Individual Differences in Differentiation in the Rating of Personal Values: The Role of Private Self-Consciousness

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Past research has shown that when personal values are measured by a rating procedure, respondents often show little differentiation among the values, tending to assign similar, high ratings to all of them. Data from two studies suggest that level of private self-consciousness moderates the degree of differentiation: individuals higher in private self-consciousness make greater distinctions among the values. Consistent with past research, these studies suggest that those higher in private self-consciousness have a better-articulated self-schema and are more aware of internal dispositions. Discussion addresses theoretical issues for self-consciousness and personal values research.

Values have long been considered important factors in explaining both individual and group behaviors. Values are considered to be relatively enduring beliefs that individuals possess and are thought to guide both attitudes and behavior (Rokeach, 1973). Values have also been described as desirable end states of existence (Rokeach, 1973), as well as a means of guiding a person's adaptation to social surroundings (Kahle & Timmer, 1983).

One important aspect of values research has centered on methods of measuring values, in particular the question whether the ranking or rating of values is the better survey procedure. Although ranking procedures force individuals to make choices, the data obtained are at an ordinal level. Consequently, a rating procedure has been suggested in order to yield data that allow for parametric statistical analyses.

Another difference between ranking and rating methods is the degree of differentiation among values. A ranking procedure requires respondents to make choices between values, forcing respondents to differentiate. A rating procedure has no such built-in requirement. Respondents may choose to rate all values differently (high differentiation) or to rate them all the same (no differentiation). Krosnick and Alwin (1988) suggest that such lack of differentiation in a rating task makes ranking a better method for measuring values.

MEASUREMENT OF PERSONAL VALUES

The primary method for measuring values has been a survey procedure in which respondents are required to rank a set of values according to personal importance. A ranking procedure has been suggested because values are often conceptualized as involving important choices for individuals (Alwin & Krosnick, 1985; Rokeach, 1973). A ranking task forces the survey respondent to choose between two or more items that are inherently positively valenced. However, even though such a choice procedure may make good psychological sense, ranking methods are relatively cumbersome to administer and do not readily lend themselves to more sophisticated analytical techniques (Krosnick & Alwin, 1988). Some researchers have suggested that a rating procedure could be used to overcome these problems (Munson & McIntyre, 1979). However, rating methods also have important limitations. Because a rating procedure allows for ties, respon-

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dents could conceivably rate all the values the same, thus showing no differentiation among values. Such responses would greatly reduce the precision of the data.

The studies to date have yielded decidedly mixed results with respect to the appropriateness of using ratings for the measurement of personal values. Several have reported findings that show little difference in the reliability or validity of data obtained from rating and ranking methods (Munson & McIntyre, 1979; Rankin & Grube, 1980). Some studies, however, do report differences resulting from the two methods of measurement. Reynolds and Jolly (1980) found reliability to be significantly lower for the rating method than for ranking. Alwin and Krosnick (1985; Krosnick & Alwin, 1988) showed that although rating and ranking procedures are similar with respect to ordering of aggregate preferences, the two methods measure different things with respect to latent content and produce different correlations between variables. Miethe (1985) found the ranking method to be slightly superior to rating in reliability, convergent validity, and discriminatory power. Thus, the findings to date are equivocal with respect to the superiority of one method over the other.

Given the differing results of studies on rating and ranking of values, more research into measurement seems warranted, especially in the area of differentiation. What exactly causes some respondents to differentiate, while others tend to give responses that do not vary to any great degree? Can particular groups be pinpointed that tend to show more differentiation, and if so, what processes are involved that lead to such differentiation?

DIFFERENTIATION AMONG VALUES

Values researchers such as Kohn (1977) and Rokeach (1973) have suggested that motivation is the determinant of whether a particular respondent will differentiate between values on a rating task. Presumably, those who are less motivated to complete the survey instrument will minimize the effort they invest in completing the task and will therefore tend to make a lesser distinction between values by assigning them similar ratings.

