

Younger and Older Adults' Schematic Representations of Intergenerational Communication

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*The current paper examines younger and older adults' cognitive representations of intergenerational conversations. In interviews, younger and older adults were asked to imagine various types of conversations with older and younger targets. They were prompted to provide a wide variety of information about the targets and the conversations. The interviews were transcribed and analyzed to uncover types of conversations commonly reported. Through a combination of coding and hierarchical cluster analysis, a hierarchical arrangement of types of conversations emerged in younger and older adults' descriptions. Each of the types is described in detail. In a second study, exemplars of each type were sorted by younger and older adults and subjected to multidimensional scaling and cluster analysis. The results supported the validity of the types from Study 1, and suggested dimensions underlying this arrangement (positive-negative and helping-not helping for the younger adults; positive-negative and high-low change orientation for the older adults). The findings are discussed in terms of the communication predicament of aging model, and the role that these representations of conversations may play in future research. It is argued that knowledge of these cognitive representations of communication provides a new perspective on the ways in which intergenerational interactions may progress. **Key words:** Intergenerational Communication, Schemas, Older Adults*

For those interested in human communication, describing the cognitive structures that influence social interaction has been a long term goal. The notion that cognitive representations are important in influencing communication is well established and supported by a variety of research (e.g., Fussell & Kreuz, 1998; Hummert, 1994; McCann & Higgins, 1990). The current paper aims to examine cognitive structures associated with intergenerational interaction, with the goal of expanding our notion of such structures. In particular, we attempt to move beyond rather constrained notions of stereotypes (trait-based cognitive representations) or scripts (cognitive representations of sequential ordering) to a broader notion of schemas. It is argued that schemas are superordinate structures containing a wide variety of information about interaction. Accessing such representations will provide us with richer, more detailed ideas of how people think about communication.

The research reported here is grounded in the assumption that younger and older adults have intergenerational communication schemas (ICSs: see Harwood, 1998). These are cognitive structures that include information on the ways in which conversations with people from other generations typically progress. They include affective, procedural, and topical information, including expectations of what topics are appropriate, what emotions are likely, and the consequences of the conversation in terms of, for example, satisfaction. The existence of such knowledge structures is

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suggested by various established research perspectives. First, Cantor, Mischel, and Schwartz's (1982) research provided support for the notion of a person-in-situation prototype. Cantor et al. suggested that we may organize knowledge about the world in person-situation categories, and demonstrated that these categories may be richer and more accessible than traditional "stereotypes" (i.e., categories of persons, independent of situation). Second, Carlston (1994) has described a model of cognitive representations of persons that he calls Associated Systems Theory. Within this perspective, cognitive representations of people constitute structured entities that include information such as affect experienced in contact with such a person, trait and category information, visual appearance information, and information about behaviors engaged in by self and other in interaction with such a person. Carlston (1994) presents neurological and socio-psychological support for the existence of such structures.

At the outset, it is worth clarifying the precise distinction between communication schemas as elaborated herein, and other cognitive representations discussed in the literature. *Stereotypes* are cognitive organizations of trait-based information about people, commonly organized with reference to social group memberships (Macrae, Stangor, & Hewstone, 1996). *Scripts* constitute cognitive representations of temporal organization: The sequence in which events occur in a social interaction (Schank & Abelson, 1977; Kellerman, 1991). Both stereotypes and scripts are viewed as subordinate to the notion of communication schemas in the current sense of that term. In other words, a communication schema might include trait-based representations of the other person, or expectations about the temporal organization of the interaction. However, the schema will include additional information (e.g., expectations about affect, behavior, or outcomes of the interaction). The interaction between all of these elements will constitute a holistic, coherent image of an interaction: An "expectation" in the broadest sense of that term.

The Intergenerational Context

The Communication Predicament of Aging Model (CPM: Ryan, Giles, Bartolucci, & Henwood, 1986) has been an important theoretical presence in conceptualizing the relationship between cognitive and communicative processes in intergenerational interaction (Coupland, Coupland, Giles, & Henwood, 1988; Harwood & Giles, 1996; Hummert, 1994; Ryan, Meredith, MacLean, & Orange, 1995). At the heart of the model is the notion that younger adults' *stereotyped expectations* of older adults negatively impact the communicative options of older adults in intergenerational contexts. It is argued that this may lead to low quality social interaction, lessened psychological well-being and declining physical health for the older adult. Since its inception, this model has driven much important research into intergenerational communication (e.g., Coupland et al., 1988; Giles & Williams, 1994; Harwood & Williams, 1998; Hummert, Shaner, Garstka, & Henry, 1998; Ryan, Hummert, & Boich, 1995; Williams et al., 1997). The current research aims to extend this model in three important ways.

First, research examining the model has focused exclusively on stereotyped expectations in terms of *trait-based* stereotypes. In contrast, the current research aims to uncover a broader range of expectations that people may have in intergenerational settings, and in particular their expectations for the *communication* itself.

Previous work has examined the role of mental representations in guiding behavior, and convincing evidence now exists that our cognitive representations of situations and people have the power to drive our behavior (Snyder, 1984; Word, Zanna, & Cooper, 1974), including in the intergenerational sphere (Carver & de la Garza, 1984; Hummert et al., 1998). However, research and theory also suggest that the cognitive representations most likely to influence behavior in a situation are those that are most specific to that situation (Ajzen & Fishbein, 1977; Cantor et al., 1982; Schank & Abelson, 1977; Snyder & Cantor, 1980). Hence, it can be expected that cognitive representations of intergenerational *conversations* might be more important in influencing such conversations than purely trait-based cognitive representations of *people*. Hence, the study of ICSs may yield more precise predictions of communicative behavior within the CPM perspective than previous work on trait-based stereotypes.

Second, the CPM originally focused largely on the role of *younger* people's stereotypes of older people. The current research examines *both* participants' expectations for an intergenerational conversation. Older adults' expectations probably influence the quality of such interactions as much as younger individual's expectations, but currently we know surprisingly little about what older adults expect to occur in intergenerational interactions, or even their trait-based stereotypes of younger adults. A full understanding of the dynamics of intergenerational communication is unlikely without simultaneous consideration of both parties' cognitions concerning the encounter.

Third, research surrounding the CPM has focused on the ways in which younger individuals' stereotypes might influence their use of *patronizing speech* to older adults. Patronizing speech features simplified grammar and vocabulary, exaggerated intonation, and terms of endearment to the older adult (Ryan et al., 1986). The study of patronizing speech has been important in understanding one salient source of problems for older adults in intergenerational communication (Caporael, 1981; Harwood & Giles, 1996; Hummert, 1994; Ryan et al., 1995). However, this focus has been somewhat restrictive, given that this is just one speech style, and one for which we do not have tremendously good data as to its prevalence in daily life (O'Connor & Rigby, 1996). Hence, the current research will examine a broader range of communicative options and styles that younger and older adults perceive to be characteristic of intergenerational situations. The goal is to understand cognitive representations of communication from a broader perspective.

