covers the things I wanted some clarification on. Let me see (shuffles through notes) yes that about does it. (Pause) I guess I've been asking all the questions, is there anything which you need to know?

Interviewee: Hmmm (pause) not that I can think of off hand.

Interviewer: Well if you have no further questions then I guess we're done. Let me thank you for stopping by and I hope to have a confirmation for you on our decision sometime next week. So you should expect a call from us at that time. Okay?

Interviewee: Yes, that will be fine. And thank you.

APPENDIX C

Questionnaire package used to evaluate target person

including 22-item evaluation measure and the

80-item memory measure

Job Candidate Performance

1. How effective was the applicant in responding to the interviewer's questions?

	+3	+2	+1	0	-1	-2	-3	
extremely effective								not effective at all

2. What was your impression of the applicant's communication skills?

	+3	+2	+1	0	-1	-2	-3	
extremely good communication skills								extremely poor communication

3. How likeable did this applicant seem to you?

	+3	+2	+1	0	-1	-2	-3	
extremely likeable								not likeable at all

4. How effective would this applicant be in planning for the accomplishment of goals?

	+3	+2	+1	0	-1	-2	-3	
extremely effective								not effective at all

5. Would you expect this applicant to be capable of administering rules and policies in a fair and consistent manner?

	+3	+2	+1	0	-1	-2	-3	
extremely capable								not capable at all

6. Would you expect this applicant to be capable of training and developing subordinates?

	+3	+2	+1	0	-1	-2	-3	
extremely capable								not capable at all

7. To what extent did this applicant demonstrate knowledge
   of what was expected of them in a management role.

extensive knowledge of what was expected	+3	+2	+1	0	-1	-2	-3	did not demonstrate any knowledge at all

8. How effective would this applicant be in communicating
   to organizational members through oral or written channels?

extremely effective	+3	+2	+1	0	-1	-2	-3	not effective at all

9. Do you think that this applicant would be effective in
   running and/or administering departmental functions?

extremely effective	+3	+2	+1	0	-1	-2	-3	not effective at all

10. How well would you expect this applicant to perform in a
    supervisor's training program?

extremely well	+3	+2	+1	0	-1	-2	-3	not well at all

11. Would you expect this applicant to be resistant to changes in
    their job functions as an organization modernizes its processes?

not resistant at all	+3	+2	+1	0	-1	-2	-3	extremely resistant

12. Would this applicant be expected to get along well with others being
    friendly, accepting and cooperative in their interactions?

would get along extremely well	+3	+2	+1	0	-1	-2	-3	not expected at all

13. Would this applicant be expected to prefer working with others
in a mutually cooperative fashion adhering to the limitations
in his job roles?

would work
extremely well
in a mutually
cooperative
fashion

+3	+2	+1	0	-1	-2	-3

not expected
at all

14. Would this applicant be expected to act in a reserved, serious
manner preferring quiet gatherings of friends?

extremely
reserved
and serious

+3	+2	+1	0	-1	-2	-3

not expected

15. Would this applicant be expected to be cautious and/or
conservative in their actions on the job?

extremely cautious
and/or
conservative

+3	+2	+1	0	-1	-2	-3

not cautious
and/or conservative
at all

16. Would this applicant be expected to be curious in seeking
out and understanding new areas of knowledge?

extremely
curious

+3	+2	+1	0	-1	-2	-3

not curious
at all

17. Would this individual be expected to concern themselves
with the admiration and recognition of their co - workers?

extremely
concerned

+3	+2	+1	0	-1	-2	-3

not concerned
at all

18. How decisive was this applicant?

extremely
decisive

+3	+2	+1	0	-1	-2	-3

not decisive
at all

19. Would you expect this applicant to be a reliable employee?

	+3	+2	+1	0	-1	-2	-3	
extremely reliable								not reliable at all

20. What is your overall impression of this applicant's performance in the interview?

	+3	+2	+1	0	-1	-2	-3	
excellent applicant								poor applicant

21. Would you recommend this applicant for a potential position in an interested firm based on his qualification?

	+3	+2	+1	0	-1	-2	-3	
highly recommended								not recommended at all

22. How typical would you rate this applicant for his age?

	+3	+2	+1	0	-1	-2	-3	
very typical								not typical at all
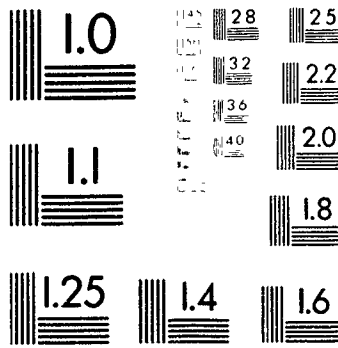
Recall Measure

