FAMILY CONVERSATIONS ABOUT END-OF-LIFE HEALTH DECISIONS

BY

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DISSERTATION

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ABSTRACT

Communicating about end-of-life decisions can be one of the most challenging and consequential experiences individuals and their families can face. A great deal of end-of-life research is predicated on the reasoning that family communication is critical to the delivery of effective advance care, but there is not a lot of clear evidence that simply talking with family members about end-of-life issues improves the end-of-life experience. Previous work on end-of-life communication has largely assumed that more communication is better communication. The present investigation sought to challenge this assumption by demonstrating that the *quality* of family communication about end-of-life decisions matters. In this study, a multiple goals theoretical perspective was used to explain how different ways of attending to interaction goals in end-of-life decision making can yield more or less favorable outcomes. Members of 121 older parent-adult child dyads ($N = 242$) completed a conversational task in which they were asked to discuss end-of-life health decisions. The elicited conversations were rated for several aspects of communication quality, including attention to identity goals (i.e., positive face and negative face), attention to relational goals, and attention to task goals (i.e., low avoidance and high elaboration). Participants also completed a questionnaire in which they reported their perceptions of interaction goals and assessments of the conversation. Results demonstrated that outside ratings of a person's communication sophistication were associated with that person's report of as well as the partner's report of conversation outcomes, including emotional response, decision-making efficacy, conversational satisfaction, and relational distancing. The rated quality of an individual's communication was also associated with the individual's perceptions of their own and their partner's interaction goals, as well as the partner's perceptions of interaction goals. Perceived interaction goals (i.e., positive face goals, negative face goals, relational goals,

avoidance goals, support goals, and influence goals) were also related to the reported outcomes of the conversation. These findings indicate that enacted goal attention and perceived goal attention consistently predict favorable outcomes in family conversations about end-of-life health decisions. Theoretically, the results reinforce the utility of a multiple goals perspective as a theory of message interpretation, suggesting a new direction for multiple goals research, which has tended to focus on message production. Practically, the findings imply that end-of-life conversations in families are most effective when family members are able to address the primary task of engaging in end-of-life talk while also adequately attending to the relevant identity and relational implications of such conversations.

For Grandpa and his trifecta

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I am most thankful for my family, without whose help there would be no acknowledgements to write. Katie was quick to offer encouragement when I felt overwhelmed. Bethany called each day on her way to work to celebrate my daily progress (and she eagerly conducted several research sessions). My parents so substantially supported this project that my dissertation belongs to them as much as it does to me. My dad drove all over Denver, Chicago, and southern Florida facilitating back-to-back-to-back research sessions, he shouldered the bulk of transcribing the 41 hours of recorded conversation, and he funded much of this endeavor in seen and unseen ways. He has always pushed me to do my best, and in this project, like so many other instances in my life, he has made my best possible. My mom walked every exciting and exhausting step of this study with me. At one point, her help, which never reached a limit, found her sitting on a portable bed pan to administer questionnaires. She is one of few people who has mastered the art of providing invisible support, which she lavished on me during this project.

My grandpa, George Norton, was born into a family of plumbers, and despite his desire to attend college to study music, he was forced into the family trade. Although he never had the opportunity of higher education, he worked hard to put my grandma through school to earn a doctorate in education and to put my aunt through to earn a doctorate in music. He was thrilled when I was accepted to graduate school and spoke often about having three generations of

doctors in the family — what he called his "trifecta." During my first year of graduate studies, he passed away from lung cancer, which he developed partly from years of exposure to asbestos in his work as a plumber. But he knew that I would eventually complete his trifecta. This dissertation is dedicated to him.

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CHAPTER ONE: Introduction

Communicating about end-of-life decisions is not a straightforward process. Not only are there numerous life-sustaining treatments to consider, but talking about end-of-life care raises interrelated and potentially conflicting identity and relational concerns as well. Advance care planning is one of the most prevalent issues in healthcare, and it is also one of the ripest areas for improvement (Council on Scientific Affairs, 1996). The process of making end-of-life decisions can be physically, psychologically, and relationally taxing because such decisions are among the most challenging and consequential choices individuals and their families can face. When end-of-life issues are not addressed adequately before a person's death is imminent, the lack of knowledge about the person's preferences, compounded by the need to make many decisions in a short amount of time, can severely compromise the quality of the person's end-of-life care and the well-being of the person's family members (e.g., Tilden, Tolle, Nelson, & Fields, 2001). When advance care issues are successfully addressed, however, an individual's end-of-life experience often entails less stress and greater meaning for all involved (e.g., Wright et al., 2008).

Recognizing the need to improve end-of-life decision making, the Robert Wood Johnson Foundation funded the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment (SUPPORT; SUPPORT Principal Investigators, 1995). This landmark multisite, multimillion dollar study of advance care planning was conducted in two phases. In the first phase, researchers used observation to examine the state of end-of-life care in hospitals and found substantial inadequacies in the quality of care most people received: 53% of doctors were unaware of their patient's preference to avoid CPR, 49% of patients who indicated a desire to avoid CPR did not have a do-not-resuscitate (DNR) order written, and 50% of patients

experienced moderate to severe pain in the last three days of life. In the second phase, researchers implemented an intervention to improve the quality of patients' end-of-life care by facilitating communication among patients, their families, and physicians. The intervention failed. There was no improvement in physician awareness of patient preferences concerning CPR, the incidence of written DNR orders, or the level of pain reported.

The failure of the SUPPORT initiative is likely the result of researchers trying to understand communicative phenomena without attending to communicative processes. The intervention was based on the mistaken assumption that more communication yields better communication and therefore focused on increasing the frequency of family conversations about end-of-life issues without attending to the quality of the conversations. Although scholars have widely acknowledged the importance of effective communication to the provision of quality advance care, little is known about what counts as effective communication about end-of-life decisions. Consequently, many provoking empirical questions remain to be investigated: How might communication influence the end-of-life choices individuals make? Are some ways of talking about advance care better than others? Is the quality of end-of-life conversations related to people's well-being? End-of-life decision making thus presents communication scholars with a valuable opportunity to substantively improve what is, for many people, one of the most demanding and profound experiences to face.

This dissertation describes a study of family conversations about end-of-life health decisions in which a multiple goals theoretical perspective was used to explain how different ways of attending to interaction goals in end-of-life decision making are more or less effective. In Chapter Two, the literature relevant to end-of-life decision making in families is reviewed. The theoretical frameworks, research question, and hypotheses that guide this study are

presented in Chapter Three. The method used to conduct this research is described in Chapter

Four, and the results are summarized in Chapter Five. Finally, in Chapter Six, the findings,

contributions, and limitations of this project are discussed.

CHAPTER TWO: Literature Review

End-of-life communication is a contextualized process. The distinct and variable meanings of communicative practices are informed by the contexts in which particular practices occur. Thus, it is important to consider the backdrop against which advance care planning takes place as well as the elements that define end-of-life talk as a communicative practice. In this chapter, literature on the context and process of end-of-life decision making is reviewed. First, aging and family processes are examined as the background against which advance care planning occurs. Second, the communication practice of end-of-life decision making is described by focusing on specific advance care choices as well as the role that advance directives and surrogate decision makers play in implementing those choices. Throughout the chapter, the complexities that arise in understanding conversations about end-of-life health decisions as well as the need for more research on advance care planning in families are considered.

The Context of End-of-Life Decision Making

End-of-life decisions are most commonly made in later life and in consultation with family members. Situating advance care planning in the communicative contexts of aging and the family provides perspective on why conversations about end-of-life care can be so difficult.

Communication and Aging

End-of-life decision making typically takes place against the backdrop of aging. The same medical advances that have made it possible for many individuals to choose the manner, timing, and place of their death have also yielded an older population. Late in the twentieth century marked the first time in global history that people over the age of 65 outnumbered the people under the age of 18 (Nussbaum, Pecchioni, Robinson, & Thompson, 2000), but despite this shifting demography, age remains a point of social inequality in American culture

(Coupland, 2004), which can undermine older individuals' ability to effectively interact with others. Communication is central to end-of-life decision making, and given that advance care choices become increasingly salient as people age, communication patterns related to aging are relevant to any discussion of end-of-life decision making.

Older age typically is accompanied by cognitive and physiological changes that affect several aspects of people's communication, including linguistic production and topics of discussion. These changes can make older people's communication challenging, which has implications for end-of-life decision making. First, age influences how language is produced. Impaired acoustic voice signals often cause older voices to sound rougher (Verdonck-de Leeuw & Mahieu, 2004), and the ability to produce phonological sounds can weaken with age (Burke & Shafto, 2004). In addition, adults in later life experience higher rates of verbal disfluency (Mathuranath et al., 2003), greater difficulty with word retrieval (Kave, Samuel-Enoch, & Adiv, 2009), and more frequent tip-of-the-tongue experiences (Shafto, Burke, Stamatakis, Tam, & Tyler, 2007) than do young adults. Such language production troubles can interrupt the conversational flow and cause older people to question their communication competence (G. Cohen, 1994) even though linguistic declines are not necessarily related to declines in communication competence (Light, 1988).

Older people also are more likely to experience a number of illnesses that can leave individuals with limited cognitive or physical ability to communicate. For instance, stroke patients frequently experience aphasia, or the loss of the capacity to speak or understand others' speech (Ross & Wertz, 2001), people with probable Alzheimer's disease or other forms of dementia often lose linguistic organizational abilities which can make interpretation of meaning difficult (Ellis, 1996), and individuals with Parkinson's disease can experience the inability to

demonstrate facial expressions (e.g., Tickle-Degnen & Lyons, 2004). A communication-impairing illness can make interaction challenging for the debilitated individual, who may experience frustration or sadness over the lost ability to converse, as well as for conversational partners, who may experience uncertainty about what to say or difficulty concealing distress (Lyons, Sullivan, Ritvo, & Coyne, 1995). People who talk with a person who has experienced a communication-debilitating illness commonly must adjust the mechanics of their communication (e.g., using or acting as an intermediary), infer meaning based on limited cues from the patient (e.g., interpreting verbal and nonverbal signals), or avoid certain topics altogether (Baxter, Braithwaite, Golish, & Olson, 2002; Bute, Donovan-Kicken, & Martins, 2007). Such communication challenges associated with aging can complicate the already complex task of talking about end-of-life issues.

Although older age can pose a number of communication difficulties, individuals do not uniformly lose linguistic abilities with age. Some older adults retain full use of their language skills. Furthermore, aging does not negatively affect all areas of linguistic processing and production. Language comprehension (Wingfield & Grossman, 2006), semantic knowledge (Little, Prentice, & Wingfield, 2004), and narrative skill (Kemper, Rash, Kynette, & Norman, 1990) tend to be well-preserved in later life; however, the general tendency for older people to experience some linguistic decline suggests that end-of-life decisions may be most fruitfully discussed before an older individual no longer has complete access to linguistic resources. Making decisions about end-of-life care before a person is unable to fully participate in such choices due to deteriorating linguistic capability can significantly reduce the difficulty of advance care planning (Dunstan, 1996).

Second, some conversational topics are more salient in later life than in youth, and these topics can make communication difficult. For example, Coupland, Coupland, Giles, Henwood, and Wiemann (1988) observed that older people are more likely than younger people to reveal personally painful information, such as poor health, loneliness, or financial difficulty. Although such disclosure generally is considered typical of older adult behavior (Coupland, Henwood, Coupland, & Giles, 1990), painful self disclosures also are sometimes regarded as "communicative grenades" (Barker, Giles, & Harwood, 2004, p. 144) that create awkward and potentially conflictive situations (Bonnesen & Hummert, 2002). Individuals who receive painful self disclosures tend to give minimal responses or to deflect the difficult conversation topics in order to avoid acknowledging the implications of the disclosures or to avoid conflict (Coupland, Coupland, & Giles, 1991). Such responses further contribute to the difficulty of the conversation and can lead to decreased intimacy and poorer health for the older individual and the disclosure recipient (Grainger, Atkinson, & Coupland, 1990).

Older people also are more likely than younger people to talk about dying and death. In American culture, death is considered a taboo conversational topic. People tend to be uncomfortable with the process of dying, and not talking about death makes its implications easier to ignore (Kubler-Ross, 1969). The general difficulty of discussing death takes concrete form in talking with a dying individual. People often limit the quantity and quality of communication with a dying person because such interaction is distressing, but this can result in the dying person's "social death," in which others treat the person as though physical death has already occurred (Kalish, 1976, p. 496). In fact, talking about death appears to be beneficial for dying people as well as their survivors (Keeley, 2007). Frank discussion of death can dispel the anxiety surrounding the topic and the stigma accorded the dying person (Nuland, 1993), facilitate

individuals' pragmatic response to death and deepen their sense of meaning in life (McQuellon & Cowan, 2000), and lead to higher levels of happiness in survivors after the person's death (Kramer, 1997). There is evidence that death anxiety is strongest when people are in their twenties and fifties (i.e., a bimodal peak) and then decreases in later life (Russac, Gatliff, Reece, & Spottswood, 2007). This suggests that older people may be more comfortable talking about end-of-life choices than are their younger relatives, whose discomfort may make the conversations challenging.

Family Communication

Advance care planning also takes place against the backdrop of the family. Family communication and health are mutually influential (Pecchioni, Thompson, & Anderson, 2006): How families talk about different topics can affect the health of family members, and people's health can shape their family interaction. Health-related decisions often are made in the context of the family (Fitzpatrick, 1990), and the way families negotiate such decisions impacts the health of their members and patterns of family interaction. Thus, a richer understanding of the process of end-of-life decision making entails consideration of several aspects of people's family communication, including family roles, decision-making patterns, social support, and conflict.

The way families interact is affected by family roles, or identity-related patterns of behavior and obligation that family members assume through interaction with one another (Schumacher, 1995). When established roles are maintained, family communication patterns typically remain unchanged, but when roles shift due to changing circumstances (e.g., a decline in the health of one family member), changes in family interaction ensue (Hummert & Morgan, 2001). Many people have a difficult time adjusting to changes in family roles. For instance, the deteriorating health of a parent may force an adult child to blend competing expectations of

different roles into a single role (e.g., the role of family caregiver entails the roles of employee, care provider, and family member; N. F. Marks, 1998) or to assume an unwanted role (e.g., decision maker for an incapacitated parent). At the same time, an older parent may experience the loss of a valued role, such as being an autonomous decision maker (Bosworth et al., 2004) or unwelcome role reversal, such as being cared for by a child (Mottram & Hortacsu, 2005).

Family roles are often renegotiated when family decisions must be made, making conversations about end-of-life choices difficult. An adult child must balance the autonomy of an aging parent and the need to protect the parent from making poor choices (Cicirelli, 1992). An older parent must wrestle with the paradoxical nature of independence in later life, when maintaining certain kinds of independence (e.g., physical, social, economic) often requires assistance from adult children (Hummert & Morgan, 2001). Dilemmas of this sort illustrate how advance care planning can entail far more than simply reaching a decision; identities are being lost, created, resisted, and embraced.

Family communication patterns are also related to the way families approach decision making. Family decision making can be an explicit or implicit process (Sillars & Kalbfleisch, 1989). Explicit decision making is marked by open expression, active problem solving, and direct verbal agreements. Conversely, families who employ implicit decision making tend to avoid open conflict and rely on silent arrangements in which decisions evolve incrementally over time. The way that families make decisions can have profound implications for the physical, psychological, and social well-being of all family members (Lieberman & Fisher, 1999). There is evidence that families in which members share decision-making power (Cubbins & Szaflarski, 2001) and demonstrate a high level of engagement in the decision-making process (Neely-Barnes, Graff, Marcenko, & Weber, 2008; Reinardy, 1992) tend to have healthier members. In

addition, families whose members use positive influence strategies (e.g., showing interest)

during decision making experience greater intimacy, whereas families in which negative

influence strategies (e.g., getting angry) are used experience less intimacy (Pratt, Jones-Aust, &

Pennington, 1993). These findings suggest that the way end-of-life decision making is

approached in families has the potential to improve or impair people's health and relationships.

