

THE EFFECT OF COMMUNICATIVE GOALS ON TELLING TWO TYPES OF  
AUTOBIOGRAPHICAL NARRATIVES IN YOUNG AND OLDER ADULTS

By

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To my husband, Jordan, and our two dogs, Abby and Bailey

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The present research investigated young and older adults' communicative goals for autobiographical narratives and then assessed their ability to meet as well as alter these goals. Young and older participants told episodic (e.g., a memorable vacation) and procedural (e.g., one's morning routine) narratives, which were rated by another group of young and older listeners. Older adults had a more comprehensive set of goals that were similar for both topics, whereas young adults' goals were more disparate across topics. For meeting goals, young adults were better than older adults at meeting the goal of clarity for procedural topics, whereas older adults were more successful at meeting the goal of elaborativeness for episodic topics. Although young adults were more successful at altering their goals, both age groups demonstrated the ability to do so. The results suggest that differences in goals and difficulties with inhibition can affect discourse styles across the lifespan.

## CHAPTER 1 INTRODUCTION

### **Background**

Previous research provides evidence for the idea that young and older adults' quality and style of discourse tends to differ as a function of their intentions, or, communicative goals. Communicative goals can determine the selection of which speech style a person may choose to utilize (Giles & Coupland, 1991; Hymes, 1972; Labov, 1969). For example, young adults may sometimes adopt a condescending style of discourse when speaking to older adults, even when the older adults are healthy and functioning normally (Hummert, 1994; Kemper, 1994; Ryan, Giles, Bartolucci, & Henwood, 1986). This speech style is thought to reflect the way in which the young speakers view older adults, which in turn shapes their communicative goals (e.g., speak slowly, clearly, loudly) with older adults (James, Burke, Austin, & Hulme, 1998). Older adults, on the other hand, may select a more expansive discourse style, as a reflection of their desire for social interaction and the value they place on the process of talking (Giles & Coupland, 1991; Giles et al., 1992). Although it is suggested in the literature that young and older adult have different communicative goals, there is no empirical research quantifying what those goals are.

My research investigated communicative goals held by young and older adults and the ways in which these goals might affect how each age group conveys autobiographical information. Autobiographical information was chosen because age differences in communicative styles are typically largest when the discourse topic is related to the telling of personal narratives and significant life events (James et. al, 1998). Specific aims of the present research were: (1) to assess communicative goals that are held by young and older adults and to determine whether these communicative goals differ as a function of age and autobiographical

discourse topic, (2) to compare young and older adults' ability to meet their communicative goals, from a listener's perspective, for two types of autobiographical discourse topics, and (3) to explore whether young and older adults can consciously alter their speech style when given specific instructions about which goals should be emphasized in their narratives.

Communicative goals have previously been shown to influence language production, specifically the level of talkativeness and off-topic speech (OTS; also referred to as off-topic verbosity, e.g., Arbuckle & Pushkar Gold, 1993; Gold, Andres, Arbuckle, & Schwartzman, 1988; Gold, Arbuckle, & Andres, 1994). For example, James et al. (1998) suggested that older adults use more elaborative speech and go off-topic more often than young adults in order to meet their specific communicative goals. However, it remains unclear in the literature whether OTS is directly tied to communicative goals or whether it is caused by other factors, such as an inability to inhibit irrelevant information. Throughout the past several decades, a fair amount of research has been done on talkativeness and OTS in older adults, topics that some might argue are still not very well understood today. OTS refers to speech that may start out on-topic, but quickly becomes prolonged, unconstrained, and irrelevant to the present topic at hand. Arbuckle and Gold (1993) identified the two key determinants of OTS, namely lack of focus and coherence. Lack of focus refers to speech that has continuous intrusions of irrelevant speech, whereas lack of coherence refers to speech that is lacking in orderly continuity to a listener. Arbuckle, Nohara-LeClair, and Pushkar (2000) added that the decrease in the focus and coherence of speech produced by older adults is typically caused by the intrusion of irrelevant personal information, such as in a conversation about autobiographical subject matter. Alternatively, James et al. (1998) proposed that OTS is a change in speaking behavior made by older adults as a reflection of their different communicative goals.

Two main hypotheses underlying the causes of age-linked OTS have been proposed in the literature to date: the inhibitory deficit hypothesis and the pragmatic change hypothesis. The inhibitory deficit hypothesis is a theoretical framework based on the inhibition deficit hypothesis (Hasher & Zacks, 1988; Stoltzfus, Hasher, & Zacks, 1996; West, 1996; Zacks & Hasher, 1994) and suggests that OTS is caused by an age-related inhibitory deficit (Arbuckle & Gold, 1993; Pushkar Gold & Arbuckle, 1995). The inhibitory deficit explanation of OTS maintains that older adults may be more inclined to OTS because they have difficulties with inhibiting irrelevant stimulus associations (e.g., random thoughts and topics) from working memory. This inhibition deficit would lead them to talk about topics that are unrelated to the actual topic at hand and will affect all aspects of older adults' language production (e.g., both autobiographical and non-autobiographical speech topics)

Evidence for the inhibitory deficit hypothesis of OTS comes from several studies (e.g., Arbuckle et al. 2000; Glosser & Deser, 1992; Juncos-Rabadan, 1996). Glosser and Deser (1992) interviewed middle-aged and elderly healthy participants and analyzed their discourse productions in terms of global thematic coherence, which refers to how well participants stayed focused on the general topic of discourse. The researchers found that in contrast to the middle-aged participants, the elderly participants did not stay on the general topic of discourse, which the authors suggested was because older adults were unable to inhibit random thoughts and topics. Arbuckle et al. (2000) assessed OTS in older adults by first categorizing participants into high, mid and low OTS groups on the basis of a life-history interview. The researchers then used a referential communication task, in which one individual (the director) is required to describe abstract figures to another individual (the matcher). The directors and matchers were given identical sets of stimuli, which consisted of six geometric figures, or Tangrams. The directors

were asked to give the matchers information about the stimuli so the matcher could rearrange his or her stimuli in the same sequence as the director. The results showed that directors from the high OTS group were less efficient than mid and low OTS directors in decreasing the time needed to complete the referential task across the trials. In addition, they found that directors from the high OTS group took more time to develop labels, (e.g., Indian, handstand, man bowing, runner, woman praying, falling backward), used more words, and were more difficult for their matchers to comprehend compared to the mid and low OTS directors. In essence, Arbuckle et al. (2000) found that high levels of OTS were associated with inefficient communication of non-autobiographical information. Therefore, the inhibitory deficit hypothesis was supported, as it predicts that OTS will affect speech even in a non-autobiographical context, such as the referential communication task.

Not all research, however, has shown age differences in OTS (Boden & Bielby; Chapman, Ulatowska, King, Johnson, & McIntire, 1995; Gould & Dixon, 1993; Shewan & Henderson, 1988) or in the amount of speech as measured by total words, propositions, or utterances. Young and older adults did not differ in these measures across a variety of different tasks, such as describing videos (Heller & Dobbs, 1993), everyday activities (Ulatowska, Cannito, Hayashi, & Fleming, 1985), inkblots (Hayslip, 1981), and memorable experiences (North, Ulatowska, Macaluso-Haynes, & Bell, 1986). This lack of consistency in age differences in OTS and talkativeness poses a problem for the inhibitory deficit hypothesis, as it maintains that the inhibition deficit that older adults experience should apply to all language production tasks.

In contrast to the inhibitory deficit hypothesis, the pragmatic change hypothesis focuses on the intentions of the speaker's communicative goals. More specifically, the pragmatic change hypothesis maintains that young and older adults have different speech styles as a result of the

different communicative goals they hold for their speech (e.g., Boden & Bielby, 1983; Giles & Coupland, 1991). One view proposes that older adults place greater value on the process of talking and the opportunity for social interaction with others relative to young adults, as older adults may view their discourse as part of their identity (e.g., Coupland & Coupland, 1995). Another view suggests that older adults reminisce more than young adults to serve the function of teaching and informing others (e.g., Webster, 1998). A third view proposes that older adults value the opportunity to talk more because they may have less social contacts and therefore fewer chances to converse with others compared to young adults (e.g., Giles & Coupland, 1991; Giles, Coupland & Wiemann, 1992). Therefore, their communicative goals may be in line with a more elaborative style of conversing, hence their propensity for off-topic speech. Given these goals, the assumption follows that OTS should not occur in all situations involving communication, but mainly in those which provide older adults with the opportunity to tell elaborative narratives about themselves and their life story. According to the pragmatic change hypothesis, older adults should not have as much OTS in communication tasks involving objective information, such as describing pictures of random events, because in that context, there are more constraints placed on speech production relative to a personal speech topic. With more constraints, older adults' communicative goals change and become more concise and objective as a function of the context in which they are communicating.

Evidence for the pragmatic change hypothesis can be found in a study conducted by James et al. (1998). Young and older participants were asked to describe three personal topics, which included their education, their family, and a memorable or enjoyable vacation. They were also asked to describe three pictures, which depicted a cookie theft, an elderly couple sitting on a bench with a family in the background, and two 19<sup>th</sup> century women looking in a store window.

The pictures were relatively unknown, and they were assumed to be equally relevant to young and older adults. The results showed that older adults were more talkative than young adults in terms of producing more words, but only for the personal topics. They were no more talkative than the young adults when describing the pictures. They also found that age differences in the proportion of OTS, which was defined as the total number of words that were off-topic, were found in both picture and personal topics, but this age effect was more pronounced for personal topics relative to the picture topics. Both of these findings are consistent with the pragmatic change hypothesis, which predicts more OTS for older adults when conversing about personal topics. However, off-topic speech within the pragmatic change hypothesis can occur for tasks like picture descriptions if the task evokes a memory for a personal experience that the older adults could relay to a listener.

Whereas personal topics automatically evoke autobiographical memories, picture descriptions may or may not do so. Therefore, the increased OTS observed in James et al. (1998) for personal topics relative to picture topics may have been due to differences in the extent to which the topics utilized an autobiographical component. The present research controlled for differences between the two types of narratives by honing in on two different types of autobiographical speech topics, namely episodic (e.g., a favorite vacation) and procedural topics (e.g., a daily routine carried out on a specific day in one's life). These topics are both autobiographical, as they refer back to a personal memory experienced by the speaker; however, they differ in terms of the type of speaking style they might elicit, much like the two types of topics used in James et al. (1998). That is, the episodic topic was designed to capture a unique autobiographical memory for a memorable one-time event, whereas the procedural topic was

intended to elicit an autobiographical memory containing a sequenced script of events that has occurred numerous times.

In a second experiment, James et al. (1998) asked a new set of young and older adults to read transcripts of the young and older adults who had provided personal narratives in the first experiment. After reading the transcripts, participants evaluated them on a variety of dimensions including focus, talkativeness, clarity, interest, informativeness, and story quality. The results revealed that young participants rated the young speakers as being more focused than older speakers, whereas older participants did not rate young and older speakers differently in terms of focus. This finding suggests that older adults do not view as many ideas as being off-topic or unfocused as do young adults. This finding may be due to older adults' increased life experiences, allowing them to draw connections between ideas that young adults might view as completely unrelated to each other. James et al., (1998) also found that older speakers' responses were rated higher than young speakers' responses on interest, informativeness, and story quality dimensions, which suggests that OTS may have a certain amount of communicative value. Other studies support the idea that people believe that older adults tell more enjoyable stories than young adults (e.g., Ryan, Kwong See, Meneer, & Travato, 1992) and that people rate older adults' stories more positively on interest, informativeness, and story quality dimensions than young adults' stories (e.g., James et al., 1998; Kemper, Kynette, Rash, O'Brien, & Scott, 1989; Kemper, Rash, Kynette, & Norman, 1990; Pratt & Robins, 1991).

All of these results provide evidence for the pragmatic change hypothesis, as they showed a more pronounced age-related increase in OTS on personal topics relative to picture descriptions. In addition, the results suggest that OTS has communicative value, as older adults'

speech was rated more positively on the interest, informativeness, and story quality dimensions than that of young adults.

### **The Present Research Studies**

Continuing to categorize OTS does not seem especially beneficial to the literature, as these categorizations are subjective and open to the biases of the experimenter. Previous research has shown multiple ways of operationally defining OTS, but what is to be considered off-topic is ultimately left up to the experimenter's discretion, which is problematic given the subjective nature of individual opinions. Therefore, the present research investigated young and older adults' communicative goals and the ability to meet them as an indirect method for looking at the phenomenon of talkativeness and OTS. As suggested by the pragmatic change hypothesis, older adults' communicative goals may be the source that leads them to be more talkative and produce more OTS because they may value the experience of social interaction and the process of talking more than young adults. By looking at the differences between young and older adults' communicative goals in varying discourse contexts, the present research sheds light on which communicative goals young and older adults value, whether young or older adults are better at meeting their own goals, and whether they are capable of altering them, in terms of becoming more concise or more elaborative, when instructed to do so.

### **Hypotheses**

**Hypothesis 1.** In accordance with the pragmatic change hypothesis, young and older adults were expected to favor a different set of communicative goals, particularly for episodic topics, and these differences in goals would lead to greater differences in young and older adults' speech styles. For episodic topics, older adults were expected to favor goals that would allow them to select a more expressive speech style appropriate for reminiscing about significant life events, such as being interesting and elaborative. In contrast, young adults were predicted to favor goals

in line with a clearer and more focused speech style because they do not value the telling of personal narratives and reminiscence as much as older adults (e.g., Giles & Coupland, 1991; Giles et al., 1992). Young and older adults' favoring of goals for procedural topics were also predicted to differ, although not to the same extent as for episodic topics because procedural topics were expected to evoke a more objective, detached, and rational speech style suited for telling a scripted and sequenced type of narrative. However, procedural topics in the present study were also designed to evoke an autobiographical memory, and therefore some age differences were expected to be found. Older adults were predicted to favor some of the same goals that they favored for episodic topics, in order to address the autobiographical aspect of the procedural topic, whereas young adults were not expected to favor these same goals, as they would not view personal anecdotes and reminiscence as germane to the topic. Therefore, young adults' speech styles were predicted to be more constrained by the procedural topic, much like it was for picture descriptions in James et al. (1998).

**Hypothesis 2.** When differences between young and older adults' goals are factored out (i.e., focusing solely on goals shared by the two groups), no age differences were expected in the ability to meet goals. The pragmatic change hypothesis would predict both age groups to be equivalent in their ability to meet the goals that are of primary value to both age groups, as their goals would determine the selection of their speech style (e.g., Boden & Bielby, 1983; Giles & Coupland, 1991) for both episodic and procedural topics. In contrast, the inhibitory deficit hypothesis would predict older adults to be less successful than young adults at meeting the goals they hold in common because of their inferior efficiency with suppressing irrelevant information once it has been activated (e.g., Stoltzfus et al., 1996, Zacks & Hasher, 1994). Specifically, goals that require the inhibition of extraneous information (i.e., staying on topic, focus, and clarity),

which are likely to be held primarily for procedural topics, would be more difficult for older adults to meet relative to young adults (e.g., Arbuckle & Gold, 1993; Glosser & Deser, 1992; Juncos-Rabadan, 1996).