On the following pages a series of statements are presented concerning the interaction of the job candidate with the interviewer. These statements reflect or describe statements made by the job candidate during the course of the entire interview. Your task is to determine which statements actually occurred during the interview process and those which did not occur. Keep in mind that these statements reflect that which was said in the interview by John Peters and represent the substantive meaning of his statements.

To rate the degree to which you felt a statement occurred please use the following scale:

(7) Definitely occurred
(6)
(5)
(4) Uncertain
(3)
(2)
(1) Definitely did not occur

_____ 1. He was born in Orangeville.

_____ 2. He was terminated from his job due to poor performance.

_____ 3. He described himself as warm.

_____ 4. He described himself as interesting.

_____ 5. He applied for a supervisor's position.

_____ 6. He had a four year degree in business administration.

_____ 7. He was born on February 17, 1928(1958).

_____ 8. He described himself as average.

_____ 9. He wanted part - time employment.

_____ 10. His home address was 605 Maple Street.

_____ 11. He received a satisfactory score on the entrance exam.

_____ 12. He felt you should set an example for employees to follow.

_____ 13. He described himself as cheerful.

_____ 14. He tried to be with the company of friends often.

_____ 15. He was aware of obstacles facing employees and tried to remove them.

_____ 16. He described himself as conceited.

_____ 17. He felt that effort should be directed toward company cost performance goals.

_____ 18. He sets goals that were difficult to reach.

_____ 19. He believed his position was strengthened by keeping employees strictly in line.

_____ 20. He felt that he rarely did anything reckless.

_____ 21. He felt confident directing others.

_____ 22. He described himself as discriminating.

_____ 23. He felt you should plan ahead and remain flexible.

_____ 24. He interpreted policy on his own.

_____ 25. He felt you needed to obtain many pieces of information to base decisions on reasoning versus opinion.

_____ 26. He described himself as ill-mannered.

_____ 27. He spent a lot of time visiting friends.

_____ 28. He described himself as conservative.

_____ 29. He felt that performance standards and objectives must be established with each employee.

_____ 30. He did not follow up to see if new policy was carried out.

_____ 31. He expressed changes in routine disturbed him.

_____ 32. He described himself as shy.

_____ 33. He preferred quiet evening with friends versus loud parties.

_____ 34. He described himself as self-centered.

_____ 35. When enforcing rules he felt that you shouldn't say management made that rule.

_____ 36. He felt that people referred to him as a hard worker.

_____ 37. He indicated starting in on new tasks without spending much time thinking.

_____ 38. He described himself as understanding.

_____ 39. He unquestionably applied rules to the letter.

_____ 40. He described himself as blunt.

_____ 41. He felt you should communicate with employees on a daily basis both verbally and through your actions.

_____ 42. He indicated forgetting to train because he was busy.

_____ 43. He didn't like to leave anything unfinished.

_____ 44. He described himself as truthful.

_____ 45. He described himself as open-minded.

_____ 46. He felt you should enforce policies whether you agree with them or not.

_____ 47. He felt that honesty and openness with problems and/or your budget was important.

_____ 48. He provided information to his boss only when questioned about specifics.

_____ 49. He often forgot to put things back where they belonged.

_____ 50. He asked his boss sometimes for too much information.

_____ 51. He described himself as intolerant.

_____ 52. He felt it was important to be held in high esteem
by people who knew him.

_____ 53. He felt he was reserved and cautious in his attitude toward life.

_____ 54. He described himself as outspoken.

_____ 55. He doesn't like to see anyone receive bad news.

_____ 56. He expressed having difficulty relating costs,
forecasting, etc. to the job.

_____ 57. He felt one must be capable of selling their ideas
orally and in written form.

_____ 58. He described himself as ill-tempered.

_____ 59. He sometimes got his paper work in late.

_____ 60. He felt one must sometimes identify with subordinates
versus management to persuade them into action.