Other individual difference variables may play a part in the extent to which respondents make the effort to differentiate among personal values. Krosnick and Alwin (1988) found evidence of individual differences in differentiation on a scale (see Kohn, 1969) measuring parental valuation of child qualities. Analysis of data from the 1980 General Social Survey found that differentiation varied across individuals and was positively correlated with education. Krosnick and Alwin suggested that cognitive sophistication was the individual difference variable responsible for the differences in differentiation and that education was a reflection of cognitive sophistication.

Another individual difference that may be related to differentiation of personal values is private self-consciousness. The trait of private self-consciousness is defined as "the consistent tendency of persons to direct attention inward" (Fenigstein, Scheier, & Buss, 1975, p. 522). The trait can be viewed as the tendency to attend to the inner aspects of the self, and individuals high in private self-consciousness would be "particularly conscious of their own thoughts, feelings, attitudes, motives and behavioral tendencies" (Carver & Scheier, 1981, p. 46). Thus, one would expect those high in private self-consciousness to be more aware of and more concerned with their values. Such persons presumably consider their values more frequently and, consequently, should be more confident or sure of their values and the particular role or importance that a specific value has in their lives. Much research lends credence to these assumptions. Scheier, Carver, and Gibbons (1979) and Shrum, McCarty, and Loeffler (1990) found subjects high in private self-consciousness to be more resistant to external suggestibility, and Froming and Carver (1981) found private self-consciousness to be inversely related to compliance. Other research suggests that individuals high in private self-consciousness have more accurate self-knowledge (Carver & Scheier, 1978; Scheier, 1980; Turner, 1978), have a better articulated self-schema (Nasby, 1985, 1989), perceive more self-consistency (Kernis & Grannemann, 1988), and show greater attitude-behavior correspondence (Miller & Grush, 1986; Scheier, Buss, & Buss, 1978).

The two studies presented here were designed to investigate the role of private self-consciousness in the differentiation among personal values on a rating task. The research hypothesis asserts that degree of differentiation of personal values will be positively correlated with degree of private self-consciousness: The higher a respondent scores on a measurement of private self-consciousness, the more that respondent will differentiate among the personal values.

STUDY 1

Sample and Measures

The participants in Study 1 were a convenience sample of 29 undergraduate students in an introductory course at a large midwestern university. The study was completed as partial fulfillment of a course requirement.

The Rokeach Value Survey (RVS) was used to measure the personal values of the respondents. The RVS is a frequently used value instrument in survey research across

TABLE 1: Rokeach Terminal and Instrumental Value Scales

Terminal Values	*Instrumental Values*
A comfortable life (a prosperous life)	Ambitious (hard-working, aspiring)
An exciting life (a stimulating, active life)	Broadminded (open-minded)
A sense of accomplishment (lasting contribution)	Capable (competent, effective)
A world at peace (free of war and conflict)	Cheerful (lighthearted, joyful)
A world of beauty (beauty of nature and the arts)	Clean (neat, tidy)
Equality (brotherhood, equal opportunity for all)	Courageous (standing up for your beliefs)
Family security (taking care of loved ones)	Forgiving (willing to pardon others)
Freedom (independence, free choice)	Helpful (working for the welfare of others)
Happiness (contentedness)	Honest (sincere, truthful)
Inner harmony (freedom from inner conflict)	Imaginative (daring, creative)
Mature love (sexual and spiritual intimacy)	Independent (self-reliant, self-sufficient)
National security (protection from attack)	Intellectual (intelligent, reflective)
Pleasure (an enjoyable, leisurely life)	Logical (consistent, rational)
Salvation (saved, eternal life)	Loving (affectionate, tender)
Self-respect (self-esteem)	Obedient (dutiful, respectful)
Social recognition (respect, admiration)	Polite (courteous, well-mannered)
True friendship (close companionship)	Responsible (dependable, reliable)
Wisdom (a mature understanding of life)	Self-controlled (restrained, self-disciplined)

a variety of social science disciplines (Braithwaite & Law, 1985; Rankin & Grube, 1980) and has received extensive validation (e.g., Feather, 1975; Rokeach, 1973). The instrument comprises two sets of 18 values, one set being termed a terminal scale and the other an instrumental scale. The terminal scale purports to measure "desirable end-states of existence," and the values are termed *ends-values* by Rokeach. The instrumental scale consists of trait adjectives that Rokeach calls "desirable modes of conduct" and are termed *means-values* (Rokeach, 1973, p. 7). A complete list of each value set, along with the descriptors used by Rokeach, appears in Table 1.