Social support (i.e., what people say and do to help others; Goldsmith, 2004), from

family members can have a protective effect on individuals' health. Family support can buffer

the negative impact of stress by facilitating adaptive coping (Manne et al., 2003), sense-making

(J. Harwood, Raman, & Hewstone, 2006), mental health (Serovich, Kimberly, Mosack, & Lewis,

2001), preventative behaviors (Allen, Stoddard, & Sorensen, 2008), and adherence to treatments

(Edwards, 2006). Despite this protective effect, supportive communication in families can be

problematic for all members (Goldsmith, 2004). For example, family support can make a

person's adjustment to illness more difficult by inhibiting uncertainty management (Brashers,

Neidig, & Goldsmith, 2004), and expressions of care and concern from family members can

promote excessive dependence in an older person (see Grainger, 2004). Furthermore, supporting

a person has been related to family members' poorer physical health, including weaker immunity

and greater susceptibility to infectious illness (Fuller-Jonap & Haley, 1995; Kiecolt-Glaser,

Dura, Speicher, Trask, & Glaser, 1991), psychological distress, including depression and anxiety

(D. G. Harwood, Barker, Ownby, & Duara, 2000; Schrag, Morley, Quinn, & Jahanshahi, 2004),

and social isolation (Minkler & Roe, 1996). These complications of support are particularly

pronounced in the situation of family caregiving. An older person's failing health often requires

elevated levels of support in daily tasks (e.g., housekeeping, transportation) as well as periodic

enterprises (e.g., medical appointments). People typically want to care for aging family members

themselves, but this caregiving goal is achieved at an expense to the caregiver, to the person who is cared for, and to the family: Caregiving burden has been associated with caregiver depression and mortality, further mental and physical decline in the older person, dysfunction in family roles, and strained family interaction (Schulz & Beach, 1999; Tremont, Davis, & Bishop, 2006).

This research on social support in families suggests that such support can buffer against the stress incurred by conversations about end-of-life choices, but it can also complicate the decision-making process. Receiving assistance from an adult child can necessitate role renegotiation, receiving unhelpful support can raise questions about relational stability, and witnessing the toll of caregiving on family members may prompt an ill person to forego life-sustaining treatment, even if such treatment would be requested were the burden of caregiving not a factor in the decision (Singer, Martin, & Kelner, 1999).

Finally, the way families handle conflict has implications for advance care planning. End-of-life decision making often entails intergenerational interaction, and the differences in the way generational cohorts manage conflict can complicate the process. There is evidence that older people tend to rate potential sources of conflict as less problematic than do younger people (Levenson, Carstensen, & Gottman, 1993), and they tend to be more noncommittal during conflict than younger individuals (Zietlow & Sillars, 1988). In addition, older adults may be likely to avoid conflict because disputes can be stressful on their health (Heffner et al., 2006). This research suggests that older individuals tend to address conflict less aggressively than their younger relatives, which could make it less probable that an older person's end-of-life wishes will be followed in the event of a disagreement between the person and younger family members.

The profundity of end-of-life choices makes advance care planning ripe for conflict, even in well-functioning families (King & Quill, 2006). People can disagree about how a decision should be made as well as which decision should be made (Watkins, Sacajiu, & Karasz, 2007). Value conflicts are especially difficult to resolve because people rarely are able to articulate their ethical positions and usually respond emotionally when discussing values (Ditto, 2009). Individuals in families who do not manage conflict well can experience debilitating consequences, including a diminished capacity to make decisions, compromised physical and psychosocial well-being, and unwanted hospital deaths (Siminoff, Rose, Zhang, & Zyzanski, 2006; Tang, Liu, Lai, & McCorkle, 2005). Moreover, when decisions about an older person's end-of-life care are made in the context of family conflict, managing the conflict (rather than the person's care) often becomes the focus, and the older person's previously expressed wishes are less likely to be honored (Elliott, Gessert, & Peden-McAlpine, 2007).

The Communication Practice of End-of-Life Decision Making

Advances in nutrition, medicine, and technology have given individuals greater control than ever before over the manner, timing, and place of their death, but all too often these advances are used to prolong the dying of individuals who have not expressed preferences about end-of-life care. This incurs immense and potentially unnecessary physiological, psychosocial, and financial cost, making a richer understanding of the communication practice of end-of-life decision making a priority for scholars and practitioners. Taking a communicative perspective on end-of-life decision making involves considering how the complex web of end-of-life choices can be negotiated formally, such as creating an advance directive or designating a surrogate decision maker, or informally, such as talking with family members about advance care preferences.

End-of-Life Choices

As medical technology continues to develop rapidly, the number of choices a person

faces near the end of life increases exponentially. An end-of-life decision is one in which

> a patient (or a legally authorized surrogate) facing the progression of an incurable
>
> medical condition (a) refuses or consents to or (b) withdraws from or continues a life-
>
> sustaining treatment that may result in or perpetuate a significant reduction in the
>
> patient's quality of life (Hines, Babrow, Badzek, & Moss, 1997, p. 200).

People nearing the end of life face a variety of issues, including questions about legal

documentation (e.g., naming a surrogate, completing a living will, requesting a DNR order), type

of care (e.g., curative, palliative), place of care (e.g., hospital, nursing home, hospice, home),

life-sustaining treatment (e.g., intubation, artificial nutrition and hydration, mechanical

ventilation, CPR), death-hastening treatment (e.g., unintended side effects of pain relief, assisted

death), and post-death arrangements (e.g., organ donation, service planning, cremation, burial).

These issues have complex interrelated ethical, financial, legal, physiological, psychological, and

relational implications that contribute to the difficulty of making end-of-life decisions.

The complexity of these choices is compounded by the intricate web of preferences and

values that people rely on to make advance care decisions. There is some overlap in the general

end-of-life preferences reported by patients, physicians, and family members. Six factors that are

consistently rated as important in end-of-life care are communicating with healthcare

professionals, making decisions about treatment preferences, managing pain, achieving a sense

of relational completion, preparing for death, and being treated as a whole person (Steinhauser et

al., 2000). Although some end-of-life preferences are widely shared among patients, doctors, and

family members, there is considerable variability in people's values for end-of-life care, as the

strength of the right-to-life and the right-to-die movements in society demonstrate (Kleespies, Miller, & Preston, 2009). For instance, patients tend to value being mentally aware, relieving burden on family members, avoiding inappropriate prolongation of death, and reconciling with God (see Kaldjian, Curtis, Shinkunas, & Cannon, 2009; Singer et al., 1999; Steinhauser et al., 2000), physicians value prolonging life more than do patients and family (Rurup, Onwuteaka-Philipsen, Pasman, Ribbe, & van der Wal, 2006), and family members tend to value being informed when death is near (Vohra, Brazil, Hanna, & Abelson, 2004). In addition, not all individuals and cultures value personal autonomy similarly (Winzelberg, Hanson, & Tulsky, 2005). Some people may defer health decisions to their doctor (E. J. Emanuel & Emanuel, 1992a); others (particularly those from more collectivistic cultures) value having the family unit make end-of-life decisions (Blackhall, Murphy, Frank, Michel, & Azen, 1995), and still others may prefer collaborative decision making among patients, physicians, and family members (e.g., Moumjid, Gafni, Brémond & Carrère, 2007).

Most people have tacit if not explicit end-of-life preferences, but less than one in three individuals formalizes end-of-life choices using an advance directive (Pew Research Center, 2006). An advance directive is a written or oral statement of a person's wishes concerning future medical care that is issued when the person is capable of making decisions in anticipation of a time when the person will not possess decision-making capacity. Advance directives typically include formal legal documentation (e.g., living will, durable power of attorney, healthcare proxy appointment), but informal instructions about advance care can also serve as directives. Some protocols record general end-of-life values (e.g., Five Wishes, 2009) whereas others record specific treatment preferences (e.g., Hammes & Rooney, 1998). Advance directives often are presented by medical institutions and the media as the "cure all for all that ails end-of-life

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medical decision making" (Ditto, 2009, p. 215). Although there is some evidence that they can improve the quality of end-of-life care (Teno, Gruneir, Schwartz, Nanda, & Wetle, 2007), advance directives can be problematic for a number of reasons that collectively underscore the importance of family communication about end-of-life decisions.

First, advance directives do not guarantee that a patient's wishes will be followed. Covinsky et al. (2000) found that half of all patients who used an advance directive to indicate they did not want CPR received it nonetheless, and Srebnik and Russo (2007) found that 47% of patients who recorded a preference to receive advance care in alternative facilities versus a hospital did not have their preferences honored when possible. The possibility that patients cannot always rely on the medical system to follow their wishes heightens the importance of conversations with family members, who can potentially advocate for them.

Second, end-of-life preferences and values can be affected by various factors that change over time, including medical issues (e.g., uncertainty of prognosis, symptom distress, physical dependence, care facility), personal issues (e.g., role expectations, depression, anxiety), and social issues (e.g., caregiver burden, financial resources, expected future quality of life; Chang & Sambamoorthi, 2009; Fried, Bradley, Towle, & Allore, 2002; Tilden et al., 2001). For example, a person's desire for life-sustaining treatment may decrease if the person experiences a decline in quality of life (Danis, Garrett, Harris, & Patrick, 1994) or is admitted to a hospital (Ditto, Jacobson, Smucker, Danks, & Fagerlin, 2006). Healthy people make systematic errors in predicting how they will react in future illness (Jansen, Stiggelbout, Nooij, Noordijk, & Kievit, 2000), and such forecasting errors make advance directives an unreliable tool for end-of-life decision making. End-of-life communication in families tends to occur over time, usually

through a series of conversations (Meeker & Jezewski, 2005), and thus can more reliably account for individuals' changing end-of-life preferences than can advance directives.

Third, advance directives are not always particularly practical. Implementing advance directives can be difficult due to logistical problems, such as misplaced (Freeborne, Lynn, & Desbiens, 2000) or invalid (Ho, Thiel, Rubin, & Singer, 2000) documentation. In addition, some advance directives are too general to guide decision making because they fail to capture important nuance in patients' preferences and values (Abbo, Sobotka, & Meltzer, 2008; Teno et al., 1997). By contrast, some advance directives are too specific in focus. No person can possibly anticipate all possible end-of-life decisions, and thus many advance directives ultimately do not apply to a person's specific situation, forcing others to interpret out-of-context preferences (Schicktanz, 2009; Seymour, Gott, Bellamy, Ahmedzai, & Clark, 2004). The relative impracticality of advance directives highlights the significance of family talk about end-of-life care because such communication can allow a person's wishes to be interpreted in terms of a specific situation by those who know the person well. In fact, many people want family members to have considerable leeway to override previous instructions on treatment preferences if there were to be a disagreement between an advance directive and the family's opinion of what the patient would want (Hawkins, Ditto, Danks, & Smucker, 2005)

The problems with advance directives call into question the singular reliance on previously articulated preferences as a basis for end-of-life decision making. The problems also throw into sharp relief the value of family communication about end-of-life care. Perhaps for these reasons, many people express ambivalence about the need to complete a formal advance directive and seem more inclined to engage in informal discussion of end-of-life wishes with family members (Hamel, Guse, Hawranik, & Bond, 2002).

Conversations about End-of-Life Decisions

Patients are most at risk of receiving end-of-life care inconsistent with their preferences when they do not participate in the decision making (Winzelberg et al., 2005), making conversations about end-of-life decisions vital to providing quality advance care. Standard approaches to advance care planning have focused primarily on end-of-life discussions between patients and physicians (e.g., L. L. Emanuel, von Gunten, & Ferris, 1999). Effective patient-doctor communication about end-of-life decisions has been associated with a number of positive outcomes, including less aggressive advance care, higher quality of life for patients, and better physical and mental health for patients' family members (Wright et al., 2008). However, conversations between patients and physicians represent a less-than-ideal method of advance care planning for several reasons.

First, few patients or doctors initiate end-of-life discussions. Some reports indicate that only 37% of people have talked about some aspect of advance care with their physicians (Wright et al., 2008), a relatively low rate given that healthcare professionals are federally mandated to have such discussions (U.S. P.L. 101-508, 2990). There are a number of possible reasons why patient-doctor conversations about end-of-life choices do not occur more frequently. Advance care becomes an increasingly salient topic with age, and the difficulties that characterize older people's communication with physicians can inhibit end-of-life talk. For instance, there is evidence that many physicians have ageist attitudes and tend to discount or trivialize the medical concerns of older patients, use condescending language when talking with them, spend less time consulting with them, and provide them with less information compared to younger patients (Adelman, Greene, & Charon, 1991; Grant, 1996). In addition, the different healthcare experiences of the current cohort of older people (e.g., exposure to economic depression, world

war, lack of access to education) have cultivated in them skepticism toward medical treatment (Haug & Ory, 1987) and prompted them to be more passive in medical encounters (e.g., Rost & Frankel, 1993), making advance care discussions less likely.

Second, even when patient-physician conversations about end-of-life decisions occur, the communication is often ineffective. Doctors tend to underestimate patients' need for information about advance care and overestimate patients' understanding of their prognosis and end-of-life options (Hancock et al., 2007), leading to ineffective patient-doctor advance care planning (DesHarnais, Carter, Hennessy, Kurent, & Carter, 2007). Many physicians present value-laden medical choices in a hypothetical and impersonal manner, which can undermine end-of-life decision making and result in higher demands for ineffective life-sustaining interventions (Weiner & Roth, 2006). Furthermore, numerous interventions have targeted and failed to improve patient-doctor advance care planning (Jezewski, Meeker, Sessanna, & Finnell, 2007). The current structure of healthcare discourages end-of-life communication by not incorporating it as part of the formal healthcare routine (Csikai, 2009; Lynn et al., 2000), and a single intervention is largely inadequate to impact formal practices related to advance care planning (e.g., SUPPORT Principal Investigators, 1995). Ultimately the healthcare system must change to facilitate effective interactions between people and their doctors about end-of-life issues.

The relative infrequency of patient-physician conversations about advance care and the tendency for such interactions to go poorly even with focused training suggest that there may be a better way to prepare for the end of life. Recent research indicates that family communication about end-of-life decisions is one of the most effective means of advance care planning. One reason family involvement is central to quality end-of-life care is simply that people are more likely to talk with family members than with doctors about advance care decisions: 69% of

married people have discussed end-of-life issues with their spouse, and among those with living parents, 57% have talked with their mothers and 48% have talked with their fathers about end-of-life care (Pew Research Center, 2006). In addition, family members are usually best positioned to know and advocate for a patient's end-of-life preferences (Bluestein, 1993; Brock, 1992), which is likely why most people (as many as 90%) designate a family member as their surrogate decision maker, or the person who assumes responsibility for making end-of-life choices on the behalf of someone whose decision-making capacity is impaired (Hines et al., 2001).

Family conversations about end-of-life choices also have the potential to enhance or undermine the quality of life for the individual's family members. Tilden et al. (2001) found that family stress associated with end-of-life decision making was highest in the absence of any kind of advance directive, lower in the presence of a written advance directive, and lowest when oral patient instructions guided decision making. Moreover, family discussions of advance care issues can facilitate or inhibit a respectful death for an individual and enhance how patients and family members pragmatically and meaningfully deal with death (Keeley, 2007; McQuellon & Cowan, 2000). For these reasons, most people who have talked about end-of-life issues with family members report that they do not regret having had the conversations (e.g., Kreicbergs, Valdimarsdottir, Onelov, Henter, & Steinbeck, 2004).