_____ 61. He described himself as thoughtful.

_____ 62. He felt his work was always well organized.

_____ 63. He felt that people liked to tell him their troubles.

_____ 64. He enjoyed being complimented.

_____ 65. He felt one needs contingency plans to be always ready.

_____ 66. He described himself as unforgiving.

_____ 67. He described himself as forward.

_____ 68. He felt he sometimes forgot to look before he leaped.

_____ 69. He described himself as reasonable.

_____ 70. He indicated that he sometimes spent more than a day on small problems.

_____ 71. He indicated getting so involved in his work that he just wouldn't do planning.

_____ 72. He described himself as jealous.

_____ 73. He indicated having an unlimited curiosity about many things.

_____ 74. He felt he did his best work when encouraged.

_____ 75. He believed in giving friends lots of advice.

_____ 76. He described himself as humorless.

_____ 77. He felt people considered him as a serious, reserved person.

_____ 78. He indicated having a sense of belonging as being important to him.

_____ 79. He was unable to tnink of anything he wouldn't enjoy learning.

_____ 80. He described himself as methodical.

APPENDIX D

All instructions to participants also

including consent forms and debriefing.

Instructions to Participants for class survey

"Hello, my name is Hope Lemoine and this is Wendy Newell, we are both masters students in psychology here at Laurier. We are working for Dr. Lane in conducting a survey about how students think and feel about elderly people. For the purposes of this study an elderly person is defined as being 65 years of age or older.

The survey consists of four parts and will probably take about 10 minutes to complete. The first part involves demographics, the second part statements of opinion regarding elderly people in general. We are interested in your personal opinion only. The third part involves how much experience you have had with elderly people. The final part involves some questions about yourself.

Your attention to each item would be appreciated although you may omit a question if you find it objectionable. Of course you may stop at any time and you are not required to hand in the package if you don't want to. Do NOT put your name on the questionnaire. Data will be analysed as a group and individual responses will not be reported. When you are finished I will collect it. If you have any questions please raise your hand.

While you are filling your survey out I am going to pass around a sign up sheet. It is possible that we would want some of you to participate in a followup study later this term. Your participation in that study would of course be voluntary as well. Thus, we would greatly apprecieate if on the sign-up sheet you would print your name, survey number (which is in red ink on the front of your booklet) and local phone number. If you decide not to fill out the questionnaire please do not write on it and pass the unused questionnaire back to us.

Thank you for your participation. Please read all instructions carefully. You may begin.

Phone contact with potential participants

Hello, my name is Donna Martin, I am conducting my M.A. thesis research under the supervision of Dr. Mary Kay Lane of the psychology department at W.L.U.. I understand that you have expressed a willingness in participating in psychological research.

The purpose of the study I am currently conducting is to determine whether the judgement of University students are as accurate and discerning as personnel officers when it comes to assessing the suitability of job candidates. Your task will be to listen to a short audiotape of an job interview and evaluate the suitability of the candidate.

The time involved will be a half an hour. I know its a busy time of year for everyone, but, I have a number of possible time slots. I'd really appreciate your cooperation.

Consent letter

March 1989

Dear Participant:

Thank you for agreeing to participate in our study. I am Donna Martin, a graduate student in the Psychology Department and I am a research assistant for Dr. Mary Kay Lane.

The purpose of the study is to compare University students' evaluations of a job candidate with those made by professionals. Your task will be to listen to an audiotape of a job interview and complete evaluation forms with respect to your assessment of the candidate.

Your individual responses will be held in the strictest confidence; only group data will be analyzed and reported. You are free to stop at any time. It would, of course, be helpful if you would complete all the questions, but please omit any items if you feel they are objectionable.

I will explain the purpose of the experiment more fully to you later. Please sign the attached form indicating your willingness to participate and allowing us to use your respones for data analysis.

If you wish to receive a copy of the summary of the results, please give your home adress.

Yours sincerely

Mary Kay Lane, Ph.D.

Associate Professor

I consent to participate in Dr. Lane's study evaluating a job candidate.

_____
signed

_____
dated

Please print your home adress (Note: Summary of results will be mailed in May)

_____

_____

_____

_____

_____

Cover Story

You will be reviewing an interview tape obtained from a professional employment agency located in Toronto. Your task is to determine to the best of your ability whether the applicant is qualified to perform in a supervisory position.

