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Question Comprehension and Response: Implications of Individualism and Collectivism

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Abstract

We integrate cross-cultural literature with broader literature in survey methodology, human cognition and communication. First, we briefly review recent work in cognitive survey methodology that advances our understanding of the processes underlying question comprehension and response. Then, using a process model of cultural influence, we provide a framework for hypothesizing how cross-cultural differences may systematically influence the meaning respondents make of the questions researchers ask, how memory is organized, and subjective theories about what constitutes an appropriate answer and therefore the answers participants are likely to give. (87 words)

How central are satisfaction with school and marital satisfaction to life satisfaction? Questions like this are almost always answered but answers are profoundly influenced by context. While we as researchers may think that we are learning about the influence of culture and cultural context by comparing answers across countries and samples, responses can be influenced by a much more proximal context: the research context and potentially systematic differences across cultures in how the research context is perceived. Recent advances in integration of survey methodology, human cognition and communication research have enhanced our understanding of the processes underlying question response (for reviews see Sudman, et al., 1996; Schwarz, 1999a; Tourengeau, et al., 2000). Unfortunately, this work has not yet been well integrated into the cross-cultural field. In the current chapter we provide a framework for hypothesizing how cross-cultural differences may systematically influence the meaning made of the questions asked by researchers and the answers participants are likely to give.

Substantive interpretation of the life satisfaction question we opened up with would be quite different if data revealed high or not very high correlations between satisfaction in a specific life domain and satisfaction with life in general. For example, if marital satisfaction and life satisfaction correlate $r = .67$ for adults then one can conclude that marriage is central to the life satisfaction of adults. Conversely, if marital and life satisfaction correlate only $r = .32$ then the conclusion would be that marriage is of no major importance to the general life satisfaction of adults. Similarly, if school-academic satisfaction and life satisfaction correlate $r = .78$ for students then is more likely to can conclude that academic success is central to the life satisfaction of students than if the correlation were say $r = .53$. In fact each set of divergent correlations come from the same populations randomly assigned to answering the question about satisfaction with life before or after the question about satisfaction with a particular life domain (marital satisfaction results from Schwarz, Strack & Mai, 1991; academic satisfaction results from Study 2, Haberstroh, et al., 2002).

In the following sections, we first outline the conversational logic of the research context. We then outline how subjective theories are employed to reconstruct plausible estimates of past behaviors and the editing processes involved in answering questions. As we will outline in the following sections, by taking into account the meaning participants are likely to make of the researchers' questions, what is likely to be remembered, and theories participants are likely to use to reconstruct memory; cross-cultural psychologists may avoid making unwarranted substantive interpretations about answers. As a first step toward this goal, we show how culture can influence how questions are understood, what is remembered, and the editing process utilizing a process model of cultural influences developed by Oyserman, Kemmelmeier, and Coon (2002).

LIMITATIONS OF SELF-REPORT

As cultural and cross-cultural psychologists are aware, self-reports are limited representations of behaviors and attitudes (e.g., van de Vijfer & Leung, 1997; Shapiro, et al., 1976; Triandis & Triandis, 1962). But cultural and cross-cultural psychologists have not systematically addressed the cognitive processes that underlie self-report methods and therefore the ways that cultural differences may systematically shift the pragmatic meaning of both questions and answers.

What are the limitations of self-report? Schwarz and Oyserman (2001) summarize the gap between researchers' hopes and the reality of the self-report research context. Researchers hope participants *understand* the question as intended, *identify* the behavior, judgment, or attitude of interest, *retrieve* relevant instances of the behavior or attitude judgments from memory, and *honestly communicate* them to the researcher. In reality, as Schwarz and Oyserman (2001) note, all questions require interpretation. What is retrieved from memory depends on retrieval cues embedded in questions, response scales, what is routinely paid attention to and what is not and culturally-rooted subjective theories about what is normative, what is stable, and what is likely to change. As we outline below, answers are typically constructed on the fly from these cues and theories, particularly

when the information requested requires access to behaviors that are habitualized, high frequency, or in other ways impossible to retrieve as a series of discrete occurrences. Prior to communicating these constructed answers, participants may edit them if answers feel culturally wrong.

Cross-cultural researchers must ask if there is reason to believe that the members of different cultures will differ systematically in (1) how the question is understood, (2) what is identified as the relevant behavior, judgment or attitude, (3) what inferences are likely to be made from the research context, the question being posed, or the question framework, (4) how common or habitual the behavior to be identified is, how sensitive the subject matter is, (5) the subjective theories used to reconstruct estimates to provide answers, and (6) what is edited.

THE CONVERSATIONAL LOGIC OF THE RESEARCH CONTEXT

To provide appropriate answers to research questions, participants need to have a pragmatic (meaning in context) understanding of the question not simply a literal (meaning of the words) understanding (see Mitchell, 1994; Simpson, 1994 for reviews). Participants are likely to use the same tacit assumptions to make sense of research questions as they use to engage in everyday conversations (for reviews see Clark & Schober, 1992; Schober, 1999; Schwarz, 1996). These tacit assumptions were formally presented by Paul Grice (1975) and are often termed Grician conversational logic (for reviews see Schwarz, 1996; Schwarz, et al., 1998).

Maxims of Conversation

According to Grice, conversations are assumed to follow the cooperativeness principle, which he operationalized as the following four maxims: 1. *Maxim of relation*: speakers make their contributions relevant to the aims of the ongoing conversation. This means that the communicator is assumed to take contextual information into account and draw on previous utterances in interpreting later ones. 2. *Maxim of quantity*: speakers make their contributions as informative as required, but not more informative than is required. This means that the communicator is assumed to provide

answers that fit the question asked not simply say whatever comes to mind and not repeat information already provided. 3. *Maxim of manner*: speakers make their contributions as clear as possible rather than obscure, ambiguous, or wordy. This means that the communicator is assumed to have chosen the clearest culturally appropriate way of phrasing the question and that therefore the culturally obvious meaning must be the correct one. If an obvious meaning does not come to mind, respondents will use contextual cues to figure out the culturally relevant meaning. 4. *Maxim of quality*: speakers do not say anything they believe to be false or lack adequate evidence for. This means that respondents assume that questions and response scales are meaningfully chosen; not arbitrary or nonsensical.