The importance of family communication about advance care is further evidenced by the negative outcomes that accompany ineffective end-of-life decision making in families. Poor communication can lead patients and family members to experience physiological decline (e.g., changes in eating and sleeping patterns, hypertension), negative emotions (e.g., shock, guilt, anger), and the inability to eventually make an end-of-life choice (Wiegand, Deatrick, & Knafl, 2008). Ineffective communication also leaves family members with inadequate knowledge of

patient wishes and thus precipitates discordance between patient preferences and surrogate choices (E. J. Emanuel & Emanuel, 1992b; Suhl, Simons, Reedy, & Garrick, 1994).

Despite the importance of family discussion of end-of-life issues, what makes such communication more or less effective is not well understood. There is not a lot of clear evidence that simply talking about end-of-life issues improves advance care. For example, surrogate accuracy in predicting patient preference ranges from 50% to 60% (Barrio-Cantalejo et al., 2009; Shalowitz, Garrett-Mayer, & Wendler, 2006), and some research indicates that having a conversation about end-of-life wishes does not significantly increase surrogate accuracy (Ditto et al., 2001; Hines et al., 2001). However, it is possible that the frequency of end-of-life talk does not appear to matter because most people who talk about end-of-life issues may do so poorly: Hines et al. (2001) found that surrogates who had had at least five conversations with the patient about advance care still had not discussed preferences for tube feedings, CPR, or dialysis, demonstrating that more end-of-life conversations does not necessarily yield better end-of-life conversations. Furthermore, families tend to focus on advance care issues that create relatively little uncertainty, leaving the most stressful decisions unaddressed and therefore increasing the risk of contradicting patient preferences (Hines et al., 1997). Families also may maintain overly optimistic expectations about a terminal prognosis in order to protect loved ones from being exposed to painful or exhausting conversations (Zhang & Siminoff, 2003), especially when family relationships are characterized by high levels of closeness (King & Quill, 2006). Such avoidance can prompt families to ignore a poor prognosis and opt for more aggressive treatment than is recommended by a physician or desired by the patient (Csikai, 2009).

There is evidence that certain kinds of messages hold particular importance at the end of life, but little is known about why or when such messages yield positive or negative effects. For

instance, messages of love tend to create a sense of connection, messages about personal identity can affirm individuals' positive qualities, discussing spirituality validates the importance of faith, and acknowledging difficult relationship issues provides an opportunity for reconciliation (Keeley, 2007). These categories represent people's interpretation and evaluation of the effects of certain messages, but the categories do not indicate the discursive features through which the interpretation or outcomes were achieved. Without information about why certain messages are evaluated as favorable or unfavorable, it is unclear what communicative characteristics are best suited for successfully engaging in end-of-life talk.

These findings suggest that to understand how end-of-life communication among family members can facilitate desired outcomes (e.g., biopsychosocial well-being, surrogate-patient concordance) and mitigate undesired outcomes (e.g., anxiety, relational dissatisfaction), there is a need to examine not only the frequency and type of talk, but also what is said, how it is said, and the meanings and assessments typically attributed to particular ways of saying things.

CHAPTER THREE: Theoretical Framework, Research Question, and Hypotheses

How families talk about end-of-life health decisions has implications for the quality of individuals' medical care at the end of life, but more work is needed to determine what makes conversations about advance care choices more or less effective. In the present investigation, a multiple goals perspective was used to conceptualize what counts as a sophisticated conversation about end-of-life decisions. In this chapter, the common assumptions of multiple goals approaches are outlined and their implications for end-of-life communication in families are discussed. Then a specific example of a multiple goals perspective, a normative theoretical approach, is used to suggest message features likely to be relevant to assessing the quality of family discussions of advance care choices. Finally, a model of multiple goals in interaction is presented as the basis for the research question and hypotheses that guided this study.

Multiple Goals Theoretical Perspective

Many interpersonal communication scholars agree that communication frequently is aimed at addressing goals (e.g., Berger, 2005). Goals are desired future states of affairs (e.g., events, processes, outcomes) that people want to achieve or maintain through interaction with others (Dillard, 2004). Even though individuals may not always be aware of their goal orientation, their communication is nonetheless demonstrably strategic (Kellermann, 1992). The conceptualization of communication as purposeful has led to the development of several multiple goals theories (e.g., Brown & Levinson, 1987; Clark & Delia, 1979; Dillard, 2004; O'Keefe, 1988; Wilson, 2002), and these theories share a number of common assumptions that are relevant to explaining end-of-life communication in families.

First, multiple goals perspectives assume that people attempt to accomplish multiple purposes simultaneously in interaction. At any point in a conversation, most individuals are

pursuing a primary goal as well as secondary goals (Dillard, Segrin, & Harden, 1989). The primary goal is a person's main objective and typically constitutes what the interaction is about. Secondary goals are additional goals pertinent to the social situation (e.g., making sure a conversation goes smoothly, fulfilling role obligations) that shape or constrain how (or whether) individuals pursue primary goals. Although there are many possible communication goals, certain broad types of goals are relevant across social situations, including task goals (which describe the primary task of the interaction, such as persuasion or support), identity goals (which address how the interactants create and manage impressions), and relational goals (which concern the maintenance of desired relationships; Clark & Delia, 1979). Although these broad types of goals are relevant in many situations, the particular tasks, identities, and relational qualities that matter vary by social context. In addition, goals are dynamic and can change or fluctuate in importance during a single interaction as well as over a series of interactions (e.g., Dillard et al., 1989; Keck & Samp, 2007; Waldron, 1997).

Multiple goals can present communication dilemmas within an individual (i.e., a person may have interactional goals that run contrary to each other) as well as between individuals (i.e., one person's goals may conflict with another's). Accomplishing a task may come at the expense of sustaining a positive identity or relationship, for instance, such as when an individual wants to give advice to another person, but the advice might make the advised person seem incompetent or the adviser seem intrusive (Goldsmith & Fitch, 1997). In social situations with few probable conflicts among goals (e.g., chatting while waiting in line at the grocery store), there is little variation in the interaction goals that are pursued. In more complex situations, however, variation in the purposes pursued becomes more meaningful because relevant goals are greater in number,

more inconsistent with each other, and more difficult to achieve than in less complex situations (O'Keefe & Delia, 1982).

Family communication about end-of-life decisions represents a complex situation in which the actions that may help achieve one goal conflict with actions that help accomplish other relevant goals. The focus of advance care planning in families is the anticipated death of a family member, a relatively threatening topic of conversation that can render valued identities and relational qualities particularly salient and vulnerable. For example, the goal of showing support for a person's decision to forego mechanical ventilation at the end of life may conflict with the goal of showing the person how much the individual's survival is valued, or the goal of persuading the person to change the choice to refuse artificial hydration may run contrary to the goal of honoring the person's autonomy. A number of desirable objectives, such as maintaining control, showing respect, and maintaining closeness, are likely important in end-of-life conversations, but such conversations also can undermine important identity and relational goals by intruding on a family member's autonomy or by implying a family member lacks the competence to make good decisions. This mix of relevant positive goals and potential pitfalls likely poses communication dilemmas in which well-intentioned messages do not always translate into favorable conversational outcomes (e.g., Goldsmith, Lindholm, & Bute, 2006).

Second, multiple goals theories assume that some ways of talking are more effective than others at accomplishing the variable (and potentially conflicting) goals relevant in certain social situations. According to this assumption, the quality of communication depends on the extent to which it achieves the primary interaction task (e.g., making an end-of-life decision) while also successfully managing what the conversation means for identities and relationships. An important implication of this second assumption is that goals are not only a means to account for

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message production, but goals also provide a way of evaluating message sophistication (Goldsmith, 2004). Most research utilizing a multiple goals framework has focused on how goals influence message construction (Berger, 2005), but multiple goals approaches also represent a useful theoretical lens for explaining how people interpret and assess communication (Wilson, 2007). Messages can be interpreted in various ways, and people's inferences about their own goals as well as the goals of others often shape the meaning, and thus the impact, of any communication (Caughlin, in press). There is some evidence that a person's attention to more goals and certain combinations of goals influences how conversational partners perceive and respond to the person's talk (Caughlin et al., 2008). In the context of advance care planning in families, people who rank identity concerns above other goals may assess the effectiveness of an end-of-life conversation differently than those who make relational maintenance or reaching a decision their main objective (e.g., Caughlin & Vangelisti, 2009).

To connect goals to outcomes, criteria for assessing the quality of communication must be identified. A normative theoretical approach (Goldsmith, 2001, 2004) represents a multiple goals perspective that offers a means of accounting for why some messages achieve more favorable outcomes than others. Like other multiple goals theories, a normative approach conceptualizes the quality of communication as the extent to which a person is able to effectively and appropriately manage the dilemmas posed by multiple goals (Goldsmith, 2004). Furthermore, a normative perspective proposes that certain goals are conventionally understood to be salient in certain social situations, and communication that does not address conventionally relevant goals is normatively evaluated as ineffective or inappropriate. The same behavior can be constructive or destructive, depending on the context of the interaction, and so rather than seeking to assess the occurrence of communication behaviors (i.e., measuring the frequency or

level of specific acts), a normative approach explains the evaluation of communication practices

by identifying the discursive features that differentiate more from less skillful responses in

particular contexts (Goldsmith, 2001). According to the theory, discursive features represent the

explanatory mechanism that accounts for assessments of communication, and because the goals

that are conventionally relevant vary across social situations, the particular features that are

associated with sophisticated management of multiple goals also vary by situation.

Although the normative approach does not propose broad associations between message

features and outcomes, it is possible to specify some general conclusions about what kinds of

messages tend to be most successful in particular types of communication scenarios. For

instance, the quality of person-centeredness appears to be important in how support attempts are

evaluated (e.g., Burleson, 1990), and controlling and forceful language is related to how

influence attempts are assessed (e.g., Dillard & Shen, 2005). A normative theoretical approach

does not imply that it is possible to compose a catalog of effective and ineffective discursive

strategies; however, within particular contexts, it is possible and useful to explain variation in

communication outcomes by identifying specific discursive resources that people more or less

successfully draw upon in managing multiple purposes.

Discursive Features Relevant to End-of-Life Communication

A multiple goals perspective implies that certain ways of engaging in end-of-life talk

should be more effective at simultaneously addressing multiple goals than are others. There are a

number of discursive features that can indicate attention to (or a lack of attention to) goals

relevant to end-of-life communication, including politeness, relational maintenance, avoidance,

and elaboration. These features certainly do not constitute an exhaustive list; rather they

represent examples of features that previous research suggests may be particularly salient in the

context of end-of-life decision making and thus may be particularly useful for assessing communicative success in that specific context.

First, politeness can indicate the extent to which conflicting goals are addressed in interaction. Politeness is a discursive means of addressing other people's face, which is the self-image a person tries to project in interaction with others (Brown & Levinson, 1987). Different ways of enacting politeness represent different ways of resolving goal conflicts in complex situations. Brown and Levinson (1987) have claimed that, in general, individuals want others to show regard for their positive face (i.e., acceptance and approval of the self-image they enact) as well as for their negative face (i.e., respect for their freedom of action and freedom from imposition). These face goals are conventionally relevant in many situations where the interaction task is inherently face-threatening. For instance, offering advice often challenges a person's positive face, and making a request imposes on a person's negative face. Furthermore, face concerns can pose conflicting purposes not only across types of interaction tasks, but also within a particular type of task (Wilson, Aleman, & Leatham, 1998). Within the broader task goal of giving advice, for example, it is possible to infer potentially conflicting face goals, such as being a helpful person and showing expertise (Goldsmith, 2000).

Face threats can jeopardize favorable interaction outcomes, making attention to positive and negative face goals important to communicative success. Communication effectiveness is not related to politeness in a straightforward way, however; that is, more facework does not necessarily lead to better outcomes (Goldsmith, 1992). In particularly challenging conversations, such as end-of-life discussions in families, there are likely limits to how much politeness can influence conversational outcomes (Morgan & Hummert, 2000). Instead, successful communication involves successfully balancing face concerns with other goals. Facework thus

provides one useful means of assessing message sophistication in the context of advance care planning in families, but it is not likely to be the only important message characteristic.

Relational maintenance provides a second potential means of assessing how well multiple goals are managed in interaction. Relational maintenance involves keeping a relationship in a desired condition, usually as a satisfactory relationship (Dindia, 2003), and can take a number of forms (e.g., positivity, openness, assurances, sharing tasks, small talk; Dainton & Stafford, 1993; Stafford & Canary, 1991). Such relational work varies in intentionality (and perceived intentionality). Strategic relational maintenance occurs when a person enacts conscious, intentional behavior with the goal of maintaining the relationship, whereas routine relational maintenance occurs when a person's actions are not necessarily intended to maintain the relationship but nevertheless accomplish that relational goal (Dainton & Stafford, 1993). The same relational maintenance behavior could be invoked in strategic or routine ways with different implications, potentially creating communication dilemmas. For example, a person may want to affirm the importance of a relationship. Showing relational assurance intentionally could imply that the person thinks the relationship is in need of such assurance (especially if relational assurance is not the primary goal of the interaction, such as in end-of-life decision making), but allowing relational assurance to be communicated through routine means could imply that the person does not think relational assurance is important.

Although research suggests that both strategic and routine relational maintenance are important to the health of most relationships (see Dindia, 2003), there is not strong evidence that relational maintenance behaviors in fact help people sustain desired relationships (Stafford, 2003). Not every relationship is always benefited or hurt by any certain relational maintenance behavior (Canary & Stafford, 1994), which highlights how relational maintenance, like

politeness, is not related to positive communication outcomes in a linear fashion. Rather, effective maintenance occurs when a person sustains the desired relationship while also achieving other relevant goals in a specific relational and interactional context.

A third message feature that may be relevant is avoidance, which occurs when a person demonstrates a lack of engagement in an interaction. Although avoidant communication is not inherently problematic (T. D. Afifi, Caughlin, & Afifi, 2007), in certain circumstances when discussing a topic is conventionally expected, avoidance can indicate a lack of sophistication in how multiple goals are addressed (Caughlin & Scott, 2010). The challenging nature of advance care planning may lead some people to avoid talking about end-of-life issues, even when avoidance is unsuited for the particular situation. One form avoidance can take in conversations about end-of-life choices is implicit decision making (Sillars & Kalbfleisch, 1989). For instance, some family members might avoid explicitly discussing advance care decisions by instead talking about how well they know one another and therefore trust one another to make end-of-life decisions on each person's behalf (Pecchioni, 2001). Such talk may attend to the goal of affirming identities and relationships but may insufficiently attend to important tasks, such as discovering and addressing misunderstandings of the interactants' end-of-life preferences. People also could employ implicit decision making by focusing discussion on the end-of-life experiences of others outside the family and assuming that the advance care preferences expressed in reference to others' experiences will be accurately translated to their own end-of-life situations in the future. This assumption is problematic, however: Research suggests that, compared to making decisions explicitly, doing so implicitly can result in greater discrepancy between the end-of-life choices made by individuals and their surrogates (Pecchioni, 2001).

Much early communication scholarship on avoidance tended to characterize avoidance as ineffective communication (Parks, 1982), and there is some evidence to support this characterization. Avoidance has been associated with a number of unfavorable personal and relational outcomes, including cardiovascular distress (Heffner et al., 2006), depression (Byrne, Carr, & Clark, 2004), substance abuse (Caughlin & Malis, 2004), low self-esteem (Caughlin & Malis, 2004), relational dissatisfaction (Caughlin & Huston, 2002; Caughlin & Golish, 2002), and physical abuse (Feldman & Ridley, 2000). However, there is also evidence that avoidance can be functional and even useful in some instances. For example, some researchers have argued that avoidance can facilitate relational development (W. A. Afifi & Guerrero, 2000; Roloff & Ifert, 2000), and Donovan-Kicken and Caughlin (in press) found that topic avoidance was positively linked to relational satisfaction when the perceived goal of the avoidance was to honor the wishes of a conversational partner to avoid talking about a certain issue. This research suggests that avoidance is not always associated with ineffective communication. Instead the association between avoidance and communicative sophistication depends on the goals that are conventionally relevant to the particular situation as well as how people perceive such goals.