Of primary importance is to place yourself in the personnel officer's role when evaluating the applicant. Try and imagine that you are interviewing this applicant for a supervisory role in your organization and make your decision based on your own judgments.

The interview is presented auditorily to minimize any effects of physical characteristics on your judgments. This is standard procedure for most employment agencies. Thus we have decided to adhere to the common employment practices used in industry.

To aid you in your judgm. nts we review briefly, some background information regarding the individual applying for this position and the job.

The employment agency is seeking a number of potential candidates for the position of supervisor. In actuality, there are several positions which need to be filled that are temporary in nature. The position requires a minimum of four to five years supervisory experience in an organizational setting where the supervisor was responsible for at least five employees.

The applicant reviewed by your particular group has recently been layed - off from a major firm in Toronto. The firm is in the process of closing the plant, due to market conditions, and will be moving to Vancouver, British Columbia.

The applicant, as well as, his fellow employees have an option to relocate to the new plant, however, due to the state of the economy the closing of the old plant and the reopening of the new may take a substantial period. Thus, the company has suggested that personnel seek alternate employment until such time when relocation efforts are co .1-pleted. At that time the employee can make a decision regarding their personal relocation.

All of the applicant's background information appears in the beginning portion of the tape. The applicant's name is John Peters and he is (31 or 61) years old. If you have any questions please refer them to the experimenter before the tape begins, otherwise please do not ask questions until the tape and evaluation period are completed.

This is the extent of the information we and the employment agency have received. All other relevant information will appear in the interview tape.

(salience manipulation) Before we listen to the interview I would like you to fill out this questionnaire regarding your opinions toward elderly people. An elderly person is being defined as 65 years of age or older.

(situational cues manipulation) I should probably mention that other students participating in this study rating this person have been not been very positive or have been very positive. It is quite common for people in your peer group to rate a candidate unfavourably or favourably in this type of situation.

O.K.? I would like you to listen to the tape very carefully and when it is over I have some questionnaires for you to complete.

Participants listen to audiotape and complete the questionnaires.

I would like you to come next door now to meet Mr. Peters. Sometimes we get a mental image of a person if we have only heard a voice you might find it interesting to meet him. I'm sorry for the state of the room but space is tight and we have to share.

Debriefing

I'm sorry but Mr. Peters seems to have stepped out for a moment so let me tell you about the experiment in which you just participated.

If you recall, I told you initially that the purpose of the study was to compare student evaluations of a job condidate with those of professional personnel officers. Previous research has indicated that a number of variables affect prefessionals' evaluations, one of which is the age of the job candidate being considered.

One of the major purposes of this study therefore is to determine whether attitudes toward the elderly are reflected in the evaluation of an older job candidate. Further, the social psychological research literature suggests that some variables will maximize attitude - behaviour correspondence whereas other variables have the opposite effect. Consequently, participants in this study were randomly assigned to different conditions. [Participants are only told about the condition they were in.]

Condition 1: You were asked to complete the ATES a second time to draw your attention to what you think and feel about older people.

Condition 2: You were told that other participants had rated the candidate very favourably (unfavourably). We did this to see how knowing other people's views may affect one's own assessment.

Condition 3: You were simply asked to evaluate the candidate in the absence of any other variables which might have affected attitude - behaviour correspondence.

Condition 4: You were asked to evaluate a younger interview candidate so that evaluations of younger condidates could be compared with the evaluations of older candidates.

We hope to have 96 participants in this experiment so we won't have the study completed and the results analyzed until the end of May.

Dr. Lane and I would be most happy to send you a copy of the summary of the results as soon as they are available.

Thank you so much for your willingness and co-op ation. It is very much appreciated.

Dear Participant:

On behalf of Dr. Lane and myself I am writing to thank you for participating in out study examining attitude - behaviour correspondence within the context of attitudes toward the elderly.

The purpose of the study was to determine whether attitudes toward the elderly are reflected in the evaluation of an older job candidate. Further, the social psychological research literature suggests that some "moderating" variables will maximize attitude - behaviour correspondence whereas other variables have the opposite effect. Consequently participants in this study were randomly assigned to different conditions.

In the first condition participants completed the attitudes toward the elderly people scale before listening to the interview tape to maximize attitude - behaviour correspondence. Results for half the participants in this condition yielded significant attitude - behaviour, however, half the participants evaluated the elderly job candidate in the opposite direction of their attitudes.