One previous study has attempted to examine cognitive representations of intergenerational conversations. Harwood (1998) described various types of conversation that younger individuals reported having with older people (e.g., a *helping* conversation in which the younger person helped the older person and felt good about it afterwards). While that research is important in terms of laying the groundwork for the current research, it suffered from a couple of limitations. First, it used written descriptions of intergenerational conversations. Such descriptions are often un-elaborated, and do not permit the research to prompt respondents into providing more detailed descriptions. Hence, some of Harwood's (1998) categories can be seen as rather crude or vague. Second, that research only examined younger adults' representations. Clearly the reports of older adults are equally important, and crucial in understanding the *intergenerational* dynamics of the situation.

Research Goals

There are two specific goals of the current research. *First*, the project aims to elicit the content of younger and older people's intergenerational communication schemas (ICSs). These will be elicited via an open-ended interview format followed by extensive coding (see Lurigio & Carroll, 1985; Rule, Bisanz, & Kohn, 1985 for similar methodological procedures). Representations that are shared by a number of people and that are internally consistent will be regarded as ICSs, and will be described in detail (Study 1). *Second*, the project aims to understand the cognitive organization of these ICSs. Previous research has shown interesting and important patterns in the structural organization of, for instance, age stereotypes (e.g., Hummert, 1990). The current research aims to understand the ways in which intergenerational conversations might be cognitively organized (e.g., their hierarchical or spatial interrelationships). This organization is first addressed in Study 1 and is the primary focus of Study 2.

Study 1

Method

Subjects for this study were 37 younger adults and 36 older adults. The younger adults were traditional students (under age 25), recruited from an introductory Communication class at a midwestern university (13 men, 24 women; 34 white, 2 African-American). The class fulfills a University requirement, hence it attracts a broad spectrum of students. Older adults were recruited from an independent-living apartment complex, an independent-living section of a nursing home, the community of a midwestern college town, and a small midwestern rural community (6 men, 30 women, age 63–91, all white). Six interviews with older adult participants did not yield any useable data.

Subjects participated in one-on-one interviews, primarily with graduate student research assistants. The interviewers informed younger and older participants that this study was concerned with how they imagined conversations with older or younger adults, respectively. Interviewers first asked the subjects to describe a "typical" conversation with an older (65+) or younger (18–25) adult. For all conversation descriptions, subjects were instructed to describe imaginary conversations. Subsequent questions probed for specific affective, experience, content, and process aspects of the conversation (e.g., how would they feel, what would they talk about, what would they like or dislike about the conversation, what would the other person think about them). This interview protocol was based, in part, on Cantor et al.'s (1982) coding scheme for analyzing person-in-situation prototypes and Carlston's (1994) Associated Systems Theory.

Once the first description had been exhausted, subjects were prompted to describe other types of conversations. These prompts were based on family/non-family contrasts, positive/negative contrasts, male/female co-worker/chance encounter situations, ideal/worst types of conversations, and Hummert's (1990) stereotypes of older and younger adults (e.g., "OK. Perhaps next you could imagine a conversation with an older person who was kind and wise"). For these additional descriptions, interviewers selected prompts contrasting with the nature of the previous conversation (e.g., "OK. The previous conversation sounded like it would be with somebody who was not a family member. Next, I'd like you to imagine a conversa-

tion with a younger person who was a member of your family"). The number of conversation descriptions attained per interview varied depending on the length and depth of descriptions for each question (Range = 1-7; Mean number of descriptions per interview = 3.04). Within and across interviews (via discussions between interviewers) attempts were made to use a variety of prompts, and elicit a variety of descriptions (e.g., male and female targets, positive and negative conversations, etc.).

Interviews were transcribed verbatim. Then, the same procedure was followed for dealing with the young and old transcripts. The procedure is described in abstract first, and then the specific findings for the young and old interviews are outlined. Due to the complexity of the process, it is described in numbered stages.

1. Transcripts were read by the three authors and a trained research assistant, and were divided into Intergenerational Conversation Descriptions (ICDs) by each investigator. ICDs were defined by the interviewer prompts, with the exception of situations where a response to a prompt was particularly short and lacked detail (in which case it was generally discarded), or when a single prompt elicited two distinct descriptions. The latter cases were identified by clear cues in the responses (e.g., "I can imagine a couple of things for this one . . ."), and were treated as two distinct ICDs by the coders (inter-coder reliability: Krippendorff's [1980] alpha = .87; disagreements resolved by discussion). Younger adult interviews resulted in a total of 125 ICDs and older adult interviews resulted in 98 ICDs.
2. *Feature lists* of salient elements within each ICD were developed. The feature lists consisted of a series of brief comments describing all salient elements within each ICD. They were devised as a way of concentrating the ICDs' information without distorting its content (e.g., by removing redundancy, irrelevant comments). The feature lists were typed on single manuscript pages, and were generally between 100-150 words in length.
3. The three investigators independently read the feature lists to identify important dimensions underlying the conversations. Attention was paid to diverse areas such as emotional tone (e.g., boredom, apprehension, happiness), orientation to the other person (e.g., liking, caring, hostility), topics of conversation (e.g., family, advice, history), and attributions for the nature of the conversation (e.g., attributions to age). Each author independently read and became familiar with all the feature lists. Consensus discussion was then used to identify a set of dimensions that would account for important variability in the feature lists.
4. The authors independently *coded the feature lists* on the emergent dimensions, with dimensions achieving acceptable reliability being retained (dimensions and reliability coefficients are described below). Previous discussions obviously played a role in this coding process. However, the researchers made a concerted effort to avoid discussing specific cases, and the actual coding of feature lists was performed truly independently. The complexity of the feature lists precluded the use of naive coders.
5. The feature lists were then submitted to a hierarchical cluster analysis based on their respective scores across the coded dimensions. The aim of this process was to uncover clusters of feature lists with similar patterns on the coded dimensions.
6. The resulting cluster solution was *interpreted* in terms of the coded dimensions (via ANOVA and cross-tabulation), as well as the authors' more general knowledge and insight on the interviews. Our goal was to supplement more objective quantitative processes with a strong familiarity with the raw data. What emerges is an empirically determined cluster solution that is interpreted in the light of intensive contact with the data.

Results

Young People's Accounts of Intergenerational Conversations

Dimensions

Six dimensions emerged from the initial sorting of the young people's feature lists. First, a broad dimension relating to the valence of the conversation was uncovered. This dimension concerned the younger adult's overall experience of the conversa-

tion. Ratings were based on whether they were satisfied, pleased, happy, or comfortable with the conversation, as opposed to being dissatisfied, uncomfortable, angry, or the like ($\alpha = .75$). Second, a dimension emerged relating to the valence of the description of the older adult. This concerned variation in descriptions of the older adult as hostile or angry at one extreme, and kind, loving, funny, or "cool" at the other extreme. Most of the features determining rating on this dimension were trait-type terms ($\alpha = .85$). Third, the younger adult's level of expressed sympathy for the older adult was coded. This was determined by references such as feeling "bad for," "sorry for," or "bad about" the older adult ($\alpha = .65$). Fourth, a measure of politeness/restraint was measured. This was indicated by the younger person reporting "being careful what you say" and "being extra polite." At times this restraint was attributed explicitly to the age of their interlocutor. This dimension is related to Williams and Giles' (1996) description of younger people's reluctant accommodation ("biting their tongues") in intergenerational settings ($\alpha = .61$). Fifth, was a dimension linked to feeling bored in the conversation or wanting to leave. This was often related to the older adult "going on" about something, and/or the younger person feeling relieved when the conversation was over ($\alpha = .63$). Finally, a dimension of "helping" was coded. This was indicated when the younger person mentioned a desire to help the older person, or when they indicated that they felt the conversation had helped the older person (e.g., "cheered them up") ($\alpha = .81$). All coding occurred on three-point scales, with the mid-point indicating ambiguous or neutral evaluations.

