SSOAR
Open Access Repository
www.ssoar.info

Evaluating one's life: a judgment model of subjective well-being

Schwarz, Norbert; Strack, Fritz

Veröffentlichungsversion / Published Version
Forschungsbericht / research report

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:
GESIS - Leibniz-Institut für Sozialwissenschaften

Empfohlene Zitierung / Suggested Citation:
Schwarz, N., & Strack, F. (1988). *Evaluating one's life: a judgment model of subjective well-being.* (ZUMA-Arbeitsbericht, 1988/05). Mannheim: Zentrum für Umfragen, Methoden und Analysen -ZUMA-. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-66552

Nutzungsbedingungen:
Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.
Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

Terms of use:
This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.
By using this particular document, you accept the above-stated conditions of use.

gesis
Leibniz-Institut
für Sozialwissenschaften

Mitglied der
Leibniz-Gemeinschaft

Evaluating one's life: a judgment model of subjective well-being

Norbert Schwarz, Fritz Strack

ZUMA-Arbeitsbericht Nr. 88/05

Zentrum für Umfragen, Methoden und
Analysen e.V. (ZUMA)
Postfach 12 21 55

D-6800 Mannheim 1

Seit Juli 1983 sind die ZUMA-Arbeitsberichte in zwei Reihen aufgeteilt:

Die **ZUMA-Arbeitsberichte** (neue Folge) haben eine hausinterne Begutachtung durchlaufen und werden vom Geschäftsführenden Direktor zusammen mit den übrigen Wissenschaftlichen Leitern herausgegeben. Die Berichte dieser Reihe sind zur allgemeinen Weitergabe nach außen bestimmt.

Die **ZUMA-Technischen Berichte** dienen zur hausinternen Kommunikation bzw. zur Unterrichtung externer Kooperationspartner. Sie sind nicht zur allgemeinen Weitergabe bestimmt.

The attached reprint replaces ZUMA-Arbeitsbericht No. 88/05 by the same authors.

Schwarz, Norbert, & Strack, Fritz. Evaluating one's life: A judgment model of subjective well-being. In F. Strack, M. Argyle, & N. Schwarz (Eds.), Subjective well-being. An interdisciplinary perspective. Oxford: Pergamon, 1991.

INTERNATIONAL SERIES IN EXPERIMENTAL SOCIAL PSYCHOLOGY

Series Editor: MICHAEL ARGYLE, *University of Oxford*

Vol. 1. BOCHNER
Cultures in Contact

Vol. 2. HOWITT
The Mass Media and Social Problems

Vol. 3. PEARCE
The Social Psychology of Tourist Behaviour

Vol. 4. COLMAN
Game Theory and Experimental Games

Vol. 5. ALBERT
Genius and Eminence

Vol. 6. SMITHSON, AMATO and PEARCE
Dimensions of Helping Behaviour

Vol. 7. CLARKE
Language and Action

Vol. 8. KAHLE
Attitudes and Social Adaptation

Vol. 9. NOLLER
Nonverbal Communication and Marital Interaction

Vol. 10. DOISE and MUGNY
The Social Development of the Intellect

Vol. 11. BROWN
Advances in the Psychology of Religion

Vol. 12. HOLLIN and TROWER
Handbook of Social Skills Training, Volume 1
Applications Across the Life Span

Vol. 13. Handbook of Social Skills Training, Volume 2
Clinical Applications and New Directions

Vol. 14. FOSTER
Intergroup Relations in South Africa

Vol. 15. RUTTER
Communicating by Telephone

Vol. 16. BULL
Posture and Gesture

Vol. 17. FURNHAM
Lay Theories

Vol. 18. SCOTT and SCOTT
Adaptation of Immigrants

Vol. 19. LIVINGSTONE
Making Sense of Television

Vol. 20. REHM and GADENNE
Intuitive Predictions and Professional Forecasts

Subjective Well-Being

AN INTERDISCIPLINARY PERSPECTIVE

Edited by

Fritz Strack, Michael Argyle
and Norbert Schwarz

PERGAMON PRESS
Member of Maxwell Macmillan Pergamon Publishing Corporation
OXFORD · NEW YORK · BEIJING · FRANKFURT
SÃO PAULO · SYDNEY · TOKYO · TORONTO

1991

3

Evaluating one's life: a judgment model of subjective well-being

NORBERT SCHWARZ and FRITZ STRACK

Introduction

Much of what we know about individuals' subjective well-being is based on the findings of a great number of representative surveys that asked respondents to report how happy and satisfied they are with their life-as-a-whole and with various life domains (see Chapters 2 and 13). These so-called *subjective social indicators* are used in social science research as measures of the subjective quality of life to supplement measures of the objective standard of living, which have dominated welfare research in the social sciences for a long time.

As Angus Campbell (1981, p. 23), one of the pioneers of subjective social indicator research, points out, the "use of these measures is based on the assumption that all the countless experiences people go through from day to day add to . . . global feelings of well-being, that these feelings remain relatively constant over extended periods, and that people can describe them with candor and accuracy." As this research progressed, however, it became increasingly obvious that these assumptions are highly problematic. In particular, the relationship between individuals' experiences and objective conditions of life and their subjective sense of well-being was found to be weak and sometimes counterintuitive. Most objective life circumstances account for less than 5 per cent of the variance in measures of subjective well-being, and the combination of the circumstances in a dozen domains of life does not account for more than 10 per cent (Kammann, 1982). Some dramatic examples from various domains of life include that poor people are sometimes happier than rich ones (Easterlin, 1974), that patients three years after a cancer operation were

happier than a healthy control group (Irwin, Allen, Kramer and Danoff, 1982), or that paralysed accident victims were happier with their life than one might expect on the basis of the event (Brickman *et al.*, 1978). These examples, and additional ones from other life domains, provide drastic illustrations inconsistent with a simple and straightforward relationship between external conditions and internal state.

Moreover, measures of well-being have been shown to have a low test-retest reliability, usually hovering around .40, and not exceeding .60 when the same question is asked twice during the same one hour interview (Glatzer, 1984). In addition, these measures were found to be quite sensitive to influences from preceding questions in a questionnaire or interview (Schuman and Presser, 1981).

A judgmental perspective

While these findings have been deplored by researchers who consider subjective social indicators to reflect rather stable inner states of the respondents (e.g. Campbell, 1981), they are less of a surprise to researchers in the area of social judgment. From this perspective, reports about happiness and satisfaction with one's life are not necessarily valid read-outs of an internal state of personal well-being. Rather, they are judgments which, like other social judgments, are subject to a variety of transient influences. As Sherman and Corty (1984) noted, judgments which researchers ask respondents to make "don't passively tap into or elicit thoughts that are already in the subject's head". Rather, "it is often the case that the judgment is developed at the time the question is asked. Whatever information is available at the time and whatever principle of judgment happens to be employed will determine the nature of the judgment. Many judgments can thus be considered constructions to a particular question posed at a particular time", rather than reflections of underlying stable attributes of the respondent (p. 218).

During recent years, we have applied this perspective to explore how individuals evaluate their subjective well-being. In this research we have not been interested in *what* makes a person happy, but rather in *how* people determine whether they are happy or not. From a "social cognition" perspective (cf. Bodenhausen and Wyer, 1987; or Strack, 1988, for general introductions), we investigated the mechanisms of information processing that result in the reports economists and sociologists use as subjective social indicators.

Accessibility of information

Which information is considered?

How do respondents go about it if they are asked "How are you?" or, more technically, "Taking all things together, how would you say things are these days? Would you say you are very happy, pretty happy, not too happy?".

Unfortunately, "taking all things together" is a difficult mental task. In fact, as an instruction to think about all aspects of one's life, it requests something impossible from the respondent. How can a person conduct a complete review of "things these days", particularly in a survey interview in which the average time to answer a question is frequently less than one minute (Groves and Kahn, 1979)? Therefore, the person will certainly not think about all aspects but probably about some of them. The question is: about which?

One of the most central principles in social cognition research predicts that it is the most accessible information that enters into the judgment. Individuals rarely retrieve all the information that potentially bears on a judgment, but truncate the search process as soon as enough information has come to mind to form the judgment with a reasonable degree of subjective certainty (cf. Wyer, 1980; Bodenhausen and Wyer, 1987; Higgins and King, 1981, for reviews). Accordingly, the judgment reflects the implications of the information that comes to mind most easily. One determinant of the accessibility of information is the frequency and recency with which it is used. Applied to judgments of subjective well-being, prior use of relevant information may increase the likelihood that this information enters into the happiness judgment.

This reasoning was tested in a study in which we manipulated the accessibility of relevant information. We asked people to think about their present life and asked them to write down three events that were either particularly positive and pleasant or were particularly negative and unpleasant (Strack, Schwarz and Gschneidinger, 1985, Exp. 1). This was done under the pretext of collecting life events for a life event inventory, and the dependent variables, among them "happiness" and "satisfaction", were said to be assessed in order to "find the best response scales" for that instrument.

As predicted, subjects who had previously been induced to think about positive aspects of their present life described themselves as happier and more satisfied with their life-as-a-whole than subjects who had been induced to think about negative aspects.

In another study (Strack, Martin and Schwarz, 1988), the same idea was tested with a somewhat more subtle priming manipulation. Respondents were led to think about a relevant life domain simply by asking a specific question before they had to report their general happiness. Generating an answer should render this specific information more accessible for subsequent use and therefore influence the judgment. In this study, we asked

American students how frequently they go out for a date, which is known to be relevant to general happiness for that population (Emmons and Diener, 1985). We asked the dating question either before or after the general happiness question and assumed that the correlation between the two measures would be increased if the specific question was asked first. Empirically, this was the case. When the general happiness question was asked prior to the dating frequency question, both measures correlated $r = -.12$; a correlation that is not significantly different from zero. Asking the general happiness question after the dating frequency question, however, increased the correlation to $r = .66$, $p < .001$ ($z = 5.04$, $p < .001$ for the difference in the correlations obtained under both conditions). We would obviously draw very different conclusions about the impact of dating frequency on happiness with one's life, depending on the order in which the two questions are asked.

Taken together, these findings indicate that it is not sufficient to experience positive and negative events, it is also necessary that these experiences are cognitively accessible at the time of the happiness report. And whether they are accessible or not may depend on transient influences, such as the nature of the preceding questions in a research interview.

Is accessible information always used?

Accessible information is not always used in forming a judgment. Rather, the communicative context of a conversation or a research interview may induce individuals to disregard highly accessible information under some conditions. One of the key norms of social discourse holds that speakers should be informative and should avoid redundancy (Grice, 1975). In particular, speakers are expected to provide information that is "new", and should not provide information that the listener already has. This principle is known in psycholinguistics as the "given-new contract" (cf. Clark, 1985), and can be fruitfully applied to survey situations as suggested by Strack and Martin (1987; see also Schwarz and Strack, 1988).

As an example, consider the following question/answer sequences:

Conversation A

Q: How is your family?

A: . . . . . .

Conversation B

Q: How is your wife?

A: . . . .

Q: And how is your family?

A: . . .

While the question about the well-being of the family includes the well-being of the wife in *Conversation A*, this is not the case in *Conversation B*.

In the latter case, the question about the family refers to the well-being of the remaining members of the family because information about the well-being of the wife was already "given" in response to the previous question.

The same given-new principle was found to underlie the use and disuse of information when forming a judgment. Above, we reported an experiment in which asking respondents about their dating frequency, prior to assessing their happiness with life-as-a-whole, dramatically increased the impact of dating frequency on reported subjective well-being, as shown in Table 3.1 (Strack *et al.*, 1988).

TABLE 3.1. *Correlations between "general happiness" and "frequency of dating"*

Control	"Priming"	"Conversation"
general dating	dating general	dating general + context
$r = -.12$	$r = .66$	$r = .15$

Note: $N = 60$/cell. a vs. b: $p < .001$; b vs. c: $p < .001$; a vs. c: $p > .05$.

Adapted from Strack, F., Martin, L. L. and Schwarz, N. Priming and communication: Social determinants of information use in judgments of life satisfaction. *European Journal of Social Psychology*, 1988; **18**, 429–442. Reprinted by permission.

While this question order effect indicated that respondents were more likely to consider their dating behaviour in evaluating their lives when information about dating was activated by the preceding question than when it was not, another condition of this experiment demonstrated that this is not always the case. For some subjects, we attempted to place the dating question and the happiness question into the same communicative context. This was accomplished by a lead-in that read, "Now we would like to learn about two areas of life that may be important for people's overall well-being." This introduction was followed by the same questions that were used in the other conditions of the study, namely "(a) How often do you normally go out on a date? (b) How happy are you with your life in general?"

As is shown in Table 3.1, placing the dating and happiness questions into the same communicative context, resulted in a dramatic decrease in the correlation, as compared with the same question order without the above lead-in. In fact, establishing one communicative context for both questions completely eliminated the impact of question order. This suggests that respondents who were asked the dating question prior to the happiness question were not more likely to consider their dating frequency in evaluat-

ing their life, despite its high accessibility, than respondents for whom the accessibility of dating information was not increased to begin with.