In the second condition participants were told that other people in the study had rated the job candidate favourably or unfavourably. Participants with favourable attitudes were told the elderly target had been rated unfavourable and participants with unfavourable attitudes were told the elderly target had been rated favourably. This manipulation was included to minimize attitude - behaviour correspondence. As predicted, there was no relationship between attitudes and behaviour in this condition.

In the third condition participants evaluated the elderly job candidate in the absence of any other variables which might have affected attitude - behaviour correspondence. As predicted, there was a significant relationship between attitudes and behaviour in this condition.

Finally, participants in the fourth condition evaluated a young job candidate. As predicted there was no attitude - behaviour correspondence in this condition. Moreover, there were no differences on the evaluations of the elderly job candidate in condition 3 and the evaluations of the young job candidate indicating no biases either favourable or unfavourable toward the elderly.

Overall, the findings suggest that attitudes towards the elderly were reflected in the evaluation of an elderly job candidate. Furthermore, attitude - behaviour correspondence can be maximized or minimized by manipulating moderating variables. Finally, there were no biases observed toward the elderly.

Once again, thank you for your participation in this study. If you have any further questions please contact me through the psychology department at Wilfrid Laurier University.

Yours truly,

Donna Martin

APPENDIX E

Principal components analysis of 17 ATES items

three factor solution

Table 12.

Principal components 3 factor analysis of 17 attitudes toward the elderly items .

	variables	varimax rotated factor matrix		
		I	II	III
1.	Older people look forward to the future as much as any other people.(L)	.01	.52	.10
2.	Old people are not interested in socializing with other people.(N)	.27	.45	-.13
3.	Old people are critical of the younger generation.(L)	.59	.02	.21
4.	Older persons are good with children.(L)	.06	.37	.15
5.	Most old people have a cynical outlook on life.(N)	.56	.29	.06
6.	Most older people do not have a broad scope of interests.(N)	.35	.49	-.07
7.	Most old people are very relaxing to be with.(L)	.28	.30	.26
8.	Most old people are not good listeners.(N)	.45	.37	-.03
9.	Old people meddle in other people's affairs.(L)	.62	.26	.14
10.	Old people are not too demanding of the young.(LR)	.31	.10	.32
11.	Older people are typically distrustful of others.(N)	.45	.37	-.01
12.	Older people love life.(L)	.15	.61	.20
13.	Most older people are constantly complaining about the behaviour of the younger generations.(L)	.69	.08	.16
14.	Most old people do not make excessive demands for love and reassurance.(LR)	.10	-.10	.49
15.	Old people are confident with their ability to cope.(N)	.03	.34	.63
16.	Old people expect the worst to happen.(N)	.42	.31	.30
17.	Most old people have close friendships.(LR)	.12	.39	.21
	% total variance	28.19	8.60	8.50
	Cronbach's alpha	.72	.58	

Note: (L)=Lane (1989) item, (LR)= Lane(1989) reworded, (N)=new item

APPENDIX F

Regression Analysis for All Participants

Table 13.

Regression analysis for all particpiants

independent variables		unstandardized coefficient	standard error	t-value
attitude		.064	.036	1.767
typicality		.109	.037	2.975**
self-monitoring		.001	.015	.063
direct experience		.024	.040	.593
group type:	cues	.051	.144	.354
	salience	.477	.145	3.284**

$F(6,65)=4.39, p<.001$
$R=29\%$
**$p<.01$

APPENDIX G

Data from 452 participants

and 96 participants

Survey data for 452 participants

GENDER	FREQUENCY	GENDER PERCENT	CUMULATIVE PERCENT
female	280	62.1	62.1
male	171	37.9	100.0

VALID CASES 451
MISSING CASES 1

AGE	FREQUENCY	AGE PERCENT	CUMULATIVE PERCENT
18	23	5.1	5.1
19	267	59.3	64.4
20	75	16.7	81.1
21	23	5.1	86.2
22	10	2.2	88.4
23	7	1.6	90.0
24	6	1.3	91.3
25	4	.9	92.2
26	2	.4	92.7
27	1	.2	92.9
28	3	.7	93.6
29	2	.4	94.0
30	1	.2	94.2
31	2	.4	94.7
32	1	.2	94.9
34	1	.2	95.1
35	1	.2	95.3
36	1	.2	95.6
40	3	.7	96.2
41	3	.7	96.9
42	3	.7	97.6
43	1	.2	97.8
45	1	.2	98.0
47	2	.4	98.4
49	1	.2	98.7
53	1	.2	98.9
56	1	.2	99.1
59	1	.2	99.3
60	2	.4	99.8
68	1	.2	100.0