Finally, elaboration can serve as an indicator of how well different kinds of messages address different goals. In the context of group decision making, elaboration is the exchange, discussion, and integration of decision-relevant information (van Knippenberg, De Dreu, & Homan, 2004). In the context of end-of-life decision making, elaboration can be conceptualized more specifically as the process of providing contextual information to explain the reasoning behind end-of-life decisions. O'Keefe (1988) identified three approaches to communication that differ in the way that elaboration is enacted and the extent to which elaboration is enacted. These three message design logics (i.e., expressive, conventional, rhetorical) represent distinct ways of

reasoning about how to accomplish goals through interaction. Individuals who utilize expressive design logic view communication as a means of expressing thoughts and feelings. They rely little on contextual information or interpretation in assigning meaning in interaction, assuming instead that messages are straightforwardly understood by hearers and thus require little elaboration. People who use conventional design logic reason that communication is a cooperative effort to follow the rules governing what is socially appropriate in a given situation, and they tend to treat social structures (e.g., roles, relationships) as fixed rather than flexible. People who use rhetorical design logic assume communication is a process of negotiation through which selves and situations are established. They treat social structures as flexible rather than fixed and often use contextualizing information to reach an intersubjective understanding with others. In end-of-life decision making, for example, expressive logic may lead a person to give "yes" or "no" answers to questions about advance care decisions and to ignore the possibility that different circumstances may lead to different decisions, whereas rhetorical logic may prompt an individual to explicitly address how their end-of-life choices might take contextual factors into account.

The three message design logics are ordered hierarchically in terms of sophistication and functional utility: Expressive design logic is the least sophisticated and least capable of producing effective messages in complex situations, and rhetorical design logic is the most sophisticated and most capable of producing effective messages in complex situations (O'Keefe, 1988). This hierarchy is evidenced in research demonstrating that sophistication of message design is associated with more effective social support messages (Peterson & Albrecht, 1996), persuasive messages (Lambert & Gillespie, 1994), and responses to HIV disclosure (Caughlin et al., 2008).

Although the current investigation does not examine the design logics, per se, as noted above, O'Keefe's (1988) discussion of the theory suggests that elaboration could serve as a rough marker for the sophistication of a design logic. Furthermore, some research is consistent with the idea that elaboration may be related to how effectively families talk about advance care. For example, the quality of elaboration in decision making is directly related to the quality of the outcomes of the interaction (van Ginkel, Tindale, & van Knippenberg, 2009; van Knippenberg et al., 2004). This finding suggests that how well family members contextualize their end-of-life decisions and reasoning may be linked to important outcomes of advance care planning, such as how well family members predict one another's end-of-life choices in specific contexts. Sophisticated elaboration can provide others with a substantial base of information from which to draw inferences about a person's preferences in unanticipated end-of-life situations.

A Model of Multiple Goals in Interaction

The logic of this dissertation thus far has turned on several main points: The reason extant research on end-of-life communication in families has produced mixed findings is because only quantity of talk (and not quality of talk) has been considered. It is important to account for the quality of people's end-of-life talk, and a useful way to conceptualize communicative sophistication is the extent to which communication attends to multiple goals.

Caughlin (in press) has proposed a conceptual model of goals in interaction that accounts for this line of reasoning (see Figure 3.1). The model consists of conversational partners' goals, messages during interaction, perceptions of own and partner goals, and interaction outcomes. The model assumes that partners' goals as well as partners' communication are interdependent and proposes that individuals' goals shape their communication, which in turn affects their perceptions of their own and their partner's goals as well as their conversational partners'

perceptions of each interactant's goals. An individual's perception of own and partner goals is

also influenced by the individual's goals. A person's evaluation of the conversation is shaped by

the person's own communication, the partner's communication, and the person's perceptions of

own and partner goals. Finally, although not a focus of the present project, perceptions of own

and partner goals are thought to moderate the association between an individual's

communication and assessment of the conversation as well as the association between the

partner's communication and the individual's conversation assessment.
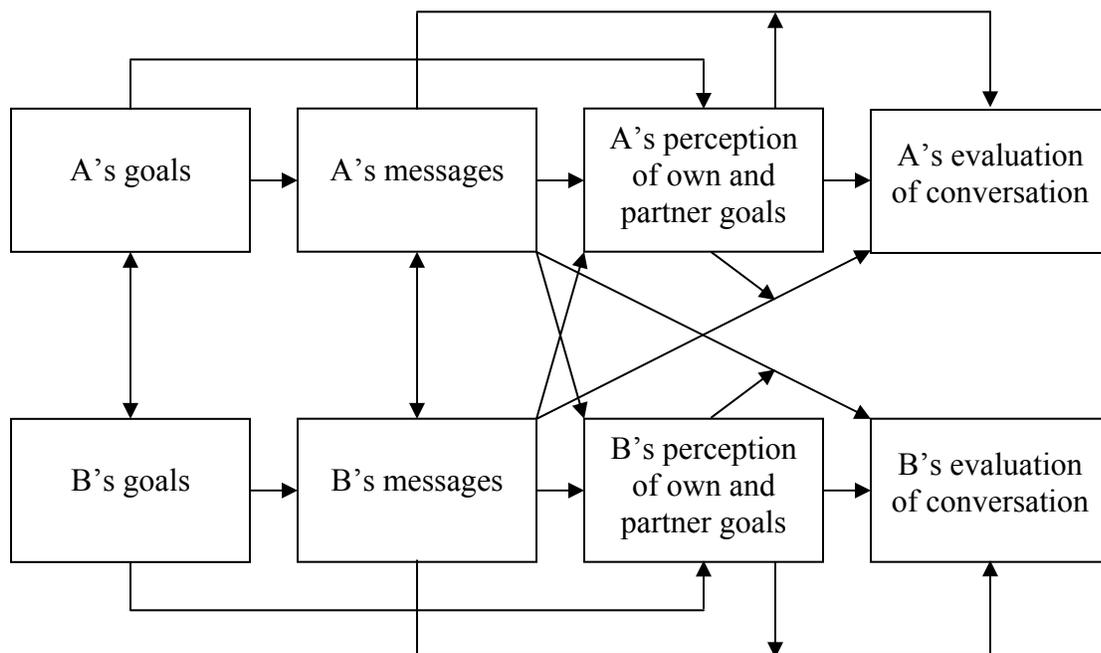
Figure 3.1. A model of multiple goals in interaction.

Part of Caughlin's (in press) model provides the basis for the research question and

hypotheses that guided the present research. More specifically, this study sought to examine the

associations among the sophistication of people's communication, perceptions of own and

partner goals, and outcomes of end-of-life conversations in families (see Figure 3.2).
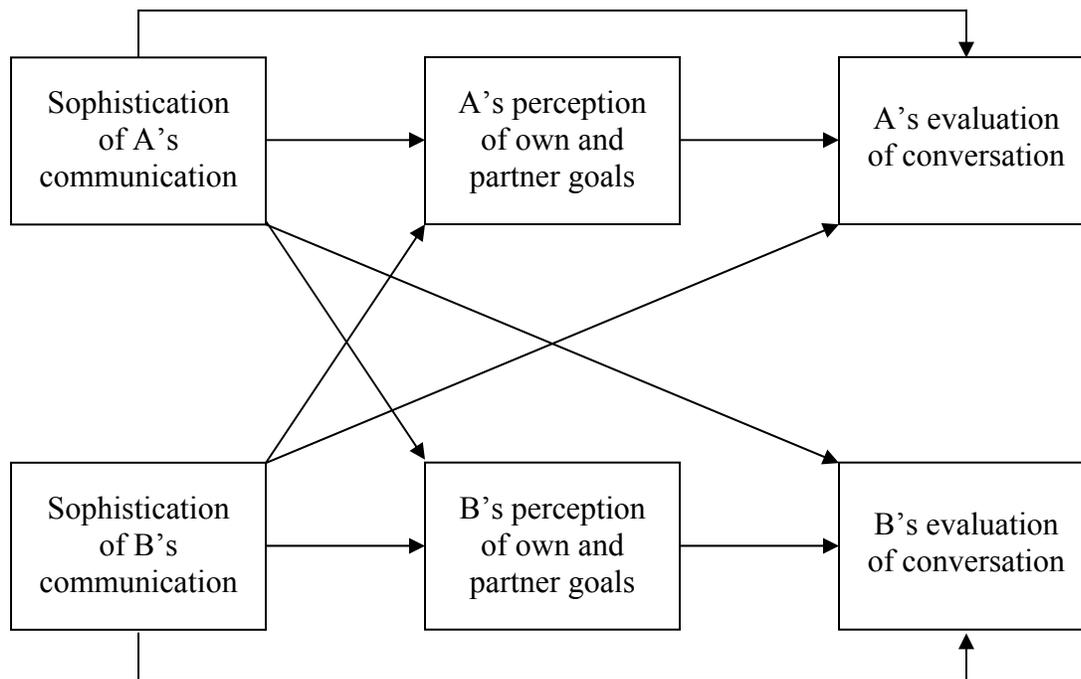
Figure 3.2. General conceptual model of the current study.

The overwhelming majority of studies on end-of-life conversations consider only whether

family members have talked about advance care and not whether certain characteristics of that

talk matter. The current investigation is based on the assumption that the quality of people's

communication about end-of-life decisions is important beyond the quantity of such

communication. Several communicative features may help to indicate the quality of end-of-life

communication (e.g., politeness, relational maintenance, avoidance, elaboration), and the first

research question asks about these (and other potential) discursive characteristics that indicate

attention to multiple interaction goals in the context of advance care planning in families:

RQ: What discursive features characterize sophisticated (and unsophisticated) family

conversations about end-of-life decisions?

Caughlin's theoretical model (in press) and considerable empirical work suggest that the

quality of people's communication influences the outcomes of interaction, including the

interactants' evaluation of conversational outcomes. Recall, for instance, the research reviewed

thus far demonstrating that more sophisticated messages are assessed as more appropriate (e.g.,

Caughlin et al., 2008), helpful (e.g., Caughlin et al., 2008), persuasive (e.g., Lambert &

Gillespie, 1994), productive (e.g., van Knippenberg et al., 2004), and supportive (e.g., Peterson

& Albrecht, 1996). The following five hypotheses predict that the sophistication with which

people interact in conversations about advance care will be related to five important outcomes of

such conversations.

First, people's emotional response to end-of-life discussions is of consequence. End-of-

life conversations typically are emotionally charged and have the potential to engender intense

negative emotions, such as anxiety, burden, confusion, depression, embarrassment, fear, guilt,

hopelessness, regret, or sadness (Larson & Tobin, 2000; Planalp & Trost, 2008; Weiner & Roth,

2006). Advance care planning may also lead people to experience positive emotions, including

encouragement, hope, and relief (Keeley, 2007; Pratt, Schmall, & Wright, 1987). Appraisal

theories of emotion propose that people's appraisals of a communicative episode shape their

experience of specific emotions as well as how they act on their feelings (e.g., Lazarus, 1991). If

a situation is congruent with a person's interaction goals, then a person typically experiences

positive emotions, which in turn prompt the person to engage in the interaction; by contrast, if a

situation is incongruent with an individual's goals, negative emotions are more likely to result,

and the person is more likely to disengage from the interaction (Frijda, Kuipers, & ter Schure,

1989). A multiple goals approach suggests that more sophisticated ways of talking about end-of-life care may facilitate positive emotions and mitigate negative emotions. Thus, the first hypothesis proposes that the quality of people's communication will predict their emotional reaction to advance care planning:

H1: The sophistication of people's communication about end-of-life decisions will predict own and partner emotional response to conversations about end-of-life decisions.

People's decision-making efficacy is another important outcome of advance care planning. Individuals who report having a greater sense of control over their decisions experience less emotional distress, lower levels of depression and anxiety, and improved general health (Stalmeier et al., 2005). There is evidence that decision-making efficacy is linked to attention to interaction goals. For example, people who perceive that their autonomy is threatened in making a decision tend to have a lower sense of decision-making efficacy (e.g., Connolly & Zeelenberg, 2002). It is therefore expected that attention to multiple goals will be related to both interactants' beliefs about their end-of-life decision-making efficacy in this study:

H2: The sophistication of people's communication about end-of-life decisions will predict own and partner end-of-life decision-making efficacy.

Communication satisfaction is an essential aspect of effective communication (Williams & Giles, 1996), making individuals' satisfaction with end-of-life conversations another significant outcome. In the context of advance care planning in families, conversational satisfaction may be particularly important given that such planning is most effective when a series of end-of-life conversations takes place over time; if a person is dissatisfied with a conversation about advance care, it is less probable that the person will engage in further discussion of the topic. Conversational satisfaction has been conceptualized as an affective

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response to the accomplishment of communication goals (Hecht, 1978). This suggests that a conversation is satisfying to the extent that multiple purposes are successfully realized, which gives rise to the third hypothesis:

H3: The sophistication of people's communication about end-of-life decisions will predict own and partner satisfaction with the end-of-life conversation.

When interactions do not go well, the individuals can experience hurt feelings (McLaren & Solomon, 2008), and relationships can become more distant (Helgeson, Shaver, & Dyer, 1987). Because difficult conversations commonly have important consequences for relational bonds, how an end-of-life discussion is negotiated can make family members feel closer or more distant from one another. For instance, distancing is a common result of conversations about death. People tend to avoid talking about dying, but most older adults prefer to discuss their eventual death and often suffer relational distancing from those who do not allow them to do so (Kalish, 1976). This implies that successfully addressing relevant interaction goals in end-of-life discussions will minimize perceptions of relational distancing:

H4: The sophistication of people's communication about end-of-life decisions will predict own and partner perceptions of relational distancing.

An obvious outcome of end-of-life conversations is concordance in predicting end-of-life preferences. Even though the quantity of end-of-life communication does not appear to improve family members' prediction of a person's advance care choices, multiple goals theories suggest that the quality of end-of-life communication should affect concordance. Recall that individuals value attention to task, identity, and relational goals in advance care planning: Discussing important end-of-life choices (Steinhauser et al., 2000), affirming autonomy (Singer et al., 1999), and maintaining a sense of connection (Keeley, 2007) are consistently prioritized in end-of-life

talk. Thus, the fifth hypothesis predicts that the quality of people's discussion of end-of-life care will affect how well family members anticipate one another's advance care choices:

H5: The sophistication of conversational partners' communication will predict their

concordance in making end-of-life decisions.

Caughlin's (in press) model also proposes associations between messages and perceptions of goals. These associations are theoretically grounded: Self-perception theory holds that individuals make inferences about their own goals based on their communication behavior (Bem, 1972), and Caughlin and Scott (2010) have suggested that individuals also can infer their partner's goals based on their own communication. For instance, an individual who resists answering another person's questions may conclude that the other person is trying to influence him or her. Consistent with this reasoning, the next hypothesis predicts that the skill with which people talk in end-of-life conversations will be related to their perceptions of goals:

H6: The sophistication of people's communication about end-of-life decisions will

predict own and partner perceptions of own and partner goals.

Finally, Caughlin's (in press) model indicates that people's perceptions of goals are related to communication outcomes. The meaning of communication does not lie exclusively in the quality of the messages; meaning is also dependent on interactants' beliefs about what they and their partner are trying to accomplish in the conversation. Such perceptions affect interaction outcomes (e.g., Caughlin & Afifi, 2004; Donovan-Kicken & Caughlin, in press; Goldsmith, 2000), and so people's perceptions of goals should influence the interaction outcomes of interest in this study:

H7: People's perceptions of own and partner goals will predict their emotional responses

to conversations about end-of-life decisions.