In summary, this and related findings (cf. Strack, Martin and Schwarz, 1987, 1988; Ottati *et al.*, in press) demonstrate that highly accessible information will not be used in forming subsequent judgments if it is already "given", because the norms that govern the conduct of conversation request speakers to be informative and to avoid redundancy.

How is accessible information used?

We now need to consider *how* individuals use accessible information, if they do so. In the preceding examples, the accessible information provided the basis of the judgment and influenced the answer in the direction of the valence of the experience. This, however, is not necessarily the case. There are conditions under which accessible information influences the judgment in the opposite direction.

In the first study mentioned above (Strack *et al.*, 1985, Exp. 1), not only the hedonic quality of the life event was varied, but also the time perspective. Some participants had to think about a recent event, others, however, about an event that had occurred several years ago. The consequences were quite different, as is shown in Table 3.2.

TABLE 3.2. *Subjective well-being: the impact of valence of event and time perspective*

Time perspective	Valence of event	
	Positive	Negative
Present	8.9	7.1
Past	7.5	8.5

Note: Mean score of happiness and satisfaction questions, range is 1 to 11, with higher values indicating reports of higher well-being.

Adapted from Experiment 1 of Strack, F., Schwarz, N. and Gschneidinger, E. Happiness and reminiscing: The role of time perspective, mood, and mode of thinking. *Journal of Personality and Social Psychology*, 1985; **49**, 1460–1469. Reprinted by permission.

Thinking about hedonically relevant past events did not only fail to influence well-being judgments in the direction of their valence, but actually had a reverse impact. Respondents who thought about a negative past event reported higher well-being than respondents who thought about a positive past event ($F(1,48) = 8.42$, $p < .005$ for the interaction of valence of event and time perspective).

In combination, these findings indicate that highly accessible information

will influence the judgment in the direction of its hedonic quality, resulting in assimilation effects, if it pertains directly to one's present living conditions. If the accessible information bears on one's previous living conditions, on the other hand, it will serve as a salient standard of comparison, resulting in contrast effects (see Chapter 6).

These experimental results are further supported by correlational data (Elder, 1974) that indicate for senior US citizens, that the "children of the great depression" are more likely to report high subjective well-being, the more they had to suffer under adverse economic conditions when they were adolescents. The cumulation of negative experiences during childhood and adolescence apparently established a baseline against which all subsequent events could only be seen as an improvement (cf. Filipp, 1982). Portraying the other side of the coin, Runyan (1980) found that the upwardly mobile recollected their childhood as less satisfying than did the downwardly mobile, presumably because they used their current situation in evaluating their past.

While the above findings bear on the impact of temporal distance of the event *per se*, subsequent research (Strack, Schwarz and Nebel, 1987) demonstrated that it is not temporal distance by itself that moderates the use of accessible information but rather the subjective perception of whether the event one thinks about pertains to one's current conditions of living or to a different episode of one's life. Specifically, we asked students to describe either a positive or a negative event that they expected to occur in "five years from now". For half of the sample, we emphasized a major role transition that would occur in the meantime, namely leaving university and entering the job market. Theoretically, this should increase the probability that respondents would assign the expected event to a "different" phase of their life, and would therefore use it as a standard of comparison. The results support this reasoning. When the role transition was *not* emphasized, subjects reported higher happiness and life satisfaction when they had to describe positive rather than negative expectations. When the role transition *was* emphasized, this pattern was reversed, and subjects reported higher well-being after thinking about negative rather than positive future expectations.

In summary, these findings indicate that the impact of an event depends upon whether or not the event is cognitively accessible at the time of judgment. Moreover, the direction of its impact depends on whether the event is perceived to bear on one's current situation or is assigned to a different phase of one's life. In the former case, the accessible information will result in assimilation effects, but in the latter, it will serve as a standard of comparison, resulting in contrast effects (see also Chapter 6). Accordingly, it is not surprising that the overall relationship between objective conditions of living and subjective well-being is weak: the same event may influence subjective well-being in opposite directions, depending on its perceived "distance" to one's current situation.

Social comparison processes

All of the preceding examples pertained to the use of accessible information about one's own life. However, the same principle of accessibility applies to the use of information about the living conditions of others. Much as the subjects in the above experiments used highly accessible information about their own previous experiences as a standard of comparison, subjects were also found to use salient information about others as a comparison standard. Accordingly, they evaluated their own life more favourably when they were exposed to a description of past adverse living conditions in their hometown (Dermer *et al.*, 1979), met a handicapped confederate (Strack, Schwarz, Chassein, Kern and Wagner, in press, Exp. 2), or listened to a confederate who described how a severe medical condition interferes with his enjoyment of life (Strack *et al.*, in press, Exp. 1). In the latter study, the impact of the confederate's description was found to be more pronounced when the seating arrangements rendered the confederate visible at the time of the later happiness report, than when they did not, a finding that further emphasizes the role of temporary accessibility in the choice of comparison standards.

However, respondents' choice of comparison standards is not only affected by their exposure to the rather extreme living conditions of others. Rather, subtle variations in question form, that frequently go unnoticed in survey research, may also exert a profound influence on respondents' judgments. Frequently, social researchers attempt to assess respondents' experiences, their objective conditions of living, or the frequency with which they engage in a certain behaviour, by asking them to check the proper alternative from the list of response alternatives provided for them. While researchers assume that the respondents' answers inform them about the respondents' behaviours or experiences, they frequently overlook that the list of response alternatives may also constitute a source of information for the respondent.

As a number of studies indicated (see Schwarz, 1988a, in press a; Schwarz and Hippler, 1987, for a review), respondents assume that the list of response alternatives designed to assess their behavioural frequency reflects the researcher's knowledge of the distribution of the behaviour. That is, they assume that the "average" or "usual" behavioural frequency is represented by values in the middle range of the scale, and that the extreme values of the scale reflect the extremes of the distribution. Accordingly, they use the range of the response alternatives as a frame of reference in estimating their own behavioural frequency. Moreover, they extract comparison information from their own location on the scale for use in subsequent comparative judgments.

A study on leisure time satisfaction illustrates this phenomenon (Schwarz, Hippler, Deutsch and Strack, 1985). In this study, we asked respondents to report their daily TV consumption in an open answer format or on one of the

two scales that are shown in Table 3.3, along with respondents' behavioural reports.

TABLE 3.3. *Reported daily TV consumption and leisure time satisfaction as a function of response alternatives*

Low frequency alternatives		High frequency alternatives	
Up to ½ h	11.5%	Up to 2½ h	70.4%
½ h to 1 h	26.9%	2½ h to 3 h	22.2%
1 h to 1½ h	26.9%	3 h to 3½ h	7.4%
1½ h to 2 h	26.9%	3½ h to 4 h	0.0%
2 h to 2½ h	7.7%	4 h to 4½ h	0.0%
More than 2½ h	0.0%	More than 4½ h	0.0%
Leisure time satisfaction	9.6		8.2

Note: $N = 79$.

Leisure time satisfaction was assessed as an 11-point bipolar scale (1 = very dissatisfied, I wish there were more variety, 11 = very satisfied, I don't want more variety).

Adapted from Experiment 2 of Schwarz, N., Hippler, H. J., Deutsch, B. and Strack, F. Response scales: Effects of category range on reported behaviour and comparative judgments. *Public Opinion Quarterly*, 1985: 49, 388–395. Reprinted by permission.

As expected, the range of the response alternatives affected respondents' reports. More respondents reported watching TV for more than 2½ hours per day when given the high than when given the low frequency range scale (cf. Schwarz and Bienias, in press, for a fuller analysis of the underlying processes). More germane to the present issue, respondents extracted comparison information from their own placement on the scale. Given a modal daily TV consumption of slightly more than 2 hours in the Federal Republic of Germany (Darschin and Frank, 1982), many respondents endorsed a value in the lower range of the high frequency scale, suggesting to them that they watch *less* TV than "usual". Accordingly, respondents who reported their TV consumption on the high frequency scale subsequently evaluated their satisfaction with the variety of things they do in their leisure time more favourably than respondents who reported their TV consumption on the low frequency scale. Respondents who provided their reports in an open answer format, which does not provide relevant comparison information, reported intermediate satisfaction.

In combination, these findings indicate that the use of comparison standards follows the same principle of cognitive accessibility as the use of other information (for additional findings see Schwarz and Scheuring, 1988, 1989). Most notably, the selection of comparison standards is not primarily determined by relatively stable attributes of the respondent, which may be expected to change only slowly over time, such as his or her orientation at

an enduring reference group (e.g. Hyman and Singer, 1968; Runciman, 1966), adaptation level (e.g. Brickman and Campbell, 1971), or aspiration level (e.g. Michalos, 1985)—contrary to what sociological theorizing would suggest.

The impact of mood states

So far, we considered which information respondents use to evaluate their well-being, and how they use it. However, judgments of well-being are not only a function of what one thinks about, but also of how one feels at the time of judgment (see also Chapter 7). As we are all aware, there are days when life seems just great and others when life seems rather dreadful, even though nothing of any obvious importance has changed in the meantime. Rather, it seems that minor events that may affect our moods may greatly influence how we evaluate our life. Not surprisingly, experimental data confirm these experiences. Thus, we found that finding a dime on a copy machine greatly increased subjects' reported happiness with their life-as-a-whole (Schwarz, 1983), as did receiving a chocolate bar (Münkel, Strack and Schwarz, 1987), spending time in a pleasant rather than an unpleasant room (Schwarz, Strack, Kommer and Wagner, 1987, Exp. 2), or watching the German soccer team win rather than lose a championship game (Schwarz *et al.*, 1987, Exp. 1).

Mood congruent recall or mood as information?

The psychologically interesting question is how the impact of mood at the time of judgment is mediated. Two possible processes deserve particular attention. On the one hand, it has been shown that moods increase the accessibility of mood congruent information in memory (cf. Blaney, 1986; Bower, 1981; Isen, 1984 for reviews). That is, individuals in a good mood are more likely to recall positive information from memory, whereas individuals in a bad mood are more likely to recall negative information. Thus, thinking about one's life while being in a good mood may result in a selective retrieval of positive aspects of one's life, and, therefore, in a more positive evaluation.

On the other hand, the impact of moods may be more direct. People may assume that their momentary well-being at the time of judgment is a reasonable and parsimonious indicator of their well-being in general. Thus, they may base their evaluation of their life-as-a-whole on their feelings at the time of judgment and may evaluate their well-being more favourably when they feel good rather than bad. In doing so, lay people may follow the same logic as psychologists who assume that one's mood represents the global overall state of the organism (e.g. Ewert, 1983) and reflects all the countless experiences one goes through in life (e.g. Bollnow, 1956). Accord-

ing to this perspective, which has a long tradition in European phenomenological psychology, our moods are an integrative function of all the experiences we have. If people share this perspective, they may evaluate their life on the basis of their mood at the time of judgment, a strategy that would greatly reduce the complexity of the judgmental task.

In fact, when people are asked how they decide whether they are happy or not, most of them are likely to refer explicitly to their current affect state, saying, for example, "Well. I feel good". Accordingly, Ross, Eyman and Kishchuk (1986) report that explicit references to one's affective state accounted for 41 per cent to 53 per cent of the reasons that various samples of adult Canadians provided for their reported well-being, followed by future expectations (22 per cent to 40 per cent), past events, (5 per cent to 20 per cent), and social comparisons (5 per cent to 13 per cent).

We conducted a number of laboratory and field experiments to explore the judgmental processes that underlie the impact of respondents' current mood on reported well-being: Is the impact of moods mediated by mood congruent recall from memory or by the use of one's mood itself as an informational basis? In one of these studies (Schwarz and Clore, 1983, Exp. 2), we called respondents on sunny or rainy days and assessed their well-being in telephone interviews. As expected, respondents reported being in a better mood, and being happier and more satisfied with their life-as-a-whole, on sunny than on rainy days.

To test the hypothesis that the impact of mood on reported well-being is due to respondents' use of their perceived mood as a piece of information, some respondents were induced to attribute their current mood to a transient external source which was irrelevant to the evaluation of one's life. If respondents attribute their current feelings to transient external factors, they should be less likely to use them as an informational basis for evaluating their well-being in general, and the impact of subjects' current mood should be greatly reduced. In the weather study, this was accomplished by directing subjects' attention to the weather. In one condition, the interviewers pretended to call from out of town and asked, "By the way, how's the weather down there?". With this manipulation, we wanted to suggest to respondents that their mood may be due to the weather and may therefore not be diagnostic for the quality of their life. What we wanted to suggest to respondents in a very indirect way is, "Don't worry about it, everybody feels lousy these days."

Table 3.4 shows the results. While good or bad weather resulted in a pronounced difference in reported well-being when the weather was *not* mentioned, this difference was eliminated when respondents' attention was directed to the weather as an irrelevant external source of their current mood.