In a nutshell, Grician conversational logic suggests that partners to a conversation focus on what is relevant, provide new information, are clear and do not lie. We will argue that these maxims are likely to be universal; to answer a question, participants always will try to figure out what is relevant, will avoid repeating themselves, will assume that the researcher is trying to be clear and not purposefully being ambiguous or opaque in how questions and response alternatives are worded. Yet maxims are also applied within a culture frame – what it means to be clear will differ cross-culturally and partners typically assume their conversational partner is using culturally appropriate cues. In this chapter we will discuss key contextual cues and how they are used by respondents to both make sense of what is being asked and to find an appropriate answer. We will argue that cross-cultural difference in focus on social context will be reflected in differential sensitivity to the conversational logic of the research context.

Asking Questions

Context influences meaning

The meaning of questions and what constitutes a reasonable answer shifts as a function of the context in which questions are asked. As Schwarz and Oyserman (2001) note, context can come in

the form of the title of the survey, the letterhead on which the survey or its cover letter are printed, or the questions that precede a question. For example, 'list all the drugs you use' carries different meaning when it is part of a Health and Retirement Study than when it is part of a Delinquency and School Failure Study. When asked to describe oneself on a survey printed on letterhead of the 'Institute of Political Research' respondents generate more social identities than when the letterhead was that of the 'Institute of Psychological Research' (Norenzayan & Schwarz, 2005). 'How often do you fight with your parents?' when asked in the context of prior questions about fighting (e.g. 'how often have you hurt someone badly enough that they needed a doctor') and delinquency (e.g., 'how often have you stolen something with more than $50?'), results in interpretation of 'fighting with parents' as physical fights rather than verbal disagreements (Schwarz & Oyserman, 2001).

Preceding questions can influence subsequent answers

The content of preceding questions can influence respondents' interpretation of and response to, later, possibly redundant, questions. Following the maxim of quantity (Grice, 1975), respondents will attempt to provide new rather than redundant answers. This is likely to result in responses that shift depending on prior questions. Moreover, following the maxim of quality (Grice, 1975), respondents assume that scales are meaningful (e.g. the middle of the scale refers to what is average in the population). This is likely to result in responses that shift depending on where answers to prior questions fell on the researchers' scales.

A classic example of the former issue comes from use of general and specific questions focused on the same content domain. When asked a general question (e.g. how satisfied are you with your life?) and then a specific question (e.g., how satisfied are you with your marriage?), response to the first question may or may not be relevant to the second question –one may (or may not) think about how one's marriage is going as a way to gauge life satisfaction. When asked the specific question first however, the information brought to mind definitely *is* relevant to how one's life is

going. One could simply give the same answer again given that 'my marriage is going pretty well, I guess my life is, too'. But Grician logic would suggest that the researcher really means 'aside from your marriage, which you already told me about, how is the rest of your life?' The question is whether respondents notice the redundancy. Indeed, when first asked about their marriage and then their life, answers were more correlated (marriage once brought to mind, is relevant) than when asked questions in the reverse order (after all, one could answer the general satisfaction question based on other criteria) and correlation between answers depended on whether the redundancy was made obvious or not (Schwarz, Strack & Mai, 1991).

Answers to prior questions also set up a meaningful context from which to infer subsequent answers. This can be seen in a number of studies (Schwarz et al., 1985, also see Rothman, et al., 2001; Schwarz, 1999b) which manipulate the rating scale on a prior question so that most participants will infer that they are higher (or lower) than the average. This difference from the average in the population, is then used to infer subsequent feelings. For example, when first asked to assess television watching time and then asked to assess satisfaction with leisure time activities, respondents who were made to infer that they watch more than the average amount of television subsequently reported lower than average satisfaction with their use of leisure time. Respondents seemed to be constructing satisfaction with leisure time based on the information about television viewing time saying in effect "I am not really satisfied with my leisure time activities because I seem to be watching more TV than anyone else" (Schwarz et al., 1985, also see Rothman, et al., 2001; Schwarz, 1999b).

Response alternatives and formats matter

Researchers often attempt to simplify the questionnaire by having a standard response format (e.g. very much agree to very much disagree; never to always) across questions and scales. Unfortunately, respondents anchor these vague quantifiers across questions. They infer what a

response like ‘frequently’ means by taking into account how they used it in prior questions. In the context of ‘frequently’ brushing one’s teeth, one is less likely to say that one ‘frequently’ calls home because frequent has just been anchored at multiple times a day. This effect is called the ‘range effect’ (Parducci, 1965).

Even when response options are varied throughout the questionnaire, they are still used as informational tools by respondents. Following Grician conversational maxims of manner and quality, respondents generally assume that the researcher constructed a meaningful response scale, relevant to the question at hand. Participants use all features of the response scale to make sense of the question. Identically worded questions may acquire different meanings depending on the response alternatives provided (see Schwarz, 1996; Schwarz & Hippler, 1991). The range of responses, number of points on a scale, the time period the scale encompasses, the numeric values used to represent points on the scale, and the words used to represent points on the scale are all useful sources of information for participants.

Respondents assume that the range of response alternatives provided reflects the distribution of the behavior in real world, such that values in the middle range of the scale reflect average behavioral frequency, whereas the extremes correspond to the extremes of the distribution (Schwarz & Scheuring, 1992). In essence, they understand the researcher to be informing them of what is average, allowing them to respond by asking themselves whether they are average, below or above average on the issue involved, then responding appropriately. This pragmatic use of response content means that substantive interpretation of results is likely to be in error if response alternatives with the same meaning are located at different points on the continuum of a response scale. Schwarz et al. (1985) demonstrated this point by shifting where 2.5 hours a day was located on a frequency of TV watching response scale. More than twice as many respondents reported watching TV for more than 2.5 hours a day when 2.5 was at the low end as when it was at the high end of the scale.