Differentiation was operationalized as the variability each respondent showed in his or her use of the rating scale. Within-subject variances were computed across all values within each set (terminal and instrumental). Thus, each respondent had two variance measures, one for the terminal set of values and one for the instrumental set. A large rating variance would be indicative of more differentiation; a smaller variance would suggest less differentiation. This method is consistent with that used by Krosnick and Alwin (1988), who also computed variances as a measure of differentiation.

The Fenigstein, Scheier, and Buss (1975) Self-Consciousness Scale was administered using a paper-and-pencil response form. The Self-Consciousness Scale consists of 23 items, 10 of which constitute a measure of private self-consciousness. Participants indicated their level of agreement with these 10 items on a 6-point scale. A score of private self-consciousness was obtained by computing an average over all 10 items.

Procedure

Participants completed the terminal and instrumental portions of the RVS as part of a larger study on personal values and consumer behavior. (This particular group served as the control group for an experiment on values, hence the small sample size.) The terminal and instrumental scales were administered separately, with order of presentation completely counterbalanced. Participants were instructed to evaluate the values as guiding principles in their lives, rating each value on a scale of 0 to 100, where 0 indicated no importance and 100 indicated extreme importance. All 18 values for the first set (terminal or instrumental) appeared on one page with a line next to each value where the participant was instructed to place his or her rating. After completing the first scale, participants turned the page and received the same instructions for the second set of values.

Results and Discussion

As predicted, the correlations between degree of private self-consciousness and rating variance were positive and significant for both the terminal and instrumental scales (terminal: $r = .37$, $df = 28$, $p = .027$; instrumental: $r = .44$, $df = 27$, $p = .009$). These correlations were not significantly different, $t = .392$, $df = 25$. The mean and standard deviation of the rating variances for the terminal scale were $M = 166.99$, $SD = 168.32$; for the instrumental scale, $M = 179.33$, $SD = 143.00$.

One possible explanation for the observed correlations between within-subject rating variance and private

self-consciousness is that persons low in private self-consciousness tend to assign higher value ratings than persons high in private self-consciousness. *Higher* within-subject ratings would result in *less* within-subject variability, because a ceiling effect would occur in instances when the ratings were at or near the top of the scale. Thus, the level of within-subject variability would be a function of within-subject mean rating. Analysis indicates, however, that this is not the case. The mean ratings and degree of private self-consciousness were uncorrelated for both the terminal scale, $r = -.02$, $df = 27$, n.s., and the instrumental scale, $r = .07$, $df = 26$, n.s.

Although the results indicate strong support for the research hypothesis, the sample size was quite small. Therefore, a second study was conducted in order to increase the sample size and to replicate and extend the findings of Study 1.

STUDY 2

Sample and Measures

The participants in Study 2 were a convenience sample of 108 undergraduate students in an introductory course at a large midwestern university. Participation in the study partially satisfied a course requirement. Private self-consciousness was assessed using the Fenigstein, Scheier, and Buss scale. The scoring procedure followed the method used in Study 1.

Procedure

In order to provide a more conservative test of the research hypothesis, a different method of gathering the rating measures was employed. As part of a larger study on reaction time, respondents were required to rate each value as it appeared on the screen of a microcomputer. Respondents used a scale of 0 to 10 and were instructed to rate each value on the basis of its importance as a guiding principle in their lives, 0 representing no importance at all and 10 representing extreme importance. The values appeared on the screen one at a time, and because of the reaction time measurements, respondents were instructed to respond with both speed and accuracy. The terminal and instrumental values were not presented as separate sets; instead, all 36 values were presented as one set with order completely randomized across respondents.

Such a method of data collection should represent a more stringent test of the hypothesis. Less differentiation across all subjects would be expected because the values were presented one at a time. Respondents had no idea what values would appear on the screen and therefore could not make any immediate comparison with other values. Furthermore, any comparison of a value with past values would be hindered because of the reaction time instructions to be both quick and accurate. On a standard paper-and-pencil survey, respondents would have the opportunity to look at the entire set of values to be rated and could choose to compare one value's importance with another's if they so desired.