**Hypothesis 3.** The ability to accept and utilize new communicative goals, different from one's original goals, was predicted to be more difficult for older adults. There is no clear evidence in the literature about whether communicative goals are chosen consciously or subconsciously. The present research attempted to answer this question by giving specific instructions about which goals should be of primary importance and then assessing whether speech styles were successfully altered by young and older adults to fit the new goals. As a function of their age, older adults may have had more time to develop and practice the communicative goals that are the most important to them in different situations (e.g., Boden & Bielby, 1983; Coupland & Coupland, 1995), whereas young adults' goals may be less well-established. Therefore, older adults would require more effort to adapt to and utilize a new speech style based on instructions about which communicative goals to emphasize. In addition, the inhibitory deficit hypothesis maintains that older adults have more difficulty inhibiting irrelevant information, which in this case would be their original communicative goals. Whether due to an inability (as proposed by the inhibitory deficit hypothesis) or a conscious choice (resistance to changing their original goals, which have worked so well for them in the past), older adults were not expected to be able to alter their original goals and meet new ones as well as young adults.

## CHAPTER 2 PILOT STUDY AND EXPERIMENT 1

### **Pilot Questionnaire**

A pilot questionnaire was completed by young and older adults to assess which communicative goals were of primary importance to each age group, and whether young and older adults favored different goals for the two autobiographical topics. The questionnaire was also used to determine which communicative goals were not considered of great importance to participants for the two topic types. This latter assessment was vital for Experiments 1 and 2 to answer the question of whether communicative goals are chosen consciously or subconsciously. By revealing which goals were not of great importance to participants in the pilot study, instructions in Experiment 1 used these goals when asking participants to alter their speech style, ensuring that these were not goals already held by participants.

### **Pilot Method**

#### **Participants**

Participants included 43 young adults (ages 18-25) and 38 older adults (ages 75-90). Young adults were recruited from a cognitive psychology class at the University of Florida, and older adults were recruited from the University of Florida Cognition and Aging Laboratory participant pool. All of the older adults were from the Gainesville area vicinity, and many were recruited from local organizations and from the University of Florida alumni association. Young adults received extra credit points for their participation, whereas older adults participated on a voluntary basis.

#### **Materials**

The pilot questionnaire consisted of four parts. The first two parts were designed to assess self-reported communicative goals when telling autobiographical narratives with two different

types of topics (e.g., episodic and procedural). Episodic indicates topics that will elicit a one-time event without a predetermined sequence, experienced at some point in the past, whereas the term procedural designates topics that will elicit a sequenced, script of events that has occurred many times by participants. These topics were chosen to investigate narratives with different purposes for eliciting autobiographical memories. The episodic topics were a memorable vacation and a memorable party. The procedural topics were a daily morning routine and a daily evening routine. The topics were introduced at the beginning of the questionnaire to allow participants to generate communicative goals specific to either an episodic or a procedural topic. Order of topics was counterbalanced across participants, such that half of the participants received the episodic topic in part 1, and the other half received the procedural topic in part 1 (see Appendix A for part 1 and 2 of pilot questionnaire with instructions).

The next two parts were designed to assess which of two specifically-paired goals was of more importance to young and older adults. Parts three and four of the questionnaire contained a list of 8 communicative goal pairs, 6 of which were experimental (clarity-interest; fascinating-focus; comprehensible-elaborative; entertaining-simple; logical-stimulating; and educational-objective) and 2 of which were fillers (humorous-honest, and emotional-imaginative). Order of topics was again counterbalanced across participants (see Appendix B for part 3 and 4 of pilot questionnaire with instructions). The communicative goals were compiled using several of the same dimensions used in James et al. (1998), and pairs were created by pitting goals suited for an expressive speech style (e.g., interest, fascinating, elaborative, entertaining, stimulating, and educational) against goals suited for a more objective speech style (e.g., clarity, focus, comprehensible, simple, logical, and objective). These goal pairs were hypothesized to reveal important age differences with respect to which goals young and older adults value when telling

narratives with episodic and procedural topics. The filler goal pairs were included to allow participants to think of additional aspects of telling a narrative but were not grounded in any previous research and therefore were not analyzed.

## **Procedure**

Older adults were contacted via telephone to assess their interest in filling out the pilot questionnaire. If older adults agreed to complete the questionnaire, it was mailed to their home address via first class postal mail. Young adults received the pilot questionnaire in class and filled it out on their own time. All participants were asked to complete all parts of the questionnaire in order and were requested to return the questionnaire within two weeks of receiving it. Older adults returned the questionnaire in a stamped envelope provided by the experimenter, and young adults turned their completed questionnaires into the experimenter.

## **Results**

The results of the pilot questionnaire were used to determine which communicative goals were of primary value, and which were of little or no value, based on self-reported goals, for the majority of participants for episodic topics and for procedural topics. Parts 1 and 2 of the pilot questionnaire revealed that for episodic topics, both young and older adults produced elaborativeness as one of their top three goals, whereas clarity was one of the top three goals produced by both young and older adults for procedural topics (see Table 2-1). Furthermore, none of the participants in either age group produced conciseness as being an important goal on the self-reported goals of parts 1 and 2 of the questionnaire for elaborative topics, whereas goals of being elaborative and detailed were not produced by any of the participants for procedural topics. Therefore, instructing participants to be concise when telling a narrative with an episodic topic, or to be elaborative for procedural topics in Experiment 1, would in effect be telling them

to alter their goals, or at the very least, to emphasize a goal that is not of great importance to them.

Ratings on communicative goal pairs from parts 3 and 4 of the pilot questionnaire were analyzed for comparison with Experiment 1 ratings (taken after narratives were produced), and will be reported in the results section of Experiment 1.

### **Experiment 1**

The purpose of Experiment 1 was to establish the communicative goals favored by young and older adults and to determine whether these goals differed as a function of narrative topic. Using ratings from the pilot study for comparison, Experiment 1 also established whether favoring these goals remained constant after producing narratives. Experiment 1 was also conducted to acquire two types of autobiographical narratives from young and older adults, with episodic and procedural topics. Although the narratives were collected in Experiment 1, analysis of these narratives were used in conjunction with the raters in Experiment 2 to provide information about how successful young and older adults were in meeting their self-reported primary goals of elaborativeness and clarity for episodic and procedural topics, respectively. The pragmatic change hypothesis maintains that young and older adults' communicative goals differ as a function of the speech styles they choose to utilize. Age-related differences in goals held by young and older adults were therefore expected to be revealed in the present study, particularly for episodic topics. Episodic topics were expected to produce the greatest age differences in goals because these topics were relevant to reminiscing about personal life events and have previously been found to elicit differing speech styles in young and older adults (e.g., Glosser & Deser, 1992; James et al., 1998, ). Procedural topics were also expected to produce some age-related differences in goals because older adults were expected to use the autobiographical aspect of these topics to bring in some personal information, whereas young adults were not expected to

do so. However, age differences were expected to be less than for episodic topics, as procedural topics were designed to be more objective, and objective topics have previously been found to elicit similar speech styles in young and older adults overall (e.g., Copper, 1990; Hayslip, 1981, Heller & Dobbs, 1993; James et al., 1998, Ulatowska et al., 1985).

## Method

### Participants

Participants included 24 young adults, consisting of 16 females and 8 males (18-21 years;  $M = 19.8$ ,  $SD = 1.0$ ) and 24 older adults, consisting of 13 females and 11 males (75-87 years;  $M = 79.6$ ,  $SD = 3.5$ ), all of whom had previously filled out the communicative goals questionnaire from the pilot study approximately three weeks to one month earlier. Young adults received extra credit for their participation, and older adults were paid \$8 per hour for their participation. Participants were screened for normal or corrected-to-normal vision and hearing. The Mini Mental State Exam of cognitive functioning (MMSE; Folstein, Folstein, & McHugh, 1975) was given to older adults, and participants with a score of 25 and above were allowed to participate ( $M = 28.3$ ,  $SD = 1.6$ ).

Background variables, including number of years in school, self-assessment of health, vocabulary, forward and backward digit span scores of working memory, and self-ratings of number of hours per day spent writing, reading, watching TV, and doing crossword puzzles were assessed on all participants. Means and standard deviation scores for all background variables are shown in Table 2-2. Older adults had more years of education,  $t(46) = -2.62$ ,  $p < .01$ , higher vocabulary scores,  $t(46) = -7.95$ ,  $p < .01$ , more hours per day spent watching TV,  $t(46) = -2.25$ ,  $p < .03$ , and more hours doing crossword puzzles,  $t(46) = -2.42$ ,  $p < .02$ . Young adults had higher self-ratings on health,  $t(46) = 3.02$ ,  $p < .01$ , more hours per day spent writing,  $t(46) = 3.77$ ,  $p <$

.01, and marginally larger forward digit spans,  $t(46) = 1.82, p < .08$ . There were no age differences on backward digit span and number of hours per day spent reading,  $ps > .48$ .

## **Materials**

Four autobiographical topics, two episodic and two procedural, were used to elicit narratives. The episodic topics were “a memorable vacation they had taken” and “a memorable party they had hosted or attended”. The term episodic indicates topics that will elicit a one-time event without a predetermined sequence, experienced at some point in the past; similar topics have yielded a wide range of responses from both young and older adults (e.g., James et al., 1998). The procedural topics were “their morning routine” (i.e., the steps they took to get ready to come in to the lab that morning) and “their evening routine” (i.e., the steps they took to get ready for bed the previous evening). The term procedural designates topics that will elicit a sequenced, script of events that has occurred many times by participants, but focuses on the most recent experience. These topics differed from the picture descriptions in James et al. (1998) in that procedural topics included an autobiographical aspect, which eliminated a potentially confounding variable of why age differences emerged more for one type of story than the other in James et al. (1998). Participants’ narratives were recorded using a SONY Digital Voice Recorder. All participants also completed a communicative goals questionnaire identical to the one they completed in the pilot study (see Appendices A and B).

## **Procedure**

Participants were tested individually by one of three female young adult experimenters with whom they were not familiar. An informed consent was administered, which instructed participants that the purpose of the study was to investigate story telling about autobiographical memories in young and older adults. After completing the background questionnaires and cognitive tests, the four topics were then given to each participant with the order of topic type

and the specific topic within topic type counterbalanced across participants. The first episodic and procedural topics were given to participants with no instructions to alter their communicative goals. Instructions for the episodic topics were as follows: “Take a moment to think back on one of the most memorable vacations you have taken. I would like you to describe this vacation to me” or “Take a moment to think back on one of the most memorable parties you have hosted or attended. I would like you to describe this party to me.” Instructions for the procedural topic were as follows: “Take a moment to think about your daily routine of getting ready in the morning. I would like you to describe this routine to me, specifically the steps that you took to get ready to come in to the lab this morning” or “Take a moment to think about your daily routine of getting ready for bed in the evening. I would like you to describe this routine to me, specifically the steps that you took to get ready to go to bed last night.”

After telling the first two narratives, participants were asked to complete a communicative goals questionnaire, identical to the one they previously filled out in the pilot study, to explore whether participants would be consistent in their ratings and reporting of goals after actually telling stories. The questionnaire was given after the first two narratives had been told, so that it would not affect the way in which participants told their stories when using their natural goals. After completing the questionnaire, participants were asked to tell another two narratives, one with an episodic topic and one with a procedural topic, with order counterbalanced across participants. This time, however, instructions were aimed at getting participants to alter the speech style with which they told the story by instructing them to use different communicative goals. Instructions for episodic topics were as follows: “Sometimes when we tell narratives in everyday life, we have to alter our communicative goals to fit the situation we’re in. For example, you may need to alter your goals if you or the person you are talking to is in a hurry.

Take a moment to think back on one of the most memorable vacations you have taken. I would like you to describe this vacation to me, but when describing this narrative, please be as concise as possible. That is, when you describe this memorable event, try to stick to the point and stay on topic.” The instructions were identical for both types of episodic topics, with the exception of the subject (e.g., vacation or party). Instructions for procedural topics were as follows: “Sometimes when we tell narratives in everyday life, we have to alter our communicative goals to fit the situation we’re in. For example, you may need to be more elaborative and detailed if you are talking about a topic that is unfamiliar to your listener. Take a moment to think about your daily routine of getting ready in the morning. I would like you to describe this routine to me, specifically the steps that you took to get ready to come in to the lab this morning. When describing this routine, please be extremely elaborative. That is, include lots of details and expand on ideas in your narrative.” The instructions were identical for both types of procedural topics, with the exception of the subject (e.g., morning or evening routine).

The instructions to alter goals by being concise on episodic topics and elaborative on procedural topics were selected based on responses on the pilot study questionnaire. Conciseness was not among the goals listed by participants for episodic topics, whereas being elaborative and detailed was not among the goals listed by participants for procedural topics on any of the questionnaires. It was therefore presumed that instructing participants to emphasize those particular goals would encourage them to alter their speech style compared to the two narratives they told in the previous condition.

Participants were told that their narratives would be recorded for future transcription and analysis and that they should speak for 3-5 minutes on each topic. They were reminded to wrap up their narratives if they went over the allotted time. During the telling of the narratives, the

experimenter only spoke in order to clarify any procedural questions from the participants and otherwise simply nodded or responded with “yes” or “no” when appropriate. The three experimenters made every effort possible to keep their comments and gestures uniform across participants.

### **Transcription**

The digital recordings of all narratives to the topics were transcribed verbatim. These transcriptions were used to obtain word counts and to obtain ratings of quality on various dimensions in Experiment 2. The number of “uhs”, “ums,” “likes,” stuttering repetitions, and extraneous comments (e.g., “That’s the end of my story”) were eliminated, yielding the total number of words spoken per topic without any disfluencies.

### **Results**

Variables of interest included speaker age group (young, older), topic type (episodic, procedural), instructions (no instructions, alter goals), and time of ratings (before narratives, after narratives). Speaker age group was a between-subjects variable, whereas topic type, instructions, and time of ratings were within-subjects variables. The dependent variable was the mean numeric scale rating given for each goal pair.

### **Goal Ratings**

For a given experimental goal pair, clarity-interest, lower numbers on the rating scale ( $< 4$ ) represent valuing the first-mentioned goal (clarity) more than the second (interest), whereas higher numbers on the rating scale ( $> 4$ ) represent valuing the second-mentioned goal (interest) more than the first (clarity). A rating of 4 meant that the two goals were valued equally, so one-sample t-tests were conducted to analyze whether each age group’s mean ratings were significantly different from 4, indicating a preference for one goal over the other. Goal ratings were then analyzed in a Speaker Age Group x Topic Type x Time of Ratings ANOVA on the

mean ratings for each of the six experimental goal pairs. Filler goal pairs were not analyzed.

Analyses for each of the six goal pairs are described below, with a summary of the outcome of these analyses, i.e., young and older adults' goal preferences, presented in Tables 2-3 and 2-4.

**Clarity-Interest.** Mean ratings of clarity-interest broken down by speaker age group and topic type are shown in Table 2-5. One-sample t-tests revealed that young adults had preferences on both types of narratives. For episodic topics, young adults valued interest more than clarity,  $t(47) = 13.54, p < .01$ , whereas for procedural topics, young adults valued clarity more than interest,  $t(47) = -17.61, p < .01$ . In contrast, the t-tests showed that older adults valued interest and clarity equivalently for both episodic topics,  $t(47) = 1.56, p > .13$ , and procedural topics,  $t(47) = -0.87, p > .39$ .

The ANOVA revealed that there was a main effect of topic type,  $F(1,191) = 111.67, MSE = 1.98, p < .01$ , which was qualified by a speaker age group x topic type interaction,  $F(1, 191) = 56.10, MSE = 0.20, p < .01$ . As shown in Figure 2-1, young adults' ratings were higher than older adults' for episodic topics,  $F(1,95) = 21.03, MSE = 1.97, p < .01$ , whereas older adults' ratings were higher than young adults' for procedural topics,  $F(1,95) = 36.02, MSE = 1.99, p < .01$ . No other effects were significant,  $ps > .31$ .