TABLE 3.4. *The informative function of mood*

	Weather	
	Not mentioned	Mentioned
Differences due to weather	2.1	0.2

Note: The difference in well-being (mean score of happiness and satisfaction; range is 1–10; 10 = high well-being) reported on sunny and rainy days is presented.

Adapted from Experiment 2 of Schwarz, N. and Clore, G. L. Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 1983; 45, 513–523. Reprinted by permission.

In addition, a measure of current mood, assessed at the end of the interview, was not affected by the attention manipulation, which suggests that the manipulation did not affect respondents' current mood itself but only their inferences based upon it. Accordingly, the mood measure was more strongly correlated with reported well-being when the weather was *not* mentioned than when it was mentioned.

In summary, these results (which have been replicated in a laboratory experiment; Schwarz and Clore, 1983, Exp. 1) demonstrate that respondents use their affective state at the time of judgment as a parsimonious indicator of their well-being in general, unless the informational value of their current mood is called into question. Moreover, the discounting effects obtained in the present study, as well as in our follow-ups, rules out an alternative explanation based on mood-congruent retrieval. According to this hypothesis, respondents may recall more negative information about their life when in a bad rather than a good mood, and may therefore base their evaluation on a selective sample of data. Note, however, that the impact of a selective data base should be independent of respondents' attributions for their current mood. Attributing one's current mood to the weather only discredits the informational value of one's current mood itself, but not the evaluative implications of any positive or negative events one may recall. Inferences based on selective recall should therefore be unaffected by salient explanations for one's current feelings. Thus, the present data demonstrates that moods themselves may serve informative functions. This hypothesis has meanwhile received considerable support in different domains of judgment (cf. Schwarz, 1987, 1988b; Schwarz and Clore, 1988; Schwarz, Servay and Kumpf, 1985), and has provided a coherent framework for conceptualizing the impact of affective states on cognitive processes (Schwarz, in press b).

When do people rely on their mood rather than other information?

So far, we have seen that individuals may evaluate their well-being on the basis of comparison processes or on the basis of their affective state at the time of judgment. This raises the question under which conditions they will rely on one rather than the other source of information.

General life satisfaction versus specific life domains

On theoretical grounds, we may assume that people are more likely to use the simplifying strategy of consulting their affective state, the more burdensome the judgment would be to make on the basis of comparison information. After all, humans have frequently been shown to be "cognitive misers" (Taylor, 1981) who prefer simple strategies to more complex ones whenever they are available. In this regard, it is important to note a basic difference between judgments of happiness and satisfaction with one's life-as-a-whole versus judgments of specific life domains. Evaluations of general life satisfaction pose an extremely complex task that requires a large number of comparisons along many dimensions with ill-defined criteria and the subsequent integration of the results of these comparisons into one composite judgment. As noted earlier, one may evaluate one's current situation by comparing it with what one expected, with what others have, with what one had earlier, and so on. And which domains is one to select for these comparisons? Health, income, family life, the quality of your environment, and what else? And after making all these comparisons, how should one integrate their results? Which weight does one want to give to each outcome? Facing this complex task, people may rarely engage in it. Rather, they may base their judgment on their perceived mood at that time, unless the informational value of their current mood is discredited.

Evaluations of specific life domains, on the other hand, are often less complex. In contrast to judgments of general life satisfaction, comparison information is usually available for judgments of specific life domains and criteria for evaluation are well-defined. An attempt to compare one's income or one's "life-as-a-whole" with that of colleagues aptly illustrates the difference. Moreover, one's affective state is not considered relevant information in evaluating many domains. Therefore, judgments of domain satisfaction are more likely to be based on inter- and intra-individual comparisons rather than on the heuristic use of one's affective state at the time of judgment. In line with this reasoning, we found that the outcome of the 1982 championship games of the German national soccer team affected respondents' general life satisfaction but not their satisfac-

tion with work and income (Schwarz, Strack, Kommer and Wagner, 1987, Exp. 1).

The hypothesis that judgments of general well-being are based on respondents' affective states, while judgments of domain satisfaction are based on comparison processes, raises the intriguing possibility that the same event may influence evaluations of one's life-as-a-whole and evaluations of specific domains in opposite directions. For example, an extremely positive event in domain X may induce a good mood, resulting in reports of increased global well-being. However, the same event may also increase the standard of comparison used in evaluating domain X, resulting in judgments of decreased satisfaction with this particular domain. Such a differential impact of the same objective event may in part account for the weak relationships between global and specific evaluations, as well as measures of objective circumstances that have frequently concerned sociological researchers in the subjective social indicators tradition (Campbell, 1981; Glatzer and Zapf, 1984).

This possibility was explored by testing subjects in either a pleasant or an unpleasant room, namely a friendly office or a small, dirty laboratory that was overheated and noisy, with flickering lights and a bad smell. To the extent that these rooms affect subjects' mood, subjects should report lower life satisfaction in the unpleasant than in the pleasant room. However, to the extent that the rooms serve as salient standards of comparison, subjects in the unpleasant room should also report higher housing satisfaction than subjects in the pleasant room. The results (Schwarz, Strack, Kommer and Wagner, 1987, Exp. 2) confirmed this prediction as shown in Table 3.5.

TABLE 3.5. *Global well-being and housing satisfaction: the impact of one's current environment*

	Type of room	
	Pleasant	Unpleasant
Global well-being	9.4	8.1
Housing satisfaction	7.4	8.6

Note: Global well-being presents the mean score of happiness and satisfaction with one's life-as-a-whole. Range of scores is 1–11, with the higher scores indicating higher well-being or housing satisfaction, respectively.

Adapted from Experiment 2 of Schwarz, N., Strack, F., Kommer, D. and Wagner, D. Soccer, rooms and the quality of your life: Mood effects on judgments of satisfaction with life in general and with specific life-domains. *European Journal of Social Psychology*, 1987; 17, 69–79. Reprinted by permission.

The relative salience of mood and competing information

As we have seen before, however, the use of comparison information is not limited to evaluations of specific life domains. Rather, we also found clear evidence for comparison processes in judgments of general well-being. Most importantly, respondents used events that they recalled from their own past as standards of comparison and reported lower current well-being when they recalled negative rather than positive past events (Strack *et al.*, 1985, Exp. 1). How is this finding compatible with the assumption that people prefer to evaluate their general well-being on the basis of their mood at the time of judgment?

The available data suggests that individuals rely on their mood state if their mood is pronounced, but use other salient information about their life in the absence of pronounced mood states. The best evidence for this assumption comes from two experiments in which we manipulated the emotional involvement that subjects experienced while thinking about past life events. In one experiment (Strack *et al.*, 1985, Exp. 2), we asked subjects to give either a short description of only a few words or to provide a vivid account of one to two pages in length. In the other study (Strack *et al.*, 1985, Exp. 3), subjects had to explain *why* the event occurred, or *how* the event proceeded. Explaining *why* the event occurred or providing a short description did not affect subjects' current mood, whereas *how* descriptions and vivid reports resulted in pronounced mood differences between subjects who reported positive and negative experiences.

When no pronounced mood state was induced, recalling negative past events resulted in reports of higher general well-being than recalling positive past events, thus replicating the contrast effects found earlier, as shown in Table 3.6. When the recall task did induce a pronounced mood state, on the other hand, mood had an overriding effect; in that case, subjects who described negative past events reported lower well-being than subjects who described positive past events, replicating the mood effects found in other studies.

In combination, these studies demonstrate that the impact of an event is a joint function of its hedonic quality, its temporal distance, and the person's emotional involvement while thinking about the event. That the relationship between objective events and subjective well-being is as weak as the subjective indicator literature demonstrated, is therefore not surprising. Knowing the hedonic quality of an event does not allow a prediction of its impact on reported well-being in the absence of knowledge about other judgmental variables.

TABLE 3.6. *Subjective well-being: the impact of style of thinking*

	Valence of Event	
	Positive	Negative
Detailed versus Short descriptions		
Detailed	9.1	7.9
Short	6.8	8.4
"How" versus "Why" descriptions		
How	8.2	6.3
Why	7.8	8.9

Note: Mean score of happiness and satisfaction questions, range is 1 to 11, with higher values indicating reports of higher well-being.

Adapted from Experiments 2 and 3, respectively: Strack, F., Schwarz, N. and Gschneidinger, E. Happiness and reminiscing: The role of time perspective, mood, and mode of thinking. *Journal of Personality and Social Psychology*, 1985; 49, 1460–1469. Reprinted by permission.

Reporting the judgment

Once respondents have formed a private judgment, either based on their mood or based on a comparison process, they face the task of communicating this judgment to the researcher. Depending on the nature of the response situation, self-presentation and social desirability considerations may bias reports at this stage. Smith (1979) provided meta-analytic evidence that higher well-being is reported in face-to-face interviews than in mail surveys. Experimental research confirmed this finding (Strack *et al.*, in press) and indicated that self-presentation effects are moderated by interviewer characteristics.

Specifically, respondents reported higher well-being in personal interviews than in self-administered questionnaires. Moreover, this difference was more pronounced when the interviewer was of the opposite sex but was not obtained when the interviewer was severely handicapped. Subjects obviously hesitated to tell someone in an unfortunate condition how great their own life is. In contrast, when the handicapped confederate did not serve as an interviewer, but was only present in the room as another subject, filling out his own questionnaire, his presence did increase subjects' reported well-being, presumably because the handicapped confederate served as a salient standard of comparison, as discussed previously.

In summary, this research indicates that public reports of well-being may be more favourable than respondents' private judgments. These findings, in combination with the usually low correlations between measures of well-being and measures of social desirability, which rarely exceed $r = .20$ (cf.

Diener, 1984), moreover, suggests that respondents' editing of their reports may be more affected by characteristics of the interview situation than by individual differences between respondents.

A judgment model of subjective well-being

Figure 3.1 summarizes the findings presented in this chapter. If respondents

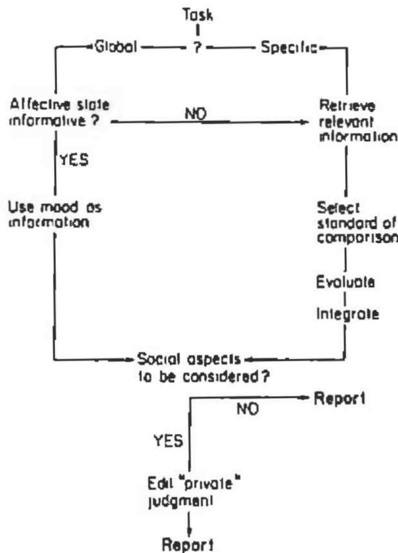

FIG. 3.1. A judgment model of subjective well-being.

are asked to report their happiness and satisfaction with life-as-a-whole, they are likely to base their judgment on their current affective state, which greatly simplifies the judgmental task. If the informational value of their affective state is discredited, or if their affective state is not pronounced and other information is more salient, they are likely to use a comparison strategy, which is also the strategy that is most likely to be used for evaluations of specific life domains.

When using a comparison strategy, both the selection of information about one's life and the selection of a comparison standard follow the principle of cognitive accessibility: whatever comes to mind first, and is relevant to the judgment at hand, is most likely to be used, unless the conversational context renders the use of information that has already been "given" inadequate. Whether information that comes to mind, and is used, serves as a standard of comparison or as descriptive information depends on whether it appears to bear on one's own current living conditions or not. Information

that appears as distinct, because it pertains to a different episode of one's life or to a distant person, is used as a comparison standard and results in contrast effects. Information that directly bears on one's current living conditions, on the other hand, is used as descriptive information and results in assimilation effects.

Finally, after having formed a judgment on the basis of comparisons or on the basis of their affective state, respondents have to report their judgment to the researcher. At this stage they may or may not edit their report to conform to social expectations, depending on the nature of the situation.

This model, along with the research that bears on it, emphasizes that reports of well-being, which are used by social scientists as subjective social indicators, are subject to a number of transient influences. Like other social judgments they can be considered constructions in response to particular questions posed at a particular time rather than reflections of stable underlying attributes of the respondent. In particular, these judgments depend on the subset of potentially relevant information that is most accessible at the time, and they are strongly likely to be affected by news events (e.g. the outcome of soccer games), seasonal variations (e.g. the weather) or the specific succession of questions in an interview, as well as other aspects of question context. Moreover, the impact of retrieved information about the objective circumstances of life is dependent on respondents' time perspective and emotional involvement. Thus, the same objective event may affect respondents' reported well-being in opposite directions depending upon its temporal distance and respondents' mode of thinking about the event. Low test-retest reliabilities and a low explanatory power of objective conditions of life are therefore unavoidable consequences of the judgmental nature of reported well-being.