Results and Discussion

As predicted, the correlations were again positive and significant (terminal scale: $r = .22$, $df = 95$, $p = .014$; instrumental scale: $r = .17$, $df = 95$, $p = .047$). The difference in the correlations between the instrumental and terminal scales was not significant, $t = .872$, $df = 92$. Means and standard deviations were $M = 2.82$, $SD = 1.97$ (terminal scale), $M = 2.17$, $SD = 1.60$ (instrumental scale). Again, analyses were conducted to rule out scale level, or ceiling effect, explanations for the observed correlations. The relationship between average rating and level of private self-consciousness was again uncorrelated for the terminal scale, $r = -.08$, $df = 95$, n.s. However, this correlation was negative and significant for the instrumental scale, $r = -.22$, $df = 93$, $p = .02$, indicating that the lower the level of private self-consciousness, the higher the mean rating of the values. Thus, for the instrumental scale in Study 2, a scale effect explanation cannot be ruled out.

The results of Study 2 were also consistent with our expectation that the data collection method would prove to be a more stringent test of differentiation. The observed correlations in Study 2 were more modest than those in Study 1 but still significant. (An additional contributor to the lower correlations observed in Study 2 may have been the restricted range of the 11-point scale, compared with the 101-point scale used in Study 1. However, we expected that the effects of the method would overshadow the effects of the scale.)

To determine more precisely the nature of the differentiation effects, the rated values for Study 2 were divided into two new categories on the basis of the order in which the values were encountered and rated: first 18 rated (first half) and second 18 rated (second half). We reasoned that the lower correlations in Study 2 would be due to little differentiation by all respondents for the first values encountered. Even with a better-articulated self-schema, we expected that the difficulty of the task would also prevent those high in private self-consciousness from exhibiting much differentiation. As the task progressed, however, and more values were encountered, we expected high private self-consciousness respondents to start to show more differentiation. If this reasoning is correct, then there should be little or no relationship

TABLE 2: Rating Variance as a Function of Private Self-Consciousness and First Half or Second Half Rated

Level of Private Self-Consciousness	Portion of Scale Rated	
	First Half	Second Half
High	2.87	2.80
Low	2.46	1.86

NOTE: Numbers indicate the average within-subject variance for the values rated.

between differentiation and private self-consciousness in the first half, but a significant relationship should be observed for the second half.

As expected, the correlation between rating variance of the first half and private self-consciousness was not significant, $r = .10$, $df = 85$, whereas the correlation between rating variance of the second 18 values and private self-consciousness was significant, $r = .27$, $df = 85$, $p = .006$. These two correlations were significantly different, $t = 1.81$, $df = 84$, $p < .05$.

The correlations above tell only part of the story, however. The lack of correlation between private self-consciousness and rating variance for the first half could be due to two possibilities: All respondents, regardless of degree of private self-consciousness, showed *much* differentiation, or all respondents showed *little* differentiation. To further consider this issue, we divided private self-consciousness into high and low groups on the basis of a median split and then evaluated the differences in mean variance between the first and second halves. The results are shown in Table 2. This analysis shows that there is very little difference in rating variance between the two halves for those high in private self-consciousness (*M*s = 2.87 for first half, 2.80 for second half; $t = .24$, $df = 86$, $p = .81$). However, the rating variance for those low in private self-consciousness is considerably lower for the second half than for the first half (*M*s = 2.46 for first half, 1.86 for second half; $t = 2.73$, $df = 86$, $p = .009$). Thus, contrary to our prediction, the lack of a correlation between private self-consciousness and differentiation in the first half was found because both private self-conscious groups exhibited much differentiation. These findings indicate that those high in private self-consciousness are consistent in their differentiation throughout the task. Those low in private self-consciousness, in contrast, start out differentiating among the values, but the degree of differentiation becomes less as the task progresses.