**Fascinating-Focus.** Table 2-6 shows the mean ratings of fascinating-focus broken down by speaker age group and topic type. One-sample t-tests showed that young adults preferred different goals depending on the type of narrative. Young valued fascinating more than focus for episodic topics,  $t(47) = -9.70, p < .01$ , whereas young adults valued focus more than fascinating for procedural topics,  $t(47) = 11.68, p < .01$ . In contrast, the t-tests showed that older adults valued fascinating and focus equivalently for both episodic topics,  $t(47) = -1.40, p > .17$ , and procedural topics,  $t(47) = 1.17, p > .25$ .

A main effect of topic type was shown by the ANOVA,  $F(1,191) = 77.94$ ,  $MSE = 2.39$ ,  $p < .01$ , and this effect was qualified by an interaction. Figure 2-2 reveals that speaker age group interacted with topic type,  $F(1, 191) = 31.95$ ,  $MSE = 0.22$ ,  $p < .01$ . Older adults' ratings were higher than young adults' for episodic topics,  $F(1,95) = 11.72$ ,  $MSE = 2.50$ ,  $p < .01$ , whereas young adults' ratings were higher than older adults' for procedural topics,  $F(1,95) = 21.14$ ,  $MSE = 2.28$ ,  $p < .01$ . No other effects were significant,  $ps > .28$ .

**Comprehensible-Elaborative.** Mean ratings of comprehensible-elaborative broken down by speaker age group and topic type are shown in Table 2-7. One-sample t-tests illustrated that for episodic topics, young adults valued elaborative more than comprehensible,  $t(47) = 3.97$ ,  $p < .01$ , whereas for procedural topics, young adults valued comprehensible more than elaborative,  $t(47) = -14.68$ ,  $p < .01$ . In contrast, older adults valued comprehensible more than elaborative for both episodic topics,  $t(47) = -5.46$ ,  $p < .01$ , and procedural topics,  $t(47) = -6.07$ ,  $p < .01$ .

The ANOVA illustrated that there was a main effect of topic type,  $F(1,191) = 44.20$ ,  $MSE = 2.02$ ,  $p < .01$ , and a main effect of speaker age group,  $F(1,191) = 16.07$ ,  $MSE = 0.15$ ,  $p < .01$ . Both of the main effects were qualified by an interaction. As demonstrated in Figure 2-3, speaker age group interacted with topic type,  $F(1, 191) = 38.96$ ,  $MSE = 0.21$ ,  $p < .01$ , because young adults' ratings were higher than older adults' for episodic topics,  $F(1,95) = 44.80$ ,  $MSE = 2.37$ ,  $p < .01$ , whereas older adults' ratings were marginally higher than young adults' ratings for procedural topics,  $F(1,95) = 3.01$ ,  $MSE = 1.67$ ,  $p < .09$ . No other effects were significant,  $ps > .39$ .

**Entertaining-Simple.** Table 2-8 shows the mean ratings of entertaining-simple broken down by speaker age group and topic type. One-sample t-tests revealed that for young adults valued entertaining more than simple for episodic topics,  $t(47) = -19.90$ ,  $p < .01$ , whereas young

adults valued simple more than entertaining for procedural topics,  $t(47) = 5.64, p < .01$ . In contrast, the t-tests showed that older adults valued entertaining more than simple for both episodic topics,  $t(47) = -7.27, p < .01$ , and procedural topics,  $t(47) = -2.97, p < .01$ .

A main effect of topic type,  $F(1,191) = 102.20, MSE = 1.92, p < .01$ , and a main effect of speaker age group,  $F(1, 191) = 6.26, MSE = .14, p < .01$ , were qualified by an interaction. Figure 2-4 illustrates that speaker age group interacted with topic type,  $F(1, 191) = 47.31, MSE = 0.20, p < .01$ , because older adults' ratings were higher than young adults' ratings for episodic topics,  $F(1,95) = 14.68, MSE = 1.25, p < .01$ , whereas young adults' ratings were higher than older adults' ratings for procedural topics,  $F(1,95) = 32.65, MSE = 2.58, p < .01$ . No other effects were significant,  $ps > .40$ .

**Logical-Stimulating.** Mean ratings of logical-stimulating broken down by speaker age group and topic type are shown in Table 2-9. One-sample t-tests showed similar patterns for young and older adults. For episodic topics, young adults valued logical and stimulating equivalently,  $t(47) = 1.57, p > .12$ , whereas for procedural topics, young adults valued logical more than stimulating,  $t(47) = -17.17, p < .01$ . Similarly, for episodic topics, older adults valued logical and stimulating equivalently,  $t(47) = -1.45, p > .15$ , but valued logical more than stimulating for procedural topics,  $t(47) = -4.16, p < .01$ .

The ANOVA showed that there was a main effect of topic type,  $F(1,191) = 49.37, MSE = 2.19, p < .01$ , qualified by an interaction. As shown in Figure 2-5, speaker age group interacted with topic type,  $F(1,191) = 40.33, MSE = 0.21, p < .01$ , because young adults' ratings were higher than older adults' ratings for episodic topics,  $F(1,95) = 4.59, MSE = 2.78, p < .04$ , whereas older adults' ratings were higher than young adults' ratings for procedural topics,  $F(1,95) = 18.37, MSE = 1.59, p < .01$ . No other effects were significant,  $ps > .17$ .

**Educational-Objective.** Table 2-10 shows the mean ratings of educational-objective broken down by speaker age group and topic type. One-sample t-tests illustrated that young adults had preferences on both types of narratives. Young adults valued educational more than objective for episodic topics,  $t(47) = -8.06, p < .01$ , whereas young adults valued objective more than educational for procedural topics,  $t(47) = 2.20, p < .03$ . In contrast, the t-tests showed that older adults valued educational more than objective for episodic topics,  $t(47) = -3.38, p < .01$ , and marginally more for procedural topics,  $t(47) = -1.94, p < .06$ .

A main effect of topic type,  $F(1,191) = 20.85, MSE = 2.50, p < .01$ , was illustrated by the ANOVA, and this effect was qualified by an interaction. Figure 2-6 reveals that speaker age group interacted with topic type,  $F(1, 191) = 11.42, MSE = 0.23, p < .01$ , because older adults' ratings were marginally higher than young adults' for episodic topics,  $F(1,95) = 3.12, MSE = 1.92, p < .08$ , whereas young adults ratings' were higher than older adults' for procedural topics,  $F(1,95) = 8.47, MSE = 3.07, p < .01$ . No other effects were significant,  $ps > .17$ .

### **Word Count**

A Speaker Age Group x Topic Type x Instructions ANOVA was used to analyze the total number of words spoken. Mean number of words broken down by speaker age group, topic type, and instructions are shown in Table 2-11. A main effect of speaker age group was found,  $F(1, 46) = 10.41, MSE = 100,690.06, p < .01$ , where older adults spoke more words ( $M = 368.74$ ) than young adults ( $M = 220.98$ ). As shown in Figure 2-7, there was also a Topic Type x Instructions interaction,  $F(1, 46) = 35.43, MSE = 746,628.80, p < .01$ , where speakers produced less words for episodic topics when there were instructions to alter goals and be more concise relative to no instructions to alter goals,  $F(1, 47) = 25.72, MSE = 25,702.86, p < .01$ . In contrast, speakers produced more words for procedural topics when there were instructions to alter goals and be more elaborative relative to no instructions,  $F(1, 47) = 6.38, MSE = 26,201.45, p < .02$ .

Alternatively, episodic topics produced more words than procedural topics with no instructions, but the opposite pattern emerged when instructions to alter goals were given. No other effects were significant, either with or without age group,  $p$ s > .11.

### **Discussion**

The pragmatic change hypotheses predicted that young and older adults would favor different goals, particularly for episodic topics, which are more inviting of expressive speech styles and personal reminiscence than procedural topics. The results supported the pragmatic change hypothesis, in part, because they revealed that young and older adults did favor different communicative goals for episodic topics and for procedural topics. For episodic topics, older adults were predicted to favor goals suited for a more expressive speech style, whereas young adults were predicted to favor goals which were in line with a more objective speech style. The results partially supported this prediction, as older adults favored some, but not all, goals in line with an expressive speech style; however, they also valued both expressive and objective goals in a goal pair equivalently in several cases. Contrary to the predictions, young adults almost exclusively favored goals in line with an expressive speech style for episodic topics. These results suggest that both young and older adults may intend to use an expressive speech style suited for telling episodic narratives, but older adults have additional goals that enable their stories to be more well-rounded. Perhaps both expressive and objective goals are necessary to tell a more enjoyable story (e.g., Ryan et al., 1992; Kemper et al., 1990; James et al., 1998), and older adults have more experience with what makes for a good story as a function of their increased age (e.g., Boden & Bielby, 1983; Kemper, 1992). Additionally, the results indicate that for older adults, comprehensibility is more important than elaborativeness for episodic topics. Older adults may be more concerned than young adults with comprehensibility, perhaps as a conscious safeguard against going off-topic, an issue with which young adults typically do not

have to be concerned, as suggested by the inhibitory deficit hypothesis (e.g., Arbuckle & Gold, 1993; Hasher & Zacks, 1988; West, 1996; Zacks & Hasher, 1994).

In accord with the pragmatic change hypothesis and with experimental predictions, there were also goals for procedural topics on which young and older adults diverged. Young adults exclusively favored goals related to an objective speech style (e.g., simple, objective), whereas older adults again favored some goals related to a more expressive speech style (e.g., entertaining, educational) and some related to a more objective speech style. This pattern of results suggests that older adults paid greater attention than young adults to the autobiographical aspect of the procedural topics, allowing them to utilize a wider variety of goals. Perhaps older adults emphasized the autobiographical aspect of the procedural topic, allowing them to keep similar goals across topics, because they are interested in personal narratives and reminiscence (e.g., Boden & Bielby, 1983; Coupland & Coupland, 1995). In contrast, young adults' communicative goals emphasize simplicity and objectivity with the change of narrative topic, suggesting that they may view this topic as less autobiographical and more objective in nature, similar to picture descriptions.

In spite of differences between young and older adults' goals, they also shared several goals in common for both topics. For episodic topics, both young and older adults valued telling entertaining and educational narratives more than telling simplistic and objective narratives. This finding suggests that when telling narratives that evoke a one-time event from autobiographical memory, such as a favorite vacation, both young and older adults prefer to utilize a speech style that leads to an engaging narrative. Perhaps entertaining and educational are valued over simplistic and objective because the memory being recalled was a memorable and enlightening event in their lives, and they wanted to convey this memory to their listeners in a manner suited

to personal narratives (e.g., Giles & Coupland, 1991; Giles et al., 1992). The present results suggest that certain goals are uniformly favored over others across the lifespan when telling a narrative about an episodic topic. Dimensions such as entertainment may be a key element when selecting a speech style for such a topic, and age differences may not be in the goals themselves, but in the ability to meet those goals, an issue that will be explored further in Experiment 2.

There were also goals for procedural topics on which young and older adults agreed. Both age groups valued telling narratives that were comprehensible and logical more than narratives that were elaborative and stimulating. Comprehensibility was valued over elaborativeness, perhaps as a way to signify that a procedural topic, such as a daily routine, does not necessarily call for a myriad of details to be included, but rather for a narrative that is understandable. Telling a logical narrative was valued above telling a stimulating narrative, indicating that procedural topics do not necessarily motivate speakers to tell an exciting story, but rather the nature of the topic lends itself to a speech style that emphasizes an orderly sequence of events. Similar to episodic topics, results for procedural topics indicate that there are specific goals that remain consistent across both age groups. Selecting a speech style suited for procedural topics appears to be based, in part, on a desire to be comprehensible and logical for both young and older adults. Perhaps those dimensions are more inherent to the topic than other goals because they allow for a speech style that best accomplishes the step-by-step description required to relay a coherent narrative about a daily routine.

The word count analyses provided a preliminary glimpse into young and older adults' ability to alter their communicative goals. The results showed that both age groups produced less words for episodic topics when told to be concise than when using their original goals, and they produced more words for procedural topics when told to be elaborative than when using their

original goals. These findings suggests that, at least in terms of words produced, young and older adults were able to inhibit or accentuate their speech to meet goals specified for them. However, number of words produced is not necessarily the best indicator of success in terms of being more concise or more elaborative, as it does not answer the question of what type of speech style was used. For example, James et al., (1998) found that older adults spoke more words than young adults for personal topics, and they were also rated higher on interest, informativeness, and story quality, suggesting that their increased talkativeness may have been a result of the speech style they chose to utilize to make for a better story. The question of whether young and older adults can alter their goals will be explored in more detail in Chapter 3.

**Summary.** The results of the present study revealed that young adults consistently had more disparity in their goals for episodic versus procedural topics compared with older adults. This finding suggests that young adults' communicative goals were more affected by the type of autobiographical narrative they were telling relative to older adults. For young adults, it appears that telling an autobiographical narrative with an episodic topic was very different from a procedural topic in terms of what communicative goals they valued and which speech style they chose to utilize. In contrast, older adults' goals were identical for episodic and procedural topics (with the exception of logical-stimulating, where older adults valued them equivalently for episodic topics and logical more than stimulating for procedural topics). The consistency in older adults' communicative goals across topic types indicates that their speech style was less affected by the type of narrative they were telling compared to young adults.

According to the pragmatic change hypothesis, young and older adults' speech styles differ because they hold different communicative goals, and present research extends this hypothesis by suggesting that age-related differences in speech styles may also appear because older adults

have a more diverse set of communicative goals relative to young adults. The results revealed that on several dimensions, older adults valued both goals equivalently (e.g., clarity-interest, fascinating-focus). This finding suggests that older adults may approach storytelling with more goals in mind than young adults. For example, older adults may utilize a speech style that is both clear and interesting, fascinating, and focused, whereas young adults may utilize a speech style that is either clear and focused or interesting and fascinating, depending on the speech topic. Older adults have typically had more experience with telling stories throughout their life (e.g., Boden & Bielby, 1983; Kemper, 1992), and may see the value of having multifaceted goals, whereas young adults may still be developing their story-telling skills and therefore have a narrower view of which goals make for the best story as well as a more limited ability to utilize multiple goals across different narrative topics. Finally, it is noteworthy that there were no significant differences in goal ratings between the pilot study and Experiment 1, suggesting that both young and older adults' ratings of their communicative goals remained constant over time, i.e., before and after telling narratives. This finding suggests that people are aware of their communicative goals and are able to reliably report them in different situations.

The following chapter will address Experiment 2, which was designed to obtain ratings of the narratives generated in Experiment 1 in order to shed light on how effective young and older adults were in meeting as well as altering their communicative goals.

Table 2-1. Percentage of time young and older speakers self-reported goals among the first three goals produced.

	Older speakers	Young speakers
Episodic topics		
	Elaborative – 63%	Elaborative – 92%
	Interesting – 46%	Convey emotions – 92%
	Listener comprehension – 42%	Involving listener – 54%
Procedural topics		
	Interesting – 54%	Logical – 75%
	Clarity – 52%	Clarity – 67%
	Comprehensible – 38%	Brevity – 46%

Table 2-2. Means and standard deviations for background variables.

Variable	Speaker age group	Mean	Standard deviation
Years of schooling*	Young	14.23	0.98
	Older	15.73	2.63
Health rating (max = 10)*	Young	8.71	1.16
	Older	7.58	1.41
Vocabulary (max = 25)*	Young	15.17	3.14
	Older	21.38	2.18
Forward digit span**	Young	7.42	0.97
	Older	6.75	1.51
Backward digit span	Young	5.17	1.4
	Older	5.04	1.3
Hours per day spent writing (max = 10)*	Young	2.58	1.69
	Older	1.13	0.85
Hours per day spent reading (max = 10)	Young	3.38	2.08
	Older	3.21	1.67
Hours per day spent watching TV (max = 10)*	Young	1.31	1.23
	Older	2.42	2.06
Hours per day spent doing crossword puzzles (max = 10)*	Young	0.29	0.86
	Older	1.13	1.45

\*indicates  $p < .05$  \*\*indicates  $p < .10$

Table 2-3. Young adults' goal preferences for episodic and procedural topics.