Cluster Analysis

Codings along the six dimensions were submitted to hierarchical cluster analysis. Examination of the agglomeration schedule did not reveal clear demarcation points within the dendrogram, hence the number of clusters was determined by examination of their content at various levels, including ANOVA analysis of between cluster differences on the coded dimensions. The descriptions below outline clusters at three levels in the hierarchy (8 clusters, 5 clusters, and 2 clusters). The levels of the hierarchy are distinguished by lower case letters, upper case letters, and roman numerals, respectively. Distinctions of more than eight clusters did not appear to provide additional insight. The descriptions were developed using procedures outlined earlier. A brief summary of the clusters is provided in Table 1, along with illustrative extracts from the interviews.

I. Positive

A. Positive, close relationship. This cluster contained the most overwhelmingly positive descriptions. All tended to include feelings of little distance between the younger and older person, and of warmth or caring. In addition, the older person was generally described in extremely positive terms (e.g., warm, caring, loving, funny, or "cool"). Within this broad description, two clusters emerged at the lowest level.

(a) ($n = 25$) These were "pure" positive encounters, including all of the elements described above. The conversations were characterized by high levels of warmth, connection between the older and younger person, and often the younger person learning from the older adult. The learning is often in terms of family, comparisons of the past and the present, and historical events. In many instances, the older person is described as a small woman with "kind of poofy" white hair.

TABLE 1

CLUSTERS RELATED TO YOUNGER ADULTS' PERCEPTIONS OF CONVERSATIONS WITH OLDER ADULTS

| Positive Cluster Categories | Illustrative Excerpts from Interviews |
|---|---|
| <p><i>A. Positive, close relationship</i> a) Overwhelmingly positive interactions; Younger person feels mild restraint/politeness; Mutual warmth and caring; Older person described very positively</p> | <p>"Really easy to talk to the person"; "I learned a lot about her and, like every time I talk to her I learn something new and different and it's always positive and it makes me feel good and herself"; "They've . . . got the droopy cheeks here and everything, but very friendly, very warm"; "A cozy little home with like a cat . . . just a cozy, nice little home with all those little knitted things and those toilet paper dolls, you know, that they put over the toilet paper—all those little hand-made little gidgets"</p> |
| <p>b) As (a), but younger person desires to help older</p> | <p>"I'm doing something good, like helping this person and, not necessarily helping but talking to them and letting them know they have a friend . . . hopefully I'd made them feel good"</p> |
| <p><i>B. Positive, respectful relationship</i> c) Younger person displays high restraint/politeness; Older person is characterized positively</p> | <p>[talking to someone older] "I guess that's kind of intimidating in a way because of the simple fact that there's not so much in common there as far as age-wise can go, yet there is some stuff in common"; "I'll listen to what advice they have to give you"; "I was very respectful to her"</p> |
| <p>d) Positive to neutral evaluation of conversation and the older; Younger wants to leave/is bored; Feels politeness/restraint.</p> | <p>"I don't mind talking to her, but it's just kind of not really what I want to do at that point"; "I wouldn't say bored, but probably, a little"; "She might be a little stuck in her ways"; "Relieved that it's over probably" [after the conversation]</p> |
| Negative Cluster Categories | Illustrative Excerpts from Interviews |
| <p><i>C. Negative, sympathy and helping</i> e) Neutral evaluation of conversation and older person; Feelings of sympathy and wanting to help the older, and politeness/restraint</p> | <p>"If it made them feel better about themselves or their life or their family. I would definitely feel better about it"; "Umm, I would be mad at myself probably, I would blame myself if I couldn't get them out of the bad mind-set"</p> |
| <p><i>D. Negative, no connection</i> f) Neutral to negative conversation; Older person characterized negatively; Younger feels moderate levels of politeness/restraint; Younger wants to help the older person</p> | <p>"I would feel uncomfortable . . . be kind of depressing probably . . . I'd feel guilty anytime anybody else was unhappy and I'm not"; "I'd feel uncomfortable because the situation would be uncomfortable—having somebody sit there and tell you about how mad they are. That wouldn't put you in a very good situation"; "As a person, I would think of them as kind of restrictive, not restrictive, but just withdrawn. Like cold"</p> |
| <p>g) Older person evaluated as neutral; Younger is bored or wants to leave; Younger wants to help</p> | <p>"It's a little hard to pull away and I don't want to be rude, you know, because I know they don't get to talk to anybody too often, you know"; "A little trying on your patience"; "Boredom, some parts you can't rush it. Kind of a good Samaritan act where you, you know, you're in your prime and you take your time to talk to them"</p> |
| <p><i>E. Negative, hostile</i> h) Older person is hostile towards younger; Younger person wants to leave conversation</p> | <p>"I get the impression the older person would feel mad or, umm, bitter for some reason just because the perception I get"; "Older people just don't have a positive perception of our generation. They seem hostile whenever they talk—look down on you"; "She would probably attack some of the things that, you know, were important to me"</p> |

(b) ($n = 8$) These were also broadly positive encounters with few or no negative features. The distinguishing feature from category (a) was that these interactions were characterized by high levels of helping from the young person. In general, the helping was in terms of the conversation simply providing company or entertainment for the older person.

B. Positive, respectful relationship. These conversations were also broadly positive or sometimes neutral, and they were differentiated from the categories above by substantially higher scores on the politeness/restraint dimension. This led to an impression of some distance in the conversation.

(c) ($n = 14$) This category featured high levels of respect and politeness in the context of positive conversations with older adults who were characterized in a positive fashion. However, the younger respondents noted feelings of restraint or being obliged to be polite to the older person. At times this restraint was framed explicitly in terms of the age of the older person.

(d) ($n = 11$) In this category, ratings of the conversation and the older adult were close to neutral. Often the descriptions of the older adult were markedly ambivalent, featuring mixtures of positive and negative elements. The distance described in category (c) is even stronger here. In addition, this category is marked by higher levels of boredom/wanting to leave the conversation.

II. Negative

C. Negative, sympathy and helping. (e) ($n = 18$) This broad category includes interactions that are largely neutral in terms of the experience and the older adult's character traits. However, they are marked by high levels of sympathy in the younger person, and a strong desire to help the older person. This is generally a product of some characteristic of the older person's life circumstances such as illness, disability, or loneliness. This is accompanied by fairly high politeness/restraint scores, resulting in distance in the conversation.

D. Negative, no connection. Within this category are two broad types of conversation in which there appears to be little or no connection between the younger and older person.