Similar analyses were also performed on the first and second sets of values rated by the participants in Study 1 in order to make relevant comparisons. If the paper-and-pencil task indeed allowed for more differentiation by all respondents than the reaction time task of Study 2, private self-consciousness should be related to rating variance for both the first and second sets of values rated. An analysis of the correlations between rating variance and private self-consciousness indicates that this is true: first 18 values and private self-consciousness, $r = .31$, $df = 27$, $p = .048$; second 18 values and private self-consciousness, $r = .48$, $df = 27$, $p = .004$. Although the correlation for the second 18 values is greater than that for the first 18, this difference is not significant, $t = 1.12$, $df = 26$. These findings lend support for the contention that showing the values one at a time was a more difficult differentiation task and contributed to the lower overall correlations between private self-consciousness and differentiation.

VALIDITY ISSUES

Convergent validity is shown when independent measures of the same construct yield the same results. Studies 1 and 2 used two different methods of collecting value ratings to determine rating variance. Each yielded correlations that were significant in the predicted direction. Further, the results of the two studies yielded correlations that were stronger for one method. Such a difference was argued to be due to the differences in the data collection methods.

Discriminant validity is shown when a measure does not significantly correlate with other measures from which it should differ. The hypothesis was that respondents high in private self-consciousness would show more rating differentiation on a value survey. However, an alternative explanation is that those high in private self-consciousness may, for whatever reason, tend to differentiate more on *any* rating task. To test for this alternative hypothesis and to lend discriminant validity, correlations were calculated on scales that did not involve value ratings. In a separate study, participants were required to rate attributes of automobiles, blue jeans, and tennis shoes. Correlations between degree of private self-consciousness and rating variance for each scale were as follows: automobiles, $r = .019$, $df = 154$, n.s.; blue jeans, $r = .074$, $df = 154$, n.s.; and tennis shoes, $r = .045$, $df = 154$, n.s. These findings support the notion that degree of private self-consciousness is related to differentiation on a values scale rather than simply measuring an overall tendency to differentiate on all rating tasks.

It should be pointed out that these findings do not suggest that degree of private self-consciousness is related to differentiation *only* on a values scale. Other scales that attempt to evaluate private or inner aspects of

the respondent's self might show greater differentiation for those high in private self-consciousness. Differentiation on a values scale would then be expected to be more likely because, by definition, values are one of the more stable and enduring core aspects of the self.

GENERAL DISCUSSION

The results from Study 1 and Study 2 support the hypothesis that individual differences exist in the extent to which respondents will differentiate among values using a rating procedure. Specifically, the degree to which people are more aware of their values (their degree of private self-consciousness) moderates their degree of differentiation. These findings are consistent with past research that has shown those higher in private self-consciousness to have greater knowledge and awareness of internal states, as well as a better-articulated self-schema.

Study 2 also examined the process of differentiation. The data collection method for Study 2 required respondents to evaluate the values one at a time, with no information about what values they would encounter. Looking at how differentiation progressed from the first 18 values encountered to the second 18 values can help us draw tentative conclusions about how individuals high and low in private self-consciousness differ in their response to the rating task. The results indicate that those high and low in private self-consciousness start out with about the same degree of differentiation. As the task progresses, highs remain consistent in their level of differentiation, while lows show less differentiation for the second 18 values encountered. Two explanations for these findings are plausible. It may be that persons low in private self-consciousness have greater difficulty providing such information about the self and show a fatigue effect by failing to make the effort to differentiate as the task progresses. Those high in private self-consciousness may find the task less difficult because they are more aware of their value structures, so that they have no problem assessing the importance of values as they appear on the computer screen. This explanation is consistent with the findings of Herzog and Bachman (1981) and Kraut, Wolfson, and Rothenberg (1975), which showed that respondents exhibited a greater tendency to rate all objects on a scale the same when the scale appeared at the end of a questionnaire than when the scale appeared at the beginning, indicating that lack of differentiation may be related to fatigue. A second possibility is that those high in private self-consciousness are better able to recall the past value items and therefore to use them as a basis for rating subsequent values. Oversimplifying, those low in private self-consciousness may compare the value to be rated against those rated most recently. As the task progresses, they may remember few of the previous values but realize that the values are all positive entities and hence begin to assign similar ratings to all the values. However, those high in private self-consciousness may better remember past value items and thus have more standards of comparison, resulting in greater differentiation. This explanation is consistent with research showing that persons high in private self-consciousness have better recall for self-relevant information that pertains to the private aspects of the self (Agatstein & Buchanan, 1984; Hull & Levy, 1979).