	Young adults' goal preference	
Goal pairs	Episodic	Procedural
Clarity-interest	Interest	Clarity
Fascinating-focus	Fascinating	Focus
Comprehensible-elaborative	Elaborative	Comprehensible
Entertaining-simple	Entertaining	Simple
Logical-stimulating	No preference	Logical
Educational-objective	Educational	Objective

Table 2-4. Older adults' goal preferences for episodic and procedural topics.

	Older adults' goal preference	
Goal Pairs	Episodic	Procedural
Clarity-interest	No preference	No preference
Fascinating-focus	No preference	No preference
Comprehensible-elaborative	Comprehensible	Comprehensible
Entertaining-simple	Entertaining	Entertaining
Logical-stimulating	No preference	Logical
Educational-objective	Educational	Educational

Table 2-5. Clarity-interest by speaker age group and topic type.

Speaker age group	Topic type	Mean	Standard deviation
Young	Episodic	5.71	0.87
	Procedural	2.04	0.77
Older	Episodic	4.40	1.76
	Procedural	3.77	1.82

Table 2-6. Fascinating-focus by speaker age group and topic type.

Speaker age group	Topic type	Mean	Standard deviation
Young	Episodic	2.5	1.07
	Procedural	5.73	1.03
Older	Episodic	3.6	1.96
	Procedural	4.31	1.87

Table 2-7. Comprehensible-elaborative by speaker age group and topic type.

Speaker age group	Topic type	Mean	Standard deviation
Young	Episodic	4.79	1.4
	Procedural	2.15	0.87
Older	Episodic	2.69	1.67
	Procedural	2.6	1.6

Table 2-8. Entertaining-simple by speaker age group and topic type.

Speaker age group	Topic type	Mean	Standard deviation
Young	Episodic	1.71	0.8
	Procedural	5.1	1.35
Older	Episodic	2.58	1.36
	Procedural	3.23	1.82

Table 2-9. Logical-stimulating by speaker age group and topic type.

Speaker age group	Topic type	Mean	Standard deviation
Young	Episodic	4.38	1.67
	Procedural	1.96	0.83
Older	Episodic	3.65	1.66
	Procedural	3.06	1.57

Table 2-10. Educational-objective by speaker age group and topic type.

Speaker age group	Topic type	Mean	Standard deviation
Young	Episodic	2.71	1.08
	Procedural	4.52	1.65
Older	Episodic	3.21	1.64
	Procedural	3.48	1.86

Table 2-11. Mean number of words by speaker age group, topic type, and instructions.

Speaker age group	Topic type	Instructions	Mean number of words	Standard deviation
Young	Episodic	No instructions	288	211
		Alter instructions	149	93
	Procedural	No instructions	155	96
		Alter instructions	292	162
Older	Episodic	No instructions	472	299
		Alter instructions	278	158
	Procedural	No instructions	347	291
		Alter instructions	378	203

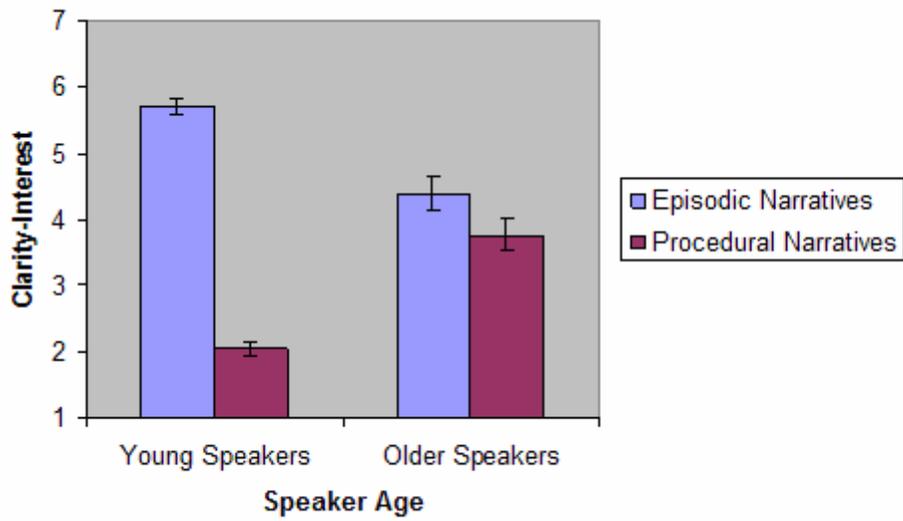


Figure 2-1. Clarity and interest as a function of topic type by young and older adults.

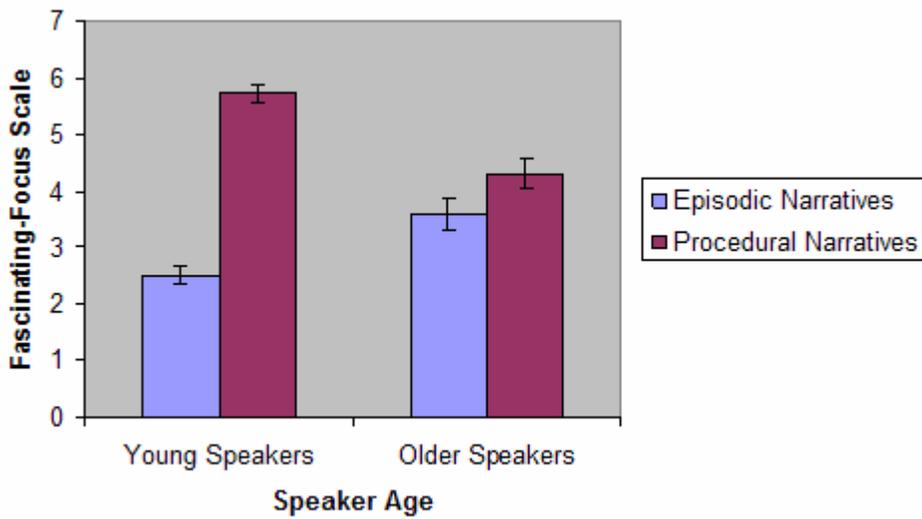


Figure 2-2. Fascinating and focus as a function of topic type by young and older adults.

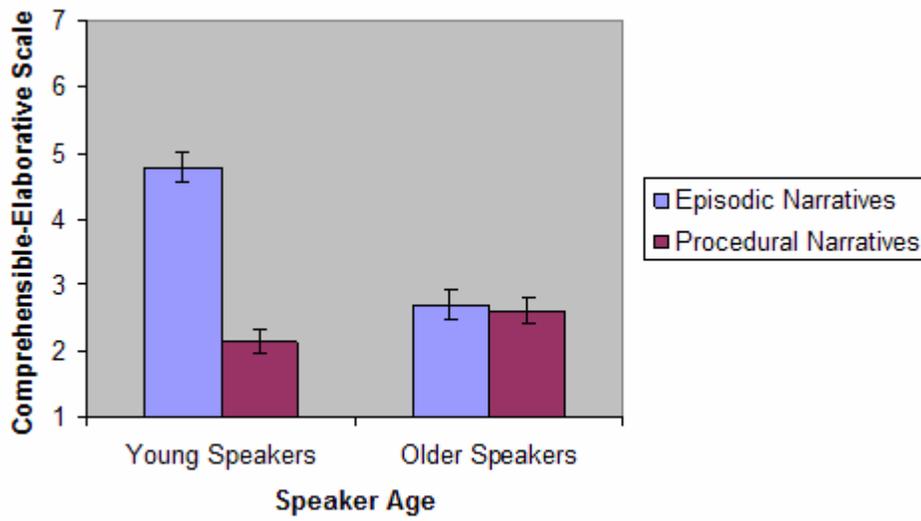


Figure 2-3. Comprehensible and elaborative as a function of topic type by young and older adults.

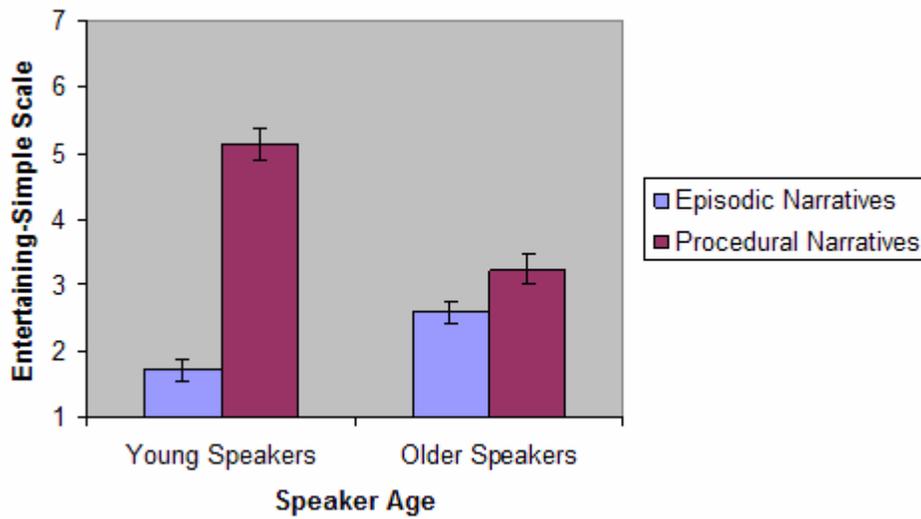


Figure 2-4. Entertaining and simple as a function of topic type by young and older adults.

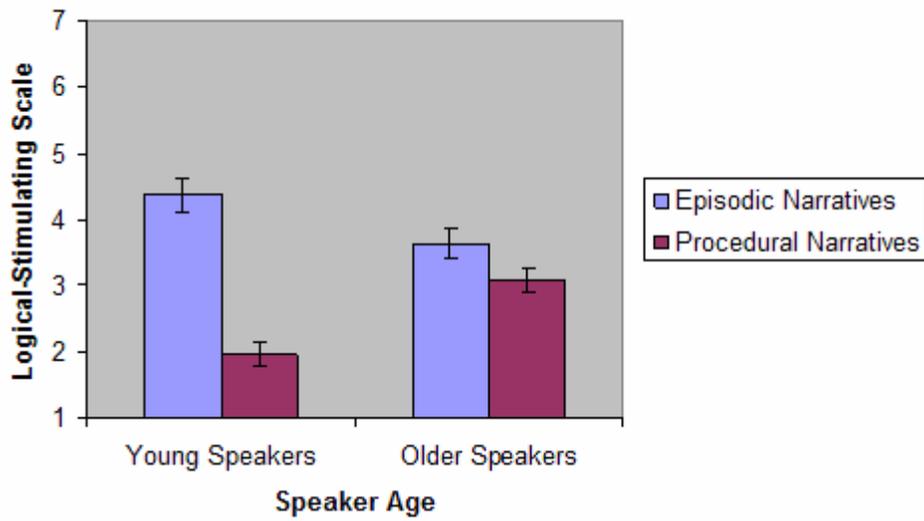


Figure 2-5. Logical and stimulating as a function of topic type by young and older adults.

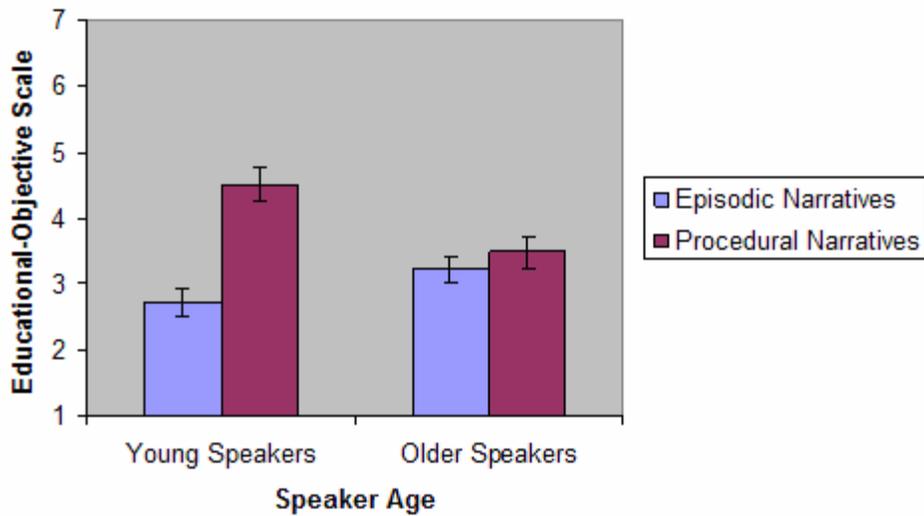


Figure 2-6. Educational and objective as a function of topic type by young and older adults.

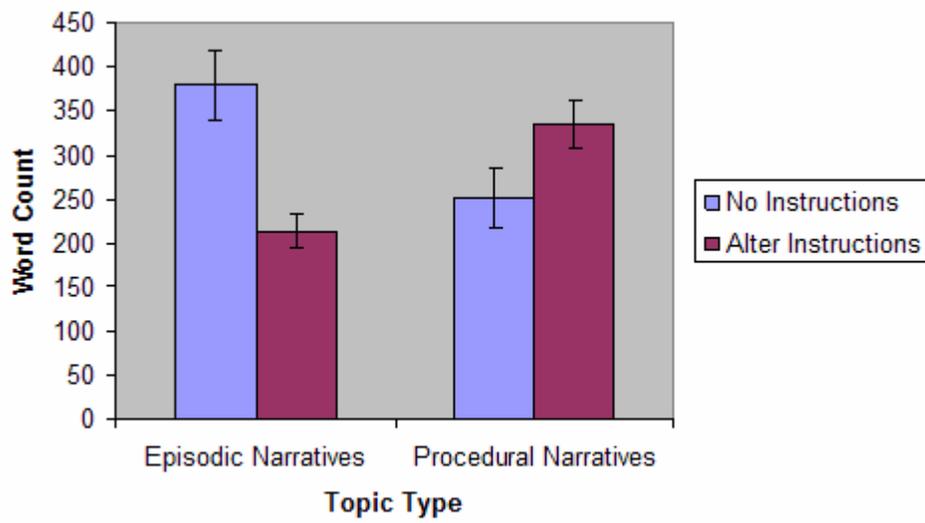


Figure 2-7. Mean number of words spoken averaged across speaker age group.

## CHAPTER 3 EXPERIMENT 2

### **Purpose**

Experiment 2 was designed to shed light on young and older adults' ability to utilize specific speech styles that (1) met communicative goals of primary value to both age groups, and (2) met goals that were specified for them. This assessment was made by obtaining ratings on the transcribed narratives given in Experiment 1 from a different group of young and older participants who served as listeners. The pragmatic change hypothesis maintains that age-related differences in speech styles are a function of differing communicative goals held by young and older adults. Thus, if young and older adults have a common goal, then they should be equally capable of selecting a speech style to match that goal. In contrast, the inhibitory deficit hypothesis suggests that age differences in speech styles are a function of older adults' inability to inhibit irrelevant information. Thus, meeting communicative goals that require inhibition of information would be more difficult for older adults, as they would be distracted by extraneous thoughts and topics not relevant to the goal of interest.