When a question is followed by a scale with very high values, this implies that the researcher assumes a high frequency of occurrence (and therefore more commonly occurring behaviors) than if the question is followed by a scale with low values. Respondents report higher frequency of irritation on a high than on a low response alternative scale -- high frequency response options led to the inference that the irritation must refer to more minor everyday things, low response options led to the inference that irritation must refer to more serious things (Schwarz, et al., 1998). Just as high response frequency options leads to the conclusion that the behavior must be common, so does the use of brief time periods (e.g., in the last week) as compared to long time periods (e.g., ever in your life). When a question refers to a brief time frame, respondents infer that the researcher is after more everyday occurrences than when the time frame for recall is longer. Respondents report more anger when the time frame is 'last week' than when it is 'last year' (Winkielman, et al., 1998).

Although formally equivalent, response scales using only positive numbers (e.g. 1-5 or 0-10) are not treated the same as scales using both negative and positive numbers (e.g. -2 to +2 or -5 to +5) (Schwarz, Knäuper, et al, 1991). Negative numbers are interpreted as the presence of a negative trait or behavior (e.g., failure) while formally equivalent positive numbers are interpreted as the absence of a positive trait or behavior (e.g. lack of success). Presence of a negative trait or behavior feels more negative than absence of a positive trait or behavior, resulting in shift of responses toward the positive side of the scale when a scale with both negative and positive numbers is used as compared to when a scale with only positive numbers is used. This shift results both in higher mean responses and in lower standard deviation because of fewer of the points in the scale are actually used.

Memory Constraints and Subjective Theories

Autobiographical memory

Responses are also systematically influenced by autobiographical memory processes-- how memories are stored and retrieved. Although researchers hope that respondents will identify the

behavior of interest, scan the reference period, retrieve all the instances of the target behavior, count or otherwise organize them to match the response scale, and provide an overall response, autobiographical memory does not work that way. First, memory decreases over time, especially for common or habitual activities that are unlikely to be stored as distinct detailed representations (Belli, 1998). Second, autobiographical memory is not typically stored by themes (Belli, 1998). When asked how many cigarettes they smoked in the past week, for example, respondents cannot open a mental file drawer labeled cigarette consumption and pull up a tally. Instead, respondents literally have to scroll through the days searching for cigarette events – a difficult and time consuming process.

The more difficult it is to retrieve the relevant autobiographical memories, the more likely it is that respondents will rely on question content and response format and other organizing frames (e.g. subjective theories) to infer their response. The easier it is to retrieve the relevant autobiographical memories (e.g. the behavior is rare and important or has to be tallied on an ongoing basis for other consequential purposes), the less likely it is that respondents will need to use these cues to estimate their response (see Menon, 1994; Menon et al., 1995).

Subjective theories of stability and change and of personality

What subjective theories are research participants likely to use? Subjective theories are culturally sanctioned rules of thumb that allow research participants to provide responses in spite of limitations of autobiographical memory (Schwarz & Oyserman, 2001). Subjective theories organize predictions about what must have happened or how one must have felt.

A simple rule of thumb participants can use to respond to questions about past behavior is to provide estimates based on current behavior. To do so, respondents ask themselves ‘Am I the same or different as I was during the time at issue in the question?’ If they see no reason to assume their behavior has changed over time, they can use their present behavior as an estimate of their past

behavior. If they do believe their behavior has changed, they adjust the initial estimate based on their current behavior to reflect the assumed change. Culturally sanctioned theories about stability of human behavior make this strategy appear reasonable.

To the extent that subjective theories of change and stability over time differ cross-culturally, the estimates based on these theories are likely to differ as well. In addition to using the present to estimate the past, respondents can also rely on their subjective theories about personality to make estimates (Schwarz & Oyserman, 2001). In essence, to answer a question about past behavior respondents ask themselves 'Am I the kind of person who would do this?' Cultures that sanction belief in stable personality should increase stable behavioral estimates whether estimating own or a target's behavior.

Answering Questions

Now that we have outlined influences on what is likely to come to mind given questions asked, we turn to responses. Responses that come to mind are not necessarily provided 'as is' to the researcher; they may be edited for various reasons. Unlike research on context effects that has shown dramatic shift in responses based on changes in question context (e.g. order and scale), there is less information about the expected size and direction of editing effects. Editing effects have typically been considered errors and handled pragmatically -- by making the response situation anonymous, improving fit between question and response to reduce guessing, and accepting that highly involving questions or questions asked of partisans (those who feel strongly about issues) are likely to be answered with the extreme points of the scale. Yet as we outline below, editing may also be due to the same cognitive processes that influence responding more generally.

Editing answers

Editing can occur consciously and deliberately or as an automatic result of biased memory search due to a combination of Grician interpretation of questions and answer format and subjective

theory driven estimation techniques (Schwarz & Oyserman, 2001). Edits typically result in more socially desirable responses (see DeMaio, 1984 for a review) and are argued to be motivated by impression-management (Ross & Mirowsky, 1984) or self-enhancement (Lalwani, et al., 2005; Paulhus, 1984) goals. Edited answers are more likely to fit what the respondent believes is the expected response (Marsh, et al., 1987). It seems plausible that editing is less likely for questions that do not carry clear social norms for appropriate responses and more likely when the question concerns behavior, attitudes or experiences that carry a clear value or morality tag in the culture.