While some of these influences may be controlled for under some conditions (cf. Schwarz, 1987, Chapter 8), they usually undermine the comparability of data across time and studies. Unfortunately, this comparability is a key prerequisite for most applied uses of subjective social indicators, as well as other survey data. If we want to avoid misinterpretations of method effects as substantive effects in this, as well as other areas of psychological and social research, we will have to learn more about the cognitive processes that underlie the reports that our respondents provide. Hopefully, the recently initiated collaboration between survey researchers and cognitive psychologists (for first results see Hippler, Schwarz and Sudman, 1987) will advance our knowledge of these important aspects of social and psychological research.

References

BLANEY, P.H. Affect and memory: A review. *Psychological Bulletin*. 1986; 99. 229–246.
BODENHAUSEN, G.V. and WYER, R.S. Social cognition and social reality: Information acqui-

sition and use in the laboratory and the real world. In H. J. Hippler, N. Schwarz and S. Sudman (eds.), *Social information processing and survey methodology*. New York: Springer Verlag, 1987.

BOLLNOW, O.F. *Das Wesen der Stimmungen*. Frankfurt: Klostermann, 1956.

BOWER, G.H. Mood and memory. *American Psychologist*, 1981; **36**, 129–148.

BRICKMAN, P. and CAMPBELL, D.T. Hedonic relativism and planning the good society. In M. H. Appley (ed.), *Adaptation-level theory*. New York: Academic Press, 1971.

BRICKMAN, P., COATES, D. and JANOFF-BULMAN, R. Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 1978; **36**, 917–927.

CAMPBELL, A. *The sense of well-being in America*. New York: McGraw-Hill, 1981.

CAMPBELL, A., CONVERSE, P.E. and RODGERS, W.L. *The quality of American life*. New York: Russell Sage, 1976.

CLARK, H.H. Language use and language users. In G. Lindzey and E. Aronson (eds.), *Handbook of social psychology, Vol. 2*, pp. 179–232. New York: Random House, 1985.

CLARK, H.H. and CLARK E.V. *Psychology and language*. New York: Harcourt, Brace, Jovanovich, 1977.

DARSCHIN, W. and FRANK, B. Tendenzen im Zuschauerverhalten. Teleskopie-Ergebnise zur Fernsehnutzung im Jahre 1981. *Media Perspektiven*, 1982; **4**, 276–284.

DERMER, M., COHEN, S.J., JACOBSEN, E. and ANDERSON, E.A. Evaluative judgments of aspects of life as a function for vicarious exposure to hedonic extremes. *Journal of Personality and Social Psychology*, 1979; **37**, 247–260.

DIENER, E. Subjective well-being. *Psychological Bulletin*, 1984; 235, 542–575.

EASTERLIN, R.A. Does economic growth improve the human lot? Some empirical evidence. In P.A. David and M. W. Reder (eds.), *Nations and households in economic growth*. New York: Academic Press, 1974.

ELDER, G.H. *Children of the Great Depression*. Chicago: University Press, 1974.

EMMONS, R.A. and DIENER, E. Factors predicting satisfaction judgments: A comparative examination. *Social Indicators Research*, 1985; **16**, 157–167.

EWERT, O. Ergebnisse und Probleme der Emotionsforschung. In H. Thomae (ed.), *Theorien und Formen der Motivation. Enzyklopadie der Psychologie*, C, IV, Vol. 1. Göttingen: Hogrefe.

FILIPP, S.H. Kritische Lebensereignisse als Brennpunkte einer angewandten Entwicklungspsychologie. In R. Oerter and L. Montada (eds.), *Entwicklungspsychologie*. München: Urban und Schwarzenberg.

GLATZER, W. Lebenszufriedenheit und alternative Masse subjektiven Wohlbefindens. In W. Glatzer and W. Zapf (eds.), *Lebensqualität in der Bundesrepublik*. Frankfurt: Campus Verlag, 1984.

GLATZER, W. and ZAPF, W. Lebensqualität in der Bundesrepublik. In W. Glatzer and W. Zapf (eds.), *Lebensqualität in der Bundesrepublik*. Frankfurt: Campus Verlag, 1984.

GRICE, H.P. Logic and conversation. In P. Cole and J.L. Morgan (eds.), *Syntax and semantics, 3: Speech acts*, pp. 41–58. New York: Academic Press, 1975.

GROVES, R.M. and KAHN, R.L. *Surveys by telephone: a national comparison with personal interviews*. New York: Academic Press, 1979.

HIGGINS, E.T. and KING, G. Accessibility of social constructs: Information processing consequences of individual and contextual variability. In N. Cantor and J.F. Kihlstrom (eds.), *Personality, cognition, and social interaction*. Hillsdale NJ: Erlbaum, 1981.

HIPPLER, H.J., SCHWARZ, N. and SUDMAN, S. (eds.), *Social information processing and survey methodology*. New York: Springer Verlag, 1987.

HYMAN, H.H. and SINGER, E. (eds.). *Readings in reference group theory and research*. New York: Free Press, 1968.

ISEN, A.M. Toward understanding the role of affect in cognition. In R.S. Wyer, Jr. and T.K. Srull (eds.), *Handbook of social cognition, Vol. 3*. Hillsdale NJ: Erlbaum, 1984.

IRWIN, P.H., ALLEN, G., KRAMER, S. and DANOFF, B. Quality of life after radiation therapy: A study of 309 cancer survivors. *Social Indicators Research*, 1982; **10**, 187–210.

KAMMANN, R. *Personal circumstances and life events as poor predictors of happiness*. Annual Convention of the American Psychological Association, Washington, DC, 1982.

MICHALOS, A. Multiple discrepancies theory. *Social Indicators Research*, 1985; **16**, 347–413.

MÜNKEL, T., STRACK, F. and SCHWARZ, N. *Der Einfluß der experimentellen Honorierung auf*

Stimmung und Wohlbefinden: Macht Schokolade glücklich? 29th Tagung Experimentell Arbeitender Psychologen, Aachen, FRG, 1987.

OTTATI, V.C., RIGGLE, E., WYER, R.S., SCHWARZ, N. and KUKLINSKI, J. (in press). The cognitive and affective bases of opinion survey responses. *Journal of Personality and Social Psychology.*

ROSS, M., EYMAN, A. and KISHCHUCK, N. Determinants of subjective well-being. In J.M. Olson, C.P. Herman and M. Zanna (eds.), *Relative deprivation and social comparison.* Hillsdale NJ: Erlbaum, 1986.

RUNCIMAN, W.G. *Relative deprivation and social justice.* London: Routledge & Kegan Paul, 1966.

RUNYAN, W.M. The life satisfaction chart: Perceptions of the course of subjective experience. *International Journal of Aging and Human Development*, 1980; **11**, 45–64.

SCHUMAN, H. and PRESSER, S. *Questions and answers in attitude surveys. Experiments on question form, wording and context.* New York: Academic Press, 1981.

SCHWARZ, N. Stimmung als Information: Zum Einfluß von Stimmungen auf die Beurteilung des eigenen Lebens. In G. Lüer (ed.), *Bericht über den 33. Kongreß der Deutschen Gesellschaft für Psychologie in Mainz 1982.* Göttingen: Hogrefe, 1983.

SCHWARZ, N. *Stimmung als Information: Untersuchungen zum Einfluß von Stimmungen auf die Bewertung des eigenen Lebens.* Heidelberg: Springer Verlag, 1987.

SCHWARZ, N. Was Befragte aus Antwortvorgaben lernen: Zur informativen Funktion von Antwortvorgaben bei Verhaltensberichten. *Planung und Analyse*, 1988a; **15**, 103–107.

SCHWARZ, N. Stimmung als Information. Zum Einfluß von Stimmungen auf evaluative Urteile. *Psychologische Rundschau*, 1988b; **39**, 148–159.

SCHWARZ, N. Assessing frequency reports of mundane behaviours: Contributions of cognitive psychology to questionnaire construction. In C. Hendrick and M. Clark (eds.), *Review of Personality and Social Psychology*, **11**. Beverly Hills CA: Sage, in press a.

SCHWARZ, N. Feelings as information: Informational and motivational functions of affective states. In E.T. Higgins and R. Sorrentino (eds.), *Handbook of motivation and cognition: Foundations of social behavior*, **2**. New York: Guilford Press, in press b.

SCHWARZ, N. and BIENIAS, J. What mediates the impact of response alternatives on frequency reports of mundane behaviours? *Applied Cognitive Psychology*, in press.

SCHWARZ, N. and CLORE, G.L. Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, **45**, 513–523.

SCHWARZ, N. and CLORE, G.L. How do I feel about it? Informative functions of affective states. In K. Fiedler and J. Forgas (eds.), *Affect, cognition, and social behavior.* Toronto: Hogrefe International, 1988.

SCHWARZ, N. and HIPPLER, H. J. What response scales may tell your respondents. In H.J. Hippler, N. Schwarz, and S. Sudman (eds.), *Social information processing and survey methodology.* New York: Springer Verlag, 1987.

SCHWARZ, N., HIPPLER, H.J., DEUTSCH, B. and STRACK, F. Response categories: Effects on behavioral reports and comparative judgments. *Public Opinion Quarterly*, 1985; **49**, 388–395.

SCHWARZ, N. and SCHEURING, B. Judgments of relationship satisfaction: Inter and intraindividual comparisons as a function of questionnaire structure. *European Journal of Social Psychology*, 1988; **18**, 485–496.

SCHWARZ, N. and SCHEURING, B. Die Vergleichsrichtung bestimmt das Ergebnis von Vergleichsprozessen: Ist-Idealdiskrepanzen in der Beziehungsbeurteilung. *Zeitschrift für Sozialpsychologie*, 1989.

SCHWARZ, N., SERVAY, W. and KUMPF M. Attribution of arousal as a mediator of the effectiveness of fear-arousing communications. *Journal of Applied Social Psychology*, 1985; **15**, 74–78.

SCHWARZ, N. and STRACK, F. The survey interview and the logic of conversation. *ZUMA-Arbeitsbericht* 1988; **3**.

SCHWARZ, N., STRACK, F., KOMMER, D. and WAGNER, D. Soccer, rooms and the quality of your life: Mood effects on judgments of satisfaction with life in general and with specific life-domains. *European Journal of Social Psychology*, 1987; **17**, 69–79.

SHERMAN, S.J. and CORTY, E. Cognitive heuristics. In R.S. Wyer and T. Srull (eds.), *Handbook of social cognition. Vol. 3.* Hillsdale NJ: Erlbaum, 1984.

SMITH, T.W. Happiness. *Social Psychology Quarterly*, 1979; **42**, 18–30.

STRACK, F. "Social Cognition": Sozialpsychologie innerhalb des Paradigmas der Informationsverarbeitung. *Psychologische Rundschau*, 1988; **39**, 72–82.

STRACK, F. and MARTIN, L.L. Verfügbarkeit und Verwendung selbstbezogener Informationen in der Befragungssituation. In M. Amelang (ed.), *Bericht über den 35. Kongreß der Deutschen Gesellschaft für Psychologie in Heidelberg 1986.* Göttingen: Hogrefe, 1986.

STRACK, F. and MARTIN, L.L. Thinking, judging, and communicating: A process account of context effects in attitude surveys. In H.J. Hippler, N. Schwarz, and S. Sudman, (eds.), *Social information processing and survey methodology*. New York: Springer Verlag, 1987.

STRACK, F., MARTIN, L.L. and SCHWARZ, N. The context paradox in attitude surveys: Assimilation or contrast? *ZUMA Arbeitsbericht* 1987; 7.

STRACK, F., MARTIN, L.L. and SCHWARZ, N. Priming and communications: Social determinants of information use in judgments of life satisfaction. *European Journal of Social Psychology*, 1988; **18**, 429–442.

STRACK, F., SCHWARZ, N., CHASSEIN, B., KERN, D. and WAGNER, D. The salience of comparison standards and the activation of social norms: Consequences for judgments of happiness and their communication. *British Journal of Social Psychology*, in press.

STRACK, F., SCHWARZ, N. and GSCHNEIDINGER, E. Happiness and reminiscing: The role of time perspective, mood, and mode of thinking. *Journal of Personality and Social Psychology*, 1985; **49**, 1460–1469.

STRACK, F., SCHWARZ, N. and NEBEL, A. *Thinking about your life: Affective and evaluative consequences.* Conference on "Ruminations, Self-Relevant Cognitions, and Stress". Memphis: State University, 1987.

TAYLOR, S.E. The interface of cognitive and social psychology. In J. H. Harvey (ed.), *Cognition, social behavior, and the environment.* Hillsdale NJ: Erlbaum, 1981.

WYER, R.S. The acquisition and use of social knowledge: Basic postulates and representative research. *Personality and Social Psychology Bulletin*, 1980; **6**, 558–573.

Neuregelung zum Versand nachfolgender Arbeitsberichte

betr.: Zuma Arbeitsberichte Nr 87/06
87/12
88/01
88/02
88/04
88/11

Die oben genannten Arb.-Berichte sind zwischenzeitlich in leicht geänderter Fassung in verschiedenen Zeitschriften veröffentlicht. Deshalb soll zukünftig auf Anfragen nicht mehr die alte Arb.-Berichtsversion verschickt werden, sondern eine Kopie des Artikels.