The findings of Study 2 indicate that something more than simply a better-articulated self-schema is responsible for the results obtained. If those high in private self-consciousness truly get better data when they introspect, then significant correlations should have been observed for both the first half and the second half. The fact that the high and low groups start out with similar levels of differentiation and the low group shows decreased differentiation as the task progresses suggests that the high group may be either more motivated or more able to provide highly differentiated ratings. Thus, it appears that the approach to the task itself may be a factor in the observed differences in differentiation.

These research findings provide additional information to that of Krosnick and Alwin (1988). Both this study and theirs postulated individual differences in differentiation due to the rating task being more difficult for one group than another. The present study hypothesized that awareness of one's personal values, as measured by private self-consciousness, would be a surrogate measure of difficulty with the rating task, whereas Krosnick and Alwin suggested that cognitive sophistication, as measured by level of education, would be indicative of difficulty. It is interesting to note that this study indicated individual differences in differentiation within a population homogeneous on level of education and presumably cognitive sophistication. (Although no measures of intelligence were taken, private self-consciousness has shown no correlation with intelligence measures; Carver & Scheier, 1981.) This would suggest that cognitive sophistication and private self-consciousness may be independent constructs that affect degree of differentiation. However, on the basis of the data collected for this study, a comparison of the contribution of each is not possible.

An alternative explanation that cannot be ruled out by the present data is that involvement is the variable responsible for differentiation. Involvement would certainly address motivation to complete the task. In other words, to the degree that a task is important or involving for a particular respondent, the respondent would presumably be more motivated to answer the questionnaire as accurately and honestly as possible. Those less inter-

ested or less involved would be more likely to minimize the effort expended and fill out the survey quickly. For example, consider a questionnaire on jogging. Those who are interested in the sport might be more likely to take the time to differentiate their responses on a rating task, whereas those having no interest might be more likely to minimize the effort of the survey task, independent of cognitive sophistication. It is also reasonable to think that a respondent high in private self-consciousness would consider a survey on personal values more involving. Such individuals consider values important, are very conscious of their values, and reflect on them often. Thus, the measure of private self-consciousness may have been tapping involvement rather than difficulty. In the Krosnick and Alwin study, it may be that those with more education were more knowledgeable of and sympathetic to survey purposes, perhaps found the survey more involving, and therefore were more motivated to comply with the task required during the survey procedure. Such an effect of involvement would produce a positive correlation between level of education and degree of differentiation.

Of course, it could be that private self-consciousness is related to *both* involvement and degree of difficulty, and the combination of the two makes the variable a robust predictor of degree of differentiation. Which actually contributes more remains unresolved by this study and should serve as an interesting research question.

The results of these studies shed some additional light on the subject of rating and ranking of personal values, specifically the problems with differentiation. From a practical perspective, it seems possible that differentiation could be increased among those low in private self-consciousness by putting the respondents in a more self-aware state. This might be accomplished by simply giving respondents instructions or scenarios designed to increase self-focus. If such a procedure were successful, then perhaps many of the limitations of rating methods could be overcome, allowing researchers to confidently take advantage of the increased statistical sophistication obtained from rating data. From a theoretical perspective, a state of self-awareness might be induced by having respondents fill out the survey instrument in front of a mirror, a procedure commonly used to manipulate private self-focus (Carver & Scheier, 1981). This method might allow researchers to gain a greater understanding of the processes involved in providing information about the self.

REFERENCES

Agatstein, F. C., & Buchanan, D. B. (1984). Public and private self-consciousness and the recall of self-relevant information. *Personality and Social Psychology Bulletin, 10,* 314-325.

Alwin, D. F., & Krosnick, J. A. (1985). The measurement of values in surveys: A comparison of ratings and rankings. *Public Opinion Quarterly, 49,* 535-552.

Braithwaite, V. A., & Law, H. G. (1985). Structure of human values: Testing the adequacy of the Rokeach Value Survey. *Journal of Personality and Social Psychology, 49,* 250-263.