Social desirability

Both the immediate social situation (source of the survey, attributes of the interviewer and interview situation) and cultural norms are likely to influence perceived desirability-undesirability of response. Socially desirable responding is more likely when confidentiality is low (e.g. face-to-face interviews), less likely when confidentiality is high (e.g. self-administered interviews, Krysan, et al., 1994). Respondents may find it embarrassing to admit not engaging in a desirable behavior, resulting in over-reporting of desirable behavior; they may find it embarrassing to admit engaging in undesirable behaviors, resulting in under-reporting of undesirable behavior.

Acquiescence (yea-saying)

Acquiescence is the tendency to answer affirmatively or systematic over use of only one extremity of the response scale (see Smith, 2004). Yea-saying is more likely when the issue asked about is one that respondents don't know much about or don't care about or if questions do not carry much social desirability information (see Knowles & Condon, 1999; Cronbach, 1950; Edwards, 1957; Jackson, 1967; Stricker, 1963).

INTEGRATING CULTURE AND CONVERSATIONAL LOGIC

How might cultural frame inform the sense made of questions, what is salient and therefore retrievable from memory, and what is not memorable and therefore must be inferred, the subjective

theories used to make needed inferences, and the editing process? Do some cultures heighten sensitivity to the conversational logic of the research context? Cross-cultural differences have been noted in self-construal (e.g., Markus & Kitayama, 1991; Oyserman, 1993), cognitive processes (Nisbett et al., 2001; Oyserman, Coon, & Kemmelmeier, 2002), and relationality (Triandis, 1994) including how tightly appropriate interactions are scripted (e.g., Triandis, 1994, 1995). All of these may influence how questions are understood and responses provided to them. To examine how culture may influence understanding, memory, subjective theory, and response editing, we use an operationalization of culture focusing on differences in individualism and collectivism.

Overview of impact of collectivism and individualism

Individualism and collectivism can be understood via their likely consequences for self-concept, cognitive style, and relationality (Oyserman et al, 2002a). Individualism implies that the self is permanent, separate from context, trait-like, and a causal nexus; that reasoning is a tool to separate out main points from irrelevant background or context; and that relationships and group memberships are impermanent and nonintensive (Oyserman et al., 2002a). Conversely, collectivism implies that the self is malleable, context-dependent and socially sensitive; that reasoning is a tool to link and make sense of the whole rather than disparate elements; and that relationships and group memberships are ascribed and fixed, “facts of life” to which people must accommodate (Oyserman et al., 2002).

While cross-cultural difference in self-reported behavior, judgment, and values may reflect substantive difference, differences in culture may also influence how questions are understood and answers given in other ways. How are individualism and collectivism likely to influence how questions are understood and what answers are provided? First, differences in self-concept, cognitive style, and relationality imply differences in likely rules of thumb used to infer behavior. Individualism is more likely to foster rules of thumb assuming individual stability; collectivism is

more likely to foster rules of thumb assuming contextual adaptation. An important issue for cross-cultural psychologists is to map out what are the likely subjective theories used by respondents from collectivistic cultures in comprehension of and responses to questions.

Second, cultural difference in focus on context is likely to influence how much participants infer from context to create meaning (Gudykunst & Ting-Toomey, 1988). Thus participants in collectivistic contexts should be even more sensitive to conversational logic of research than participants in individualistic contexts. Given that the substantive research reviewed in the prior section on conversational logic of the research context is based in the US and Germany, this implies that even bigger effects should be found in collective contexts. Third, collective cultures are likely to enhance sensitivity to appropriate engagement in public behaviors, resulting in differential need to estimate these behaviors in collective vs. individualistic cultures. Finally, and perhaps most obviously, cultures are likely to differ in what constitutes desirable behavior resulting in differences in editing strategies.

How might individualism and collectivism interact with other influences on question response?

Distal culture

We start with a process model of cultural influences that distinguishes distal from situated and proximal operationalization of 'culture' (Oyserman, Kemmelmeier & Coon, 2002). Following this model, as graphically displayed in Figure 1, when culture is operationalized by its distal features – a society's history, religion, or philosophic traditions, it is likely to have only weak direct impact on current behavior, rather the effect of distal culture is likely to be felt via its impact on features of the current social structures and institutions (termed 'situated' culture) and the likelihood that individual vs. collective models for making sense of the self and of the situation are primed in the moment. Because all societies must have mechanisms for their own survival, all must have some collective (work for the common good) features. Because all societies must provide some outlets for

choice when this does not undermine the group, all must have some individualistic features. Thus for example, while everyone is able to think about themselves as both separate from and unique and also part of and connected, the frequency with which one or the other of these comes to mind depends on what is relevant in the moment and societies differ in the likelihood that an individualistic or collectivistic lens will be primed, as we will discuss in the next section.

FIGURE 1 ABOUT HERE

Situated culture

Situated culture refers to social systems (e.g. educational, legal systems), social structures (e.g. transportation, employment, banking), social patterns and practices (e.g. friendship, family and child-rearing practices) and ways of communicating. Together these create the likely everyday situations a person living in a culture is likely to experience, what is required, what must be paid attention to, what can be ignored. The assumption here is that differences in situated culture are not random but rather are rooted in differences in the extent that the distal culture focuses on individualism and collectivism.

Cultures placing greater emphasis on context (high context communication cultures) focus attention on what is said between the lines, sensitizing participants in these societies to what is implied rather than stated. 'Tight' cultures that tightly prescribe appropriate public behaviors and sanction inappropriate behavior are likely to increasing on-going attention paid to what is socially appropriate in the context and what one, oneself, is doing (in absolute terms, relative to social standards, and relative to others in the context) (e.g., Triandis, 1994). 'Loose' cultures that permit wide latitude of acceptable public behavior do not require that participants in these societies pay much attention to what oneself is doing (either in absolute terms or relative to others in the context,

e.g. Triandis, 1994). In this way, situated culture structures not only what is considered of value and what is considered normative, but also what is memorable and what is likely to need to be estimated.