Die Zeitschriftenartikel dürfen nicht in Deckel mit ZUMA-Aufdruck gebunden werden. Eine Masterkopie des jeweiligen Artikels befindet sich in der Mappe für Masterkopie des zu ersetzenden Arbeitsberichts. Eine aktuelle Liste vorhandener ZUMA-Arbeitsberichte soll beigelegt werden.

Vorläufig sollen die bereits kopierten Arb.-Berichte noch verschickt werden, bis die bereits erstellten Kopien aufgebraucht sind.

Zukünftig werden nur noch Kopien von den Zeitschriftenartikeln hergestellt.

Gruss Angelika

ZUMA-ARBEITSBERICHT No. 88/04

The attached reprint replaces ZUMA-Arbeitsbericht No. 88/04 by the same authors.

Hans-J. Hippler, & Norbert Schwarz:

"No opinion" filters: A cognitive perspective.

International Journal of Public Opinion Research, 1989, 1, 77-87.

International Journal of Public Opinion Research Vol. 1 No. 1 0954-2892/89 $3.00

'NO OPINION'-FILTERS: A COGNITIVE PERSPECTIVE*

Hans J. Hippler, Norbert Schwarz

ABSTRACT

Research on the use of 'no opinion'-filters suggests that respondents are the less likely to offer a substantive response the more strongly the filter question is worded. A series of experiments is reported that demonstrates that filter questions influence respondents' perception of their task: the more strongly the filter question is worded, the more respondents assume that they will have to answer difficult questions, and that they may not have the required knowledge. Accordingly, filter questions discourage respondents from offering global opinions that they may hold. In line with this assumption, all respondents who reported not having an opinion in response to a filter question, subsequently provided substantive responses on a global opinion question—presumably because the global question asked was less demanding than expected on the basis of the filter. Analyses of these substantive responses indicated that respondents who initially reported not having an opinion differed from respondents who reported having one. Methodological implications of these findings for the use of filter questions and for research on the nature of 'floating' are discussed.

CONSEQUENCES OF 'NO OPINION'-FILTERS

The major goal of public opinion research is the description of opinions held by a population. Accordingly, public opinion researchers frequently attempt to screen out respondents who do not hold an opinion on the issue under study because they assume that these respondents may provide meaningless responses. To accomplish this screening task, they developed a variety of filter questions that allow the identification of respondents who do not hold an opinion.

This methodological research resulted in some of the most reliable findings in the area of question wording (cf. Schuman and Presser, 1981; Sudman and Bradburn, 1974 for reviews). In general, respondents are more likely to report not having an opinion on an issue when this alternative is explicitly offered as

* A previous version of this paper was presented at the meeting of the American Association for Public Opinion Research, Toronto, Canada, May 1988. The reported research was supported by ZUMA's program on Cognition and Survey Methodology and by a Feodor-Lynen Fellowship from the Alexander von Humboldt Stiftung to Norbert Schwarz.

© World Association for Public Opinion Research 1989

part of a 'filtered' question, than when it has to be volunteered in response to the 'standard form' of the question that does not explicitly offer a 'don't know' response alternative. If a 'don't know' option is offered, the increase in 'no opinion' responses depends on the specific form of the filter used. Generally, the use of a so called 'quasi-filter' results in smaller increases than the use of a 'full-filter'. In the former case, a 'no opinion' option is offered as part of a precoded set of response alternatives, whereas in the latter case respondents are explicitly asked whether they have an opinion on the issue before the interviewer proceeds to ask the question proper. Finally, the increase in 'don't know' responses to a full filter depends on the strength of the wording of the filter question, with stronger wordings resulting in higher rates of no opinion responses. For example, more respondents provide a substantive answer when the filter question is worded, 'Do you have an opinion on this?', than when it is worded, 'Have you thought enough about this to have an opinion?'. Several processes are likely to contribute to these findings.

CONVERSATIONAL NORMS

From the perspective of conversational norms, the mere fact that a person is asked a question presupposes that the person can answer it (cf. Belnap and Steel, 1976; Clark, 1985; Grice, 1975 for a general discussion, and Strack and Martin, 1987 for applications to survey methodology). Thus, responding that one has no opinion is an illegitimate answer to an opinion question that respondents are unlikely to give unless the question indicates its legitimacy. In the survey interview, this effect of communication norms is likely to be enhanced by respondents' assumption that they have to work within the set of response alternatives provided to them (Schuman and Kalton, 1985). Accordingly, they may only offer a 'don't know'-response if that response is explicitly offered as a legitimate answer. Note, however, that conversational norms do not account easily for the differential impact of different forms of filters because any filter should be sufficient to render no opinion responses legitimate. Thus, the differential impact of different filter wordings suggests that filters may have effects over and above the reduction of question constraints.

Regarding the differential impact of filters, Bishop et al. (1983) suggested that full filters 'encourage' don't know responses more strongly than quasi-filters, and the more so the more strongly they are worded. While this assumption describes the findings very well, it seems to us that a slightly different focus, that is in line with recent research on the informative functions of response alternatives (Schwarz and Hippler, 1987; Schwarz, in press), provides a better account for the underlying process.

Specifically, we want to suggest that full filters, in particular if they are

strongly worded, *discourage* substantive responses because they suggest to respondents that considerable knowledge is required to answer the question. For example, respondents who are asked, 'Have you thought enough about this issue to have an opinion on it?', may assume that this question is particularly important to the researcher and that they should only answer it when they have a well considered opinion based on sound knowledge of the facts. Moreover, respondents may assume that this filter question leads in to a series of detailed questions that require considerable knowledge about the issue. Both of these assumptions may prevent respondents from offering a substantive opinion even though they may have a general preference for one or the other side of the issue, which they would report in response to a global question with, for example, 'favor'/'oppose'/ 'no opinion' response alternatives.

If this analysis is correct, full filter questions—in particular if they are strongly worded—may screen out respondents on the basis of an inappropriate criterion: full filters may suggest to respondents that they face a much more demanding task than is actually the case. To this extent, full filters may result in a considerable underestimation of the proportion of respondents who hold an opinion at the level of specificity to which the question proper actually pertains—not to speak of opinions at the level of global reactions that individuals may act upon in everyday life.

Moreover, the discouraging effect of strongly worded filters may affect different respondents to different degrees. For example, respondents who hold a position with which they expect others to disagree, may be the more likely to avoid substantive responses the more the filter suggests that they are expected to answer a large number of difficult questions. Thus, the discouragement hypothesis allows some specific predictions about the nature of floaters. However, before we consider the methodological and substantive implications of the discouragement hypothesis, we will first report some evidence that bears on the impact of different filter forms on respondents' perception of task demands.

EXPERIMENTS 1 AND 2: WHAT FILTERS MAY TELL THE RESPONDENTS

METHOD

To explore the impact of different filter forms and wordings on respondents' perception of their task, we conducted an experimental survey with 320 college students at the University of Illinois at Urbana-Champaign, and a conceptual replication of this study with 104 students of business administration at the University of Mannheim, West Germany. As part of a larger self-administered questionnaire, respondents were exposed to a controversial statement, e.g. in the

US study: *The Russians are basically trying to get along with America.* For subjects assigned to the *Quasi-Filter Condition* this statement was followed by

'Do you agree or disagree, or do you have no opinion on this?
( ) *agree*
( ) *disagree*
( ) *have no opinion*

For subjects assigned to the *Weakly Worded Full Filter Condition* the filter read,

'Do you have an opinion on this?
( ) *no, have no opinion*
( ) *yes, have opinion*

whereas the *Strongly Worded Full Filter* read,

'Have you thought enough about this issue to have an opinion on it?
( ) *no, have no opinion*
( ) *yes, have opinion*

Subjects assigned to a *No Filter Control Condition* were only asked to consider the statement before proceeding to the subsequent questions.

Following these experimental manipulations, respondents' expectations about the number of follow-up questions asked, and their difficulty, were assessed, and respondents estimated how likely it is that they would have the knowledge required to answer these questions.

Results of Experiment 1: US Data

The first row of Table 1 shows respondents' expectations about the number of follow-up questions that the researcher is likely to ask. As predicted by the discouragement hypothesis, respondents' expectations about the number of follow-up questions they would have to answer increased with increasing strength of the filter ($F(3, 312)=9.43$, $p<0.001$, for the linear trend). Thus, respondents assigned to the No Filter Condition expected the smallest, and respondents assigned to the Strongly Worded Full Filter Condition, the largest number of follow-up questions.

Respondents' assumptions about the difficulty of these follow-up questions showed a similar increase ($F(3, 312)=8.37$, $p<0.001$, for the linear trend), as shown in the second row of Table 1. Accordingly, their estimate of the likelihood that they would have 'all the knowledge required for an adequate answer' decreased ($F(3, 312)=5.49$, $p<0.001$, for the linear trend).

TABLE 1 Respondents' Expectations about Follow-up Questions by Condition

	Condition			
	No Filter	*Quasi Filter*	*Weak Full Filter*	*Strong Full Filter*
	Mean Values			
Expected Number of Follow-up Questions[1]	1.9a	3.2b	4.8c	7.4d
Expected Difficulty of Follow-up Questions[2]	6.2a	7.3b	7.9b	9.8c
Expected Availability of Adequate Knowledge[3]	4.1a	3.8b	3.6b	2.2c[4]

n = 320

[1] Open ended question: number of expected questions.
[2] Scale: 1 = not at all difficult 11 = very difficult.
[3] Scale: 1 = not at all likely/11 = very likely that I have all the knowledge required for an adequate answer.
[4] Means not sharing the same subscript differ at least at $p < 0.10$, Duncan Test.

RESULTS OF EXPERIMENT 2: GERMAN DATA

A conceptual replication of parts of this study in West Germany (Trometer, 1986), using a question on the treatment of terminally ill patients, replicated the basic findings. Again, respondents exposed to a strongly worded full filter expected a larger number of follow-up questions ($M = 6$) than respondents exposed to a weakly worded full filter ($M = 4$), $F(1, 92) = 5.0$, $p < 0.03$. Moreover, the former respondents assumed that these follow-up questions would be more difficult to answer ($M = 6.7$, on a 10-point scale) than the latter ($M = 5.4$), $F(1, 97) = 9.4$, $p < 0.01$.

SUMMARY

In combination, these findings support the hypothesis that the use of filter questions may discourage respondents from giving substantive answers: the stronger the filter, the more respondents assume that they are facing a difficult task—and the less likely they are to provide a substantive response, as many previous studies have shown. Accordingly, the use of filter questions may result in an underestimation of the number of respondents who hold an opinion at the level of specificity that the question requires: respondents who may well hold an opinion may be unlikely to report doing so because they expect a more demanding task than they actually would have to face.

If this hypothesis is correct, respondents who give a 'don't know' response to a

filter question may well be able and willing to give a substantive response to a general opinion question, even if they reported that they do not have an opinion.

EXPERIMENT 3: DISCOURAGEMENT AND THE NATURE OF FLOATING

Method

This possibility was explored in a third experiment, that followed a procedure previously used by Hippler and Hippler (1986) in a study on threatening questions. Specifically, respondents were asked the actual opinion question independently of whether they previously reported, in response to a full filter question, that they have an opinion or not. A random sample, drawn from telephone directories, of 336 adults (age 18 or older) living in Mannheim, West Germany, participated in a telephone survey on cable TV, conducted in the fall of 1986. As Question 34, respondents were read the statement, *It has recently been suggested that horror videos may put teenagers at a risk. Some people believe that these videos are harmful to teenagers, others think this is not the case.* Directly following this statement, respondents assigned to the *Standard Form Condition* were asked if they found the effect of horror videos on teenagers to be 'very harmful, harmful, somewhat harmful, or not at all harmful?'. A 'don't know' option was not offered, but accepted if volunteered. Respondents assigned to the *Weakly Worded Full Filter Condition* were asked if they 'have an opinion on the issue', while respondents assigned to the *Strongly Worded Full Filter Condition* were asked if they had 'thought much about this issue?'

Following the filter questions, all respondents assigned to the full filter conditions—independently of whether they reported having an opinion or not—were asked how harmful they believed horror videos to be for teenagers:

Generally speaking, do you think that the influence of horror videos on teenagers is
( ) *very harmful*
( ) *harmful*
( ) *somewhat harmful*
( ) *not at all harmful?*

Results and Discussion

As in previous studies, more respondents reported having no opinion in response to the strong (25 per cent) than in response to the weak (7 per cent) filter question, or in response to its standard form (3 per cent), chi-square $(1) = 12.1$, $p < 0.01$. However, *all* respondents who had reported *not* having an opinion when presented one of the filter questions, subsequently provided a substantive

response to the general opinion question. That is, all don't know (DK) respondents eventually 'floated'.