The present study analyzed whether young or older adults were better at meeting two of their primary goals, one for episodic topics and one for procedural topics. The pilot study and Experiment 1 revealed young and older adults' top three goals for both topic types, one of which they had in common for each topic. Both age groups cited elaborativeness as one of their top three goals for episodic topics, and clarity as one of their top three goals for procedural topics. According to the pragmatic change hypothesis, young and older adults select speech styles based on their goals, so there should be no age differences in speech styles for the goals they hold in common. In contrast, the inhibitory deficit hypothesis predicts that young adults would be better than older adults at meeting the goal of clarity, as the clarity of older adults' speech would be

compromised by their inability to inhibit irrelevant information. In contrast, for elaborativeness, the inhibitory deficit hypothesis predicts that older adults would be better at meeting this goal than young adults, as older adults' speech would already be elaborative as a result of their inhibition deficit, and adding the goal of being elaborative would only further enhance the elaborativeness of their speech.

Altering speech styles to fit a communicative goal that was contrary to their own goals was expected to be more difficult for older adults than young adults, according to the inhibitory deficit hypothesis. Older adults' increased difficulty with inhibition would make the task of altering goals more difficult because they would need to inhibit an automatic process (e.g. speaking using natural goals) in order to successfully use alternative goals. Older adults have had more time to develop and use their own goals, which may have become more automatic with practice and experience, making their natural speech more difficult to inhibit. Contrary to predictions of meeting older adults' own goals, these inhibition difficulties were expected to occur independent of topic because the inhibition of natural speech was required for both episodic and procedural narratives. The pragmatic change hypothesis does not offer any age-related predictions with respect to altering communicative goals on cue, as it assumes that young and older adults use their own goals to select a speech style appropriate to the discourse they mean to convey.

## **Method**

### **Participants**

Participants included 30 young adults, consisting of 20 females and 10 males (18-21 years;  $M = 18.9$ ,  $SD = 0.8$ ) and 30 older adults, consisting of 17 females and 13 males (75-87 years;  $M = 74.3$ ,  $SD = 5.6$ ). Young and older adults were recruited and compensated in a manner similar to

that of Experiment 1. Participants were screened for normal or corrected-to-normal vision and hearing.

Background variables, including years of schooling, health, and self-ratings of time spent writing, reading, watching TV, and doing crossword puzzles, were assessed on all participants. Means and standard deviation scores for the background variables are shown in Table 3-1. Older adults reported more years of schooling,  $t(58) = -5.67, p < .01$ , than young adults. Young adults spent more time per day writing than older adults,  $t(58) = 4.24, p < .01$ . There were no age differences on health, or number of hours spent reading, watching TV, and doing crossword puzzles,  $ps > .17$ .

## **Materials**

The verbatim transcripts of all spoken narratives produced by the 24 young and 24 older adults in Experiment 1 (two episodic and two procedural topics per participant) were read by a female young adult experimenter and recorded on a SONY Digital Voice Recorder. The narratives were recorded in a normal speaking voice, and the experimenter read the narratives as if she were reading a story aloud to another person. Disfluencies, stuttering repetitions, and comments given after the story was completed (e.g., “That’s the end of my story”, “I’m done”) were eliminated. Recorded sets of transcripts were assigned to rater groups, such that each rater group rated 32 narratives, sixteen from four young speakers (2 episodic and 2 procedural per speaker) and sixteen from four older speakers (2 episodic and 2 procedural per speaker). This assignment process yielded six separate rater groups each composed of ten raters, five young and five older adults. Transcripts were assigned to rater groups such that the six sets of transcripts were as similar in length (number of words) as possible within each rater group. Table 3-2 shows the mean number of words for each set.

Booklets containing 32 pages, one page for each narrative in a set, were created. On each page, there were 12 goals, five of which were deemed experimental for the purposes of this experiment. The experimental goals were related to the hypotheses of looking at OTS and included the following: (a) clarity, (b) elaborativeness, (c) talkativeness, (d) focus, and (e) logical. To the right of each dimension was a 7-point scale ranging from 1 (not at all) to 7 (completely). The other seven goals were fillers, as they were not relevant to the experimental questions and were therefore not analyzed. A sample booklet page containing the five experimental goals and seven filler goals is shown in Appendix C.

### **Procedure**

Participants were tested in groups of five, and they took approximately two hours to complete the ratings. The experimenter informed participants that the study was investigating what makes a good story, and that they would hear 32 recorded transcripts of narratives told by real people that had been transcribed and re-recorded by the experimenter. Participants were not told whether a young or an older adult was the original speaker of each recorded transcript. Participants were told to evaluate the narratives on a variety of dimensions, which were defined and explained by the experimenter. The experimenter also emphasized that the participants should not base their judgments on the narratives solely on the length of the narrative; both long and short stories could be ranked high or low on any of the dimensions. Participants wrote the number of the story they were rating (e.g., 1 – 32) on the top of each page of the booklet. Narratives were presented by alternating young and older speakers' narratives in the same order they were collected in Experiment 1, such that that the order of topic type and the specific topic within topic type were counterbalanced across listeners. The experimenter gave participants as much time as they needed to fill out the ratings and waited until everyone was finished rating a particular narrative before playing the next narrative.

## Results

### Meeting Goals

To investigate the question of whether young or older adults were more successful in meeting their shared primary goals, raters' assessments of clarity (the common goal for procedural topics) and elaborativeness (the common goal for episodic topics) were analyzed. Independent variables were rater age group (young, older), speaker age group (young, older), and topic type (episodic, procedural), and only narratives with no instructions to alter goals were included in these analyses, to capture the effectiveness of meeting one's own goals. Rater age group was a between-subjects variable, whereas speaker age group and topic type were within-subjects variables. Larger numbers on the rating scale indicated a higher rating of the dimension (i.e., clearer, more elaborative, etc.) The mean ratings for clarity and elaborativeness by speaker age group and topic type are shown by young raters in Table 3-3 and by older raters in Table 3-4.

**Clarity.** There was a main effect of speaker age group,  $F(1,59) = 8.06$ ,  $MSE = 0.32$ ,  $p < .01$ , qualified by an interaction. As shown in Figure 3-1, there was a Speaker Age Group x Topic Type interaction,  $F(1,59) = 6.18$ ,  $MSE = 0.24$ ,  $p < .02$ , because for episodic topics, young and older speakers were rated equivalently on clarity,  $F < 1$ , whereas for procedural topics, young speakers were clearer than older speakers,  $F(1,59) = 15.29$ ,  $MSE = 0.26$ ,  $p < .01$ . Young speakers were rated as clearer on procedural topics than episodic topics,  $F(1,59) = 5.18$ ,  $MSE = 0.30$ ,  $p < .03$ , whereas older speakers were rated equivalently on clarity for episodic and procedural topics,  $F < 1$ . No other effects were significant,  $ps > .35$ .

**Elaborativeness.** There was a main effect of speaker age group,  $F(1,58) = 14.72$ ,  $MSE = 0.19$ ,  $p < .01$ , because older speakers were more elaborative than young speakers, and a marginally significant main effect of topic type,  $F(1,58) = 3.38$ ,  $MSE = 1.30$ ,  $p < .07$ , where

episodic topics were marginally more elaborative than procedural topics. No other effects were significant,  $ps > .17$ .

### **Altering Goals**

Dimensions including talkativeness and elaborativeness were analyzed to address the question of whether young and older adults were capable of altering their communicative goals to become more concise for episodic topics and more elaborative for procedural topics.

Following instructions to alter goals, higher ratings on talkativeness and lower ratings on elaborativeness (relative to no instructions) would indicate that speakers successfully altered their goals. Variables of interest for these questions included rater age group (young, older), speaker age group (young, older), topic type (episodic, procedural), and instructions (no instructions, instructions to alter goals). Rater age group was a between-subjects variable, whereas speaker age group, topic type, and instructions were within-subjects variables.

The mean ratings for talkativeness and elaborativeness by speaker age group, topic type, and instructions are shown by young raters in Table 3-5 and by older raters in Table 3-6.

**Talkativeness.** The main effect of rater age group was significant,  $F(1,58) = 7.71$ ,  $MSE = 5.39$ ,  $p < .01$ , with older adult raters assigning higher ratings than young adult raters. Significant main effects of speaker age group,  $F(1,58) = 28.13$ ,  $MSE = 0.55$ ,  $p < .01$ , and instructions,  $F(1, 58) = 5.05$ ,  $MSE = 0.18$ ,  $p < .03$ , occurred but were qualified by a Speaker Age Group x Topic Type x Instructions interaction (see figures 3-2 and 3-3),  $F(1,58) = 20.50$ ,  $MSE = 0.37$ ,  $p < .01$ . For episodic topics without instructions to alter goals, older speakers were rated as marginally more talkative than young adults,  $F(1,59) = 3.13$ ,  $MSE = 0.35$ ,  $p < .08$ , whereas for procedural topics without instructions to alter goals, older speakers were perceived as significantly more talkative than young speakers,  $F(1,59) = 14.69$ ,  $MSE = 0.49$ ,  $p < .01$ . When given instructions to alter goals, older speakers were more talkative than young speakers for episodic topics,  $F(1,59) =$

32.04,  $MSE = 0.50$ ,  $p < .01$ , but young and older speakers were equivalently talkative for procedural topics,  $F < 1$ . Comparing the different instructions, young speakers were rated as more talkative for episodic topics with no instructions than with instructions to alter goals,  $F(1,59) = 55.29$ ,  $MSE = 0.43$ ,  $p < .01$ , whereas they were more talkative for procedural narratives with instructions to alter goals than with no instructions,  $F(1,59) = 31.47$ ,  $MSE = 0.44$ ,  $p < .01$ . Similarly, older adults were more talkative for episodic topics with no instructions than with instructions to alter goals (but to a lesser extent than young adults),  $F(1,59) = 9.77$ ,  $MSE = 0.37$ ,  $p < .01$ , and they were only marginally more talkative for procedural narratives with instructions to alter goals than with no instructions,  $F(1,59) = 3.76$ ,  $MSE = 0.36$ ,  $p < .06$ . Comparing topics, both young speakers,  $F(1,59) = 29.61$ ,  $MSE = 0.47$ ,  $p < .01$ , and older speakers,  $F(1,59) = 15.56$ ,  $MSE = 0.28$ ,  $p < .01$ , were more talkative on episodic topics than procedural topics with no instructions to alter goals. However, whereas young adults showed the opposite pattern from no instructions to alter goals when given instructions to alter goals,  $F(1,59) = 47.07$ ,  $MSE = 0.50$ ,  $p < .01$ , older adults were similarly talkative on episodic and procedural topics with instructions to alter goals,  $F(1,59) = 2.34$ ,  $MSE = 0.41$ ,  $p > .13$ . No other effects were significant,  $ps > .12$ .

**Elaborativeness.** There were main effects of speaker age group,  $F(1,58) = 30.88$ ,  $MSE = 0.64$ ,  $p < .01$ , topic type,  $F(1,58) = 12.61$ ,  $MSE = 0.63$ ,  $p < .01$ , and instructions,  $F(1,58) = 8.14$ ,  $MSE = 0.44$ ,  $p < .01$ , qualified by a Speaker Age Group x Topic Type x Instructions interaction,  $F(1,58) = 23.04$ ,  $MSE = 0.56$ ,  $p < .01$  (see Figures 3-4 and 3-5). For episodic topics, older speakers were rated as more elaborative than young speakers with no instructions to alter goals,  $F(1,59) = 6.87$ ,  $MSE = 0.50$ ,  $p < .01$ , and even more so with instructions to alter goals,  $F(1,59) = 49.89$ ,  $MSE = 0.56$ ,  $p < .01$ . For procedural topics with no instructions to alter goals, older speakers were also more elaborative than young speakers,  $F(1,59) = 10.60$ ,  $MSE = 0.70$ ,  $p < .01$ ,

whereas for procedural topics with instructions to alter goals, young and older speakers were similarly elaborative,  $F(1,59) = 2.60$ ,  $MSE = 0.39$ ,  $p > .11$ . Comparing different types of instructions, young speakers were more elaborative on episodic topics with no instructions than with instructions to alter goals,  $F(1,59) = 48.65$ ,  $MSE = 0.54$ ,  $p < .01$ , as were older speakers but to a lesser extent,  $F(1,59) = 5.41$ ,  $MSE = 0.53$ ,  $p < .02$ . In contrast, young speakers were more elaborative on procedural topics with instructions than with no instructions to alter goals,  $F(1,59) = 22.36$ ,  $MSE = 0.52$ ,  $p < .01$ , whereas older speakers were equivalently elaborative on procedural topics with and without instructions to alter goals,  $F < 1$ . Comparing topics, for narratives with no instructions to alter goals, young adults were marginally more elaborative for episodic topics than for procedural topics,  $F(1,59) = 3.63$ ,  $MSE = 0.62$ ,  $p < .06$ , whereas older adults were rated equivalent on elaborativeness for both topic types,  $F < 1$ . In contrast, for narratives with instructions to alter goals, young speakers were more elaborative for procedural topics than episodic topics,  $F(1,59) = 99.99$ ,  $MSE = 0.49$ ,  $p < .01$ , whereas older adults were rated equivalent on elaborativeness for both topic types,  $F(1,59) = 1.00$ ,  $MSE = 0.53$ ,  $p > .31$ . No other main effects or interactions were significant,  $ps > .26$ .

## **OTS**

To address OTS, dimensions including focus and logical were analyzed, using Arbuckle et al.'s (1993) definition of OTS as lack of focus and coherence. Lower ratings on focus and logical would therefore indicate more OTS. Variables of interest for these questions included rater age group (young, older), speaker age group (young, older), topic type (episodic, procedural), and instructions (no instructions, instructions to alter goals). Instructions was included as a variable of interest to explore whether OTS becomes more apparent when using goals other than one's own. Rater age group was a between-subjects variable, whereas speaker age group, topic type, and instructions were within-subjects variables. The mean ratings for focus and logical by

speaker age group, topic type, and instructions are shown by young raters in Table 3-7 and by older raters in Table 3-8.

**Focus.** There was a main effect of speaker age group,  $F(1,58) = 9.81$ ,  $MSE = 0.73$ ,  $p < .01$ , which was qualified by an interaction. As shown in Figure 3-6, speaker age group interacted with topic type,  $F(1,58) = 9.99$ ,  $MSE = 0.36$ ,  $p < .01$ , because young and older speakers were equivalently rated on focus for episodic topics,  $F < 1$ , whereas young speakers were seen as more focused than older adults for procedural topics,  $F(1,59) = 25.68$ ,  $MSE = 0.23$ ,  $p < .01$ . Within each age group, young speakers were rated as more focused for procedural topics than episodic topics,  $F(1,59) = 4.68$ ,  $MSE = 0.33$ ,  $p < .04$ , whereas older speakers' focus was equivalent for episodic and procedural topics,  $F(1,59) = 2.45$ ,  $MSE = 0.23$ ,  $p > .12$ . No other main effects or interactions were significant,  $p > .10$ .

**Logical.** There was a marginally significant main effect of instructions,  $F(1,58) = 2.85$ ,  $MSE = 0.32$ ,  $p < .09$ , qualified by an interaction. There was a Speaker Age Group x Instructions x Rater Age Group interaction,  $F(1,58) = 4.51$ ,  $MSE = 0.34$ ,  $p < .04$ . For narratives with no instructions to alter goals, young raters equivalently rated young and older speakers as logical (i.e., sensible and coherent),  $F < 1$ , as did older raters,  $F(1,29) = 1.10$ ,  $MSE = 0.34$ ,  $p > .30$ . In contrast, for narratives with instructions to alter goals, young raters rated young speakers' stories as more logical than older speakers,  $F(1,29) = 4.73$ ,  $MSE = 0.17$ ,  $p < .04$ , whereas older raters rated young and older speakers similarly,  $F < 1$ . When comparing the rater groups, young and older raters gave equivalent logical ratings to young speakers,  $F < 1$ , and to older speakers,  $F < 1$ , on narratives with no instructions to alter goals. Similarly, for narratives with instructions to alter goals, young speakers' stories were rated equivalently logical by young and older raters,

$F(1,59) = 1.12$ ,  $MSE = 1.04$ ,  $p > .29$ , and so were older speakers,  $F < 1$ . No other main effects or interactions were significant,  $ps > .14$ .