H8: People's perceptions of own and partner goals will predict their end-of-life decision-making efficacy.

H9: People's perceptions of own and partner goals will predict their satisfaction with end-of-life conversations.

H10: People's perceptions of own and partner goals will predict their perceptions of relational distancing.

H11: Conversational partners' perceptions of own and partner goals will predict their concordance in making end-of-life choices.

CHAPTER FOUR: Method

Considerable research has examined advance care planning in families using individual and group interviews (e.g., Colcough & Young, 2007; Searight & Gafford, 2005) and questionnaires (e.g., Hines et al., 2001; Kreicbergs et al., 2004; Pew Research Center, 2006), but little research has captured actual interactions of family members talking about end-of-life decisions. Furthermore, the most common method of analyzing communication in terms of multiple goals is to identify a common repertoire of various types of goals (e.g., Dillard et al., 1989; Sabee & Wilson, 2005; Samp & Solomon, 1998) or strategies available for managing various types of goals (e.g., Keck & Samp, 2007; Wilson, Kunkel, Robson, Olufowote, & Soliz, 2009); less is known about how individuals more or less effectively draw upon a common repertoire of discursive resources in end-of-life communication. These data collection and analytic techniques have left scholars with an incomplete picture of how families talk about advance care decisions.

The current study addresses these methodological gaps. Using elicited talk from dyads allows this study to build on end-of-life research by accounting for the perspective of more than one individual (e.g., Keeley, 2007; Wilson & Kunkel, 2000) and focusing on actual rather than hypothetical conversations (e.g., Morgan & Hummert, 2000; Samp & Solomon, 1999). In addition, this study examines whether individuals in a particular communicative situation manage conventionally relevant goals in similar ways (e.g., O'Keefe & Shepherd, 1989), which advances scholarly understanding of how family members address multiple goals in end-of-life conversations by moving beyond typological claims to include normative conclusions. This chapter details the methodological choices that shaped the present project, including the design, participants, procedure, and measures used in the study.

Design

The present investigation used multiple means of collecting data, which allows for a deeper level of inquiry and bolsters the confidence that can be placed in the results. First, this study used elicited conversations between family members about end-of-life choices. Elicited conversations involve audio-recording the talk of people whose conversation has been prompted by the researcher, typically by asking interactants to complete a conversational task. Elicited talk represents a particularly advantageous method for studying end-of-life decision making in families because such communication retains many qualities of realism accorded to naturally-occurring conversations but provides a way to study interactions that rarely occur naturally, such as end-of-life discussions (McLaughlin, 1984).

Second, to access participants' perceptions of their own and their partner's interaction goals, as well as their assessment of the end-of-life conversations, this study also utilized self-report questionnaires. There are several benefits to using a self-report design. Compared to other methods of data collection, questionnaires are relatively convenient and efficient to administer, and self-report instruments represent the only way to assess subjective responses that only respondents can access and report (Keyton, 2001). Self-report data also permit inferences about populations of interest. Questionnaires produce comparable information across many individuals so that findings can be generalized to a larger group of people (M. J. Smith, 1988).

Participants

Dyads of older adults and their adult children composed the sample in this study. Individuals may talk about end-of-life decisions with a variety of family members, including spouses, siblings, grandchildren, or extended family members. However, there are at least two advantages to examining end-of-life conversations in the context of the parent-child relationship.

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First, the renegotiation of roles that commonly occurs in the older parent-adult child relationship (but not necessarily in other family relationships) makes interaction between older parents and their adult children ripe for identity and relational goal challenges (Hummert & Morgan, 2001). Second, many older people depend on help from adult children more than from any other source (Cicirelli, 1992), and many ask children to be their surrogate decision makers (Hayley, Stern, Stocking, & Sachs, 1996). Adult children consequently have a great deal of influence over their parents' decision making, which lends parent-child interaction about end-of-life issues greater potential for impact than interactions among other family members.

The use of dyads in this study represents an important strength as well as a limitation in examining advance care planning in families. There is a strong case to be made for considering more than one or two family members when investigating family processes (see Cox & Paley, 1997). Family systems theory posits that a family is a set of interconnected relationships whose dynamics render the family unit as a whole greater than the sum of its individual members (von Bertalanffy, 1955). Thus, studying intact dyads represents an improvement over previous studies, which have focused exclusively on individuals, because dyadic interaction is more indicative than individual reports of typical family dynamics. However, generalizing from dyads to the family as a whole is not always warranted.

Participants included 121 dyads (242 individuals), with 70 (57.85%) mother-daughter dyads, 25 (20.66%) father-daughter dyads, 17 (14.05%) mother-son dyads, and 9 (7.44%) father-son dyads. This yielded a sample with 182 (75.21%) females and 60 (24.79%) males. The parent participants ranged in age from 47 to 91 years old and had a mean age of 70.12 years ($SD =$ 10.93). Adult child participants ranged in age from 29 to 66 years old with a mean age of 43.55 years ($SD = 9.16$). The sample included White ($n = 196$, 80.99%), African American ($n = 26$,

10.74%), Latino ($n = 9$, 3.72%), and Asian ($n = 8$, 3.31%) respondents, as well as some who reported other or multiple ethnicities ($n = 3$, 1.24%). Participants reported a range of education levels, including grade school ($n = 2$, 0.83%), high school ($n = 123$, 50.83%), a Bachelor's degree ($n = 66$, 27.27%), a Master's degree ($n = 31$, 12.81%), and a doctoral degree ($n = 18$, 7.43%), with 2 (0.83%) participants declining to respond. Respondents indicated a variety of religious affiliations, including Christian ($n = 182$, 75.21%), Jewish ($n = 10$, 4.13%), Muslim ($n = 4$, 1.65%), other affiliations ($n = 6$, 2.48%), and no religious affiliation ($n = 40$, 16.53%).

Procedure

Following approval from the Institutional Review Board, the sample was recruited from a number of locations, including Champaign, IL, Chicago, IL, Denver, CO, Louisville, KY, Omaha, NE, Fort Lauderdale, FL, Fort Myers, FL, and Los Angeles, CA. The study was advertised with flyers, newspaper advertisements, and electronic newsletter notices. In addition, some participants were recruited by offering a small amount of extra credit to undergraduate students in communication courses at the University of Illinois who referred a participating dyad to the study. The recruitment material described the purpose of the study (i.e., to learn about how parents and adult children talk about health decisions and getting older), activities entailed in participation (i.e., having a face-to-face conversation with a parent or adult child and completing two questionnaires), and incentive for participation (i.e., $40 per dyad). Recruitment material also contained the contact information of the researcher, and individuals interested in participating or learning more were encouraged to contact the researcher (see Appendix A).

When interested individuals contacted the researcher, any questions were answered. Dyads who wanted to participate were then asked to choose a convenient location where both members felt comfortable having a private conversation (e.g., participant's home, coffee shop,

reserved room at the public library). Participants were allowed to choose the location because discussions recorded in a place where participants feel comfortable tend to be more spontaneous and natural than interactions recorded in a research laboratory (Zietlow & Sillars, 1988). The researcher met participants for the research session with the materials for the study. Informed consent was obtained according to university human subjects guidelines (e.g., participants were provided with a description of the study, including risks and benefits, and assured of the voluntary and confidential nature of their participation; see Appendix A). Participation consisted of three tasks: a preconversation questionnaire, a conversational task, and a postconversation questionnaire. Dyads that completed the study were paid $40 ($20 per individual).

The preconversation questionnaire consisted of four instruments, which are listed in Table 4.1. The researcher was present when participants completed the preconversation questionnaire to ensure the members of the dyad did not influence one another's responses. The questionnaire took most respondents between 45 and 60 minutes to complete.

Table 4.1

Order of Measures in the Preconversation and Postconversation Questionnaires

Preconversation questionnaire	Postconversation questionnaire
Anticipated partner end-of-life preferences	Emotional response
Own end-of-life preferences	Relational distancing
End-of-life conversational experience	Decision-making efficacy
Demographic information	Conversational satisfaction
	Perceptions of partner goals
	Perceptions of own goals
	Predicted partner end-of-life preferences
	Own end-of-life preferences
	Conversational realism

Once participants completed the preconversation questionnaire, they were given digital audio-recording equipment, oral and written instructions for the conversational task, and six large cards listing the topics they were asked to discuss in the order they should discuss them (see Appendix A). The instructions informed participants that they would be asked to have a conversation about future health decisions, including decisions about end-of-life medical care. The goal of the present study was not to educate people on advance care planning, but to discover how people talk about end-of-life choices given their existing level of knowledge. Therefore, the topic cards provided enough basic information to facilitate conversation, but did not include extensive educational material. After ensuring that the participants had no questions about the conversational task, the researcher moved to a separate location to give the dyad privacy for the conversation. The conversations lasted an average of 20.33 minutes ($SD = 10.06$) and ranged from 4.54 minutes to 60.07 minutes long.

To complete the conversational task, participants were instructed to have one person read the first card aloud and then to talk together about the set of questions for as long as they wanted before discussing the next topic. Individuals were directed to take turns reading the cards to prevent one person from initiating and terminating discussion. Conversations about advance care can be challenging, and to help the dyads ease into talking about end-of-life issues, the first card asked participants to discuss recent health-related decisions each has had to make and health decisions they anticipate making in the future as they both get older. To introduce the discussion of end-of-life issues in a relatively nonthreatening way, the second card asked participants to talk about a person they know who recently has had to make end-of-life choices. Next the dyads were asked to talk about where each person would prefer to receive care (e.g., hospital, hospice, home), what medical treatments would be acceptable and unacceptable to each person (e.g.,

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intubation, artificial nutrition and hydration, mechanical ventilation, CPR, pain medicine), and

how each person defines "quality of life" and "reasonable chance of recovery." The final card

asked if there was anything else the participants would like to talk about with one another before

ending the conversation. The mean length of time spent discussing each set of questions is

displayed in Table 4.2.

Table 4.2

Length of Time (in Minutes) Spent on Each Question Set in the Conversational Task

Question set	*Mean*	*SD*	*Range*
1 Recent and anticipated health decisions	3.16	2.84	.48 - 20.38
2 Another person's end-of-life decision	3.01	1.75	.63 - 12.87
3 Place of end-of-life care	2.96	2.06	.00 - 13.12
4 Specific end-of-life treatments	4.08	2.08	1.30 - 14.28
5 Definitions of end-of-life concepts	5.07	2.86	.00 - 17.78
6 Invitation for participant-directed discussion	2.05	1.90	.00 - 11.52

These topics were intended to reflect the main types of end-of-life health choices a person

typically must make and were based on the issues identified as particularly important in end-of-

life research. The cards were numbered to indicate the sequence for discussion. The sequence

represented a progression from relatively less challenging topics (i.e., talking about health in

older age) to more challenging topics (i.e., talking about one's own anticipated experience with

death). Some researchers have suggested that family communication about end-of-life issues is

best executed when family members begin by discussing more general issues that induce less

stress and then move to issues that are accompanied by greater discomfort (Hines et al., 2001),

and thus the topic order did not vary across dyads in this study. A similar procedure has been

successfully used in several studies focusing on difficult interpersonal communication (e.g.,

Blieszner & Mancini, 1987; Caughlin & Malis, 2004; Caughlin & Vangelisti, 1999; Zietlow & Sillars, 1988).

When the dyad completed the conversational task, participants were instructed to retrieve the researcher so that the second questionnaire could be administered. The postconversation instrument was completed in the presence of the researcher to prevent participant collaboration. The questionnaire contained nine instruments, which are listed in Table 4.1, and took about 20 minutes to complete.

After both members of the dyad completed the postconversation questionnaire, they were debriefed. Participants were asked if they would like to talk more about anything concerning the research experience and were provided with printed information on advance care planning and local resources (e.g., counseling, support services) in case they experienced any lasting discomfort after completing the research. The participants also were encouraged to contact the researcher at any time if they had questions or concerns after the research session. In addition, the researcher mailed hand-written thank you cards to each participant approximately one week after their participation. The debriefing material appears in Appendix A.

Most participants said that their involvement in the research was a positive experience, and many expressed gratitude for the opportunity to participate in the study. Although some respondents appeared to experience some sadness during the conversational task, no participants were visibly distressed by the end of research session. A considerable number of participants mentioned that they had been meaning to talk about the issues raised in the research and that the study provided them with a chance to discuss end-of-life decisions in a non-threatening way. In addition, several participants asked for copies of the questionnaires and conversational task questions to use as guides for discussions with other family members.

Measures

This investigation utilized measures of communication sophistication (e.g., discursive features), perceptions of goals (e.g., perception of own goals, perception of partner goals), and conversational assessment (e.g., emotional response, decision-making efficacy, conversational satisfaction, relational distancing, concordance in predicting end-of-life preferences). The instruments used in this study are presented in Appendix B with intact subscales and scoring instructions. It was important that some measures appear before others in the questionnaire (e.g., decision-making efficacy was better assessed before own end-of-life preferences), and thus the order of the measures remained fixed (see Table 4.1). Separate questionnaires were developed for use by parents and children.

Communication Sophistication Variables

In this study, the sophistication of participants' communication was assessed by independent raters. Given that the ratings of communication quality were based on the answer to the first research question, a description of the rating scheme and procedure is included in the results section.

Perceptions of Interaction Goals Variables

This dissertation has noted several interaction goals that are normatively relevant in end-of-life conversations. The instructions for the conversations implied a primary task goal of engaging in conversation. Other potential task goals included providing support (e.g., emotional validation, advice) or persuading a family member to accept or reject a particular end-of-life choice. A number of identity goals were also relevant, including maintaining positive face and negative face. Relevant relational goals included maintaining and strengthening the relationship.

In the current investigation, participants were asked to report their perceptions of their own and their partner's interaction goals. Some researchers have argued that self report is a limited method for assessing people's goals because, even though communication is purposeful, it is also "primarily automatic" (Kellermann, 1992, p. 288), and thus individuals may not be aware of their goals, even if their communication demonstrates attention to those goals. However, there is evidence that interaction goals often are accessible to conscious awareness and that people can provide insights into their goals (see Dillard, 2004). Even though people act on their goals without thinking about them most of the time, when asked to reflect on the reasons behind their actions, they often can do so (Wilson, 2007). Furthermore, the theoretical model described in this study is concerned with how people's perceptions of their own and their partners' goals affect assessments and outcomes of communication, not with how people's actual goals affect such assessments and outcomes. Thus, the ability to access awareness of interaction goals is all that was necessary for perceived goals to be measured in this study.

To measure participants' perceptions of goals, items based on the instruments developed by Dillard et al. (1989) and Samp and Solomon (1998) were used. Respondents completed the measure of perceived goals twice: once to report perceptions of their partner's goals and once to report perceptions of their own goals. The measure contained 15 items that assessed six situationally-relevant goals in end-of life conversations: maintaining the positive face of the partner, maintaining the negative face of the partner, maintaining the relationship, avoiding the conversation, giving support to the other, and influencing the other. Participants responded to the items using a 7-point Likert-type response (1 = *strongly disagree*, 7 = *strongly disagree*). The Cronbach's (1951) alphas, mean scores, standard deviations, and ranges for each perceived goal are presented in Table 4.3.

Table 4.3

Descriptive Statistics for Reported Perceived Interaction Goals

Perceived interaction goal	α	*Mean*	*SD*
Own goal to attend to partner's positive face	.83	5.81	1.51
Own goal to attend to partner's negative face	.60	6.16	1.22
Own goal to attend to the relationship	.73	4.87	1.80
Own goal to avoid	.55	1.67	1.21
Own goal to provide support	.69	5.95	1.41
Own goal to influence	.74	2.00	1.29
Partner's goal to attend to own positive face	.81	5.55	1.50
Partner's goal to attend to own negative face	.70	5.84	1.41
Partner's goal to attend to the relationship	.61	4.53	1.70
Partner's goal to avoid	.60	1.63	1.17
Partner's goal to provide support	.58	5.82	1.35
Partner's goal to influence	.66	2.07	1.29

Conversational Assessment Variables

In addition to asking participants about specific goals during the conversations, it was also important to collect information about their general impressions of the conversations. Five aspects of conversational assessment were of interest in this study: emotional response, decision-making efficacy, conversational satisfaction, relational distancing, and concordance in predicting end-of-life preferences. The descriptive statistics for these outcome variables appear in Table 4.4.