This finding is compatible with different theoretical accounts of the floating phenomenon, each of which has different implications for the key issue: how meaningful are the responses provided by floaters? On the one hand, the present finding is in line with the discouragement hypothesis. According to this account, respondents who hold a global opinion may nevertheless say 'don't know' because the filter suggests that they will have to answer a number of detailed follow-up questions, and respondents may doubt that they have sufficient knowledge to live up to that task. Would they know that only one global judgment is expected, they would be happy to offer it—and this is what they do when a global question is asked. Accordingly, their substantive responses are perfectly meaningful at the low level of specificity that the global question requires.

On the other hand, it has been assumed that floaters may provide random responses—often referred to as a mental flip of a coin—in response to unfiltered questions. This hypothesis is based on the assumption that floaters do not hold an opinion on the issue but only dare to admit so if a 'don't know' option is explicitly offered. Accordingly, floaters may also have given 'random' responses to the global opinion question that followed the filter. Finally, it has also been suggested (e.g. Bishop *et al.*, 1983; Schuman and Kalton, 1985) that floaters are highly uncertain about their opinion, and—if pushed to provide an answer—may therefore adopt the majority position to be on the safe side. Accordingly, their responses would not reflect their opinion but rather a strategic self-presentation.

To evaluate these issues, we need to explore the relationship of the substantive responses provided by floaters to other variables. In previous research, this has not been possible because respondents who said 'don't know' were not subsequently asked for their opinion. The approach used in the present study, however, does in principle allow this exploration because floaters' substantive responses are assessed. Unfortunately, the limited sample size of the present study limits our possibilities to conduct the required analyses. However, a comparison of the substantive responses provided by floaters and non-floaters reveals an interesting finding: specifically, more than half (56 per cent) of the respondents who reported having an opinion on the filter question assume that horror videous are very harmful to teenagers, as shown in Table 2.

In contrast, only 29 per cent of the floaters hold this position. Similarly, only 9 per cent of the non-floaters assume that horror videous may be only 'somewhat harmful', while a third of the floaters (31 per cent) holds this opinion. Thus, a considerable proportion of the floaters endorsed what is a minority position in the sample. This finding is well in line with the discouragement hypothesis suggested by the results of Experiments 1 and 2. If the use of filter questions elicits

TABLE 2 Substantive responses of floaters and non-floaters regarding the harmfulness of horror videos

Harmfulness	*Floaters* (n = 35)	*Non-Floaters* (n = 291)
	per cent	
Very harmful	29	56
Harmful	37	34
Somewhat harmful	31	9
Not at all harmful	3	1
Total:	100	100

X^2 (3) = 18.8, $p < 0.01$.

expectations of a difficult task, respondents who hold a minority position may be particularly motivated to avoid a series of detailed questions bearing on it. Note, however, that this argument assumes that respondents were aware of their minority status. While research on the spiral of silence (Noelle-Neumann, 1980) suggests that respondents have a reasonably accurate perception of the distribution of opinions in the population, and may thus be aware of their minority or majority status, a more direct test of the hypothesis is called for.

EXPERIMENT 4: PERCEIVED MAJORITY AND THE LIKELIHOOD OF FLOATING

METHOD

To provide this test, respondents' perception of the opinion held by the majority of the population was assessed in a follow-up study. According to the above hypothesis, it was assumed that respondents who perceive their own position as the minority position are more likely to float than respondents who assume that their position is shared by the majority of the population. As part of a larger survey about the noise impact of heavily used freeways, conducted in the fall of 1987, a random sample of 165 adults (age 18 years or older) living in the Heidelberg, West Germany, area reported their own opinion, as well as their perception of the majority opinion, on the use of leaded gas (a current issue in West Germany).

All respondents were exposed to a filter question that read: *It is currently discussed that leaded regular gas should no longer be supplied. There are different opinions about this issue. Some people are in favor, others are opposed to the issue. Do you have an opinion on that?* Following this filter question, all respondents were asked how strongly they favor or oppose the supply of leaded regular gas

TABLE 3 Substantive responses and perceived majority position regarding the supply of leaded gas

	Floaters (No Opinion)	*Non-Floaters* (Opinion)
	Mean values	
Own Opinion	4.5	5.9
Perceived Population Position	4.4	4.9

Note Scale: 1 = opposed to 7 = in favor of supply of leaded regular gas.

(1 = oppose, 7 = favor). Either before or after this question sequence, respondents were asked to report which position the majority of the population would endorse on the same rating scale.

RESULTS

As in Experiment 3, all respondents who reported that they do not have an opinion (10 per cent) in response to the filter question did provide an opinion on the issue in response to the subsequent substantive question. As in the previous experiment, their opinion differs significantly from the opinion of respondents who initially reported holding an opinion about the issue. As shown in Table 3, floaters were more opposed to the supply of leaded gas than non-floaters, $F(3, 157) = 10.3$, $p < 0.01$.

However, contrary to expectations, both groups did not differ in their estimates of the majority position, $F(3, 157) = 1.6$, n.s. Moreover, a comparison of respondents' own position with their perceptions of the majority position indicates that the floaters perceived a high degree of similarity between their own position ($M = 4.4$) and the assumed majority position ($M = 4.5$). In contrast, non-floaters, that is, respondents who had reported holding an opinion in response to the filter question, assumed that their own position ($M = 5.9$) *differs* from the majority ($M = 4.9$). These findings obviously contradict the previously entertained minority hypothesis, and are more compatible with the rival hypothesis that floaters may endorse what they perceive to be the majority position if pressed to provide a substantive response.

CONCLUSIONS

In the present paper, we addressed two related issues. We explored what respondents learn from various forms of filter questions, and we attempted to gain insight into the nature of floating. Regarding the first issue, our findings indicate

consistently that filter questions influence respondents' expectations about their task. Respondents who are exposed to a filter question expect more, and more difficult, follow-up questions, and doubt that they have sufficient knowledge to answer them. Moreover, this effect is the more pronounced the more strongly worded the filter is. Accordingly, the present findings suggest that it may be fruitful to reconsider the use of filter questions. While recent research on the use of filter questions focussed on, 'How do we allow respondents to tell us that they do *not* have an opinion?', we also need to consider the complimentary issue: 'How do we assure that respondents *can* report an opinion about which they may not feel totally at ease?' So far, it seems that using a quasi-filter, that is, offering a 'don't know' option as part of the response alternatives, may be the choice that satisfies both needs.

With regard to the nature of floating, our results do not allow substantive conclusions. While Experiments 3 and 4 demonstrated that the responses provided by floaters differ from the responses provided by non-floaters, the obtained findings are compatible with a number of different hypotheses. More importantly, however, these experiments illustrate the feasibility of a procedure that avoids one of the major methodological limitations in research on floating. Usually, inferences about the opinion of floaters are based on comparisons of the responses provided to a filtered and a non-filtered form of the same question in a between subjects design. This approach renders it impossible to identify floaters and to analyze their behavior at the individual level. In contrast, using a within subjects design, we attempted to assess respondents' opinions independently of whether they reported having or not having an opinion in response to the filter question—and found that all respondents offered a substantive answer, presumably because the substantive question asked was less demanding than what they expected when answering the filter question. While the use of a within subjects design is not without its own problems, it provides the previously missing opportunity to analyze floating at the individual level, and is therefore likely to contribute to the power of future research in this area.

REFERENCES

Belnap, D. and Steel, B. (1976): *The Logic of Questions and Answers*, New Haven, Yale University Press.

Bishop, G. F., Oldendick, R. W. and Tuchfarber, A. J. (1983): 'Effects of filter questions in public opinion surveys', *Public Opinion Quarterly*, 47, 528–46.

Clark, H. H. (1985): Language use and language users. In G. Lindzey and E. Aronson (eds.), *Handbook of Social Psychology*, Vol. II, New York, Random House.

Grice, H. P. (1975): Logic and conversation. In P. Cole and J. L. Morgan (eds.), *Syntax and Semantics 3: Speech Acts*, New York, Academic Press.

Hippler, H. J. and Hippler, G. (1986): 'Reducing refusal rates in the case of threatening questions: the "door-in-the-face" technique', *Journal of Official Statistics*, 1, 25–33.

Noelle-Neumann, E. (1980): *Die Schweigespirale*, München, Piper-Verlag.

Schuman, H. and Kalton, G. (1985). Survey methods. In G. Lindzey and E. Aronson (eds.), *Handbook of Social Psychology*, Vol. I, New York, Random House.

Schuman, H. and Presser, S. (1981): *Questions and Answers in Attitude Surveys. Experiments on question form, wording and context*, New York, Academic Press.

Schwarz, N. (1988): 'Was Befragte aus Antwortalternativen lernen', *Planung und Analyse*, 15, 103–7.

Schwarz, N. (in press): 'Assessing frequency reports of mundane behaviors: Contributions of cognitive psychology to questionnaire construction'. In C. Hendrick and M. S. Clark (eds.), *Review of Personality and Social Psychology*, Vol. 11, Beverly Hills, CA, Sage.

Schwarz, N. and Hippler, H. J. (1987): Response effects in surveys. In H. J. Hippler, N. Schwarz and S. Sudman (eds.), *Social Information Processing and Survey Methodology*, New York, Springer Verlag.

Strack, F. and Martin, L. (1987): 'Thinking, judging, and communicating: A process account of context effects in attitude surveys'. In H. J. Hippler, N. Schwarz and S. Sudman (eds.), *Social Information Processing and Survey Methodology*, New York, Springer Verlag.

Sudman, S. and Bradburn, N. (1974): *Response Effects in Surveys: A review and synthesis*, Chicago, Aldine.

Trometer, R. (1986): *Meinungslosigkeit in der Umfrageforschung*, Unpublished Diplomarbeit, University of Mannheim.

Hans-J. Hippler is Project Director at the Zentrum für Umfragen, Methoden und Analysen, ZUMA, in Mannheim. He published numerous papers on survey methodology and recently co-edited a book on *Social information processing and survey methodology* (New York, Springer Verlag, 1987) with N. Schwarz and S. Sudman.

Norbert Schwarz is Program Director at the Zentrum für Umfragen, Methoden und Analysen, ZUMA, in Mannheim and 'Privatdozent' of psychology at the University of Heidelberg. He published numerous papers on human judgmental processes and recently co-edited a book on *Social information processing and survey methodology* (New York, Springer Verlag, 1987) with H.-J. Hippler and S. Sudman.

ZUMA-Arbeitsberichte

80/15 Gerhard Arminger, Willibald Nagl, Karl F. Schuessler
Methoden der Analyse zeitbezogener Daten. Vortragsskripten der ZUMA Arbeitstagung vom 25.9. bis 5.10.79

81/07 Erika Brückner, Hans-Peter Kirschner, Rolf Porst, Peter Prüfer, Peter Schmidt
Methodenbericht zum "ALLBUS 1980"

81/19 Manfred Küchler, Thomas P. Wilson, Don H. Zimmerman
Integration von qualitativen und quantitativen Forschungsansätzen

82/03 Gerhard Arminger, Horst Busse, Manfred Küchler
Verallgemeinerte Lineare Modelle in der empirischen Sozialforschung

82/08 Glenn R. Carroll
Dynamic analysis of discrete dependent variables: A didactic essay

82/09 Manfred Küchler
Zur Messung der Stabilität von Wählerpotentialen

82/10 Manfred Küchler
Zur Konstanz der Recallfrage

82/12 Rolf Porst
"ALLBUS 1982" - Systematische Variablenübersicht und erste Ansätze zu einer Kritik des Fragenprogramms

82/13 Peter Ph. Mohler
SAR - Simple AND Retrieval mit dem Siemens-EDT-Textmanipulationsprogramm

82/14 Cornelia Krauth
Vergleichsstudien zum "ALLBUS 1980"

82/21 Werner Hagstotz, Hans-Peter Kirschner, Rolf Porst, Peter Prüfer
Methodenbericht zum "ALLBUS 1982"

83/09 Bernd Wegener
Two approaches to the analysis of judgments of prestige: Interindividual differences and the general scale

83/11 Rolf Porst
Synopse der ALLBUS-Variablen. Die Systematik des ALLBUS-Fragenprogramms und ihre inhaltliche Ausgestaltung im ALLBUS 1980 und ALLBUS 1982

84/01 Manfred Küchler, Peter Ph. Mohler
Qualshop (ZUMA-Arbeitstagung zum "Datenmanagement bei qualitativen Erhebungsverfahren") - Sammlung von Arbeitspapieren und -berichten, Teil I + II

84/02 Bernd Wegener
Gibt es Sozialprestige? Konstruktion und Validität der Magnitude-Prestige-Skala

84/03 Peter Prüfer, Margrit Rexroth
Erfahrungen mit einer Technik zur Bewertung von Interviewerverhalten