Proximal culture

Situated culture influence what typically comes to mind in particular situations. Of particular concern here is what is likely to come to mind in the research context. Of course, research is not a uniform context – as we have described in the previous sections. Indeed, an expanding literature makes clear that it is relatively straightforward in experimental contexts to prime individual vs. collective focus. The context of the research questionnaire can also serve as a prime, making salient individualistic vs. collectivistic focus. For example, priming collectivism increases social content in self-concept descriptions (Gardner, et al., 1999), sensitivity to the conversational common ground (Haberstroh et al., 2002), and assimilation of information about others into self-judgment (Stapel & Koomen, 2001, Study 1). Collectivism can be primed by language (Chui, 2004; Marian & Kaushanskay, 2004), and, we will argue, by other features of the questionnaire.

Culture and Sensitivity to Maxims of Conversation

Grice's maxims of relation, quantity, manner and quality state in essence 'be relevant to the aims of the conversation', 'provide new information', 'be clear', and 'do not lie'. These maxims were developed in a Western frame. Some have argued that within high context communication cultures these maxims do not apply because high communication involves use of indirect, implicit, and ambiguous messages (e.g., Gudykunst, 1998; Gudykunst & Ting-Toomey, 1988), including qualifier words such as 'maybe, 'perhaps' and messages that do not reveal speaker's true intentions and emphasize in-group harmony rather than speaking one's own mind and telling the truth (e.g., Okabe, 1983, 1987). We agree that cultures differ in how much attention must be paid to the conversational common ground and emphatically disagree with the argument that Grice applies only in low context, Western cultures.

Rather than simplifying Grice to mean 'interact like an American' we understand Grician maxims to be relevant for all human conversation. High context communication requires increased sensitivity to the conversational common ground in order to interpret the nuanced cues the other is providing. Only by truly focusing on these contextual cues could a person hope to infer meaning from a 'perhaps' or understand what is inferred. Overall, given that the explicit content of messages tends to be less clear in high context communication settings, speakers are required to attend more carefully to the social cues to infer the message meaning compared to low context communication settings. To understand how individualism and collectivism are likely to influence answers, taking seriously the increased sensitivity of collectivist respondents to nuances in the questionnaire context is critical. We examine this assertion in greater detail in the following section.

Culture and Asking Questions

Culture and context of the question

Generally, collectivism should increase sensitivity to every aspect of the question as context. When primed or chronically salient, collectivism should increase the likelihood that responses are congruent with the general theme of the survey, that respondents rely on the preceding questions to infer the meaning of subsequent questions and response scales and so on. Of particular impact on cross-cultural research, collectivism should increase shift in responses depending on features of the researcher (as implied in letterhead, in preamble, introduction, or consent forms). A standard part of cross-national surveys is to note the affiliation of the researcher and the fact that the study is taking place cross-nationally; this sets up an implied comparison at the group level "what do 'we' do, say, or think, as compared with 'them'." The 'them' could be the country from which the survey originates as well as more general sense of intergroup comparison; this should increase collective focus and make salient intergroup concerns. The implied standard can come from language – thus for example when randomly assigned to Chinese vs. English response conditions, Chinese

respondents at a Canadian University reporting in Chinese marked (culturally appropriate) lower self-esteem, than when reporting English (in which case their self-esteem was no different from European heritage Canadian respondents) (Ross, Xun, & Wilson, 2002). When asked to report in Chinese, the respondents may have been cued that the researcher was asking them as representatives of Chinese culture, something that would not be salient if they were asked in English and then might assume that they were asked as individual college students.

In the same vein, collectivism should increase sensitivity to the content of previous questions asked in a questionnaire to determine the appropriateness of the responses to later questions, resulting in greater endorsement of the maxim of quantity (Grice, 1975). Haberstroh and her colleagues (2002) tested this possibility. Hypothesizing that interdependence increases sensitivity to the conversational common ground, they expected that interdependent respondents would be more likely to take care to provide non-redundant answers to redundant questions. Indeed, Chinese respondents were more likely to provide non-redundant answers than German respondents. When primed with interdependence, German respondents became as sensitive as Chinese respondents to the implied common ground. Thus, Haberstroh and colleagues demonstrate not only that cross-culture difference is in line with our reasoning on cross-cultural differences in sensitivity to the Grician maxims but also demonstrate via their priming results that it is in fact interdependent self-focus that activates this sensitivity.

Culture, response alternatives, and formats

Primed or chronic collectivism should also influence sensitivity to the implied meaning of response alternatives and format. For example, when estimation is necessary, respondents high in collectivism should be more likely to use the middle of the scale as the assumed population mean and to interpret the scale extremes as the assume ends of the population distribution. Not only will this greater use of the scale influence response to the question, it will also influence inferences taken

to subsequent questions. Similarly, collectivism is likely to be associated with a greater use of prior responses to anchor the meaning of ambiguous scale markers like 'very much' or 'frequently' as a result of greater attention paid to answers given to previously asked questions using the same response format.

Culture, Memory Constraints, and Subjective Theories

Culture and autobiographical memory

Because the implied meaning drawn from questions, response alternatives and the like are used in estimating appropriate responses, cross-cultural differences in whether requested information requires estimation are likely to be important in predicting effects. Estimation is not necessary if the information requested can be drawn from memory. This is likely when information is stored in the form requested and is therefore well-represented in memory (e.g., Menon, et al., 1995) or when one has relevant cognitive schemas that anchor and organize memory search (e.g. Bartlett, 1932).