(f) ($n = 16$) These are conversations that are broadly neutral to negative in overall tone, and feature fairly negative characterizations of the older adult. They feature moderate levels of politeness/restraint, and moderate levels of young helping. They are conversations in which the older person often displays some hostility or negative attitude toward the younger person. The younger person tries to be polite and help the older person a little, but does not enjoy the experience.

(g) ($n = 10$) These conversations are somewhat more negative in overall tone than those in (f), however the characterization of the older person is more neutral. The younger person feels more boredom and more of a desire to leave, while also displaying some interest in helping the older person. The helping is similar to category (b) in terms of having made the older person feel good by talking to them ("made their day"). However, unlike categories (b) and (d), the remainder of the description is distinctly negative.

E. Negative, hostile. (h) ($n = 23$) The final category is the most negative. In these conversations the older person is generally hostile or angry and displays negative attitudes towards the younger person. The older person is prejudiced against young

people in general, and at times also towards other groups (e.g., ethnic groups, homosexuals). Their negative attitude seems to be unchangeable, and the young person wants to leave the conversation. Expressions of positive emotions or characteristics are rare in these conversations. Conversations in which the older person expressed racist sentiments often involved overweight, bald older men.

Older People's Accounts of Intergenerational Conversations

Dimensions

Six dimensions also emerged from the initial sorting of the older people's feature lists. First, a broad dimension relating to the valence of the conversation was again uncovered. This dimension concerned the older adult's overall experience of the conversation: whether they were satisfied, happy, or comfortable with the conversation, as opposed to being dissatisfied, uncomfortable, or angry ($\alpha = .83$). Second, a dimension relating to the younger person's attitude emerged. This concerned variation whereby the younger adult was described as hostile and uncouth at one extreme, or respectful and intelligent at the other ($\alpha = .75$). Third, the degree to which the older adult felt younger (more vibrant, energetic) as a result of the contact was important in distinguishing various feature lists ($\alpha = .78$). Fourth, the extent to which the older person perceived too much of a generation gap or having "nothing in common" with the younger person was coded ($\alpha = .85$). Fifth, we coded the description of the younger person's evaluation of the older person. Particularly common here were older adults' perceptions that the younger person would see them as sweet at one extreme, or as a busybody at the other ($\alpha = .67$). Sixth, a dimension of "helping" was coded. This was related to the older person offering advice or education, or attempting to get the younger person "back on the right track" (e.g., off drugs) ($\alpha = .80$).

Cluster Analysis

Codings along the six dimensions were submitted to hierarchical cluster analysis. As described above, the emerging clusters were interpreted through examination of variation in the coded dimensions across clusters, as well as the authors' collective knowledge of variation in the interviews. As with the younger adults, a three-level hierarchy is presented for the older adults. It also features two categories at the highest level, and five at the intermediate level. At the lowest level seven categories appeared to offer the best account of the data. A brief summary of the clusters along with illustrative extracts can be found in Table 2.

I. Positive

A. Positive, helping. (a) ($n = 17$) In these conversations, the older person is offering some help or advice to the younger person. In general, this advice is not to correct some "problem" in the younger person (as was the case with young helping older), but rather it is general "life advice." The older person is self-presenting as a provider of wisdom or experience in the relationship. They are positive conversations in all respects: The older person's evaluation of the conversation, their evaluation of the younger person, and their perception of the younger person's evaluation of them. There are few reports of their feeling a generation gap or distance between

TABLE 2

CLUSTERS RELATED TO OLDER ADULTS' PERCEPTIONS OF CONVERSATIONS WITH YOUNGER ADULTS

| Positive Cluster Categories | Illustrative Excerpts from Interviews |
|---|--|
| <p><i>A. Positive, helping</i> a) Positive experience; Younger person rated positively; Older person provider of wisdom</p> | <p>"I'll tell him to be sure that she was a nice girl and not to form an opinion of the girl by what he just sees of her. Think what . . . kind of wife and mother she would be and whether or not he was really interested or just passing fancy"; "He's a clean-cut boy, he's interested in getting ahead, getting a good-education, not too frivolous, just a coming down to earth, clean-cut boy"</p> |
| <p><i>B. Positive, no helping</i> b) No helping of young person; Low to moderate generation gap; Positive experience</p> | <p>"She was a very pleasant young lady and she was definitely concerned about her mother. When you look at me, you can tell that I'm over 50 years old, a lot older and she was respectful and I would, at the same token, be respectful to her"</p> |
| <p><i>C. Positive, youthful feelings</i> c) Older person feels younger; Little generation gap; Older person helping younger person</p> | <p>"Well, I'd kind of like to talk to the young 'cos I think they help me stay a little bit young by passing some of their ideas onto me"; "I've worked with a lot of teenagers and it gives you a different perspective on what you're going through at your time of life . . . it's like gaining knowledge, uhhh, just basically makes you feel more a part of the world"</p> |
| <p>d) As (c), but milder youthful feelings; Milder helping; Stronger generation gap</p> | <p>"I think their conversation would be intriguing to me, maybe to them"; "When I was very young I wanted to be around older people because I thought they had much more knowledge, and then as I get older I want to be around the young to stay young. At heart, you know, young at heart"</p> |
| Negative Cluster Categories | Illustrative Excerpts from Interviews |
| <p><i>D. Negative, bad young attitude</i> e) Young person extremely negative; Young person negative towards older; Older person trying to help younger</p> | <p>"He gets in and out of trouble and, finally, he has come to me because he wants to pick my brain as to what could happen to him under the circumstance that he's gotten himself involved in. He wants advice. He has kind of a slouchy-manner"; "I wouldn't accelerate it to pushing and shoving, but I would probably find a word or two that might, for me to try to put them down a little bit"</p> |
| <p><i>E. Negative, no connection</i> f) Negative conversation; Young person negative toward older; High generation gap/nothing in common</p> | <p>"I don't think I would try to advise anymore with someone that young. The age gap is too big and I wouldn't try to tell anybody what to do"; "I'd be more at ease with someone my own generation . . . I think I relate to them a little better than I would to a younger person . . . I'm not around them [young people] enough anymore"</p> |
| <p>g) Negative conversation; Young person negative toward older; Smaller generation gap than (f)</p> | <p>"She isn't helpful, and she doesn't take other people into consideration, she just goes around like she thinks she's a little bit better than everything"; "She was brisk. She was just interested in getting it over, so she kind of hurried a little bit with her talking and with her explanations and everything, just seemed like "I want to get you out of here and get on with my own business or my own life" "</p> |

themselves and the younger person. The younger people in these encounters are often described using phrases such as "clean cut."

B. Positive, no helping. (b) ($n = 31$) These are conversations broadly similar to category (a) with the exception that they do not include reports of helping. The younger person is characterized positively, as is their attitude towards the older person. The generation gap is perceived as low to moderate.

C. Positive, youthful feelings. In these conversations, the older person reports feeling younger, or that the younger person has provided a sense of youth and vibrancy. In most respects they match the positive tone of the conversations described above, however the conversations described above do not feature reference to "feeling young" or the like. Two subtypes are worth differentiating.

(c) ($n = 5$) In these positive conversations, the youthful feelings are extremely strong. This is associated with a very low perception of any generation gap between the two individuals, and a moderate level of the older person helping the younger person (e.g., by offering advice).