VALID CASES 450
MISSING CASES 2

SELF-MONITORING	SELF-MONITORING FREQUENCY	PERCENT	CUMULATIVE PERCENT
2	2	.5	.5
3	4	1.1	1.6
4	6	1.6	3.2
5	11	3.0	6.2
6	14	3.8	10.0
7	11	3.0	13.0
8	28	7.6	20.5
9	31	8.4	28.9
10	37	10.0	38.9
11	45	12.2	51.1
12	34	9.2	60.3
13	38	10.3	70.5
14	40	10.8	81.4
15	22	5.9	87.3
16	13	3.5	90.8
17	13	3.5	94.3
18	5	1.4	95.7
19	9	2.4	98.1
20	5	1.4	99.5
21	2	.5	100.0

VALID CASES 452
MISSING CASES 0

EXPERIENCE	DIRECT EXPERIENCE FREQUENCY	PERCENT	CUMULATIVE PERCENT
2	15	3.3	3.3
3	10	2.2	5.5
4	21	4.7	10.2
5	25	5.5	15.7
6	80	17.7	33.5
7	141	31.3	64.7
8	116	25.7	90.5
9	25	5.5	96.0
10	8	1.8	97.8
11	9	2.0	99.8
18	1	.2	100.0

VALID CASES 451
MISSING CASES 1

ATTITUDE	ATTITUDE (factor scores) FREQUENCY	PERCENT	CUMULATIVE PERCENT
3	2	.5	.5
5	1	.2	.7
6	5	1.1	1.8
7	26	5.9	7.8
8	47	10.7	18.5
9	82	18.7	37.2
10	82	18.7	55.9
11	78	17.8	73.7
12	57	13.0	86.8
13	38	8.7	95.4
14	17	3.9	99.3
15	3	.7	100.0

VALID CASES 452
MISSING CASES 0

Data for 96 participants by condition

NOTE: sex (0=female,1=male , de=direct experience; sm=self-monitoring; sd=social distance; att=attitude factor scores; recall=memory test; bias= memory bias; eval=competence; typ=typicality; like=likeability

low self-monitors, salience

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	18	5	7	60	10.17	450	12	119	7	6
0	19	6	11	42	10.18	437	17	103	7	2
1	19	7	9	60	11.45	394	10	96	4	5
0	19	6	4	60	10.25	406	13	125	6	6
1	19	3	8	58	13.24	423	-13	107	4	4
0	19	6	10	60	8.16	403	18	128	7	6
1	20	7	8	58	11.49	439	2	115	2	3
0	18	8	8	40	9.38	439	13	130	5	6
0	19	6	11	54	11.27	422	14	117	5	5
0	20	7	5	62	12.85	441	-11	118	7	6
1	19	7	9	60	10.61	466	12	122	6	5
1	24	3	8	58	10.54	378	14	96	3	6

high self-monitors, salience

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	20	6	12	52	11.60	386	27	114	6	6
0	19	8	14	60	9.08	401	-7	105	3	5
0	19	6	13	62	9.63	428	16	98	2	5
0	18	7	12	60	10.27	475	21	127	4	6
0	19	10	12	40	10.84	423	12	122	2	7
1	19	8	20	40	6.74	445	17	107	3	5
0	19	6	13	54	10.42	391	25	128	7	6
0	19	6	19	42	8.45	406	6	87	3	2
1	19	7	14	46	9.72	379	33	99	4	5
1	19	6	15	56	7.71	387	8	107	2	5
1	19	9	15	46	10.75	444	25	92	2	4
1	19	7	14	46	12.07	429	24	121	5	6