Table 4.4

Descriptive Statistics for Reported Conversational Assessment

Outcome	α	*Mean*	*SD*
Burden	.71	1.73	1.07
Distress	.88	1.54	.97
Hurt	.76	1.28	.72
Hopefulness	.83	4.51	1.61
Decision-making efficacy	.57	2.89	1.22
Conversational satisfaction	.86	6.35	.94
Relational distancing	.78	1.68	.84
Concordance change	NA	.05	.17

Emotional response. Participants' emotional response to the end-of-life conversation was assessed using 14 items based on previous research on emotions relevant to end-of-life talk. Specifically, participants' burden (based on Chochinov et al., 2007), distress (based on Batson, Fultz, and Schoenrade, 1987), hurt (based on Vangelisti, Young, Carpenter-Theune, and Alexander, 2005), and hopefulness (based on Beach, 2003) were measured. Respondents were asked to indicate the extent to which the discussion made them feel a variety of emotions using a 7-point Likert-type response format (1 = *not at all*, 7 = *a lot*).

Decision-making efficacy. The extent to which people feel equipped to make choices is often assessed in terms of their uncertainty about making the decision and their control over making the decision (O'Connor, 1995; Stalmeier et al., 2005). To measure participants' decision-making efficacy in this study, two instruments were adapted to address end-of-life decisions. Uncertainty about decisions was operationalized with two items from the decisional conflict scale (O'Connor, 1995), and decision control was operationalized with two items from Stalmeier et al. (2005). The four items asked respondents to report the extent of their agreement with

statements about making health-related decisions using a 7-point Likert-type format (1 = *strongly disagree*, 7 = *strongly agree*).

Conversational satisfaction. Participants' conversational satisfaction was assessed using items based on Hecht's (1978) measure of interpersonal communication satisfaction. Participants were asked to respond to five statements about their end-of-life conversation using 7-point Likert-type items (1 = *strongly disagree*, 7 = *strongly agree*).

Relational distancing. The relational impact of the conversation was assessed with the measure developed by Vangelisti and Young (2000). The scale asked respondents to complete five 7-point semantic differential items to indicate the extent to which the conversation affected their relationship with their partner. Anchors completed the statement "It made us more…."

Concordance change. Measures of respondents' end-of-life preferences were used to operationalize concordance among conversational partners. To assess each person's preferences as well as predicted partner preferences, items from three instruments were used. First, preferences were assessed using the autonomous decision making subscale from the Preferences for Care near the End of Life instrument (PCEOL) developed by Gauthier and Froman (2001). The PCEOL scale asked participants to report the extent to which they agreed with four statements about end-of-life preferences. Given that concordance scores are typically calculated based on dichotomous answers to questions about advance care treatment (e.g., Barrio-Cantalejo et al., 2009), in the present study, the response scale was a yes/no format. In addition, several of the PCEOL items were altered to avoid confusion given the yes/no answer options (e.g., "I do not want to be resuscitated" was changed to "I want to be resuscitated"). Second, the PCEOL scale does not account for preferences concerning hastened death, and thus two items from Bonin-Scaon, Sastre, Chasseigne, Sorum, and Mullet (2009) were used to measure preferences

related to pain medication and physician-assisted suicide (i.e., "I want to be able to get enough pain treatment" and "I want to be able to have the option of physician-assisted suicide"). Third, end-of-life preferences were assessed with the Life Support Preferences Questionnaire (LSPQ; Beland & Froman, 1995). The advantage of the LSPQ is that it uses contextual information to inform respondents' answers. The six-item measure presents common end-of-life clinical situations that allow participants to consider their preferences against the backdrop of a particular scenario rather than in the abstract. There is evidence that such contextual information is an important determining factor in end-of-life treatment decisions (e.g., Bookwala et al., 2001; Winter & Parker, 2007). The LSPQ asks participants to choose to accept or refuse life-sustaining treatment in each of the six scenarios.

Concordance in predicting each participant's end-of-life preferences was calculated by computing the proportion of each person's preferences that was correctly predicted by the partner. A preconversation and postconversation concordance score were computed, and the change in concordance was calculated by subtracting the preconversation concordance score from the postconversation concordance score for each participant. Given that conceptually distinct items comprise the end-of-life preferences measure used in this study, it was not expected that the items would be highly correlated. Thus, the traditional models of measurement, which assume a single underlying construct of which items are different indicators, do not apply (Bollen & Lennox, 1991). Consequently, internal consistency was not assessed for this variable.

Descriptive Variables

Two variables were measured to provide information about the nature of the sample and the conversations in the study.

End-of-life conversational experience. Participants were asked to indicate their experience with end-of-life conversations by following a similar procedure to that used in Hines et al. (2001). Respondents reported the approximate number of conversations they had had about advance care with their participating partner, other family members, and their doctor. The reported frequencies are presented in Table 4.5. Most of the participants had not discussed end-of-life issues frequently before.

Table 4.5

Frequencies of Reported End-of-life Conversational Experience

Number of conversations	With partner	With family	With doctor
None	58	35	205
1 - 2	77	40	29
3 - 5	63	69	4
6 - 10	31	42	4
More than 10	11	54	0

Note. 2 participants declined to respond to the items about the partner and family.

Conversational realism. To check how realistic or typical the end-of-life conversations were, respondents were asked to indicate the extent to which they agreed with five statements about the conversation using 7-point Likert-type responses (1 = *strongly disagree*, 7 = *strongly agree*). Similar manipulation checks have been used in other studies utilizing conversational tasks (e.g., T. D. Afifi, Joseph, & Aldeis, 2008). The mean score was high, indicating that the typical participant thought the conversations were very realistic. ($M = 6.19$, $SD = .95$, $\alpha = .76$).

CHAPTER FIVE: Results

The research question in this study laid the foundation for examining the eleven hypotheses put forth in this dissertation. This chapter thus begins with a summary of preliminary analyses related to the research question, including an explication of discursive features that characterize attention to face, relational, and task goals in conversations about end-of-life health decisions as well as a description of the rating procedure used to assess communication sophistication in this study. Next, the results of the main analyses related to the hypotheses are summarized. Specifically, findings are presented according to the associations between rated communication sophistication and reported conversational assessment (*H1*, *H2*, *H3*, *H4*, *H5*), the associations between rated communication sophistication and reported perceived interaction goals (*H6*), and the associations between reported perceived interaction goals and reported conversational assessment (*H7*, *H8*, *H9*, *H10*, *H11*).

Preliminary Analyses

Attention to Multiple Goals

The research question asked about the discursive features that characterize attention to multiple goals in conversations about end-of-life health decisions. This question was addressed by using two analytic approaches. First, the researcher analyzed the conversations using inductive techniques (Bulmer, 1979). The audio recordings of the conversations were transcribed using the transcription conventions described in Appendix C. As the researcher read the transcripts, attention was given to the conversations that seemed to be particularly "good" and those that seemed to be particularly "bad," and to the features of the conversations that distinguished the more sophisticated from the less sophisticated conversations. This analysis revealed that attention to multiple goals was one such differentiating feature, and given the sound

theoretical reasons for focusing on message features that indicated attention to relevant goals, a more focused level of analysis was pursued.

Second, the transcripts were analyzed by operationalizing a set of theoretically derived message features (O'Keefe & Shepherd, 1987). Drawing on a key assumption of a normative theoretical approach, namely that identity, relational, and task goals are conventionally relevant in nearly any interaction, the researcher analyzed the transcripts for specific features that demonstrated attention to identity-related goals, relationship-related goals, and task-related goals. Operationalizing a set of theoretically derived message features (in this case, those that indicated sophisticated attention to multiple relevant goals) is not the one correct way of describing end-of-life conversations, but focusing the analysis on discursive features represents one important way of understanding the form and effectiveness of pursuing multiple goals in interaction. This theoretically driven analysis resulted in the identification of several discursive features that mark attention to multiple goals in end-of-life conversations: attention to positive face, attention to negative face, attention to the relationship, avoidance, and elaboration. Although the discursive features are presented here in separate categories, many times a single message demonstrated skilled (or poor) attention to more than one type of goal.

Attention to face goals. Positive face as well as negative face were relevant in the conversations, and some participants showed skill in attending to these face concerns, whereas others ignored these identity goals. Participants demonstrated sophisticated attention to positive face in a number of ways. Some explicitly expressed general approval of the other person. Sometimes this occurred without any specific prompting (as in Example 1), and other times explicit approval was a response to a comment that could be understood as an indirect request for affirmation from the other person (as in Example 2).

Example 1 (dyad 033):

D: [[Is there anything else you would like to talk with one another about before ending the conversation?]]

M: No, you're just a wonderful mother, and you have to live forever.

Example 2 (dyad 022):

M: A—actually, I really feel like I'm quite a happy person.

D: You are. You're really easy to be around.

M: Thank you.

Another way participants showed attention to positive face was by expressing approval of their partner's decision-making skills, including the health decisions the partner has made on behalf of others in the past (see Example 3) or the anticipated health decisions the partner may make on behalf of the participant in the future (see Examples 4 and 5).

Example 3 (dyad 064):

D: My impression was that you were doing everything you could to make sure that you were making the right decision, you weren't thinking about yourselves, you were putting Auntie and Grandma first. You weren't making the decision based on how you felt, how exhausted you were with everything, how tired you were, and, you know, you still made the decision based on what they would have wanted.

Example 4 (dyad 008):

M: And I think whatever you think is best is you should do for me. Just keep me comfortable, and whatever you decide is, will be fine with me.

D: Okay.

M: I trust you to take care of me.

D: Okay.

Example 5 (dyad 068):

F: Well, as far as health decisions, uh, uh, I have utter confidence in, in you making the decisions for me…

D: Mmm-hmm.

F: …if in the event I'm not able to make it myself.

Participants also showed attention to positive face by expressing approval of the specific contributions their partners made to the conversation, such as in Examples 6 and 7.

Example 6 (dyad 064):

M: Oh, that's a good, that's a good way to put it.

Example 7 (dyad 93):

F: I would accept that as an improvement over my answer.

In contrast to the individuals who attended to positive face in explicit ways, some participants paid little attention to positive face in the conversations. One way participants threatened their partner's positive face was by expressing disapproval of the partner, such as by criticizing the person's character (Example 8) or behavior (Example 9).

Example 8 (dyad 86):

M: Well, I'd rather go into a home.

D: {Not me.

M: I don't want} to have to worry about—

D: You liar.

M: I—

D: Here you won't get your hip done 'cause you're scared they're going to put you in a home.

M: I know, but that's because I'm mobile right now. But if I got to the point where I couldn't do anything at all for myself, I wouldn't want to be at your mercy.

Example 9 (dyad 019):

S: Well, you need to throw that [funeral wishes] into the collection of {stuff that you've, have yet to do.

M: Yeah, I know,} I know, I've been waiting for you to bring up the collection of stuff, but—

S: Well, you know, we're sitting at, we're {doing a study…

M: I know.}

S: …now about planning for death, and…

M: Well—

S: …you're someone who ha—just two minutes ago said you had to take up the reins with your four brothers and sisters 'cause they wouldn't do anything, yet your own son asks you to do a reasonable thing that will take you, like, maybe an hour of your time, and you still can't do it to make that a lot more doable when the time comes.

[14 conversational turns later]

S: Well, the part, the, the part that gets me on it is that you sit there and go, "Well, you know, it's not that hard. The key's here, and the file's there." Well, if it's not that freaking hard, then just get it together.

M: [chuckles]

S: […] You at least know what you're looking for, so, that, that's my point, that's why it's annoying that you're so…

M: Uh.

S: …"Well, what's the big deal?" 'cause you sit there going, "What's the big deal for you?" You know what you're looking for. So if it takes you five minutes, it, then it's done. I'll leave you alone. I swear to God, I'll leave you alone. Just do it.

Another way participants threatened the other person's positive face was to express disapproval of the other person's decision-making skills, such as by questioning the person's ability to make good decisions (e.g., Example 10), or by excluding the person from the end-of-life decision-making process (e.g., Example 11).

Example 10 (dyad 060):

D: I don't think you can make the decision for anybody.

M: I think I could.

D: I don't, I don't think you could.

M: Not for my children…

D: Not for your children.

M: …or my brother and sister?

D: No, e—ne—neither one of them, I don't think.

M: Why?

D: 'Cause I don't think you, I think you would keep the person there on life support as long as you could.

Example 11 (dyad 034):

M: Yeah, and just so you know too, um, I haven't done it yet, but I will be, it was suggested that I, that we give our policies to somebody else, make a copy…

D: Mmm-hmm.

M: …at least of the first…

D: Mmm-hmm.

M: …few pages. So I figured [male name] would probably be a good one to give that to.

D: Okay.

M: Alright.

D: You could probably make another one, and I could keep it too, just in case.

M: Yeah, do you…

D: Depending on—

M: …do you have a lock box?

D: Mmm-hmm.

M: Okay.

Other participants showed no attention to their partner's positive face by challenging the partner's contributions to the conversation, such as in Example 12.

Example 12 (dyad 106):

D: I don't know. I don't know what I would consider [a] reasonable [chance of recovery]. It'd definitely be, have to be a hell of a lot more than one percent. And it depends on what's recovery. I mean, am I on a, am I, are we total one hundred percent ventilating, eating out of a tube, are we talking Terry Schaivo here, you know. In that case, unplug me, let me die, but don't starve me to death like they did her. That was horrible, that was horrible. That was horrible.

M: Well, when you starve, you're not in any pain.

D: Well, how do you know? Have you starved to death?

The interactants' negative face was also a relevant concern in the conversations, and some participants showed skilled attention to their partner's negative face. Some participants attended to negative face by expressing respect for the other person's end-of-life health decision, such as affirming the other person's autonomy in making their own decisions (as in Examples 13 and 14) or showing reluctance to influence the other person's decisions (as in Example 15).

Example 13 (dyad 034):

M: [[If the parent becomes seriously or terminally ill, where would you like for the parent to receive care?]]

D: Well, I want you to get whatever care you want, wherever you want.

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Example 14 (dyad 84):

M: [[If the parent becomes seriously or terminally ill, where would each of you like for the parent to receive care?]]

D: Well, my answer to that is, I mean, I just firmly believe that it's up to you, you know.

M: Mmm-hmm.

D: So, that's why it's important for us to know…

M: Yeah.

D: …what you want if anything happens.

Example 15 (dyad 078):

M: [[Receiving pain medication that reduces your pain, but also reduces your level of awareness.]]

S: What do you think about that one?

M: Well, I don't want to deal with a lot of pain, but also, I don't want to be goofy. [chuckles]

S: Yeah.

M: So, I don't know. That's a hard one. What do you think?

S: Well, I don't know. It's, it's, I mean, I can tell you how I answered that, or how I think I answered, um, on my, when it, on my questionnaire when it asked me what I thought you would say about that. But, I mean, you know, what I think doesn't really matter. I mean, I guess it shouldn't impact your decision.

Another way in which participants attended to the other person's negative face was by expressing a desire to not place any kind of burden (e.g., emotional, financial) on the other person as they faced end-of-life issues, such as in Examples 16 and 17.

Examples 16 (dyad 87):

S: [[If the parent becomes seriously or terminally ill, where would each of you like for the parent to receive care?]]