(d) ($n = 10$) In this subtype, the positive conversations feature a milder level of reported youthful feelings, although still stronger than most other conversations. The generation gap/distance is slightly higher than in (c), and the level of reported helping is lower.

II. Negative

D. Negative, bad young attitude. (e) ($n = 15$) These conversations all feature a younger person with a negative attitude (generally hostile, disapproving, antagonistic to the older person). The experience is mildly or strongly negative. The older adult's experience of the conversation is often extremely negative, and a substantial generation gap may be present. The older person perceives that the younger person has a negative attitude towards the older person. Interestingly, there is sometimes a strong level of helping reported by the older person: Often in terms of trying to get the younger person back on the "right track." Frequently, the younger person's attitude is attributed to drugs or alcohol, and their appearance is described as unkempt or scruffy.

E. Negative, no connection. These are also negative conversations, although the young person's attitude and evaluation of the older person is rated more neutrally. Little helping is reported by the older person, indeed, they do not appear particularly involved in the conversation at any level. At a fundamental level, there simply seems to be no connection between the younger and older individuals.

(f) ($n = 9$) In these conversations the generation gap/distance between young and old is described as extremely high. The older person perceives a barrier to understanding across the generations, and this leads to a general feeling that the conversation is not accomplishing much.

(g) ($n = 11$) These conversations match the general pattern reported above with the absence of the high generation gap in (f). Instead, the lack of connection appears to be a function of some other features (e.g., individual personality characteristics of the younger person). In these conversations, the younger person is often a professional of some sort.

These categories are presented as representative of younger and older adults' cognitions concerning intergenerational interactions. We find it useful to think of

them as a repertoire of representations of such conversations. Further examination of the cognitive representation of the categories is provided in Study 2.

Study 2

In this study, we were interested in whether naive subjects' implicit category systems would match those emerging from Study 1, and in understanding more about the cognitive organization of those clusters. To address these goals, subjects sorted exemplar conversations from each category, and we used multivariate statistical techniques to examine the results of their sorting.

Method

Subjects for this study were 41 younger adults and 25 older adults. The younger adults were traditional students (under age 25), recruited from an introductory Communication class at a midwestern university (14 men, 27 women; 38 white, 2 Asian, 1 Middle-Eastern). Older adults were recruited from an independent-living apartment complex, a university retirees club, and the community of a midwestern college town (10 men, 14 women, 1 unknown; mean age 75 years; all white).

The feature lists from Study 1 were used in this study. First, each feature list was rated for its typicality of the category into which it had fallen in Study 1. The second and third authors independently rated all feature lists for typicality on a four-point scale from "somewhat atypical" to "very typical" (inter-coder reliability was acceptable: Krippendorff's $\alpha = .71$). The *two* feature lists with highest average typicality ratings for their respective category were utilized in Study 2. The only restriction placed on this process was that the two feature lists selected had to be the product of different Study 1 interviews. This resulted in 16 feature lists from the interviews of younger adults (8 categories), and 14 from the interviews with older adults (7 categories).

Sheets of paper containing these feature lists were then given to younger and older adult respondents (younger adults received the feature lists from the younger adult interviews, older adults received the lists from the older adult interviews). The respondents were asked to read the feature lists and form a mental picture of each conversation represented. They were then asked to sort them into piles based on their similarity to one another. No constraints were placed on the sorting task except that a range of 3–10 piles was prescribed. Respondents were also asked to write brief descriptions of each pile, primarily to aid their thought process in establishing meaningful sorts. Similarity matrices were created by computing the number of times any given pair of feature lists was sorted together into the same pile. Hence, two similarity matrices emerged: One for the perceived similarity of feature lists from the older adults, and one for the feature lists from the younger adults. These were submitted to hierarchical cluster analysis and multidimensional scaling (MDS). The results are presented below for younger and older adults separately.

Results

Younger Adults' Structural Representations of Intergenerational Conversations

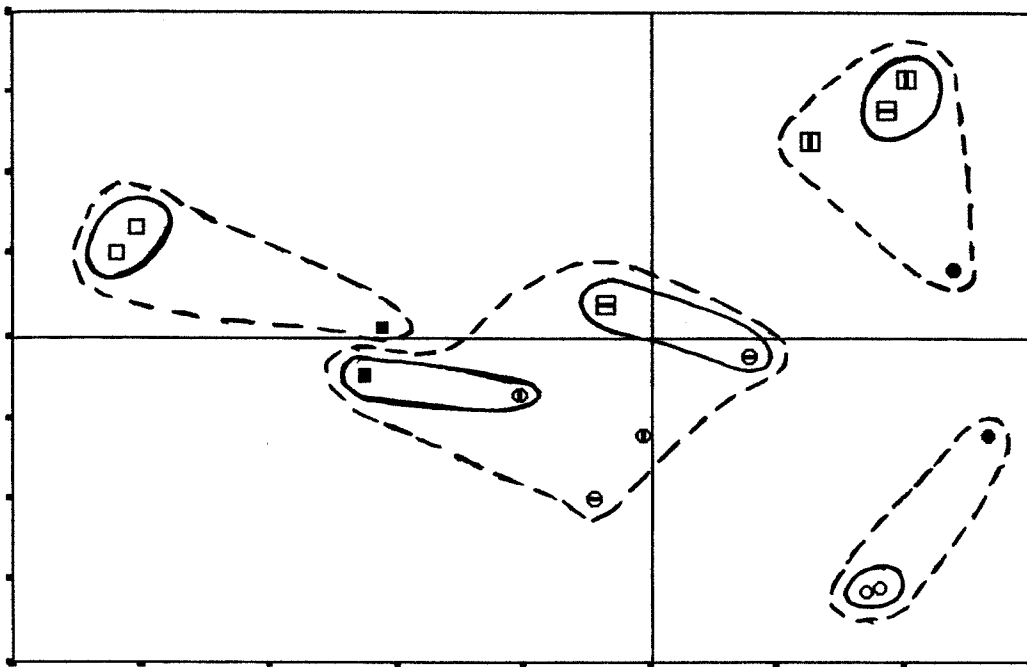
For the young adults' responses, a two-dimensional MDS solution was appropriate ($R^2 = .98$, Stress = .06). Figure 1 illustrates this solution, overlaid by two levels of a cluster analysis solution of the same data (represented by solid and broken lines).

The original category memberships from Study 1 are shown by the different symbols on the figure. Figure 1 suggests that the categories described in Study 1 were a valid interpretation of the conversational descriptions. As can be seen from the figure, the feature lists that were from similar categories in Study 1 also fall into similar regions of this map. Their physical proximity indicates a high degree of perceived similarity from our respondents. In many instances they are also grouped together within the new cluster analysis. Caveats to this general impression are noted later. The map reflects two dimensions. First, a broad positive-negative dimension is arrayed from the bottom right to the top left. The highly positive categories (a) and (b) from Study 1 are both in the extreme right of the figure, and located in the lower two-thirds. The hostile category (h) is on the extreme left and in the upper quadrant. Directly between these are three categories all featuring restraint and politeness in dealing with the older person ((f), (c), (d)). Interestingly, these three categories transcend the simple "positive-negative" split described in Study 1. The group of feature lists in the central area of the map reflect neutral affect along with this sense of restraint and politeness. It appears that our analysis in Study 1 may have over-emphasized the distinctions between these types, and that actually they are perceived as largely similar to one another by independent observers.