In tight cultures that prescribe appropriate public behavior and sanction inappropriate behavior, respondents should be well aware of their own and others' public behaviors and therefore be relatively impervious to differences in question order and response format. Because only public behaviors can be monitored by others, only public, visible behavior (not private, non-visible behaviors, attitudes and cognitions) should be differentially well-represented in by individuals living in collective contexts. Ji et al. (2000) showed these effects in a comparison of Chinese and American respondents. When asked about the frequency of public behavior (e.g. coming late to class), Chinese were not influenced by response format and response alternatives, while Americans were. Americans seemed to be using the scale to estimate their behavior frequency using the distribution information provided in the scale. This meant that both absolute and relative differences between Americans and Chinese were not stable – depending on Americans using the response options as information. When

the frequency of private behaviors were compared (e.g. having a nightmare), Americans and Chinese were equally influenced by the context provided by the scale.

Differences in how the self is schematized (connected to or separate from others) should also influence autobiographical memory processes (Markus & Kitayama, 1991; Wang, 2001; Wang & Leichtman, 2000). Following Bartlett's (1932) argument that "… remembering is 'schematically' determined" (p. 312), events that are congruent with one's self-schema are expected to have a perceptual and comprehension advantage over those that do not; indeed, schema-congruent information is remembered more accurately than irrelevant information and missing or ambiguous information is likely to be remembered in terms of the schema (Markus, 1977). Thus, events fitting an interdependent schema would be expected to be better remembered by those with an interdependent self-construal, and events fitting an independent schema would be expected to be better remembered by those with an independent self-construal (Ng & Zhu, 2001). In line with this prediction, Ng and Zhu (2001) found that individuals from Beijing and Hong Kong who scored higher on interdependent self-construal than individuals in Wellington, New Zealand, had a better memory for group-acting situations than for individual-acting situations. Similarly, Wang (2001) found that individuals who were more focused on private aspects of the self in their self-descriptions provided more specific and more self-focused childhood memories than did those who more often described themselves in terms of social roles and group memberships.

Language can serve as a prime. For example, when randomly assigned to speak Russian or English with a bilingual research assistant, Russian émigrés describing events in Russian, were more likely to include a description of others present and their perspective as compared to when events were described in English in which case others and their perspective were largely absent from descriptions (Marian & Kaushanskaya, 2004). Priming influences not only self-report of behavior

and social judgment but also recall and processing of non-social information (Kühnen & Oyserman, 2002; Oyserman, et al., 2005).

Culture, subjective theories of stability and change and about personality

Can current behavior be used as an estimate of past behavior? Can one use information about oneself in one realm to estimate other things about oneself? These are plausible strategies to the extent that people are assumed to be stable and to the extent that traits are expressed in behavior across settings. Emerging evidence suggests cross-cultural difference in the extent that these assumptions are endorsed, with individualism carrying these assumptions of self stability and generalizability from behavior to traits, while collectivism carries an assumption of self malleability in response to context. To the extent that context, not personal trait, matters in predicting behavior, then estimates of past behavior will more comfortably be made based on information about the context one was in.

When asked to explain why a person committed a crime, Americans focused on the person's disposition, Chinese on the situation (Morris and Peng,1994). When asked to explain the behavior of a motorist who did not stop after a fender bender, Indian respondents focused on the situation while Americans focused on the person (Miller, 1984). Indians suggested that the motorist might have been in a rush to get to work, Americans suggested that the motorist was a thoughtless or heartless person. In their comparison of Chinese and American responses, Ji and her colleagues (2001) found that Americans predicted more stability and Chinese more change in a variety of events and more change in the direction of trends– that is, for Chinese respondents, the present is a less helpful indicator of the future. Greater change perceived under collectivism should also lead to a reduced reliance on current behavior to infer past behavior when retrieval from memory is difficult. Similarly, when primed with collectivism, respondents were more likely to be influenced by norms

rather than personal attitudes in making judgments about the likelihood of future behavior (Ybarra and Trafimow, 1998).

Culture and Answering Questions

Questions evoke responses; responses may or may not be filtered or edited prior to being provided as an answer to a research question. A number of studies in the cross-cultural literature have examined response tendencies, either simply comparing countries or comparing countries assumed to be high or low on individualism or collectivism. A few cross-cultural studies that do assess individualism and collectivism report inconsistent findings. Because the studies are not framed in terms of cognitive survey methods, detailed information about the research context, the questionnaire, response formats and so on are not provided, so inconsistencies are impossible to interpret. In the following sections we integrate available research with our cultural process model.

Culture and editing answers

Culture and s*ocial desirability*

Social desirability responding means responding in culturally-sanctioned ways (Crowne and Marlowe, 1964); in this sense social desirability can be reasonably assumed to be universal (for a review, see Johnson & van de Vijfer, 2003). However, as discussed earlier, cultures vary dramatically in identifying what is sanctioned and what is not (e.g., Newby, et al., 1998), meaning that even if the same process occurs to the same extent cross-culturally, the number and substantive of questions impacted by social desirability should differ cross-culturally. Differences in social desirability responding may be moderated by factors such as the cultural relevance of questions, anonymity, and salience of inter-group (or cross-national) comparison.

Social desirability responding has been posited to be higher when collectivism is primed or chronically salient, lower when individualism is primed or chronically salient. With regard to collectivism, this is explained as reduced motivation to provide accurate information to outgroup

members (Triandis & Suh, 2002), reduced willingness to self-disclose (Smith & Bond, 1998), increased conformity (Bond & Smith, 1996) and face-saving behavior (e.g., Triandis, 1995). With regard to individualism this is explained as a norm of providing an honest, sincere, or self-disclosing response regardless of who is the recipient of communication (Triandis, 1995; van Hemert, et al., 2002). To the extent that social desirability is differentially likely when collectivism is salient, then responses of collectivists should be more influenced by, for example, format of the scale if the meaning implied by scale anchors is differentially socially desirable or undesirable. When what is being rated is desirable - culturally valued, a low score on a bi-polar (e.g., -5, +5) scale may be more difficult to endorse than a low score on a uni-polar (e.g., 0, 10) scale because low responses on the former scale connote presence of negative traits while equally low responses on the latter scale simply connote absence of positive traits. Moreover, negative responses in general may fit better with some cultural values (e.g. humility) than others (e.g. pull yourself up by your bootstraps).