Carver, C. S., & Scheier, M. F. (1978). Self-focusing effects of dispositional self-consciousness, mirror presence, and audience presence. *Journal of Personality and Social Psychology, 36,* 324-332.

Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior.* New York: Springer-Verlag.

Feather, N. T. (1975). *Values in education and society.* New York: Free Press.

Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology, 43,* 522-527.

Froming, W. J., & Carver, C. S. (1981). Divergent influences of private and public self-consciousness in a compliance paradigm. *Journal of Research in Personality, 15,* 159-171.

Herzog, A. R., & Bachman, J. G. (1981). Effects of questionnaire length on response quality. *Public Opinion Quarterly, 45,* 549-559.

Hull, J. G., & Levy, A. S. (1979). The organizational functions of the self: An alternative to the Duval and Wicklund model of self-awareness. *Journal of Personality and Social Psychology, 37,* 756-768.

Kahle, L. R., & Timmer, S. G. (1983). A theory and method for studying values. In L. R. Kahle (Ed.), *Social values and social change: Adaptation to life in America* (pp. 43-69). New York: Praeger.

Kernis, M. H., & Grannemann, B. D. (1988). Private self-consciousness and perceptions of self-consistency. *Personality and Individual Differences, 9,* 897-902.

Kohn, M. L. (1969). *Class and conformity: A study in values.* Homewood, IL: Dorsey.

Kohn, M. L. (1977). Reassessment 1977. In M. L. Kohn (Ed.), *Class and conformity: A study in values* (2nd ed.). Chicago: University of Chicago Press.

Kraut, A. I., Wolfson, A. D., & Rothenberg, A. (1975). Some effects of position on opinion survey items. *Journal of Applied Psychology, 60,* 774-776.

Krosnick, J. A., & Alwin, D. F. (1988). A test of the form-resistant correlation hypothesis. *Public Opinion Quarterly, 52,* 526-538.

Miethe, T. D. (1985). The validity and reliability of value measurements. *Journal of Psychology, 119,* 441-453.

Miller, L. E., & Grush, J. E. (1986). Individual differences in attitudinal versus normative determination of behavior. *Journal of Experimental Social Psychology, 22,* 190-202.

Munson, J. M., & McIntyre, S. H. (1979). Developing practical procedures for the measurement of personal values in cross-cultural marketing. *Journal of Marketing Research, 16,* 48-52.

Nasby, W. (1985). Private self-consciousness, articulation of the self-schema, and recognition memory of trait adjectives. *Journal of Personality and Social Psychology, 49,* 704-709.

Nasby, W. (1989). Private and public self-consciousness and articulation of the self-schema. *Journal of Personality and Social Psychology, 56,* 117-123.

Rankin, W. L., & Grube, J. W. (1980). A comparison of ranking and rating procedures for value system measurement. *European Journal of Social Psychology, 10,* 233-246.

Reynolds, T. J., & Jolly, J. P. (1980). Measuring personal values: An evaluation of alternative methods. *Journal of Marketing Research, 17,* 531-536.

Rokeach, M. (1973). *The nature of human values.* New York: Free Press.

Scheier, M. F. (1980). Effects of public and private self-consciousness on the public expression of personal beliefs. *Journal of Personality and Social Psychology, 39,* 511-521.

Scheier, M. F., Buss, A. H., & Buss, D. M. (1978). Self-consciousness, self-report of aggressiveness and aggression. *Journal of Research in Personality, 12,* 133-140.

Scheier, M. F., Carver, C. S., & Gibbons, F. X. (1979). Self-directed attention, awareness of bodily states, and suggestibility. *Journal of Personality and Social Psychology, 37,* 1576-1588.

Shrum, L. J., McCarty, J. A., & Loeffler, T. L. (1990). Individual differ-

ences in value stability: Are we really tapping true values? In M. E. Goldberg, G. J. Gorn, & R. W. Pollay (Eds.), *Advances in consumer research* (Vol. 17, pp. 609-615). Provo, UT: Association for Consumer Research.

Turner, R. G. (1978). Consistency, self-consciousness and the predictive validity of typical and maximal personality measures. *Journal of Research in Personality, 12*, 117-132.