84/04	Frank Faulbaum Ergebnisse der Methodenstudie zur internationalen Vergleichbarkeit von Einstellungsskalen in der Allgemeinen Bevölkerungsumfrage der Sozialwissenschaften (ALLBUS) 1982
84/05	Jürgen Hoffmeyer-Zlotnik Wohnquartiersbeschreibung. Ein Instrument zur Bestimmung des sozialen Status von Zielhaushalten
84/07	Gabriele Hippler, Hans-Jürgen Hippler Reducing Refusal Rates in the Case of Threatening Questions: The "Door-in-the-Face" Technique
85/01	Hartmut Esser Befragtenverhalten als "rationales Handeln" - Zur Erklärung von Antwortverzerrungen in Interviews
85/03	Rolf Porst, Peter Prüfer, Michael Wiedenbeck, Klaus Zeifang Methodenbericht zum "ALLBUS 1984"
86/01	Dagmar Krebs Zur Konstruktion von Einstellungsskalen im interkulturellen Vergleich
86/02	Hartmut Esser Können Befragte lügen? Zum Konzept des "wahren Wertes" im Rahmen der handlungstheoretischen Erklärung von Situationseinflüssen bei der Befragung
86/03	Bernd Wegener Prestige and Status as Function of Unit Size
86/04	Frank Faulbaum Very Soft Modeling: The Logical Specification and Analysis of Complex Process Explanations with Arbitrary Degrees of Underidentification and Variables of Arbitrary Aggregation and Measurement Levels
86/05	Peter Prüfer, Margrit Rexroth (Übersetzung Dorothy Duncan) On the Use of the Interaction Coding Technique
86/06	Hans-Peter Kirschner Zur Kessler-Greenberg-Zerlegung der Varianz der Meßdifferenz zwischen zwei Meßzeitpunkten einer Panel-Befragung
86/07	Georg Erdmann Ansätze zur Abbildung sozialer Systeme mittels nicht-linearer dynamischer Modelle
86/09	Heiner Ritter Einige Ergebnisse von Vergleichstests zwischen den PC- und Mainframe-Versionen von SPSS und SAS
86/11	Günter Rothe Bootstrap in generalisierten linearen Modellen
87/01	Klaus Zeifang Die Test-Retest-Studie zum ALLBUS 1984 - Tabellenband
87/02	Klaus Zeifang Die Test-Retest-Studie zum ALLBUS 1984 - Abschlußbericht
87/04	Barbara Frbslöh, Michael Wiedenbeck Methodenbericht zum "ALLBUS 1986"
87/05	Norbert Schwarz, Julia Bienias What Mediates the Impact of Response Alternatives on Behavioral Reports?

87/06	Norbert Schwarz, Fritz Strack, Gesine Müller, Brigitte Chassein The Range of Response Alternatives may determine the Meaning of the Question: Further Evidence on Informative Functions of Response Alternatives
87/07	Fritz Strack, Leonard L. Martin, Norbert Schwarz The Context Paradox in Attitude Surveys: Assimilation or Contrast?
87/08	Gudmund R. Iversen Introduction to Contextual Analysis
87/09	Seymour Sudman, Norbert Schwarz Contributions of Cognitive Psychology to Data Collection in Marketing Research
87/10	Norbert Schwarz, Fritz Strack, Denis Hilton, Gabi Naderer Base-Rates, Representativeness, and the Logic of Conversation
87/11	George F. Bishop, Hans-Jürgen Hippler, Norbert Schwarz, Fritz Strack A Comparison of Response Effects in Self-Administered and Telephone Surveys
87/12	Norbert Schwarz Stimmung als Information. Zum Einfluß von Stimmungen und Emotionen auf evaluative Urteile
88/01	Antje Nebel, Fritz Strack, Norbert Schwarz Tests als Treatment: Wie die psychologische Messung ihren Gegenstand verändert
88/02	Gerd Bohner, Herbert Bless, Norbert Schwarz, Fritz Strack What Triggers Causal Attributions? The Impact of Valence and Subjective Probability
88/03	Norbert Schwarz, Fritz Strack The Survey Interview and the Logic of Conversation: Implications for Questionnaire Construction
88/04	Hans-Jürgen Hippler, Norbert Schwarz "No Opinion"-Filters: A Cognitive Perspective
88/05	Norbert Schwarz, Fritz Strack Evaluating One's Life: A Judgment of Subjective Well-Being
88/06	Norbert Schwarz, Herbert Bless, Gerd Bohner, Uwe Harlacher, Margit Kellenbenz Response Scales as Frames of Reference: The Impact of Frequency Range on Diagnostic Judgments
88/07	Michael Braun ALLBUS-Bibliographie (7. Fassung, Stand: 30.6.88)
88/08	Günter Rothe Ein Ansatz zur Konstruktion inferenzstatistisch verwertbarer Indices
88/09	Ute Hauck, Reiner Trometer Methodenbericht International Social Survey Program - ISSP 1987
88/10	Norbert Schwarz Assessing frequency reports of mundane behaviors: Contributions of cognitive psychology to questionnaire construction
88/11	Norbert Schwarz, B. Scheuring (sub.) Judgments of relationship satisfaction: Inter- and intraindividual comparison strategies as a function of questionnaire structure
88/12	Rolf Porst, Michael Schneid Ausfälle und Verweigerungen bei Panelbefragungen - Ein Beispiel -

88/13 Cornelia Züll
SPSS-X. Anmerkungen zur Siemens BS2000 Version

88/14 Michael Schneid
Datenerhebung am PC - Vergleich der Interviewprogramme "internerv+" und "THIS"

88/15 Norbert Schwarz, Bettina Scheuring
Die Vergleichsrichtung bestimmt das Ergebnis von Vergleichsprozessen: Ist - Idealdiskrepanzen in der Partnerwahrnehmung

88/16 Norbert Schwarz, Bettina Scheuring
Die Vergleichsrichtung bestimmt das Ergebnis von Vergleichsprozessen: Ist-Idealdiskrepanzen in der Beziehungsbeurteilung

89/01 Norbert Schwarz, George F. Bishop, Hans-J. Hippler, Fritz Strack
Psychological Sources of Response Effects in Self-Administered And Telephone Surveys

89/02 Michael Braun, Reiner Trometer, Michael Wiedenbeck
Methodenbericht. Allgemeine Bevölkerungsumfrage der Sozialwissenschaften - ALLBUS 1988

89/03 Norbert Schwarz
Feelings as Information: Informational and Motivational Functions of Affective States

89/04 Günter Rothe
Jackknife and Bootstrap: Resampling-Verfahren zur Genauigkeitsschätzung von Parameterschätzungen

89/05 Herbert Bless, Gerd Bohner, Norbert Schwarz und Fritz Strack
Happy and Mindless? Moods and the Processing of Persuasive Communications

89/06 Gerd Bohner, Norbert Schwarz und Stefan E. Hormuth
Die Stimmungs-Skala: Eine deutsche Version des "Mood Survey" von Underwood und Froming

89/07 Ulrich Mueller
Evolutionary Fundamentals of Social Inequality, Dominance and Cooperation

89/08 Robert Huckfeldt
Noncompliance and the Limits of Coercion: The Problematic Enforcement of Unpopular Laws

89/09 Peter Ph. Mohler, Katja Frehsen und Ute Hauck
CUI - Computerunterstützte Inhaltsanalyse. Grundzüge und Auswahlbibliographie zu neueren Anwendungen

89/10 Cornelia Züll, Peter Ph. Mohler
Der General Inquirer III - Ein Dinosaurier für die historische Forschung

89/11 Fritz Strack, Norbert Schwarz, Brigitte Chassein, Dieter Kern, Dirk Wagner
The Salience of Comparison Standards and the Activation of Social Norms: Consequences for Judgments of Happiness and their Communication

89/12 Jutta Kreiselmaier, Rolf Porst
Methodische Probleme bei der Durchführung telefonischer Befragungen: Stichprobenziehung und Ermittlung von Zielpersonen, Ausschöpfung und Nonresponse, Qualität der Daten

89/13 Rainer Mathes
Modulsystem und Netzwerktechnik. Neuere inhaltsanalytische Verfahren zur Analyse von Kommunikationsinhalten

89/14	Jutta Kreiselmeier, Peter Prüfer, Margrit Rexroth Der Interviewer im Pretest. Evaluation der Interviewerleistung und Entwurf eines neuen Pretestkonzepts. April 1989
89/15	Henrik Tham Crime as a Social Indicator
89/16	Ulrich Mueller Expanding the Theoretical and Methodological Framework of Social Dilemma Research
89/17	Hans-J. Hippler, Norbert Schwarz, Elisabeth Noelle-Neumann Response Order Effects in Dichotomous Questions: The Impact of Administration Mode
89/18	Norbert Schwarz, Hans-J. Hippler, Elisabeth Noelle-Neumann, Thomas Münkel Response Order Effects in Long Lists: Primacy, Recency, and Asymmetric Contrast Effects
89/19	Wolfgang Meyer Umweltberichterstattung in der Bundesrepublik Deutschland
89/20	Michael Braun, Reiner Trometer ALLBUS Bibliographie (8. Fassung, Stand: 30.6.1989)
89/21	Günter Rothe Gewichtungen zur Anpassung an Statusvariablen. Eine Untersuchung am ALLBUS 1986
89/22	Norbert Schwarz, Thomas Münkel, Hans-J. Hippler What determines a "Perspective"? Contrast Effects as a Function of the Dimension Tapped by Preceding Questions
89/23	Norbert Schwarz, Andreas Bayer Variationen der Fragenreihenfolge als Instrument der Kausalitätsprüfung: Eine Untersuchung zur Neutralisationstheorie devianten Verhaltens
90/01	Norbert Schwarz, Andreas Bayer Assimilation and Contrast Effects in Part-Whole Question Sequences: A Conversational Logic Analysis
90/02	Norbert Schwarz, Fritz Strack, Hans-J. Hippler, George Bishop The Impact of Administration Mode on Response Effects in Survey Measurement
90/03	Norbert Schwarz, Herbert Bless, Gerd Bohner Mood and Persuasion: Affective States Influence the Processing of Persuasive Communications
90/04	Michael Braun, Reiner Trometer ALLBUS-Bibliographie 90
90/05	Norbert Schwarz, Fritz Strack Context Effects in Attitude Surveys: Applying Cognitive Theory to Social Research
90/06	Norbert Schwarz, Herbert Bless, Fritz Strack, Gisela Klumpp, Annette Simons Ease of Retrieval as Information: Another Look at the Availability Heuristic
90/07	Norbert Schwarz, Fritz Strack, Hans-J. Hippler Kognitionspsychologie und Umfrageforschung: Themen und Befunde eines interdisziplinären Forschungsgebietes
90/08	Norbert Schwarz, Hans-J. Hippler Response Alternatives: The Impact of their Choice and Presentation Order

90/09	Achim Koch Externe Vergleichsdaten zum ALLBUS 1984, 1986, 1988
90/10	Norbert Schwarz, Bärbel Knäuper, Hans-J. Hippler, Elisabeth Noelle-Neumann, Leslie Clark Rating Scales: Numeric Values May Change the Meaning of Scale Labels
91/01	Denis J. Hilton Conversational Inference and Rational Judgment
91/02	Denis J. Hilton A Conversational Model of Causal Explanation
91/03	Mood Effects on Interpersonal Preferences: Evidence for Motivated Processing Strategies
91/04	Joseph P. Forgas Affective Influences on Interpersonal Perception
91/05	Norbert Schwarz, Herbert Bless Constructing Reality and Its Alternatives: An Inclusion/Exclusion Model of Assimilation and Contrast Effects in Social Judgment
91/06	Herbert Bless, Roland F. Fellhauer, Gerd Bohner, Norbert Schwarz Need for Cognition: Eine Skala zur Erfassung von Engagement und Freude bei Denkaufgaben
91/07	Norbert Schwarz, Bärbel Knäuper, E. Tory Higgins Der Einfluß von Rangordnungsaufgaben auf nachfolgende Denkprozesse: Zur Aktivierung prozeduraler Sets
91/08	Bettina Scheuring, Norbert Schwarz Selbstberichtete Verhaltens- und Symptomhäufigkeiten: Was Befragte aus Antwortvorgaben des Fragebogens lernen
91/09	Norbert Schwarz, Herbert Bless Scandals and the Public's Trust in Politicians: Assimilation and Contrast Effects
91/10	Rolf Porst Ausfälle und Verweigerungen bei einer telefonischen Befragung
91/11	Uwe Blien, Heike Wirth, Michael Müller Identification risk for microdata stemming from official statistics
91/12	Petra Beckmann Methodological Report ISSP 1989
91/13	Martina Wasmer, Achim Koch, Michael Wiedenbeck Methodenbericht zur "Allgemeinen Bevölkerungsumfrage der Sozialwissenschaften" (ALLBUS) 1990
91/14	Uwe Blien, Oded Löwenbein Einkommensanalysen auf der Grundlage amtlicher Daten und Umfragedaten: Ergebnisse zur betrieblichen Seniorität und Arbeitslosigkeit
91/15	Petra Beckmann, Peter Mohler, Rolf Uher ISSP Basic Information on the ISSP Data Collection 1985 -1994
91/16	Norbert Schwarz In welcher Reihenfolge fragen? Kontexteffekte in standardisierten Befragungen
91/17	Ellen D. Riggle, Victor C. Ottati, Robert S. Wyer, Jr., James Kuklinski, Norbert Schwarz Bases of Political Judgments: The Role of Stereotypic and Non-stereotypic Information