The other dimension appears, to reflect a helping orientation. This ranges from the central area of the diagram to the top right corner. Categories (e) and (b) are located in the top right of the diagram, and helping was described as a prominent theme in both of these in Study 1. Supporting this interpretation, one feature list from category (g) ends up in this region of the diagram. This particular feature list contains considerable reference to the younger person helping the older person and feeling sympathy for him. In contrast, the other feature list from category (g), while similar in other regards, demonstrates considerably less in the way of sympathy or helping, and is located in the central region of the diagram. Consistent with our interpretation of the dimensions, category (b) was characterized as highly positive but also concerned with helping in Study 1. In the map it straddles the central region at the right side. It is notable that the helping dimension is virtually non-existent at the negative affective extreme. It seems likely that a helping orientation is rarely associated with extremely negative encounters.

Differences in the cluster structures of Study 1 and Study 2 are worth further consideration. Categories (h) and (a) are clustered in this cluster analysis exactly as they did in Study 1, and are distinct from one another as would be suggested by Study 1's descriptions. The remainder of the clusters all show some minor variations between the studies. The Study 2 cluster analysis placed one of the (f) feature lists with the more hostile (h) category. Likewise, the two "positive-helping" (category b) feature lists ended up splitting between the "helping" style feature lists (category e) and the highly positive category (a). As noted above, categories (c), (d), (g), and (f) show varying degrees of overlap. Distinctions between these categories were less clear to our respondents than they were to us as researchers.

Overall, these differences suggest that *four broad categories* may account best for these data. A clearly positive cluster (a), a clearly negative cluster (b), a helping cluster (e), and a neutral-restrained cluster (c and d). These are represented broadly by the broken lines in Figure 1 (which represent the four cluster solution from the Study 2 cluster analysis). The remaining Study 1 clusters split between these categories. Those clusters may still be useful and certainly represent meaningful



| POSITIVE | | NEGATIVE | |
|----------|---|----------|--|
| ○ | a) Overwhelmingly positive interactions; Younger person feels mild restraint/politeness; Mutual warmth and caring; Older person described very positively | □ | e) Neutral evaluation of conversation and older person; Feelings of sympathy and wanting to help the older, and politeness/restraint |
| ● | b) As (a), but younger person desires to help older person | ■ | f) Neutral to negative conversation; Older person characterized negatively; Younger feels moderate levels of politeness/restraint and wants to help the older person |
| ⊕ | c) Younger person displays high restraint/politeness; Older person is characterized positively | ⊖ | g) Older person evaluated as neutral; Younger is bored or wants to leave; Younger wants to help |
| ⊖ | d) Positive to neutral evaluation of conversation and the older; Younger wants to leave/is bored; Feels politeness/restraint. | □ | h) Older person is hostile towards younger; Younger person wants to leave conversation |

FIGURE 1

COMBINED MULTIDIMENSIONAL SCALING AND CLUSTER ANALYSIS SOLUTIONS
FOR YOUNGER ADULTS' SORTING DATA

variation in conversations, however within the confines of Study 2, they do not appear to be salient to our respondents.

Despite the differences between the two studies, the overall pattern of clusters in Study 2 reflects our original scheme fairly well. The differences illustrate the fact that each individual conversation has a slightly different weighting of the various elements described throughout the paper. While a set of feature lists appeared to define a category, exemplars of particular categories can easily be seen as fitting "adjacent" categories. We do not intend that our categories be interpreted as static entities with boundaries between them. Rather, the variations in the cluster solutions suggest that these are overlapping fuzzy categories. At the same time, the dimensions and the categories themselves are eminently functional. They illustrate the dimen-

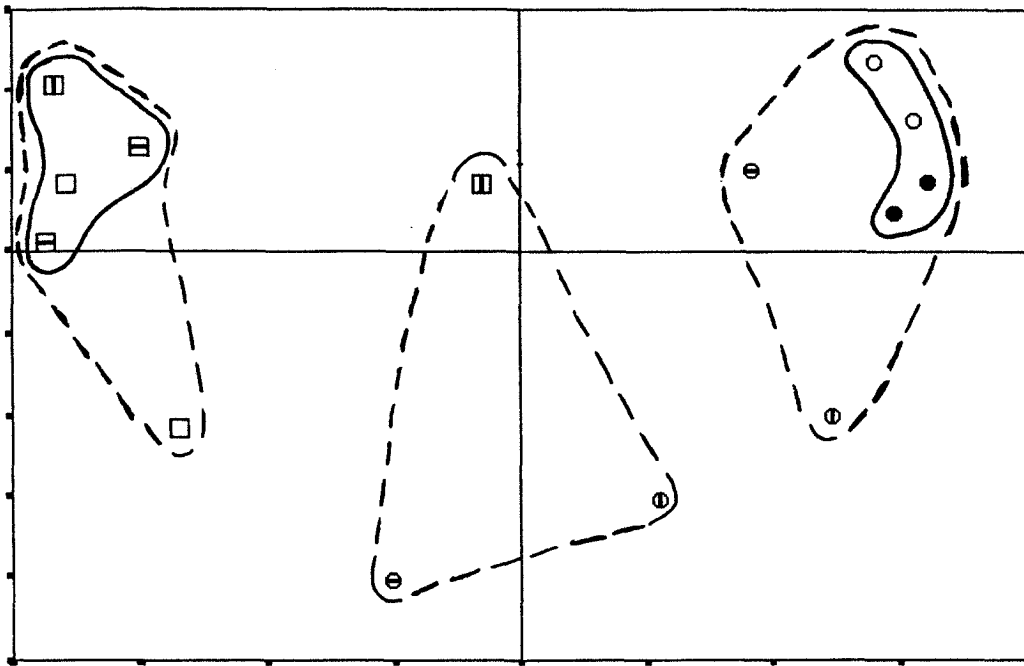
sions along which these types of conversation are interpreted and evaluated by younger individuals. Indeed, this is exactly the purpose of examining the spatial and hierarchical organization of these conversational representations. It illustrates which categories are adjacent to one another, the dimensions along which such differences are present, and hence the ways in which conversations may "shift" from one type to another.

Older Adults' Structural Representations of Intergenerational Conversations

For the older adults' responses, a two-dimensional MDS solution was appropriate ($R^2 = .99$, Stress = .04). Figure 2 illustrates this solution in the same fashion as described for the younger adults (solid and broken lines represent two levels of cluster solution of these sorting data; symbols represent clusters from Study 1). Figure 2 suggests that the categories described in Study 1 were a valid interpretation of the conversational descriptions. In particular, the feature lists originally classified as clusters (a), (b), and (g) emerged in close proximity. Category (e) feature lists were classified together at the higher level of the cluster analysis. At that level, five of the six negative feature lists, and six of the eight positive feature lists also clustered together.