Another possibility is that the mechanism underlying social desirability responding differs by cultural frame, with individualism highlighting the need to present a positive, self-enhancing image to oneself and others, and collectivism highlighting the need to save face in public. Indeed, collectivism is associated with public image management and individualism is associated with self-image enhancement (Lalwani et al., 2005). Findings in this research were the result of using targeted rather than general scales. This might explain why some research has not found a relationship between collectivism and social desirability or found a relationship only with individualism (e.g. Okazaki, 2000). Similarly, Grimm and Church (1999) observed no relationship between several social desirability indexes and individualism and collectivism as measured by the Individualism-Collectivism scale by Hui (1988). In a study where culture-level variables were examined in relation to social desirability, Van Hemert and her colleagues (2002) found that the strongest predictor of the lie scores measured by the Eysenck Lie Scale was GNP such that low GNP

scores predicted high lie scores. We believe that further research directed to understanding culture-specific processes that might underlie socially desirable responding across cultures and culturally-relevant context effects that might impact socially desirable responding is needed to resolve some of the confusion that exists in the current literature on culture and social desirability.

Culture and use of middle or extreme responses

Some authors have speculated that chronic or situationally-primed collectivism increases use of a non-committal midpoint response, particularly when the correct response is not clear or when the respondent does not want to offend the interviewer. With regard to collectivism, this is explained as due to salient norms of limiting self-disclosure (Steel, 1991), guarding affective expression (Lai & Linden, 1993), masking feelings (Gross & John, 1998), and greater emphasis on modest and cautious (Hui and Triandis, 1989) responses. Asian collectivism, influenced by Confucianism is also thought to be related to midpoint responding as a reflection of moderation, deference, and modesty valued by this philosophical thinking style (Chia, et al., 1997; Tu, 1979). These values may be endorsed particularly by those members of the cultures influenced by Confucianism who are high on public self-consciousness which is associated with a greater concern about how one appears to others (Hamid, et al., 2001). Dialectical thinking –viewing reality as dynamic and changeable, believing that contradictory features can co-exist in the same object or event and that everything is related–, as opposed to analytical thinking –paying attention primarily to the object and the categories to which it belongs and using rules such as formal logic to understand it behavior– is also thought to contribute to midpoint responding (Triandis, 2004).

While use of mid-point may be due to these cultural values and cognitive styles, it also may be due to use of questions that are differentially involving for individualistic respondents (who would then be more likely to choose extreme answers), while being of little relevance to collectivist participants (who would then be more likely to choose non-committal answers). A general tendency

of cultural and cross-cultural research to be focused on the west would create a general tendency of research questions to be relevant to individualists. Questions focused on irrelevant behaviors, judgments and attitudes are more likely to need to be estimated. If culturally relevant subjective theories focus on context-focused rather than person-focused stability, then individuals high in collectivism may be left less sure of their estimated answers. Question irrelevance and difficulty using estimation cues together could produce what would appear to be a tendency to use the mid-point on the part of collectivists. Van de Vijfer and his colleagues (2004) have found evidence for domain effects; country differences in extreme responding depend on the extent to which a domain involves personal involvement. To the extent that questions are culturally-specific, midpoint responding should increase when they are culturally irrelevant. To the extent that questions are universal, midpoint responding should decline.

Unfortunately, few studies have explicitly measured individualism and collectivism and examined its link to midpoint and extremity responding. We found two studies. The first study (Johnson et al., 2005) showed no relationship between Hofstede country-level individualism score and individual variability in extreme responding in diverse samples of adults in 19 countries. The second study (Chen and colleagues, 1995) assessed individualism at the individual level and showed both the expected general cultural differences in use of midpoint and at least some evidence that the effect has to do with relevance of questions.

Chen and colleagues (1995) measured individualism in 11th grade students in Japan, Taiwan, Canada, and the US (N = 6,451) who also completed scales inquiring about different school-related domains (e.g. value of education, academic self-concept). Individualism correlated positively with extreme responding and negatively with midpoint responding. In addition, Japanese and Taiwanese students had a significantly greater preference for midpoint responding and significantly lower preference for extreme responding than the US students, but neither Asian group differed from the

Canadian group. In addition to general differences by individualism-collectivism and by country, question-specific differences also emerged. Japanese students had a greater preference for midpoint responding when questions asked about social and physical self-concept, but this difference almost disappeared when questions inquired about attitudes concerning math. Similarly, American students had a greater preference than the other three groups for extreme responding when asked about value of education, but had equal preference for extreme points when asked about school anxiety.

In addition to question relevance effects, there is some evidence that format-related features of questions influence extreme responding cross-culturally. Unfortunately, studies are not framed in terms of cognitive survey methodology making results interpretable. Hui and Triandis (1989) report increased use of extreme responses in a collectivistic group (U.S. Hispanic supervisors) when presented a 5-point response alternative (response options ranging from A to E), but not when provided a 10-point alternative (response options ranging from 1 to 10) compared to an individualistic group (U.S. non-Hispanic whites). Grimm and Church (1999) report increased use of extreme responses in a collectivistic group of participants (Philippine students) compared to an individualistic group of participants (US students) when presented with 8- or 9-point response scales, but not when presented with 2-, 5-, and 6-point response scales.