91/18	Dagmar Krebs Was ist sozial erwünscht? Der Grad sozialer Erwünschtheit von Einstellungsitems
91/19	Michael Braun, Reiner Trometer ALLBUS-Bibliographie
91/20	Michael Schneid Einsatz computergestützter Befragungssysteme in der Bundesrepublik Deutschland
91/21	Rolf Porst, Michael Schneid Software-Anforderungen an computergestützte Befragungssysteme
91/22	Ulrich Mueller The Reproductive Success of the Elites in Germany, Great Britain, Japan and the USA during the 19th and 20th Century
92/01	P.H. Hartmann, B. Schimpl-Neimanns Zur Repräsentativität sozio-demographischer Merkmale des ALLBUS - multivariate Analysen zum Mittelschichtbias der Umfrageforschung
92/02	Gerd Bohner, Kimberly Crow, Hans-Peter Erb, Norbert Schwarz Affect and Persuasion: Mood Effects on the Processing of Message Content and Context Cues and on Subsequent Behavior
92/03	Herbert Bless, Gerd Bohner, Traudel Hild, Norbert Schwarz Asking Difficult Questions: Task Complexity Increases the Impact of Response Alternatives
92/04	Wolfgang Bandilla, Siegfried Gabler, Michael Wiedenbeck Methodenbericht zum DFG-Projekt ALLBUS Baseline-Studie
92/05	Frank Faulbaum Von der Variablenanalyse zur Evaluation von Handlungs- und Prozeßzusammenhängen
92/06	Ingwer Borg Überlegungen und Untersuchungen zur Messung der subjektiven Unsicherheit der Arbeitsstelle
92/07	Ingwer Borg, Michael Braun Arbeitsethik und Arbeitsinvolvement als Moderatoren der psychologischen Auswirkungen von Arbeitsunsicherheit
92/08	Eleanor Singer, Hans-Jürgen Hippler, Norbert Schwarz Confidentiality Assurances in Surveys: Reassurance or Threat?
92/09	Herbert Bless, Diane M. Mackie, Norbert Schwarz Mood Effects on Attitude Judgments: The Independent Effects of Mood before and after Message Elaboration
92/10	Ulrich Mueller, Carola Schmid Ehehäufigkeit und Fruchtbarkeit weiblicher Mitglieder der deutschen Elite
92/11	Herbert Bless, Fritz Strack, Norbert Schwarz The Informative Functions of Research Procedures: Bias and the Logic of Conversation
92/12	Norbert Schwarz, Herbert Bless, Michaela Wänke Subjective Assessment and Evaluation of Change: Lessons from Social Cognition Research
92/13	Norbert Schwarz, Hans-J. Hippler Buffer Items: When Do They Buffer and When Don't They?

92/14 Hans-J. Hippler, Norbert Schwarz
The Impact of Administration Modes on Response Effects in Surveys

92/15 Michaela Wänke, Norbert Schwarz
Comparative Judgments: How the Direction of Comparison Determines the Answer

92/16 Michael Braun, Reiner Trometer
ALLBUS-Bibliographie (11. Fassung, Stand: 30.6.1992)

92/17 Anke Nau, Rolf Porst
Projektbericht ZUMA-Methodenpanel Teil 1: Konzeption, Vorbereitung und Durchführung

92/18 Michael Schneid
Handbuch ZUMA-Feldsteuerungsprogramm

92/19 Paul Lüttinger, Bernhard Schimpl-Neimanns
Amtliche Bildungsstatistik und empirische Sozialforschung

92/20 Rolf Porst, Michael Schneid
Fragebogenschreiben mit Microsoft WORD 5.0: Druckformate, Textbausteine und Makros zur effizienten Gestaltung von Fragebogen

92/21 Michael Braun, Jacqueline Scott, Duane F. Alwin
Economic Necessity or Self-Actualization? Attitudes toward Women's Labor-force Participation in the East and West

92/22 Duane F. Alwin, Michael Braun, Jacqueline Scott
The Separation of Work and the Family: Attitudes Towards Women's Labour-Force Participation in Germany, Great Britain, and the United States

92/23 Michaela Wänke, Norbert Schwarz, Herbert Bless
The Availability Heuristic Revisited: Experienced Ease of Retrieval in Mundane Frequency Estimates

93/01 Michael Braun, Carmen Eilinghoff, Siegfried Gabler, Michael Wiedenbeck
Methodenbericht zur Allgemeinen Bevölkerungsumfrage der Sozialwissenschaften (ALLBUS) 1992

93/02 Michael Häder, Sabine Novossadeck
Einstellungsdynamik in Ostdeutschland. Auswertung von Wiederholungsuntersuchungen zur individuellen Bewältigung des sozialen Wandels

93/03 Norbert Schwarz
Judgment in a Social Context: Biases, Shortcomings, and the Logic of Conversation

93/04 Norbert Schwarz, Michaela Wänke, Herbert Bless
Subjective Assessments and Evaluations of Change: Some Lessons from Social Cognition Research

93/05 Norbert Schwarz
Context Effects in Attitude Measurement

93/06 Reiner Trometer
Die Operationalisierung des Klassenschemas nach Goldthorpe im ALLBUS

93/07 Carola Schmid
Der Zugang zu den Daten der Demographie

93/08 Michael Schneid
Fragebogenschreiben mit Word für Windows

93/09	Achim Koch Die Nutzung demographischer Informationen in den Veröffentlichungen mit ALLBUS-Daten
93/10	Helmut Schröder Über den Zusammenhang zwischen Aktivitäten und Zufriedenheit: "Eine kommunale Seniorenbefragung"
93/11	Michael Braun, Reiner Trometer ALLBUS-Bibliographie, 12. Fassung, Stand: 30.9.93
93/12	Rolf Porst Ausschöpfungen bei sozialwissenschaftlichen Umfragen. Annäherung aus der ZUMA Perspektive.
93/13	Steven E. Finkel, Peter R. Schrott Campaign Effects on Voter Choice in the German Election of 1990
93/14	Jürgen Hoffmeyer-Zlotnik, Dagmar Krebs Subjektive Statuszuweisung; Objektive Schichtmessung
93/15	Dagmar Krebs Richtungseffekte von Itemformulierungen
93/16	Dagmar Krebs Social Desirability: The collective conscience? Judging the degree of social desirability in attitude items
93/17	Bernhard Krüger, Heiner Ritter, Cornelia Züll SPSS Einsatz auf unterschiedlichen Plattformen in einem Netzwerk: Daten und Ergebnisaustausch
94/01	Jürgen H.P. Hoffmeyer-Zlotnik, Michael Wiedenbeck Überlegungen zu Sampling, Qualitätsprüfung und Auswertung von Daten aus Teilpopulationen
94/02	Michael Häder, Sabine Häder Die Grundlagen der Delphi-Methode: - Ein Literaturbericht -
94/03	Sabine Häder Auswahlverfahren bei Telefonumfragen
94/04	Peter Prüfer, Margrit Rexroth Ein Verfahren zur Erfassung von Erhebungsproblemen bei Interviews der Hauptstudie
94/05	Michael Häder, Sabine Häder Ergebnisse einer Experimentellen-Studie zur Delphi-Methode
94/06	Bernhard Schimpl-Neimanns, Heike Wirth Bestandsaufnahme und Nutzungsmöglichkeiten amtlicher Mikrodaten der DDR für Sekundäranalysen zur Bildungs- und Einkommensungleichheit
94/07	Norbert Schwarz, Hans-J. Hippler Subsequent Questions May Influence Answers to Preceding Questions in Mail Surveys
94/08	Norbert Schwarz, Hans-J. Hippler The Numeric Values of Rating Scales: A Comparison of their Impact in Mail Surveys and Telephone Interviews
94/09	Norbert Schwarz Cognition, Communication, and Survey Measurement: Some Implications for Contingent Valuation Surveys
94/10	Michael Braun, Reiner Trometer ALLBUS Bibliographie (13. Fassung, Stand 30.8.94)

94/11	Achim Koch, Siegfried Gabler, Michael Braun Konzeption und Durchführung der allgemeinen Bevölkerungsumfrage der Sozialwissenschaften (ALLBUS) 1994
95/01	Michael Schneid Fragebogenschreiben mit Microsoft Word für Windows Version 6.0
95/02	Michael Schneid Disk-By-Mail Eine Alternative zur schriftlichen Befragung?
95/03	Michael Schneid Einsatz computergestützter Befragungssysteme in Südamerika, Nah-Ost, Asien, Afrika und Australien. Eine Fax-Umfrage
95/04	Rolf Porst, Christa von Briel Wären Sie vielleicht bereit, sich gegebenenfalls noch einmal befragen zu lassen? Oder: Die Gründe für die Teilnahme an Panel-Befragungen
95/05	Michael Häder, Sabine Häder, Andreas Ziegler Punkt- versus Verteilungsschätzungen: Ergebnisse eines Tests zur Validierung der Delphi-Methode
95/06	Achim Bühl Das Wertewandel-Theorem Ronald Ingleharts. Methodenausbildung anhand des ALLBUS
95/07	Chr. Michael Dunke Regionale Unterschiede von Medienverbreitung und Mediennutzung. Ausgewählte Ergebnisse der MEDIA-ANALYSE '94 im Regierungsbezirk Stuttgart
96/01	Peter R. Schrott, Michael F. Meffert How to Test 'Real' Campaign Effects: Linking Survey Data to Content Analytical Data
96/02	Michael Häder Zur Evaluation der Delphi-Technik Eine Ergebnisübersicht
96/03	Janet Harkness ISSP 1993 - Environment ZUMA-Report on the German Study
96/04	Georgios Papastefanou Verbrauchsdaten der amtlichen Statistik - Forschungspotentiale zur Untersuchung des Wandels der Lebensführung in den neuen Bundesländern
96/05	Peter Prüfer, Margrit Rexroth Verfahren zur Evaluation von Survey-Fragen: Ein Überblick
96/06	Michael Häder/Sabine Häder/Kerstin Hollerbach Methodenbericht zur Untersuchung „Leben Ostdeutschland 1996“

96/07	Rolf Porst Aufschöpfung bei Sozialwissenschaftlichen Umfragen Die Sicht der Institute
96/08	Martina Wasmer, Achim Koch, Janet Harkness, Siegfried Gabler Konzeption und Durchführung der „Allgemeinen Bevölkerungs-umfrage der Sozialwissenschaften“ (ALLBUS) 1996
96/09	Janet Harkness Research into Environmental Attitudes and Perceptions (REAP) 1993/1994 ZUMA Report on the German Implementation of the Survey
96/10	Janet Harkness ISSP 1995. National Identity ZUMA Report on the German Study
97/01	Michael Schneid Einsatz computergestützter Befragungsssteme in Europa (Eine computerisierte Fax-Umfrage)
97/02	Georgios Papastefanou, Osvaldo Rojas Comparative analysis of sociodemographic effects on subjective well-being in West Germany and in Chile
97/03	Karin Kurz, Michael Blohm ALLBUS Bibliographie, 14. Fassung, Stand: Juli 1996 (Diesen Arbeitsbericht gibt es nur auf Diskette, Anfragen bitte richten an ZUMA, Abt. ALLBUS, oder World Wide Web)
97/04	Günther Schühly, Ulrich Mueller Secularization in Eastern and Western Europe Results from the ISSP 1991 Survey on Religion in 10 West and East European Nations
97/05	Carmen Eilinghoff Die Relevanz der regionalen Dimension bei sozialwissenschaftlichen Fragestellungen am Beispiel der Allgemeinen Bevölkerungsumfrage der Sozialwissenschaften (ALLBUS)
97/06	Angelika Glöckner-Rist, Wolfgang Bandilla Das ZUMA-Informationssystem (ZIS)
97/07	Melina Alexa Computer-Assisted Text Analysis Methodology in the Social Sciences
97/08	Tracy L. Tuten Getting a Foot in the Electronic Door: Understanding Why People Read or Delete Electronic Mail
97/09	Tracy L. Tuten Electronic Methods of Collecting Survey Data: A Review of ‘E-Research’
98/01	Heike Wirth, Paul Lüttinger Die Klassenzugehörigkeit von Ehepaaren 1970 und 1993. Kontinuität oder Wandel?

98/02	Rolf Porst Im Vorfeld der Befragung: Planung, Fragebogenentwicklung, Pretesting
98/03	Rolf Porst Erfahrung mit und Bewertung von Umfragen. Was unsere Befragten über Umfragen denken.