M: […] Um. […] It kind of, it kind of depends on, I mean, if you could keep a person at home as long as possible. But there comes a point where, where it's such a burden on the family. Like if, like, say I were terminally ill and I could almost literally die any minute, I wouldn't want to put that nerve-wracking, "Oh, my goodness, is it going to happen any minute?" I wouldn't want…

S: Mmm-hmm.

M: …to put that on your shoulders.

Example 17 (dyad 112):

M: I think most people would prefer to be at home, but I don't want to become a burden for my children, if I need that kind of care. I would prefer that they would be able to put me someplace where they can get on with their lives and not have it interfere with their daily lives.

Other participants ignored negative face concerns in the conversations. One way participants threatened negative face was by saying that their partner's end-of-life wishes would not be honored. Contradicting the other person's end-of-life preferences took direct (see Example 18) and indirect (see Example 19) forms.

Example 18 (dyad 049):

M: [[Is there any, is there anything else you would like to talk with, talk with one another about before ending this conversation?]] No, you know what I want.

D: I know what you want, but it doesn't mean I agree to it.

M: It doesn't matter if you <u>agree</u> to it. You're not ever going to <u>agree</u> to it.

D: If it's not on paper, I don't have to <u>agree</u> to it.

Example 19 (dyad 115):

D: Would you want your kids to put you in a nursing home?

M: No, I would not ever want to be put in a nursing home. Never. I'm saying that right now. Do not ever put me in a nursing home.

[11 conversational turns later]

D: Depending upon the nature of the illness, I would like for my mother to be where she's going to be cared for properly. And in some conditions, she may not get to be cared for at home, depending on her state. And for me, I would like to be kept in a hospital where I will be looked over. And I wouldn't want to put any sort of pressure on anyone to provide needed medical attention.

M: Hmm.

Another way participants threatened negative face was by not letting their partner express their own end-of-life preferences, for example, by not allowing the other person the opportunity to express their preferences (Example 20), by implying that the other person does not really know their own preferences (Example 21), or by trying to persuade the other person to change their preferences (Example 22).

Example 20 (dyad 110):

M: [[Being placed on a me—mechanical ventilator if you are no longer able to breathe on your own.]]

D: You don't want that.

M: I don't want that.

D: Do you want artificial nutrition?

M: N—

D: No.

M: No, not at all. [[Receiving CPR to try to revive if you stop breathing or your heart stop.]]

D: You don't want it.

M: You don't want that, I don't want that.

Example 21 (dyad 86):

M: I don't want to be in a nursing home. I'm talking about end-of-life, I want to be in a hospice.

D: Okay.

M: I don't want to be in a nursing—

D: Well, welcome to the nursing home.

M: I don't want to be in a nursing home.

D: Well, welcome to a nursing home.

M: Well.

D: 'Cause that's what it is.

M: I don't want to be in a nursing home.

D: Well, then you don't want to go to a end-of-life facility, {you want to stay home.

M: Yes, I do.} Hospice, they have individual rooms up there. You're not in a room with anybody. {You live by yourself.

D: You don't have the kind of insurance} to pay for that.

M: Well, you don't know {what kind of…

D: Keep reading.}

M: …insurance I have. I might.

Example 22 (dyad 029):

D: [[Being placed on a mechanical ventilator if you are no longer able to breathe on your own.]]

M: No, I wouldn't want that either.

D: But what if it was temporary? I mean, it's like [male name] that had, had a heart attack at our office, he's on a ventilator and they're—

M: He's a younger person than I am too.

D: I know, but if you're going to get off of it at some time, it's not, sometimes it's not permanent. I think if it's not permanent—

M: I don't think at my age I would want to.

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D: Not at all? [[Receiving CPR to try and.]] I am not sure what that says. It might be like resuscitate, you stop breath—if your heart stops. I would, you would want CPR. If you had a heart attack, you would want CPR.

M: I suppose I would probably get it whether I wanted it or not.

Attention to relational goals. Relational goals were also relevant in the conversations about end-of-life decisions, and some participants effectively attended to the relational goals that are normatively present in this type of conversation, whereas others showed no consideration for such goals. One way that participants attended to relational goals was by affirming the closeness (e.g., Example 23) or importance (e.g., Example 24) of the relationship with their partner.

Example 23 (dyad 071):

M: I th—it would, if I had my faculties and knew that I was facing death, I would be more worried about my family than I would about myself, because I know how close we have been, and that we get closer all the time.

Example 24 (dyad 120):

D: Would you want to stay here in [city name] if [male name] was still here, or, you know, if [male name] goes first, would you rather be in [state name] or [city name] or [city name] or wherever we happen to be? I mean, taking you away from [city name] would be a hard choice, I think for us, 'cause that's where you've been.

M: That wouldn't, I know, but that wouldn't make any difference to me.

D: Okay.

M: My family's more important than friends.

Another way participants showed sophisticated attention to relational goals was by expressing affection for their partner, as in Example 25.

Example 25 (dyad 071):

M: [[Is there anything else you'd like to talk with one another about before ending the conversation?]] We don't have to talk about it…
D: [chuckles]
M: …but we sure do love each other.
D: Absolutely.
M: [chuckles]
D: I think that's kind of evident. [chuckles]

Other participants ignored relational goals. One way participants undermined relevant relational concerns was by making unfavorable comparisons to other relationships to show that the relationship with the partner lacks closeness (e.g., Example 26) or productivity (e.g., Example 27).

Example 26 (dyad 98):
M: Now, [[what do you see as the advantages and disadvantages to receiving end-of-life care in different facilities?]]
S: Okay. Well, if you're here, I can see, see you. If you go back to [state name], I'm not sure.
M: I know. [chuckles]
S: But of course, then my sister is closer to you, and she's the, she's the sister, which sometimes is better to be close to the mother…
M: Yeah.
S: …than the son.
M: I agree with you on that.

Example 27 (dyad 119):

D: And Dad and I talked about his, um, and he was pretty straightforward about it, whereas with you, it's a little bit, we just haven't had the discussions the way we should have, Mom.

Attention to task goals. The relevant task goal in the conversations involved talking about end-of-life health decisions. One way participants effectively attended to the task was to show engagement in rather than avoidance of the conversation, such as by bringing up additional questions for discussion beyond those that they were asked to discuss as part of the study (see Example 28).

Example 28 (dyad 044):

D: Okay. Okay, now. [[How would each of you define a reasonable chance of recovery for yourself?]]

M: [...] If it was something sudden that happened to you, like a heart problem, and they could, uh, fix it, to where your, you were just the way you were before, then I think that's okay. But if it's a heart problem where you're just getting sicker and sicker because of the heart problem, I don't know if I'd fix it. I might just say just let me s—go.

D: Okay, what about the—

M: It would depend on the s—

D: What about, like, a stroke? Um, let's say, you know…

M: This all depends.

D: …you're going to have a stroke and your mind's not going to be the same anymore, but it's still enough to where you're aware of who your family members are, but you, you can't communicate with them, you've lost the ability to speak, but you, you know who they are.

M: Oh, is that what that says?

D: No, I'm just, I'm just throwing…

M: Oh.

D: …that out there.

M: Because some strokes aren't that bad.

D: Mmm-kay.

M: There's different kind of strokes.

Other participants showed poor attention to task goals by avoiding discussion of end-of-life issues. Different ways that participants declined to engage in the conversation included refusing to continue the conversation (Example 29), moving on to the next question before the other person was ready (Example 30), or avoiding a specific topic (Example 31).

Example 29 (dyad 119):

D: [[Is there anything else you'd like to talk with one anoth—another before ending the conversation?]] I do. […] We've, we know how to handle the medical decisions. You know what I don't know, Mom? [teary: And I don't know if this is a conversation to even have right now, but I want—]

M: If you're going to cry, then I don't want to talk to you.

Example 30 (dyad 063):

F: [[Is there anything else you'd like to talk with one another about before ending the conversation?]]

D: I think we need, we, I don't think that this, are your, your plans are all laid out?

F: Well, I'm not sure. I guess I'd have to pull that, uh, medical plan out.

D: I feel like I would want to meet your wishes, and I don't feel prepared to do that after reading all, doing all this.

F: Alright. [[After you have completed your conversation…

D: [sighs]

F: …you may stop the audio recorder by pressing the stop button.]]

Example 31 (dyad 007):

D: Okay. [[Is there anything else you'd like to talk with one another about before ending the conversation?]]

M: You know what I want, {don't you?

D: Yeah,} cremated.

M: Yes, but that isn't what they, uh, but you also know what—

D: Uh-huh, no nursing home, no hospice, no hospital, {home.

M: And you} also know what else, if I were in such a condition as I was out, I know you never wanted to talk about it but this, the girls know. My sisters know.

D: What?

M: That, you know, if I'm lying there, f—God forbid, that somebody does not follow my wishes.

D: Oh, yeah, {no, I know.

M: But you know} my wishes on that.

D: Yeah.

M: My sisters, we don't have to talk about that, do we?

D: {No.

M: Or do we?} Okay.

D: No, {I know what you want.

M: You know, you know what I'm saying.}

D: Yeah.

M: Okay.

Another way participants avoided was by saying that the issues had already been discussed in the past (as in Example 32) or would be discussed in the future (as in Example 33), and thus did not need to be discussed during this particular conversation.

Example 32 (dyad 068):

F: Alright. My page number two is, [[as people get older they often ask about health decisions that others have to make. Sometimes the decisions are related to medical care at the end of life.]] Um, uh, we've discussed this…

D: Mmm-hmm.

F: …and we've got it in our, uh, in our will and our, uh—

D: And I have a copy of it.

F: Yep.

D: Mmm-hmm.

F: Right.

Example 33 (dyad 032):

S: Okay, and also, you know, my concern is, uh, uh, w—those were some important questions that we had to ask or answer, and, uh, you know, if you did get sick, and you weren't able to, uh, make good decisions or the right decisions, would you want me to make decisions for you?

M: Mmm-hmm.

S: Uh, those are some of the things that we'll have to talk about in the future.

M: Mmm-hmm.

S: You know, uh, the importance of making the right decision, of me knowing what you would want, even in the power of attorney or whatever. So I'm going to go to my questions now.

Some participants avoided by expressing general agreement rather than articulating specific answers to the questions, such as in Example 34.

Example 34 (dyad 012):

D: [[How would each of you define a reasonable, oh, chance of recovery for each other?]] Well, I think we both agree.

F: Yeah.

D: Yeah.

Other participants avoided discussion of end-of-life decisions by making a joke to deflect the topic of the conversation (see Examples 35 and 36).

Example 35 (dyad 079):

F: Would you rather, if you were ill, would you rather pass at home or be at a hospital, or?

D: Mmm. I don't really know. I just want to go quick. [chuckles]

F: [chuckles] Yeah. Okay. What do you got for four?

Example 36 (dyad 98):

M: [[If the parent becomes seriously or terminally ill, where would each of you like for the parent to receive care?]]

S: Okay. Where would you like to receive care?

M: Well, I live here, so probably have to have it here.

S: Okay, but you've said that you'd like to be taken back to [state name]…

M: Yeah. [chuckles]

S: …if possible.

M: I was kidding.

S: You were kidding. Okay, because I didn't know you were kidding, Mother.

M: [chuckles]

S: You don't kid that oft—I mean, we, you, you do kid, but you're usually pretty serious about this.

M: Well, if that could be done, I would appreciate it.

S: Okay, so if it could be done…

M: Yeah.

S: …you might appreciate it. Alright.

Elaboration represented a second aspect of participants' attention to task-related goals. Some participants used sophisticated elaboration to explain their answers to the questions, such as by presenting different end-of-life scenarios and explaining what they would prefer in each scenario and why (e.g., Examples 37 and 38), or by describing the various factors that their end-of-life decisions would depend upon (e.g., Example 39).

Example 37 (dyad 044):

D: [[One thing that some people consider when making end-of-life health decisions is a person's quality of life. How would each of you define quality of life?]] Well, that's a good question.

M: Mmm-hmm. I define quality of life if your mind is good, and if you're not so sick that you can't even talk to anyone, uh. If, if something's wrong with you and they're bringing you back with CPR because your heart just has a little malfunction, and you're going to be alright again…

D: Mmm-hmm.

M: …then I say, do CPR. But if you're like a vegetable, or if your mind is gone, then don't do CPR.

D: Okay, so the mind is the key word. If, if you can mentally…

M: Mmm-hmm.

D: …be aware of who people are.

M: Right.

D: Okay, but let's say your, your m—mind is there. Well, by mind, I mean, let's say you can, you know, you can still communicate with people, but you don't know who anybody is, because of the, like, let's say Alzheimer's, would you consider that quality of life…

M: No.

D: …even though you, you can talk to people.

M: No. If I didn't really know them, I, 'cause I, my sister had Alzheimer's, and I know her quality of life was not good. So I'm s—so.

D: Yeah, but not, okay, but not good because she couldn't r—see, to me, that was more harmful on the family…

M: Mmm-hmm.

D: …than it was to her.

M: To her.

D: So I, I wonder, would that be not quality of life, then?

M: Well.

D: Even though you can still go for a walk and see what's around you, and, and talk to people even though you don't know who they are and you won't remember them again, is that not quality of life for you?

M: That wouldn't be quality of life for me.

D: Okay.

Example 38 (dyad 82):

M: Okay, which [treatments] would be acceptable?

D: Um. […] When it comes to nutrition, if I was still cognitively aware of what was going on and could still speak and do that, do that sort of thing, I don't think it's, um. I think I answered that I, I wouldn't want the tube, but it just depends on what the circumstance is. If I am in a very much vegetative state, and they have to keep me alive by feeding me…

M: That's true.

D: …I do not want that.

M: Yeah.

D: If I'm still cognizant. You know, consider people that have throat cancer, and are unable to eat or drink because of the pain or because of surgical reasons, but I still have my mind, I can still speak, I can still function in a limited way, then I would say it would be okay to place a feeding tube because…

M: Mmm-hmm.

D: …there are different circumstances for that. There was just a boy on the news who had the swine flu, like, a month ago. It was a teenager, and he's having to be fed through his

nose because he was so weakened by the flu, it was like a sixteen-year-old kid, and he almost died from it.

M: Oh!

D: But, so there are circumstances where I think the feeding tube is, is alright for me. What about you?

Example 39 (dyad 026):

D: [[What do you see as the advantages and disadvantages to receiving end-of-the-life, end-of-life care in different facilities?]] Well, we just said.

F: Well, I think a lot depends on the ailment, whether or not, i—if you're a Alzheimer's patient, for example, and you're maybe violent or…

D: Yeah.

F: …subject to not taking care of yourself, cl—clean, cleanliness…

D: Yeah.

F: …and that sort of thing, and you don't really know where you're at…

D: Yeah.

F: …then probably a facility where they're trained to treat you is much better than home, for example. On the other hand, if, if you're a stroke patient and somewhat limited, but yet have your faculties, and you're able to think, and, and with some help you're mobile and can move around, then probably home. And in the other situation, if it's just more or less hopeless, then you almost have to be on a ventilator or, or have intensive care, then obviously the hospital.

Another form of sophisticated elaboration involved identifying key decision-making criteria, as the participants do in Examples 40 and 41.

Example 40 (dyad 078):

M: Okay. [[Which treatments would be unacceptable?]] is the next question.

S: Um.

M: There's so many

S: I know, but wh—yo—you're right. I mean it, but, I think that what, what we're, what you, what we've done though is kind of identified the things that were important to you, so that, you know, regardless of what the treatment is, and even if it's not treatments that are identified on that list, my sense of what you're telling me is that the, the important thing for, for you is to, to be able to interact with people…

M: Mmm-hmm.

S: …um, and to not have, uh, an extraordinary amount of pain…

M: Right.

S: …and that if, um, i—if you can maintain the ability to interact with people, and be aware of people who are around you, um, whatever the, and not be in extraordinary pain, whatever is necessary to provide you with the ability to do that, or, or extend your life or give you comfort, you would be willing to do.