### **Discussion**

The results of the present study shed light on young and older adults' ability to meet as well as alter their communicative goals. No age differences were predicted in the ability to meet goals that were of primary importance to both young and older adults; however, this prediction was not supported, as age differences emerged for both topics: Older adults were better at meeting the goal of elaborativeness for episodic topics, whereas young adults were better at meeting the goal of clarity for procedural topics. Older adults were also predicted to have greater difficulty with altering their natural goals to meet a new goal, and the results support this prediction. Although older adults were capable of accepting new goals for both episodic and procedural topics, they were less successful in doing so than young adults.

Age differences in the ability to meet their own goals, when the same goals were valued by both young and older adults, were found in the present study. For procedural topics, young adults were better at meeting the goal of clarity than older adults, a goal which both age groups considered of primary value. The inhibitory deficit hypothesis predicted this result as a function of older adults' inability to inhibit irrelevant information, thereby making their narratives less clear than young adults (e.g., Arbuckle & Gold, 1993; Stoltzfus et al., 1996; Zacks & Hasher, 1994). An alternative explanation is that older adults' valuing of multiple goals (i.e., clarity and interest for procedural topics) may have compromised their ability to meet the goal of clarity to the same extent as young adults, who favored clarity over interest for procedural topics. In this perspective, older adults do not necessarily have an inhibition deficit, but rather they may include more information in their procedural topics based on other goals that they hold, making their narratives less clear.

The opposite pattern emerged for episodic topics, where older adults were better than young adults at meeting their shared goal of elaborativeness. The inhibitory deficit hypothesis suggests that this finding is a result of older adults' inability to inhibit extraneous information, thereby making their narratives more elaborative. However, young and older adults were rated as clear equivalently on episodic topics. This finding suggests that older adults were not simply inserting irrelevant information into their narratives, which would make their narratives unclear, but rather they were meeting their goal of elaborativeness by inserting information appropriate to the topic while remaining clear and easy to follow. The results also imply that there may be less stringent criteria for what constitutes unclear information on episodic topics, because more details are expected to be produced on these types of narratives.

The results for both episodic and procedural topics were in contrast to the pragmatic change hypothesis, which maintains that young and older adults' speech styles should be similar if they have common goals (e.g., Giles & Coupland, 1991; Hymes, 1972; Labov, 1969). However, age differences could be due to the fact that although young and older adults shared a primary goal, they did not necessarily share all of their other goals for either topic. For example, as described above, the ability to meet clarity to the same extent as young adults for procedural topics may have been compromised by older adults' desire to also tell an interesting and fascinating narrative, whereas young adults favored telling a focused and clear narrative.

In assessing young and older adults' ability to alter their original communicative goals, speakers were told to be concise for episodic topics and to be elaborative for procedural topics. The ability to meet these goals was assessed by talkativeness and elaborativeness ratings on narratives with and without instructions to alter goals. As predicted by the inhibitory deficit hypothesis, young adults were better than older adults at altering their goals to become more

concise, although both groups successfully altered their speech styles. Older adults' ability to become less talkative and less elaborative on episodic topics when instructed to become concise suggests that their inhibition process is efficient enough to select a speech style suited for the goal they were told to emphasize. However, since they were not as proficient at this task as young adults, older adults may have had more difficulty inhibiting their primary goal of wanting to be elaborative and detailed, or they may simply not have wanted to eliminate too many details because of the value they place on reminiscing and telling personal narratives (e.g., Boden & Bielby, 1983; Coupland & Coupland, 1995).

For procedural topics, young adults were again successful in altering their goals to become more elaborative, both in terms of ratings of talkativeness and elaborativeness. However, older adults were not viewed as more elaborative for procedural topics following instructions to alter their goals, and they were rated as only marginally more talkative. In contrast to episodic topics, these findings suggest that older adults were not successful at taking on new goals of being more elaborative and detailed for procedural topics. There are several potential explanations for this finding. Older adults may have had a clearer idea about the appropriate amount of details to include for procedural topics than young adults, and they did not want to violate this basic rule. Another reason for the results could be that older adults may have already included all the details in their procedural narratives using their natural goals, and therefore further elaboration was more difficult for them than for young adults, who were less elaborative than older adults when using their own goals. Finally, the idea of adding additional details to their narratives may have caused discomfort in older adults, as they may have recognized their potential for being perceived as off-topic in certain situations and did not want to encourage that view.

These findings suggest that communicative goals can be under conscious control and altered at will (e.g., Boden & Bielby, 1983; Giles & Coupland, 1991), implying that speech styles are selected based on a conscious awareness of the type of discourse that young and older adults plan to produce. Whether older adults were less proficient at altering their goals relative to young adults because they were having more difficulty with inhibiting their natural goals, or whether they simply felt compelled to meet their primary goals cannot be teased apart in the present data.

The present experiment also addressed OTS, both in terms of amount produced with natural goals and with altered goals. When using their own goals, young and older adults were equivalently focused and logical (defined as sensible and coherent) for episodic topics, suggesting that OTS was not more pronounced for older than young speakers. In contrast for procedural topics, young adults' narratives were rated as more focused than older adults' narratives (but no less logical), which is consistent with increased OTS for older speakers. Age-related differences in communicative goals may explain these findings. Young adults' goals were aimed at producing an expressive speech style for episodic topics, while older adults' goals were a mixture between goals suited for an expressive and an objective speech style. Previous research has shown that age differences in OTS are typically found for narratives where the speakers' autobiographical experience is relevant (e.g., James et al., 1998). Young adults were consciously trying to be more expressive, which could have boosted their level of OTS to be equivalent to that of older adults. The goals held by young and older adults also suggest that older adults may have viewed autobiographical information as being more relevant to the procedural topics than young adults. Young adults' goals reflected a preference for a more objective speech style for procedural topics, suggesting that they found autobiographical reminiscing irrelevant to the

description of a daily routine. Therefore, as a result of young and older adults' different communicative goals held for procedural topics, older adults produced speech that was relatively higher in OTS than young adults.

According to previous research, older adults' speech has more OTS than young adults, (e.g., Arbuckle & Gold, 1993, Gold et al., 1988; Gold et al., 1994) because of an age-related decline in an inhibition process needed to suppress irrelevant information (e.g., Arbuckle & Gold, 1993; Hasher & Zacks, 1988; Stoltzfus et al., 1996; West, 1996; Zacks & Hasher, 1994).

Therefore, more OTS might be expected for altered goals (e.g., when the inhibition of natural goals is needed to succeed on the task). When meeting new goals, the same pattern of results was found as when one's own goals were used, with the exception that older adults were perceived as less logical than young adults by young raters only, for both episodic and procedural topics. Both young and older adults' narratives were as focused for their new goals as they were when using their natural goals, suggesting that staying on topic was not problematic for either age group. However, altering natural goals may have changed older adults' speech style just enough for young raters to consider it less logical, whereas older raters did not detect this difference, suggesting that young raters' criteria for coherent narratives is more stringent than that of older adults. This difference in criteria fits with the results of James et al. (1988), where young, but not old, raters viewed young speakers as being more focused than older speakers.

The results of the present study may contradict previous research because OTS was assessed via listener ratings of dimensions thought to make up OTS, whereas previous research has defined OTS using categorizations imposed by experimenters, which are subject to experimenter biases (e.g., Arbuckle & Gold, 1993; Gold et al., 1994; Glosser & Deser, 1992;

James et al., 1998; Juncos-Rabadan, 1996). OTS in previous research has typically been categorized in terms of number of words that were off-topic, and what constituted words that were off-topic was ultimately left up to the experimenter (e.g., Arbuckle & Gold, 1993; James et al., 1998). In contrast, the present study looked at OTS from the listeners' perspective in terms of how on-topic and coherent they felt the speakers' narratives were. This assessment of OTS is advantageous because it takes the whole narrative into account when judging how focused and coherent a speaker was, rather than separately examining each sentence of the story for off-topic speech, without knowing how it might tie in to something relevant later in the narrative.

It is worth noting that the age of the raters had little effect on the results of the present study, consistent with previous research (e.g., James et al., 1998). This finding suggests that the criteria held by raters for the different goal dimensions changes very little across the lifespan. There may be a relatively standard way for assessing what makes a story high or low on different dimensions, and this standard is similar across different ages. These results suggest that future research does not necessarily need both young and older raters to assess story quality, as their assessments are remarkably similar on multiple dimensions.

**Summary.** Overall, the results of the present study provided interesting patterns of age differences in terms of meeting and altering goals and also in terms of capturing OTS from a new perspective. With respect to meeting goals, the inhibitory deficit hypothesis was supported as young adults more effectively met the goal of clarity than older adults for procedural topics, whereas older adults more effectively met the goal of elaborativeness for episodic topics. The inhibitory deficit hypothesis was also supported in terms of young and older adults' ability to alter their goals. Young adults proved more successful than older adults at altering their natural goals to meet new ones. However, the reason that older adults were less successful than young

adults in altering their goals is not necessarily due to an inhibition deficit. The results could be due to a weaker inhibition process, a stronger desire for older adults' to meet their natural goals, or a combination of both explanations.

However, the inhibitory deficit hypothesis was not supported with respect to its predictions about OTS. Age differences in OTS were only found for procedural topics. Episodic topics may not have yielded any age differences in OTS because young adults' communicative goals for episodic topics were almost exclusively favoring an expressive speech style, whereas older adults' goals were more mixed between an expressive and objective speech style. The age differences in OTS for procedural topics may have been a result of older adults' desire to enhance the autobiographical aspect of the topics, whereas young adults pursued the topic in a more objective way, as indicated by their communicative goals, similar to the way they might describe a picture (e.g., James et al., 1998).

The following chapter will provide an overall summary of both studies and discuss limitations of the present research as well as new directions for future research.

Table 3-1. Means and standard deviations for background variables in Experiment 2.

Variable	Speaker age	Mean	Standard deviation
Years of schooling*	Young	13.4	1.07
	Older	17.02	3.32
Health rating (max = 10)	Young	7.97	1.54
	Older	8.23	1.28
Hours per day spent writing (max = 10)*	Young	2.55	1.7
	Older	1.04	0.84
Hours per day spent reading (max = 10)	Young	2.97	1.55
	Older	2.64	1.37
Hours per day spent watching TV (max = 10)	Young	2.24	2.13
	Older	2.81	1.84
Hours per day spent doing crossword puzzles (max = 10)	Young	0.21	0.68
	Older	0.54	1.07

\* indicates  $p < .05$

Table 3-2. Characteristics of the six sets of transcripts in Experiment 2.

Set	Mean no. words			
	Young speakers		Older speakers	
M	SD	M	SD	
1	1082	874	1523	1314.5
2	999	637.6	1527	992.5
3	855	347.8	1514	901.1
4	879	340.7	1521	879.4
5	896	342.6	1549	616.4
6	917	298.6	1501	464.2

Table 3-3. Young and older speakers on clarity and elaborativeness by young raters in Experiment 2.

Dimension	Episodic				Procedural			
	Young		Older		Young		Older	
	M	SD	M	SD	M	SD	M	SD
Clarity	4.15	0.92	4.14	0.77	4.47	0.81	4.08	0.78
Elaborativeness	4.06	0.86	4.43	0.87	3.61	1.16	4.19	1.04

Table 3-4. Young and older speakers on clarity and elaborativeness by older raters in Experiment 2.

Dimension	Episodic				Procedural			
	Young		Older		Young		Older	
	M	SD	M	SD	M	SD	M	SD
Clarity	4.34	0.90	4.25	0.96	4.48	0.92	4.14	1.09
Elaborativeness	4.14	1.14	4.45	0.96	4.04	1.45	4.46	1.12

Table 3-5. Young and older speakers on talkativeness and elaborativeness by young raters in Experiment 2.

Dimension	Instructions	Episodic				Procedural			
		Young		Older		Young		Older	
		M	SD	M	SD	M	SD	M	SD
Talkativeness									
	None	4.28	0.73	4.73	0.89	3.54	0.92	4.13	0.91
	Alter	3.39	1.03	4.19	1.11	4.41	0.91	4.42	0.94
Elaborativeness									
	None	4.06	0.86	4.43	0.87	3.61	1.16	4.19	1.04
	Alter	3.23	0.73	4.13	1.16	4.38	0.91	4.08	0.89

Table 3-6. Young and older speakers on talkativeness and elaborativeness by older raters in Experiment 2.

Dimension	Instructions	Episodic				Procedural			
		Young		Older		Young		Older	
		M	SD	M	SD	M	SD	M	SD
Talkativeness									
	None	5.01	0.92	4.94	1.06	4.38	1.24	4.78	1.03
	Alter	4.13	1.27	4.79	1.01	4.88	0.97	4.92	1.09
Elaborativeness									
	None	4.14	1.14	4.45	0.96	4.04	1.45	4.46	1.12
	Alter	3.09	1.15	4.13	1.11	4.51	1.30	4.45	1.16

Table 3-7. Young and older speakers on focus and logical by young raters in Experiment 2.

Dimension	Instructions	Episodic				Procedural			
		Young		Older		Young		Older	
		M	SD	M	SD	M	SD	M	SD
Focus									
	None	4.20	0.99	4.12	1.05	4.77	1.06	4.25	0.77
	Alter	4.59	1.06	4.50	0.89	4.72	0.97	4.18	0.85
Logical									
	None	3.86	0.82	3.94	0.93	4.16	1.20	4.02	0.87
	Alter	4.17	1.14	4.13	1.02	4.11	1.08	3.68	0.92

Table 3-8. Young and older speakers on focus and logical by older raters in Experiment 2.

Dimension	Instructions	Episodic				Procedural			
		Young		Older		Young		Older	
		M	SD	M	SD	M	SD	M	SD
Focus									
	None	4.73	0.96	4.42	1.20	4.81	1.13	4.37	1.22
	Alter	4.45	1.36	4.63	1.12	4.58	1.34	4.32	1.28
Logical									
	None	4.18	0.94	3.94	1.22	4.19	1.05	4.11	1.23
	Alter	3.82	1.19	4.06	1.01	3.90	1.20	3.83	1.02

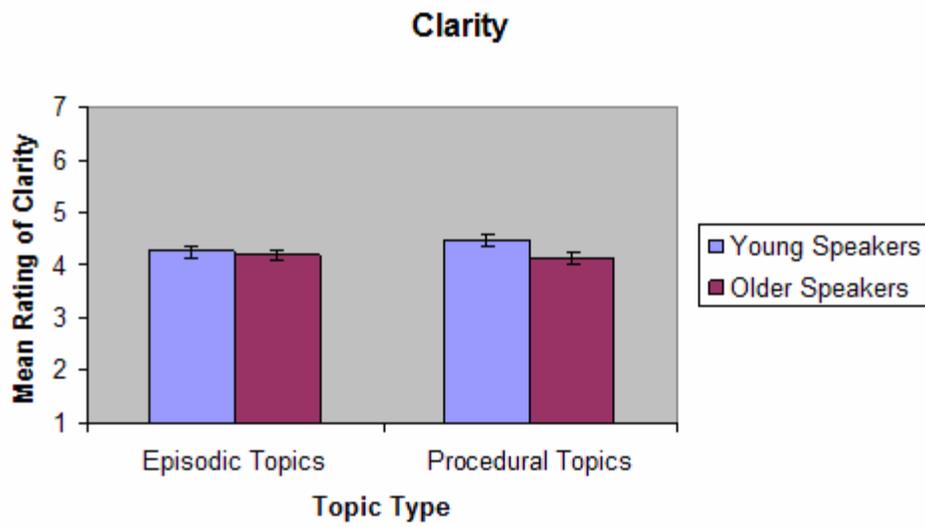


Figure 3-1. Clarity for the Speaker Age Group x Topic Type interaction. Range: 1 = not at all; 7 = completely.