As with the younger adults, a positive-negative dimension appears most clearly, with all positive conversations located in the right areas of the figure and negative conversations appearing largely on the left hand side of the figure. The other dimension is more difficult to interpret: we call it the "change orientation" dimension. Variation along this dimension appears to reflect variation in terms of the older person trying to change the younger person, or "correct" some perceived problem. In the lower descriptions (particularly the lower left), the older person strongly suggests attempting to influence or adjust the younger person in terms of their behaviors. Feature lists in other regions of the figure do not include this change orientation. The conversations in category (a) involve the older person helping the younger person, however, these conversations feature more offering of wisdom or advice as opposed to repair of problems. This type of helping appears quite distinct in our subjects' minds from the attempts to change the younger person. The former tends to occur in close relationships and with younger individuals who are described in a positive fashion. The latter occurs with younger people who are less congenial. The most negative conversations (those in the top left of the figure) do not feature the change orientation either. In these situations, the younger individuals are apparently "beyond the pale," in terms of being provided assistance. Hence, we interpret this dimension as one of the degree of change orientation that the older person has toward the younger person. Further research is required to test this interpretation.

As with the younger adults' data, there are interesting deviations between our original clusters and the results of the sorting data. First, the feature lists did not fall as cleanly into positive and negative categories as might have been expected. Specifically, a third cluster emerged (appropriately mid-way between the positive and negative clusters), which contained feature lists originally classified as either positive or negative. On closer examination, two of these conversations are ones in which the younger individuals take a somewhat negative attitude toward the interaction, even though the older person is positively disposed. In the other case, the younger person is described in a neutral fashion, but the older adult feels a lack of connection. Our original classification may have focused too much on the experience of the conversa-



| POSITIVE | | NEGATIVE | |
|----------|---|----------|--|
| ● | a) Positive experience; Younger person rated positively; Older person provider of wisdom | □ | e) Young person extremely negative; Young person negative towards older; Older person trying to help younger |
| ○ | b) No helping of young person; Low to moderate generation gap; Positive experience | ⊠ | f) Negative conversation; Young person negative toward older; High generation gap / nothing in common |
| ⊖ | c) Older person feels younger; Little generation gap; Older person helping younger person | ⊞ | g) Negative conversation; Young person negative toward older; Smaller generation gap than (f) |
| ⊕ | d) As (c), but milder youthful feelings; Milder helping; Stronger generation gap | | |

FIGURE 2

COMBINED MULTIDIMENSIONAL SCALING AND CLUSTER ANALYSIS SOLUTIONS
FOR OLDER ADULTS' SORTING DATA

tion from the older person's perspective in classifying some of the conversations as "positive." The sorting data from the older participants appears to indicate that both parties' enjoyment and involvement are essential.

Second, two categories ended up with their exemplars in radically different regions of the figure. Category (c) placed one exemplar in the highly positive top right region, while the other was towards the bottom left. This difference appears to be a function of differences in the change orientation focus described above. The first exemplar featured the older person offering advice to the younger person in terms of a family problem, however, the second mentioned the older person "trying to make a difference" and wanting to change the younger person's behavior ("stop him becoming a workaholic"). In our original system, both were classified simply as "helping." The MDS solution makes it clear that these are perceived as very different kinds of helping by our older adult respondents. In addition, category (f) placed one exemplar near the top left of the figure, while the other was virtually central. This discrepancy appears to be largely a matter of degree of negative affect. Both

conversations were originally clustered together because they feature largely negative affect from the older adult. However, this affect is quantitatively different in the two conversations. In the first, the older person describes the conversation as not harmonious, and wants to get out of the conversation as quickly as possible. The younger person is described as haughty and gross. In the second, the older person mentions not having any need to talk to the younger person again, and feeling a bit uneasy. The younger person is described in neutral terms ("is a man, works on a farm"). The latter conversation is considerably less negative than the former, despite both being originally classified as "negative." These examples provide further indication of the value of the MDS solution in understanding the broader space within which particular "types" may be arranged.

Overall, we would conclude from the two studies that *three broad categories* may be useful for distinguishing older adults' cognitive representations of intergenerational interaction. These are distinguished by the broken lines in Figure 2. First, mutually positive conversations, in which the older person may provide wisdom to the younger person, and may feel younger as a product of the interaction. Second, conversations in which one party feels some disconnection or distance from the other—the positivity is not mutual. However, these are not interactions with substantial negative elements. Finally, conversations in which the younger person displays considerable negativity. The older person may attempt to help the younger person, but such attempts may be futile. Obviously, this is the very crudest level at which to characterize such representations—the more subtle distinctions described earlier will undoubtedly be useful in some contexts.

Discussion

The paper has uncovered clusters of younger and older adults' descriptions of intergenerational conversations. As is revealed by the thematic coding in Study 1, these clusters do not represent entirely independent types of conversations. Rather, they represent particular combinations of dimensions that repeatedly emerged in our respondents' descriptions. There are similarities in the coding dimensions and categories across young and old interviews. The authors worked hard to allow the dimensions to emerge from the data, and it appears as if these dimensions may be fundamental to this communication context from both partners' perspectives. Some (e.g., positive-negative) are clearly fundamental dimensions of evaluation in many contexts. This is supported by the fact that this dimension emerged in our original codings, and appeared to be clearly represented in both of the MDS solutions.

The conversation types that emerge from this study are useful in terms of understanding cognitive representations of conversations. However, they are not intended to be treated as static and immutable (Rosch & Mervis, 1975). It is clear that some differ only in the *degree* of certain emotions or experiences. As is demonstrated by the MDS solution, particular exemplars of the same type of conversation may differ from each other along certain dimensions, while remaining similar on others. As is also illustrated by the cluster and MDS solutions, some of the categories seem very homogeneous, while others capture a more diverse range of conversations. That said, the features in each of these types are reliably associated with one another, and logically sensible. To this extent they may represent a culturally-determined repertoire of intergenerational communicative resources upon which individuals draw in intergenerational settings. The remainder of the discussion focuses on

theory, methodological developments, limitations, and suggestions for future research.

Theoretical Developments

As outlined at the start, this analysis has consequences for an important model of intergenerational communication: the Communication Predicament of Aging Model (CPM). The CPM suggests that younger adults' stereotyped expectations will (probably negatively) influence an intergenerational conversation in ways that may result in restricted communicative options for the older adult, and ultimately perhaps in deteriorating psychological and physical health for the older person (see also Hummert [1994] for a variation on this model). As noted, stereotyped expectations have been conceived in the literature largely in terms of *trait-based* perceptions of the *older* adult. The current paper expands this notion in two ways. First, it is now possible to conceive of a CPM in which *both* generations' stereotyped expectations are incorporated. The current research blends data from younger and older adults and indicates that each may enter an intergenerational interaction with a particular set of expectations that may dramatically influence the events that occur. Second, a far broader range of concepts is incorporated in the gloss "stereotyped expectations." Hence, we are not merely concerned with traits of the other person, but also affect toward them, approach-avoidance tendencies, communicative behaviors, physical appearance cues, and others. None of these elements are "necessary" to an ICS, but it is likely that most will be incorporated in most schemas. It is possible to imagine a cognitive representation that is particularly affect-laden (e.g., a sense of revulsion that is not easily tied to particular traits or behaviors of an individual), or particularly behavioral (e.g., enjoying talking to somebody, without an overwhelming sense of affect toward that person). However, the current data illustrate that most schemas tend to be pretty diverse in their content. Such complex "sets" of intercorrelated variables may provide a more powerful link between cognitions and behaviors in intergenerational communication, and possibly allow more precise predictions of the situations under which negative outcomes are likely. This method is also more in tune with recent understandings of the cognitive representation of social information (e.g., Cantor et al., 1982; Carlston, 1994; Wyer & Srull, 1989).