Culture and acquiescence

As is the case for other of the response effects, there is no clear evidence for the size or stability of acquiescence effects as a function of individualism-collectivism. In general, acquiescence or yea-saying is assumed to be a learned and functionally adaptive response, reflecting nonresistance, deference, and a willingness to conform; characteristics that may be more functional in collectivistic societies, especially in those that also put emphasis on the observance of social hierarchy (e.g., Ross and Mirowsky, 1984). Lynch (1973) suggested that collectivism is likely to be associated with acquiesce more than individualism because of the greater value collectivism puts on

smooth interpersonal relations. Smith (2004) suggested that acquiescence might be higher in cultures characterized by anxiety and uncertainty. Cultures where many rules and norms are imposed tightly may also promote acquiescent response style (Triandis, 2004). Because acquiescence is likely to increase in the same contexts that enhance social desirability concerns (see Knowles & Condon, 1999), the cognitive and contextual factors we discussed above in relation to social desirability are also applicable here. Similarly, to the extent that positive extreme values can be considered as reflecting an acquiescent tendency, our discussion related to extreme values are relevant to acquiescence.

A few studies explicitly examining acquiescence across cultures provide evidence for the individualism-collectivism and acquiescence link. Smith (2004) observed that correlations between estimates of acquiescent bias estimates derived from previous studies that have sampled 34 or more nations and value scores in 4 different multi-nation studies (Hofstede, 2001; Schwartz, 1994; Smith, Duggan, & Trompenaars, 1996; GLOBE, House et al., 2004) revealed that acquiescent bias was high in countries characterized as high in collectivism. Moreover, Smith showed that that question content made a difference in acquiescent responses such that personally relevant scales (focused on behaviors, attitudes, beliefs, and especially values) were convergent estimates of acquiescence, but that estimates derived from questions inquiring about one's perceptions of one's own society as a whole was not correlated with acquiescence. Johnson and colleagues (2005) also reported that individualism was negatively associated with acquiescent bias, such that individuals from individualistic countries were less likely to engage in acquiescent responding. They also observed that that GNP was negatively associated with acquiescence -- less affluent countries were more likely to manifest acquiescent bias in responding to questions. Van Herk and colleagues (2004) examined data from surveys on household domains and personal care in 6 countries in the EU (Greece, France, Spain, Italy, Germany, and the UK) and found that Greek respondents

systematically scored higher in both acquiescence bias and extreme responding than members of other European countries including French and Italian.

SUMMARY

In the present chapter, we focused on commonly discussed aspects of individualism and collectivism and linked them to question comprehension and response. Of course culture is not simply individualism and collectivism. As other operationalizations of culture are brought to bear, other influences may be discovered (e.g. influences of future-past orientation as discussed by Armagan and her colleagues in Chapter XX or of power and hierarchy as discussed by Zhong and his colleagues in Chapter XX on question comprehension and responses). We applied cognitive survey approaches to understanding how contexts influence answers to make predictions about the implications of the research context on outcomes of cultural and cross-cultural research. By thinking of research as a form of communication between researcher and respondent, the cognitive approach has highlighted first that questions, questionnaires, consent forms, previous questions, response scales and formats all provide clues as to the meaning of the current question and what would constitute an appropriate response. We proposed that collectivism would, in principle, increase sensitivity to these context effects. By highlighting the interplay between autobiographical memory and responses, we clarified likely culture effects on what would likely be salient vs. have to be reconstructed on the spot as well as likely cultural effects on the subjective theories used to reconstruct appropriate responses. In the final section, we explored possible differential sensitivity to social desirability effects and to response style tendencies. We noted that while the processes were likely to be universal, they were likely to be cued in culturally relevant ways. Collectivism increases sensitivity to situation, influences what is stored and accessible in memory, subjective theories and what is socially desirable and requires extremity or modesty. Collectivism also influences what is salient enough to be memorable and not require estimation.

As illustrated earlier in Figure 1, language (a marker of distal culture) and social situations are likely to influence the cultural lens brought to bear on the research questions, but so are features of the questionnaire and research context itself. It is this proximal cultural lens that will be drawn on in responding. To the extent that cultural and cross-cultural researchers fail to pay attention to the impact of the research context on what respondents understand questions to mean and what appear to be reasonable answers to questions, we may dramatically over or underestimate actual cultural differences in values and behaviors. To the extent that cultural and cross-cultural researchers fail to pay attention to the impact of the research context on the strategies respondents use to construct their answers, we may dramatically over or underestimate actual cultural differences in social and non-social cognition – how we think.

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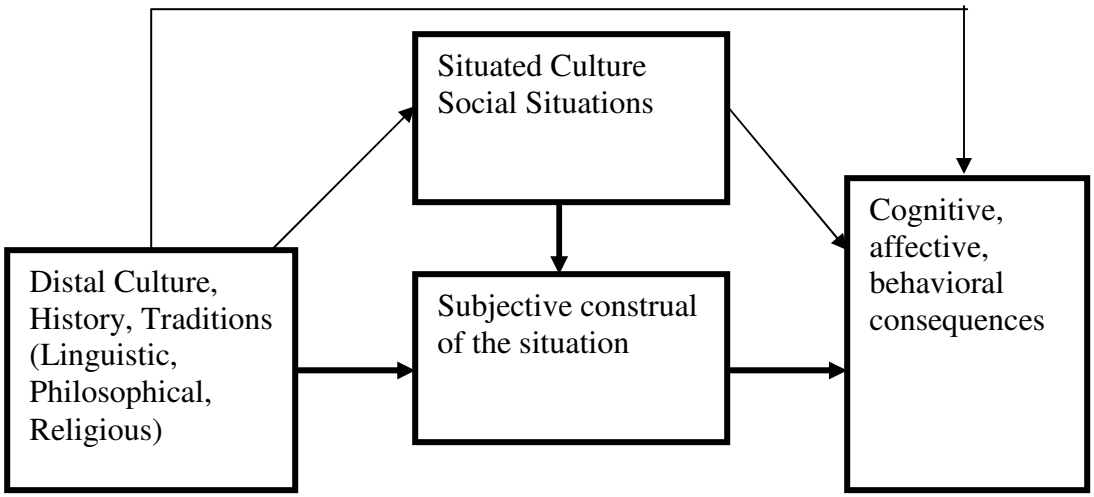
Figure 1. A process model of cultural influences