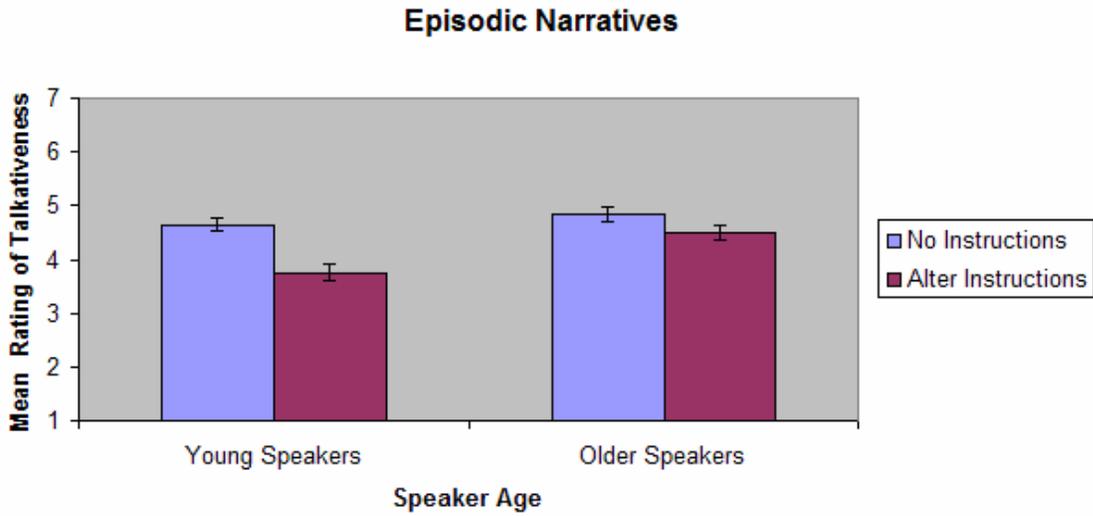


Figure 3-2. Episodic Topics: Talkativeness for the Speaker Age Group x Topic Type x Instructions interaction. Range: 1 = not at all; 7 = completely.

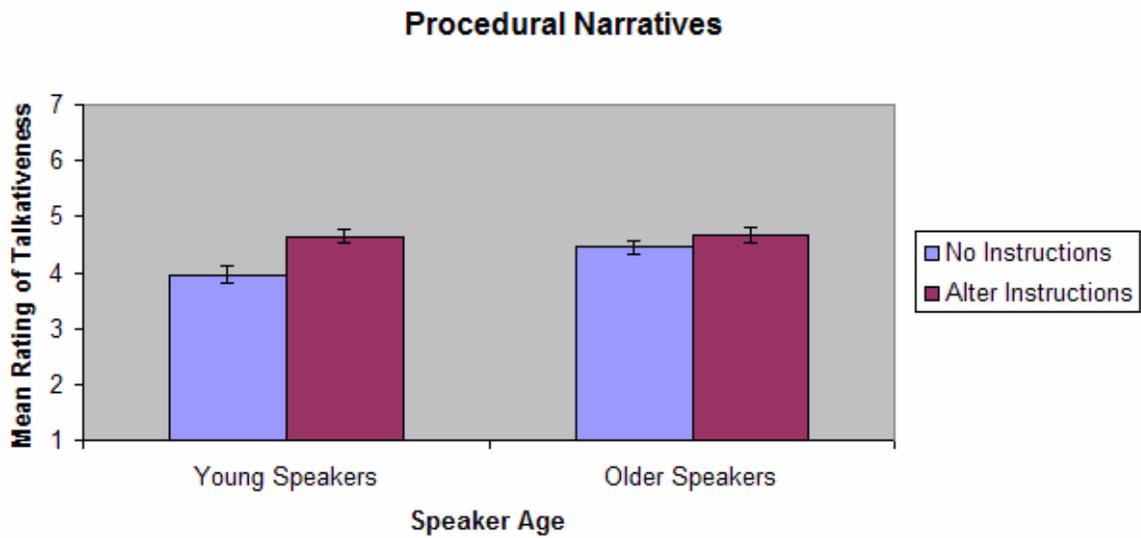


Figure 3-3. Procedural topics: Talkativeness for the Speaker Age Group x Topic Type x Instructions interaction. Range: 1 = not at all; 7 = completely.

### Episodic Narratives

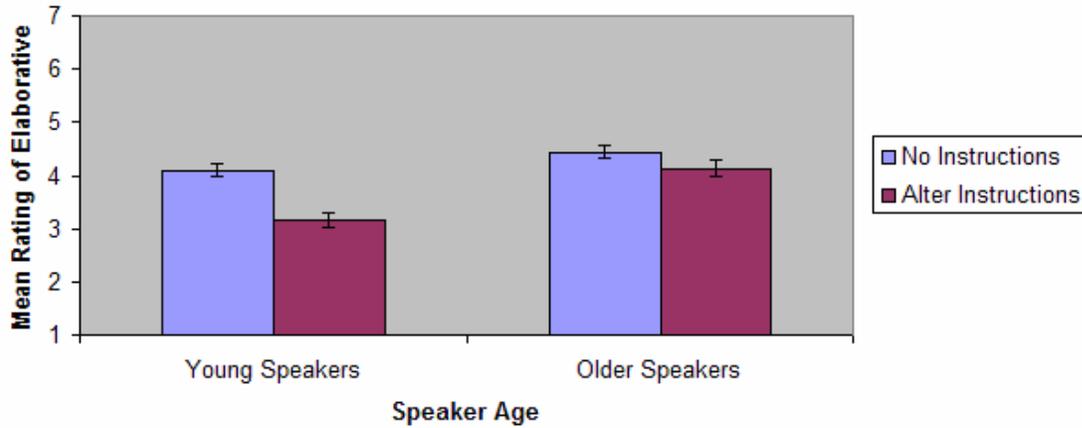


Figure 3-4. Episodic topics: Elaborativeness for the Speaker Age Group x Topic Type x Instructions interaction. Range: 1 = not at all; 7 = completely.

### Procedural Narratives

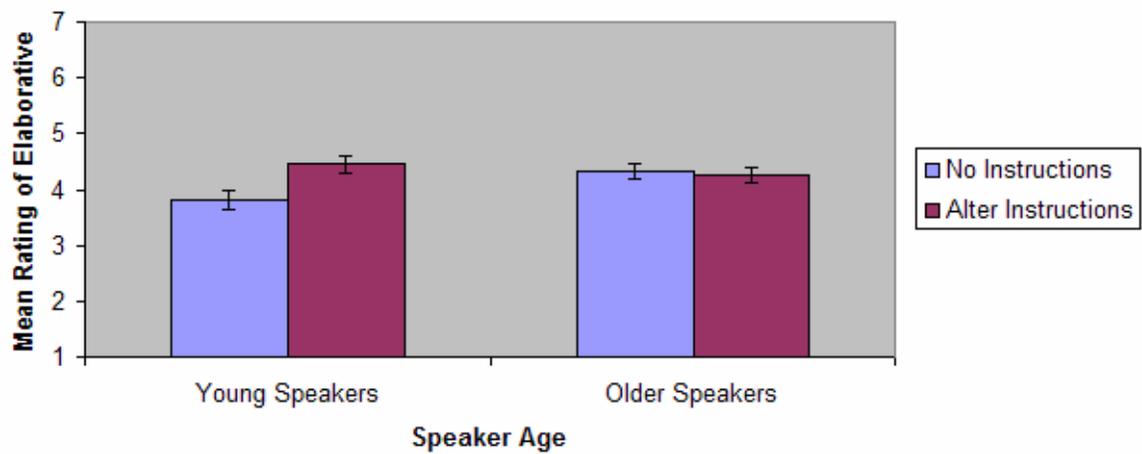


Figure 3-5. Procedural topics: Elaborativeness for the Speaker Age Group x Topic Type x Instructions interaction. Range: 1 = not at all; 7 = completely.

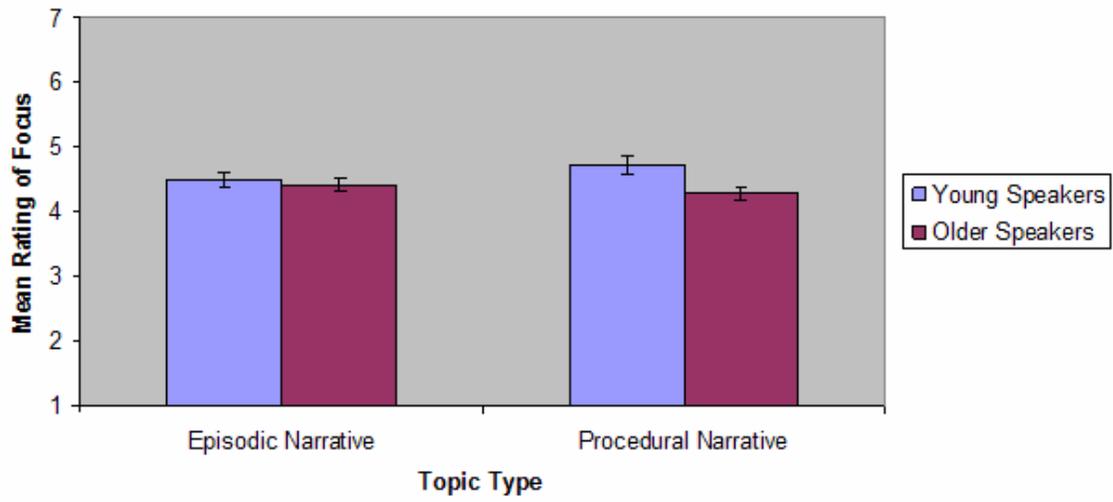


Figure 3-6. Focus for the Speaker Age Group x Topic Type interaction. Range: 1 = not at all; 7 = completely.

## CHAPTER 4 DISCUSSION

The results of my studies provide empirical evidence to support previous research, which claims that young and older adults' speech styles differ as a function of their communicative goals (Giles et al., 1991; Hymes, 1972; Labov, 1969), and that these goals can shape the style of discourse a person may choose to utilize in different contexts (Hummert, 1994; Kemper, 1994; Ryan et al., 1986). My studies quantified young and older adults' communicative goals, which differed as a function of the type of autobiographical narratives they intended to tell. In addition, young and older adults demonstrated differential capabilities for meeting as well as altering their goals, i.e., using goals that were not their own.

Hypothesis 1 of the present study addressed the question of whether young and older adults' communicative goals differed as a function of age and topic type. The results of Experiment 1 suggest that young adults' communicative goals were shaped by the topic of discourse more so than older adults, who selected almost identical goals for both topic types. Furthermore, older adults consistently favored a more comprehensive set of communicative goals than did young adults, regardless of the topic of discourse that they planned to produce. This research extends the predictions of the pragmatic change hypothesis by suggesting that not only do young and older adults' communicative goals differ, but age-related differences in speech styles may also be a function of older adults' relatively comprehensive goals. Older adults may hold more communicative goals than young adults because the variety of goals they hold enable them to tell more enjoyable stories than young adults (e.g., Ryan et al., 1992; Kemper et al., 1990) as well as more interesting, informative, and higher-quality stories (e.g., James et al., 1998). Older adults may recognize the value of holding multifaceted goals as a result of their increased experience and practice with telling stories, relative to young adults, who

may still be developing their communicative goals and story-telling skills (e.g., Boden & Bielby, 1983; Kemper, 1992).

The different pattern of results found for young and older adults' selection of goals provides evidence for the pragmatic change hypothesis, which states that young and older adults hold different goals, which in turn results in the use of different speech styles. There are several possible explanations for why older adults have different communicative goals than young adults. One is that through years of practice and experience, older adults are more confident about their communicative goals, and rather than tailoring their goals to the specific topic of conversation, they prefer to adapt the discourse topic to fit their communicative goals, which are well-engrained, easy to invoke, and typically lead to high-quality stories. This explanation is supported by older adults' superior story telling ability, (e.g., James et al., 1998; Kemper et al., 1989; Kemper et al., 1990; Prat et al., 1991), which indicates that older adults know which goals make for a good story, and therefore choose to utilize these goals across multiple discourse topics. Another explanation is that selecting goals on the basis of topic is an extra burden placed on working memory during speech production, so older adults default to a single set of goals to allow them capacity to focus on the content of what is to be recalled (e.g., Stoltzfus et al., 1996; Zacks & Hasher, 1994). However, if older adults use only one set of goals, then their speech styles should be identical for all types of discourse, but previous research has contradicted this claim (e.g., James et al., 1998).

Hypothesis 2 of my study was concerned with age differences in the ability to meet goals that were of primary value to both young and older adults, and this hypothesis was addressed in Experiment 2. Young and older adults both reported clarity as one of their primary goals for procedural topics, and the results showed that young adults were better at meeting this goal than

older adults. This finding was consistent with the inhibitory deficit hypothesis, which maintains that older adults cannot inhibit irrelevant information from being produced, which in turn sacrifices the clarity of their narratives (e.g., Arbuckle & Gold, 1993; Stoltzfus et al., 1996; Zacks & Hasher, 1994). However, this explanation cannot explain why older adults' narratives were as clear as young adults' narratives for episodic topics. Perhaps young adults' superior ability to produce a clear narrative for procedural topics is a function of older adults' more comprehensive set of goals. Older adults may tell a narrative that is not quite as clear as young adults' narratives in order to meet the additional goals they may hold (e.g., telling an interesting story). This explanation is also consistent with previous research, which found that young adults typically produced clearer narratives while older adults produced more interesting narratives (e.g., James et al., 1998).

When telling an episodic narrative, elaborativeness was reported by both young and older adults as being a primary goal, and now older adults were better than young adults at meeting this goal. The inhibitory deficit hypothesis would explain this finding by suggesting that older adults' inability to inhibit extraneous information from being produced would allow them to tell narratives that are more elaborative (e.g., Arbuckle & Gold, 1993; Stoltzfus et al., 1996; Zacks & Hasher, 1994). However, adding irrelevant information should decrease the clarity of the narratives, but older adults' episodic narratives were rated as clear and easy to follow as narratives produced by young adults. Since older adults' goal of elaborativeness did not sacrifice the clarity of their narratives relative to young adults, it is unlikely that their elaborativeness came from irrelevant information and instead resulted from additional details relevant to the topic. It is noteworthy that young adults listed elaborativeness overwhelmingly as a primary goal for episodic topics, but they received relatively low ratings on this dimension by both young and

older raters. This finding suggests that although young adults value elaborativeness, they are not very good at including details and expanding on ideas in their narratives. Perhaps an elaborative speech style is developed throughout the life span and becomes more pronounced with aging, or perhaps the idea of what elaborativeness consists of changes over time.