Methodological Developments

We feel that this paper represents a useful combination of quantitative and qualitative methodologies. All three authors became familiar with the content of the interviews in the course of performing and transcribing them, breaking them into individual descriptions of conversations, and creating feature lists. The authors then familiarized themselves with the feature lists through processes of sorting and developing categories for coding. This permitted interpretations of the Study 1 cluster analysis solutions in ways that would be impossible based on the coding alone. Finally, the process of sorting exemplars in Study 2 allowed for a validity check of our interpretations, via examination of similarities and differences between the MDS/cluster analysis solutions and our original cluster solution. This suggests ways in which our analysis could be extended, uncovers distinctions that were perhaps unnecessary, and suggests more subtle distinctions that were initially ignored. We hope that researchers will explore similar techniques in understanding

cognitive representations of conversations in other domains (e.g., intercultural, gay-straight, marital). The “maps” presented in Study 2 represent a novel way of understanding cognitive representations of conversations, and one that could be beneficial across contexts.

Limitations

Some limitations with the current research should be acknowledged. First, the participants constituted a convenience sample of college students and older adults. The level of diversity in the sample was less than desired, especially with regard to ethnicity. In addition, the older adults were skewed in terms of sex. Older men are notoriously difficult to recruit for research, and are excluded entirely from some important gerontological research (e.g., Coupland et al., 1988). We included those that we could gain access to. Certainly, future research should examine gender differences and pursue a greater understanding of the relatively under-investigated older male population. That said, the descriptions provided in the interviews indicate that our respondents varied dramatically in their life experiences (e.g., rural, urban), and their overall orientation to intergenerational contact (i.e., we received overwhelmingly positive and negative responses).

Second, the nature of the interviewers in Study 1 may be seen as a limitation. Only younger adults were used as interviewers due to the lack of older adults available to work as research assistants. It is clear from interview responses that these younger adults did not inhibit older adults in expressing negative views about the younger generations. However, more subtle effects of the age difference between interviewer and interviewee in this context cannot be determined.

Third, it is possible that our categories can be seen as artifacts of our process. In asking individuals to describe conversations with positively and negatively framed targets it is possible that we led them towards certain responses. However, we were careful to ensure that our prompts were either empirically-derived (e.g., using trait-based stereotypes that are established in the literature: Hummert, 1990), or had clear face validity (e.g., male vs. female targets). In addition, the first prompt to all respondents was for a “typical” conversation, and these first prompts resulted in responses that covered the full range of types emerging from our analysis. Finally, the fact that the cluster analysis solutions in Study 2 did not precisely reflect those from Study 1 may be seen as a cause for concern. From our perspective this is not the case. The feature lists used in Study 2 were reliably rated by coders as *most typical* of the Study 1 categories. However, they were specific exemplars with their own unique combinations of features. As such, they could not be expected to map perfectly onto a scheme that was developed using many more examples. The features that comprised each description were common across many descriptions. Relatively minor differences in emphasis on one dimension versus another might cause a shift between clusters, despite an overall similar tone. From our perspective, the overall pattern of the MDS solution, in which Study 1 clusters all emerged in fairly close proximity to one another, indicates considerable support for the Study 1 clusters. We would suggest that this supports the validity of the clusters and the dimensions developed in Study 1 to explain variation in descriptions of intergenerational conversations.

Future Directions

The current research has the potential to spur work in a number of areas. First, research needs to be performed examining the relationship between trait-based stereotypes and ICS activation. Such research might involve exposing subjects to trait descriptions of a target and seeing which ICS they perceive as more likely in such a situation. Analytical techniques such as correspondence analysis might be used to map the relationships between stereotypes and ICSs. Clearly, these relationships require more attention given the volume of literature concerning stereotypes, and their demonstrated importance in communication processes (Hummert, 1994). Second, experimental studies might examine factors that activate particular ICSs. Physiognomic features, dress style, relationship factors, vocal cues and the like may all play a role in triggering particular ICSs (Hummert, Garstka, & Shaner, 1997; Mulac & Giles, 1996). Experimental work might also draw on the dimensions emerging in the current analysis. These dimensions could be used in constructing scenarios of intergenerational interactions. The dimensions might also assist us in developing measures of intergenerational communication (e.g., should "helping" be measured more clearly and frequently in studies of younger adults' experiences). All of these suggestions would help us understand when particular ICSs may become active in everyday communication situations, and would facilitate prediction of immediate communication outcomes as well as more long term consequences (e.g., as predicted by the predicament model: see Introduction).

Third, this research would benefit from cross-cultural elaboration. Cultural variation in attitudes towards aging has been demonstrated both within the United States (Noor al-Deen, 1997) and in international contexts (Harwood et al., 1996; Williams et al., 1997). The extent to which the available repertoire of ICSs varies accordingly would aid our understanding of life-span development in contexts very different from the USA. Fourth, the role of individual differences should be examined. Are different ICSs more accessible for different individuals, and does this influence those individuals' satisfaction with intergenerational communication? Influential determinants might include age identification levels (Garstka, Branscombe, & Hummert, 1997), intergenerational attitudes (Harwood & Williams, 1998), and level of intergenerational contact (Knox, Gekoski, & Johnson, 1986). For instance, to what extent do individuals with high levels of intergenerational contact display more complex organizations of ICSs? This work would enhance our understanding of the role of contact in determining intergroup attitudes (e.g., Hewstone & Brown, 1986), by expanding on traditional definitions of the attitude construct.

Fifth, it will be important to develop methodologies that directly examine the influence of ICSs on actual intergenerational communication. Research into the role of these ICSs in determining the practice of intergenerational communication will enhance our understanding of the role of social cognition in influencing intergenerational relationships. Such work will bring us to more profound understandings of the roots of successful and unsuccessful intergenerational encounters. Finally, more focus on intergenerational *relationships* is required: To what extent are the ICSs uncovered in this research characteristic of the grandparent-grandchild relationship? Increased consideration of relational issues will help us understand the development of ICSs and their role in family relationships (Harwood, in press).

Conclusion

This research has been grounded in a particular communication context—interpersonal interaction between members of different generations. However, the principles involved in the research are of value beyond this context. It is possible to conceive of individuals having expectations entering almost any communication event. Hopefully, the current research has outlined a methodology by which those expectations might be elicited, and their cognitive structure uncovered. In addition, it is possible, and not inconsistent with the goals of the current research, that some of the schemas outlined herein would apply in other contexts (see Harwood, 1998). As we seek to understand the relationship between cognitive processes and social interaction it is hoped that the current research provides some useful directions.

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