low self-monitors, situational cues

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
0	19	8	8	58	10.27	394	-15	106	2	5
1	19	5	9	44	8.16	420	14	124	6	6
1	21	7	5	38	8.94	385	00	106	2	4
0	18	7	11	36	7.99	407	-19	84	3	4
0	18	9	10	38	14.26	461	11	80	3	4
0	19	7	7	44	10.96	426	10	115	5	5
0	21	8	9	46	9.62	420	8	119	4	6
1	20	7	10	40	9.52	361	8	88	1	5
1	19	4	11	60	11.26	397	18	96	5	4
0	19	8	11	54	10.20	421	8	111	7	6
1	21	6	11	60	10.64	438	-8	93	2	6
1	23	8	8	54	12.29	439	12	121	5	5

high self-monitors, situational cues

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	25	6	21	42	9.58	416	-1	115	5	7
1	20	8	18	54	12.38	416	14	83	6	4
0	19	8	13	58	12.13	383	-2	62	4	2
0	19	8	19	62	11.70	403	12	73	4	4
1	19	7	17	52	9.43	373	9	107	5	5
0	19	4	14	50	12.81	406	-1	126	4	6
1	19	6	14	32	8.52	422	11	108	2	6
0	19	8	13	40	12.34	397	7	103	6	4
0	19	2	13	42	9.32	373	00	117	6	6
0	20	9	13	42	11.31	403	31	118	6	6
1	19	6	16	54	10.40	444	22	115	6	5
1	20	7	17	42	12.89	405	12	130	4	7

low self-monitors, elderly target control

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	24	4	7	58	12.15	399	24	85	5	2
0	19	7	10	48	10.29	410	5	117	7	6
1	22	8	10	48	7.77	419	-5	60	6	3
0	19	7	5	36	10.24	385	10	113	5	5
1	18	7	11	50	9.68	419	00	102	3	5
0	19	8	11	50	7.43	413	-2	85	4	5
0	19	6	11	60	10.07	435	6	108	6	5
1	19	7	11	52	12.15	430	-6	93	3	4
0	21	9	3	60	13.93	421	32	102	7	5
1	19	7	9	52	10.83	408	9	105	6	5
0	19	8	11	56	14.33	437	28	115	4	6
0	18	9	4	62	13.57	405	27	128	6	6

high self-monitors, elderly control

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	22	7	21	52	10.80	456	20	106	2	5
0	19	6	12	62	12.23	410	3	82	4	2
0	19	6	14	56	9.28	379	6	76	3	2
0	19	7	14	44	11.74	392	24	114	5	6
1	19	8	13	18	14.25	417	6	83	4	5
0	20	4	14	48	9.09	417	15	121	4	5
1	20	7	14	34	8.30	378	-15	106	3	4
0	19	8	15	54	9.24	440	7	112	4	4
0	19	6	17	47	9.19	359	27	106	5	6
1	19	7	17	47	11	384	6	81	1	4
1	24	7	12	52	9.83	454	-21	74	7	4
1	19	8	15	58	11.44	392	7	96	4	7

low self-monitors, young target control

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	20	5	9	54	13.08	379	-4	82	2	2
0	19	8	11	50	12.74	361	11	89	3	4
0	19	8	9	48	10.12	395	6	112	6	6
1	20	7	10	60	10.73	398	22	102	4	5
1	19	8	7	57	9.15	371	19	105	6	5
0	19	8	8	48	10.53	425	-3	63	1	5
0	19	4	9	60	8.57	428	-3	60	2	1
1	20	8	8	42	13.76	406	6	101	3	5
0	19	6	10	60	7.45	410	18	94	5	3
1	18	6	9	50	12.16	436	5	120	7	5
0	20	8	11	60	11.57	400	13	78	3	3
0	19	7	6	54	13.84	469	-3	120	6	6

high self-monitors, young target control

sex	age	de	sm	sd	att	recall	bias	eval	typ	like
1	19	7	13	56	11.01	414	13	109	6	6
0	20	4	20	58	12.44	435	15	116	3	5
0	19	4	15	60	10.21	483	-2	109	6	3
0	19	6	17	56	8.59	416	-12	98	4	5
1	19	4	13	46	12.00	405	-2	91	4	3
1	19	8	12	60	9.39	415	1	68	5	2
1	20	7	17	62	8.58	424	-1	89	4	5
1	20	2	19	62	8.70	407	6	111	6	6
0	19	7	14	58	8.28	415	21	107	5	6
0	19	7	14	60	13.40	442	-26	68	3	3
0	19	6	16	62	13.22	398	2	84	3	4
1	19	7	14	60	11.80	395	17	79	5	5