At first glance, the findings related to Hypothesis 2 also appear to contradict the predictions of the pragmatic change hypothesis, which maintains that speech styles are a function of communicative goals (e.g., Boden & Bielby, 1983; Giles & Coupland, 1991). If young and older adults both hold clarity and elaborativeness as their primary goals for procedural and episodic topics respectively, then the pragmatic change hypothesis would predict no differences in speech styles. The results of the present research did find differences in speech styles. However, it is important to recall that while young and older adults had one of their primary goals in common for both topic types, they did not share all of their goals. Therefore, the goals that were different for young and older adults may be the cause of age-related differences in the ability to meet their shared goals, which is consistent with the pragmatic change hypothesis.

Hypothesis 3 of the present study was concerned with young and older adults' ability to inhibit their original goals in order to meet a goal that was specified for them. When instructed to accept new goals, both young and older adults were capable of becoming less talkative and elaborative for episodic topics, but young adults were better than older adults at meeting this goal. The results also showed an ability to alter speech styles for procedural topics, but only for young adults, who increased their level of talkativeness and elaborativeness. In contrast, older adults showed no increase in their elaborativeness and were only marginally more talkative on procedural topics, following instructions to alter their goals. These findings support the inhibitory deficit hypothesis, which states that older adults' difficulty with inhibiting information

would hinder their ability to alter their goals (e.g., Arbuckle & Gold, 1993; Stoltzfus et al., 1996; Zacks & Hasher, 1994). However, although young adults were better at altering their goals, older adults also showed some inhibition of their desire to be elaborative in order to meet an alternate goal. This finding, particularly the ability to become more concise (which is in direct opposition with the idea of increased OTS with age), suggests that older adults' inhibition deficits may not be as severe as previous literature suggests (e.g., Arbuckle & Gold, 1993; Stoltzfus et al., 1996; Zacks & Hasher, 1994).

The present study did not investigate OTS directly; however, several aspects of the results speak to previous OTS literature. Dimensions including focus (defined as staying on topic) and logical (defined as sensible and coherent) were used to shed light on the issue of OTS in the present study. As defined by Arbuckle et al (1993), OTS is speech lacking in focus and coherence. Furthermore, Arbuckle et al. (2000) proposed that OTS is caused by the intrusion of irrelevant personal information, such as in a conversation about autobiographical subject matter. If older adults were to have more OTS than young adults in the present study, then they would have been rated lower on the focus and logical dimensions than young adults.

Interestingly, the results of the present study show that for episodic topics similar to those used in previous studies, young and older adults were rated as equally focused and logical, suggesting that older adults did not have more OTS than young adults for these types of topics. These results are inconsistent with the inhibitory deficit hypothesis, which predicts that older adults would have more OTS than young adults due to their inability to inhibit random thoughts and topics from coming out in their stories. The results are also inconsistent with previous studies claiming that older adults have more OTS and less effective communication skills than young adults (e.g., Arbuckle et al., 2000; Glosser & Deser, 1992). However, the results could

potentially be reconciled with previous work if the definition of OTS was measured purely in terms of listeners' perceptions of how well young and older adults' narratives remained focused and coherent across studies.

The results of the present studies were also inconsistent with James et al.'s (1998) findings that young raters rated older speakers as less focused than older speakers, whereas older raters rated them as equivalently focused. There was no effect of rater age on focus ratings in the present experiment for either topic type. This finding could be related to the method used to present the narratives. In James et al. (1998), participants read written forms of the narratives, whereas they listened to orally-presented narratives in the present study. Perhaps hearing a story is a more comparable experience for young and older raters because they perceive the information presented in the exact same way (e.g., voice, intonation, prosody, emphasis on particular words, etc.) and use these auditory cues to adopt similar criteria for what constitutes focus. In contrast, when reading narratives, young and older adults do not have the advantage of these auditory cues and may process the texts differently, which could ultimately affect whether they view information in the narrative to be on-topic (i.e., focused). In sum, the findings of the present research provide evidence against the OTS literature, which suggests that older adults are more prone to producing speech that lacks in focus and coherence (e.g., Arbuckle & Gold, 1993; Gold et al., 1988; Gold & Arbuckle, 1995; Gold et al, 1994). The present results suggest that older adults are not necessarily producing OTS, but rather speech that is in line with their communicative goals, which have been developed through a lifetime of experience with what makes for a good story.

In contrast to episodic topics, older adults were rated as being less focused than young adults for procedural topics, but they were also rated as being equivalently logical. Perhaps

procedural types of narrative have a more stringent definition of what is considered on topic, as listeners may not have expected much personal information for this topic. These findings also speak to the subjectivity of deciding what should and should not be considered off topic. For example, young speakers may have viewed personal anecdotes as off-topic for procedural topics, whereas older speakers may have viewed them as germane to the topic, given that they were grounded in an autobiographical memory. When presented with a procedural topic, older adults valued telling a fascinating story to the same extent as telling a focused narrative, so it is possible that their ratings on focus may have been compromised by their additional goal of being fascinating, similar to the earlier claim of sacrificing clarity for interest when telling procedural narratives. This finding supports the pragmatic change hypothesis, which suggests that age differences in speech styles, such as the ones seen in the present study, are due to a difference in communicative goals held by young and older adults (e.g., Boden et al., 1983; Giles et al., 1991).

Future research should continue to explore the differences, both actual and perceived, between young and older adults' speech styles. The present research shows that communicative goals vary greatly with age, and that despite the negative beliefs about older adults' speech styles (e.g., Arbuckle & Gold, 1993; Glosser & Deser, 1992; Gold et al., 1988; Gold & Arbuckle, 1995; Gold et al., 1994), they are considered superior story-tellers (e.g., Ryan et al., 1992; Kemper et al., 1990; James et al., 1998). Future research might explore what types of factors make for a good story and whether these factors can be traced back to the speakers' communicative goals. Furthermore, investigating whether good story-telling is a skill than can be taught, or whether it only comes with years of practice and experience, is another question for future exploration. Finally, future research on OTS needs to address the issues of differing communicative goals found in the present studies. Continuing to promote the idea that OTS is an issue related to

cognitive decline with old age (e.g., Zacks et al., 1994), without accounting for other studies finding no age differences in OTS, is problematic, as it unfairly endorses negative beliefs about older adults' language skills.

The current studies had several limitations. One is the inclusion of a lenient definition for “older” when defining older adults. There may be important differences with respect to communicative goals held, the ability to meet goals, the ability to alter goals, and in OTS, among people who are in their 60s, 70s, and 80s, which were not captured in the present research. Future research may look at differences among adults in their 60s, 70s, and 80s, and whether those potential differences reveal a pattern of results different from what was found in the present research. Perhaps differences more in line with the inhibitory deficit Hypothesis will be found in the oldest-old (i.e., ages 80 and above) of the population, when cognitive declines may be more prominent (e.g., Zacks & Hasher, 1994). The oldest-old may have more difficulty with selecting appropriate goals to suit the speech style for the discourse they intend to produce. They may also be less successful than younger adults in meeting their chosen goals, and they may be unable to alter their goals at will, due to an inefficient inhibition system caused by their increased age (e.g., Stoltzfus et al., 1996; Zacks & Hasher, 1994). Older adults over age 80 are also more likely to have dementia that has not yet been diagnosed, so it is important to separate healthy older adults from adults with pathological diseases when testing this age group.

Another limitation of the current research is the failure to take into account both personality and social characteristics when assessing young and older adults' communicative goals and speech styles. For example, people with extraverted personalities and large social networks may have a different way of communicating than introverted people with smaller social networks, and their speech styles may differ as a function of their personalities and social

circumstances even when holding the same communicative goals. Similarly, gender of speaker and listener could play an important role in assessing differences in speech styles, as could cultural backgrounds. In addition to cognitive factors, future research investigating communicative goals and OTS across the lifespan should also include personality traits and social factors, such as extraversion, socioeconomic status, size of social network, etc., which could potentially influence speech styles.

The present research is also limited in that it only explored a small subset of possible communicative goals. Other goals may be important for understanding age-related differences in speech styles. For example, humor might be an interesting dimension to investigate, as it could potentially influence (both positively and negatively) how narratives are produced as well as perceived. Young and older adults are likely to have different sense of humors, and even within these groups, individuals' senses of humor vary greatly. Additionally, pragmatic goals, such as including the listener in the discourse by making eye-contact, asking questions, and encouraging feedback, should be explored to assess their effects on speech styles and effectiveness on listener ratings.

A final limitation is that the speakers' narratives were not analyzed directly. An important follow-up to the present research is to analyze different components of the narratives produced by the speakers. For example, narratives with procedural topics could be analyzed in terms of their inclusion of personal information and reminiscence to explore whether older adults did indeed include more autobiographical information than young adults, as suggested by their communicative goals. Additionally, narratives could be analyzed in terms of the types of information young and older adults chose to eliminate when told to be concise, as well as the types of information they chose to expand upon when told to be elaborate. This information

would reveal the information that young and older adults consider vital versus superfluous to their narratives, which would be useful for gaining insight about what makes a good story.

In sum, the purpose of the present research was to shed light on communicative goals held by young and older adults and the ways in which these goals affect how each age group conveys information of an autobiographical nature. Communication is arguably one of the most important aspects of everyday life and is universally utilized across the lifespan. Communication is not only necessary for the concise exchange of information, but it also allows for a chance to reminisce about one's life. The present research suggests that older adults' ability to communicate is enhanced by their selection of goals, and when elaboration is encouraged, we become more capable of meeting our goals as we age. Thus, contrary to negative perceptions about older adults' speech, older adults have some advantages in their production of discourse.

APPENDIX A  
PARTS 1 & 2 OF PILOT QUESTIONNAIRE

Part 1:

Communication is an extremely important part of our everyday lives. The goal of communication is essentially to transmit or share ideas or information. Everyone has their own individual communicative goals, and we are interested in finding out what yours are.

This questionnaire assesses your communicative goals in telling a narrative about your daily routine. Close your eyes for a minute and recall one of your daily routines, such as getting ready in the morning, or getting ready for bed at night. Try to picture yourself going through one of your daily routines and imagine describing this routine to a new person that you have just met. Which communicative goals would be important for you to convey when telling this type of narrative? Please list at least 4 communicative goals in order of their importance to you.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

Part 2:

This questionnaire assesses your communicative goals in telling a narrative about an episode in your life. Close your eyes for a minute and recall a memorable event in your life, such as a memorable vacation you have taken or a memorable party you have attended. Try to picture yourself being back at that event, and imagine describing this event to a new person that you have just met. Which communicative goals would be important for you to convey when telling this type of narrative? Please list at least 4 communicative goals in order of their importance to you.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

APPENDIX B  
PARTS 3 & 4 OF PILOT QUESTIONNAIRE

Part 3:

On the following questionnaire, we are interested in finding out how you would rate specific communicative goals in terms of their importance to you when telling a narrative about your daily routine.

Close your eyes for a minute and recall one of your daily routines, such as getting ready in the morning, or getting ready for bed at night. Try to picture yourself going through one of your daily routines and imagine describing this routine to a new person that you have just met. On the following pages you will see a list of communicative goal pairs. Please circle a number between 1 and 7 for each communicative goal pair, based on which one of the two communicative goals listed is most important to you when telling a narrative about your daily routine.

Here is an example:

Complex	1	2	3	4	5	6	7	Relevant
telling a narrative that is multifaceted								telling a narrative that is personally meaningful

How do you determine which number to circle?

In this example, the numbers 1, 2, and 3 represent valuing telling a Complex narrative more than telling a Relevant narrative, with the number 1 indicating the strongest value on telling Complex narratives. The numbers 5, 6, and 7 represent valuing telling a Relevant narrative more than telling a Complex narrative, with the number 7 indicating the strongest value on telling Relevant narratives. The number 4 should be circled if you value both communicative goals equally.

Please begin circling on the next page



Circle a number between 1 and 7 for each of the following communicative goal pairs:

Clarity telling a narrative that is understandable, straightforward, and unambiguous	1	2	3	4	5	6	7	Interest telling a narrative that keeps the listener's attention and makes the listener want to hear more
Fascinating telling a narrative that is intriguing and contains unique information	1	2	3	4	5	6	7	Focus telling a narrative that stays on topic
Comprehensible telling a narrative that makes sense and is easy to follow	1	2	3	4	5	6	7	Elaborative telling a narrative full of details and expanding on ideas
Entertaining telling a narrative that is amusing to listen to	1	2	3	4	5	6	7	Simple telling a narrative without frills, using little or no elaboration
Logical telling a narrative that is sensible and coherent	1	2	3	4	5	6	7	Stimulating telling a narrative that is thought-provoking
Humorous telling a narrative that is funny and amusing	1	2	3	4	5	6	7	Honest telling a narrative that is sincere and serious
Educational telling a narrative that is instructive and enlightening	1	2	3	4	5	6	7	Objective telling a narrative that without expressing personal feelings and opinions
Emotional telling a narrative while showing a range of emotions	1	2	3	4	5	6	7	Imaginative telling a narrative that is creative and original

Part 4:

On the following questionnaire, we are interested in finding out how you would rate specific communicative goals in terms of their importance to you when telling a narrative about a memorable event in your life.

Close your eyes for a minute and recall a memorable event in your life, such as a memorable vacation you have taken or a memorable party you have attended. Try to picture yourself being back at that event and imagine describing this event to a new person that you have just met. On the following page you will see a list of communicative goal pairs. Please circle a number between 1 and 7 for each communicative goal pair, based on which one of the two communicative goals listed is most important to you when telling a narrative about a memorable event in your life.

Here is an example:

Complex	1	2	3	4	5	6	7	Relevant
telling a narrative that								telling a narrative that
is multifaceted								is personally meaningful

How do you determine which number to circle?

In this example, the numbers 1, 2, and 3 represent valuing telling a Complex narrative more than telling a Relevant narrative, with the number 1 indicating the strongest value on telling Complex narratives. The numbers 5, 6, and 7 represent valuing telling a Relevant narrative more than telling a Complex narrative, with the number 7 indicating the strongest value on telling Relevant narratives. The number 4 should be circled if you value both communicative goals equally.

Please begin circling on the next page



Circle a number between 1 and 7 for each of the following communicative goal pairs:

Clarity telling a narrative that is understandable, straightforward, and unambiguous	1	2	3	4	5	6	7	Interest telling a narrative that keeps the listener's attention and makes the listener want to hear more
Fascinating telling a narrative that is intriguing and contains unique information	1	2	3	4	5	6	7	Focus telling a narrative that stays on topic
Comprehensible telling a narrative that makes sense and is easy to follow	1	2	3	4	5	6	7	Elaborative telling a narrative full of details and expanding on ideas
Entertaining telling a narrative that is amusing to listen to	1	2	3	4	5	6	7	Simple telling a narrative without frills, using little or no elaboration
Logical telling a narrative that is sensible and coherent	1	2	3	4	5	6	7	Stimulating telling a narrative that is thought-provoking
Humorous telling a narrative that is funny and amusing	1	2	3	4	5	6	7	Honest telling a narrative that is sincere and serious
Educational telling a narrative that is instructive and enlightening	1	2	3	4	5	6	7	Objective telling a narrative that without expressing personal feelings and opinions
Emotional telling a narrative while showing a range of emotions	1	2	3	4	5	6	7	Imaginative telling a narrative that is creative and original



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## BIOGRAPHICAL SKETCH

Dunja Trunk was born in Denmark and relocated to Pennsylvania with her family when she was 11 years old. She received her BA in psychology from Indiana University of Pennsylvania in 2002. Dunja received her MS in 2004 and her PhD in 2007, both in cognitive psychology, from the University of Florida. After graduation, Dunja will begin her academic career as an assistant professor of psychology at Bloomfield College.