M: Right.

S: But if that's, if that's compromised, if you're not conscious, if you're not going to regain consciousness, uh, or if you're not going to have the ability to interact with people, y—you wouldn't be interested in life-{sustaining treatment unless…

M: Just, right, just hanging around.}

S: …there was some promise that {that treatment…

M: In the future.}

S: …would get you to s—{would be healthy in the future.

M: Yes. Exactly,} that's exactly.

Example 41 (dyad 104):

D: So, what I'm hearing is that the social aspect of all of this is very important, and especially I see that with you, because you are so social. So, if it came down to it, where there was nobody else but just you, I would think that you would thrive having the social part of it, but that you wouldn't do well, if someone put you in a home and left you alone.

F: I probably wouldn't get along and, eh, socialize with most of the beings there, because they would be out, we'd be at two different wave lengths, and we just wouldn't connect. I'd find somebody in there that I could talk to, but he'd probably be worse off than I was.

D: But that's important to you, is to be able to connect with people.

F: Oh, yeah, yeah, yeah, yeah, it is very important.

Some participants did a poor job of elaborating on their logic for end-of-life choices in the conversations, such as by giving one-word answers to questions, (see Examples 42 and 43).

Example 42 (dyad 97):

F: [[If you were seriously or terminally ill, is a point at which your quality of life would not be high enough for you to want to continue living?]] I would say yes. [[Is there a point at which your quality of life would not be high enough for you to want to continue living?]]

S: Yes.

F: That's what, that…

S: I mean…

F: …that would be my, my {feeling too.

S: …without getting} into it, I'd have to say at some point, yes.

Example 43 (dyad 047):

S: [[The following list includes possible treatments you may choose to accept or refuse. Receive artificial nutrition or hydration if you are no longer able to eat or drink fluids on your own.]]

M: {No.

S: Would you} want that? {No.

M: No.} Hmm-mmm.

S: [[Being placed on a mechanical ventilator if you are no longer to breathe on your own.]]

M: No.

S: No. [[Receive CPR to try to revive you if you stop breathing or your heart stops.]] Yes.

M: Yeah.

Other participants enacted poor elaboration by saying that their answers would depend on the circumstances, but not explaining specifically how their answers would depend (Example 44).

Example 44 (dyad 058):

F: Yeah. Um, I think, I think I would have to asses it with, uh, what the doctors were saying, [male name]…

S: Right.

F: …you know what I'm saying? All this, some of this is so vague. I would want to know what the pros and cons…

S: Right.

F: …of it is with everything, you know.

S: Yeah, research it.

F: That's the whole thing about this. I would be making, m—a lot of this here stuff, I would have to have a little bit more information…

S: Yeah.

F: …before I could make a decision.

Rating Procedure

Analyzing the hypotheses required quantitative assessments of communication sophistication. These assessments were made by outside raters, who analyzed the participants' conversations using a rating scheme that was based on the discursive features characterizing attention to multiple goals discussed above. Although rating has been widely used to analyze discourse, little extant research has utilized rating to assess end-of-life conversations among family members. The method holds promise for analyzing such interaction, however, because rating provides a way to evaluate specific features of discourse that participants may not be able to identify (Bakeman & Gottman, 1997). Several studies have used raters to infer attention to interaction goals from people's discourse (e.g., Lannutti & Monahan, 2004; O'Keefe, 1988;

O'Keefe & Shepherd, 1987), and although some have argued that raters can miss goals that are not consistent with a person's speech (Austin & Vancouver, 1996), the focus of this measure was how well participants' communication attended to normatively relevant goals, not whether their communication matched their idiosyncratic purposes.

The first step in rating the conversations involved unitizing the conversations for analysis. In this study, each set of questions that participants talked about in their conversational task represented natural distinct units, and thus the unit of analysis was defined as the discussion that occurred in response to each of the six question sets.

The next step in rating the conversations involved training outside raters to assess the conversations. The raters were four undergraduate students who were not focusing their studies on interpersonal communication. Consistent with recommendations by Gottman and Levenson (1986), the raters' shared cultural understanding of identity, relational, and task goals were relied upon. There is evidence that allowing outside raters to draw on intersubjective understanding of discourse is a more reliable analytic technique than using outside analysts to code for specific features of communication (D. A. Smith, Vivian, & O'Leary, 1990). Furthermore, using observers as "cultural informants" rather than as "detectors" allows raters to integrate impressions of the frequency and affective intensity of communication and thus to analyze conversations with greater complexity than is afforded by coding for the frequency and intensity of specific discursive features separately (Bakeman & Gottman, 1997, p. 22). Therefore, sophistication of communication was assessed by raters serving as cultural informants.

Training involved having the raters first listen to five randomly selected conversations to become familiar with what constitutes typical communication in this context. The raters were then guided through a detailed explanation of the guidebook (Appendix C), which contained

instances of each aspect of communication sophistication that was of interest in this study, including attention to identity goals, (which had two indicators: attention to positive face and attention to negative face), attention to relational goals (which had a single indicator since typically the only relational concern in these conversations appeared to be affirmation of the relationship), and attention to task goals (which had two indicators: avoidance and elaboration). The raters were told that the instances in the guidebook were only examples and not definitions of the relevant categories. The purpose of the guidebook was to clarify each dimension of communication sophistication without making the categories so specific that the ratings would be based on counting particular behaviors. In addition, the raters were asked to consider both the frequency and the intensity of the interactants' attention to goals when rating the conversations.

After completing the training, each rater independently assessed all of the conversations. The rating procedure involved having each rater listen to the audio recording of each conversation while following along with a hard copy of the transcript in the presence of the researcher. The audio recording was paused after each of the six question sets so the raters could complete the rating sheet. Thus, for each conversation, each of the four raters assessed each aspect of communication sophistication six times (once for each unit of analysis). For each of the six units of analysis, the raters used a 7-point scale to rate the five aspects of the participants' communication sophistication (i.e., attention to positive face, attention to negative face, attention to the relationship, avoidance, elaboration). The rating sheet is reproduced in Appendix C.

Preliminary analyses of the various dimensions indicated that the ratings were quite consistent across the six topics; thus to simplify the analyses, each rater's score for each aspect of communication quality was based on the mean score for the aspect across the six sets of questions. Interrater reliability, which was calculated with intraclass correlations (Fleiss, 1981),

for the various dimensions were: .86 for parent attention to child's positive face, .89 for child attention to parent's positive face, .88 for parent attention to child's negative face, .91 for child attention to parent's negative face, .79 for parent attention to the relationship, .79 for child attention to the relationship, .94 for parent avoidance, .91 for child avoidance, .95 for parent elaboration, and .94 for child elaboration.

Each participant's score for each aspect of communication sophistication was calculated by taking the mean across the four raters' scores (which were based on the mean of each rater's six ratings for each conversation) for the aspect of communication. In other words, each participant's score for each of the five aspects of communication quality was based on the average score of the four raters, which was in turn based on the average score across the six question sets in the conversation.

A score for a sixth dimension of communication sophistication, attention to multiple goals, was calculated by using dummy coding. Participants received a score of 0 for attention to positive face, attention to negative face, attention to the relationship, avoidance (which was reverse coded), or elaboration if their score for attention to the particular goal was at or below the mean score of all participants for that item. Participants received a score of 1 for attention to each aspect of communication sophistication if their score for that aspect was above the average participant score for that item. This created five dummy codes. These five dummy codes were then summed to create a score ranging from 0 to 5 for each participant. A score of 0 indicated that the participant was not above average in attending to any of the five aspects of communication sophistication, and a score of 5 indicated that the participant was above average in attending to all the relevant goal dimensions measured. Whereas the scores for the individual aspects of communication sophistication provided a way to measure the depth of participants'

attention to specific interaction goals, the score for attention to multiple goals created a way to assess the breadth of interactants' attention to multiple goals. The means, standard deviations, and ranges for the ratings of communication sophistication are presented in Table 5.1.

Table 5.1

Descriptive Statistics for Ratings of Communication Sophistication

Variable	*Mean*	*SD*	*Range*
Attention to positive face	4.17	.37	2.58 - 5.67
Attention to negative face	4.08	.28	2.21 - 5.04
Attention to the relationship	4.10	.21	3.29 - 5.04
Avoidance	2.62	.93	1.00 - 6.79
Elaboration	3.23	1.13	1.00 - 6.71
Attention to multiple goals	2.39	1.65	0 - 5

Correlations

As an initial step in understanding the interrelationships of the variables, zero-order correlations were computed among the rated communication sophistication variables (i.e., attention to positive face, attention to negative face attention to the relationship, avoidance, elaboration, attention to multiple goals), the reported perceived interaction goals variables (i.e., positive face, negative face, relationship, avoidance, support, influence), and the reported conversational assessment variables (i.e., emotional response, decision-making efficacy, conversational satisfaction, relational distancing, concordance change). Two sets of correlations were calculated: within-individual correlations (for parent and child) and within-dyad correlations (between parent and child). These findings are provided for descriptive purposes.

Correlations among the rated communication sophistication variables for parents and children are presented in Table 5.2, correlations among the reported perceived interaction goals

variables are displayed in Table 5.3, and correlations among the reported conversational

assessment variables appear in Table 5.4. The ratings of parents' and children's communication

sophistication were significantly related for all six measures. Also, with a few exceptions, the

correlations between parent- and child-report of perceived goals and conversational assessment

demonstrated significant within-dyad variance. (Given the low correlations between parent- and

child-report on the dependent variables of one's own goals to attend to the partner's positive face

and negative face, separate analyses were run for parents and children to make sure the results

were not influenced by the lack of within-dyad correlation. The results for the separate analyses

did not differ significantly from the results for the combined sample of parents and children, and

thus the combined results are reported here.) The significant between-person correlations

indicated nonindependence for most of the dependent variables in the study. It was therefore

important to analyze the data using a technique that accounted for the nonindependence.

Table 5.2

Correlations among Rated Communication Sophistication Variables

Variable	1	2	3	4	5	6
1 Attention to positive face	**.56*****	.48***	.58***	-.19*	.15	.52***
2 Attention to negative face	.61***	**.32*****	.37***	-.28**	.24**	.55***
3 Attention to the relationship	.69***	.51***	**.73*****	-.32***	.28**	.56***
4 Avoidance	-.29**	-.09	-.33***	**.73*****	-.87***	-.72***
5 Elaboration	.24**	.13	.31**	-.84***	**.59*****	.71***
6 Attention to multiple goals	.56***	.43***	.59***	-.71***	.72***	**.67*****

Note. Results for parents are presented in the upper triangle. Results for children are presented in

the lower triangle. Correlations between ratings of parent communication and ratings of child

communication are presented along the diagonal.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.3

Correlations among Reported Perceived Interaction Goals Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1 Own goal to attend to partner's positive face	**.01**	.61***	.77***	.04	.83***	.18	.70***	.46***	.60***	-.09	.50***	.09
2 Own goal to attend to partner's negative face	.43***	**-.05**	.55***	-.09	.66***	.01	.40***	.59***	.45***	-.03	.38***	.00
3 Own goal to attend to the relationship	.59***	.41***	**.11**	.15	.67***	.25**	.66***	.49***	.78***	-.26**	.47***	.18
4 One goal to avoid	-.10	-.25**	.06	**.34***	.04	.33***	.02	-.05	.05	.47***	-.08	.40***
5 Own goal to provide support	.77***	.43***	.41***	-.03	**.08**	.13	.61***	.43***	.45***	-.05	.59***	.08
6 Own goal to influence	.18*	-.15	.19*	.32***	.05	**.16**	.18	-.08	.16	-.40***	-.08	.59***
7 Partner's goal to attend to own positive face	.78***	.39***	.48***	-.09	.63***	.10	**.19***	.40***	.62***	-.09	.61***	.16
8 Partner's goal to attend to own negative face	.37***	.41***	.37***	-.15	.23*	-.13	.55***	**.12**	.50***	-.06	.59***	-.12
9 Partner's goal to attend to the relationship	.47***	.43***	.72***	-.03	.35***	.12	.49***	.53***	**.26****	-.29**	.49***	.20*
10 Partner's goal to avoid	-.04	.01	-.05	.51***	-.02	-.35***	.16	.13	-.10	**.21***	.01	-.39***
11 Partner's goal to provide support	.62***	.59***	.40***	-.25**	.61***	-.12	.70***	.57***	.53***	.07	**.32***	-.10
12 Partner's goal to influence	.02	-.20*	.17	.39***	-.10	.48***	-.07	-.19*	.11	-.26**	-.23*	**.25****

Note. Results for parents are presented in the upper triangle. Results for children are presented in the lower triangle. Correlations between parent-report and child-report are presented along the diagonal.

* *p* < .05, ** *p* < .01, *** *p* < .001.

Table 5.4

Correlations among Reported Conversational Assessment Variables

Variable	1	2	3	4	5	6	7	8
1 Burden	**.36*****	.81***	.71***	-.20*	-.29**	-.01	.30**	.06
2 Distress	.58***	**.39*****	.80***	-.33***	-.25**	-.02	.25**	.06
3 Hurt	.45***	.64***	**.15**	-.31**	-.27**	-.12	.32***	-.05
4 Hopefulness	-.13	-.12	-.01	**.27****	-.32***	.33***	-.34***	.06
5 Decision-making efficacy	-.30**	-.30**	-.22*	.22*	**.27****	.25**	-.18	-.05
6 Conversational satisfaction	-.12	-.20*	-.18*	.30**	-.18*	**.24****	-.38***	-.04
7 Relational distancing	.10	.22*	.16	-.40***	-.17	-.50***	**.18***	-.07
8 Concordance change	-.20*	.05	.05	.13	-.06	-.10	-.04	**.22***

Note. Results for parents are presented in the lower triangle. Results for children are presented in the upper triangle. Correlations between parent-report and child-report are presented along the diagonal.

* *p* < .05, ** *p* < .01, *** *p* < .001.

The intraclass correlations (which measure the amount of variance in the predicted variable that can be accounted for by between-dyad differences) for the two sets of predicted variables, perceived interaction goals and conversational assessment, are summarized in Tables 5.5 and 5.6, respectively. (The intraclass correlations for one's own goal to attend to the partner's positive and negative face were so low that the computer could not compute them, indicating that the values for the intraclass correlations for these two dependent variables were close to .00.) The strength of the intraclass correlations for the predicted variables indicated grouping effects in the data, further demonstrating the need for data analytic techniques that account for nonindependence in the data.

Table 5.5

Intraclass Correlations for Reported Perceived Interaction Goals Variables

Perceived interaction goal	Intraclass correlation
Own goal to attend to partner's positive face	.00
Own goal to attend to partner's negative face	.00
Own goal to attend to the relationship	.09
Own goal to avoid	.31**
Own goal to provide support	.08
Own goal to influence	.17
Partner's goal to attend to own positive face	.13
Partner's goal to attend to own negative face	.03
Partner's goal to attend to the relationship	.23*
Partner's goal to avoid	.22*
Partner's goal to provide support	.25**
Partner's goal to influence	.25**

* *p* < .05, ** *p* < .01, *** *p* < .001.

Table 5.6

Intraclass Correlations for Reported Conversational Assessment Variables

Outcome	Intraclass correlation
Burden	.36***
Distress	.39***
Hurt	.15
Hopefulness	.26**
Decision-making efficacy	.27**
Conversational satisfaction	.23**
Relational distancing	.17*
Concordance change	.21**

* $p < .05$, ** $p < .01$, *** $p < .001$.

To gain an initial understanding of the relationships between communication sophistication, perceived interaction goals, and conversational assessment, correlations were calculated for each hypothesis. The first set of tables presents correlations between rated communication sophistication and reported conversational assessment, including emotional response (*H1*) in Table 5.7, decision-making efficacy (*H2*) in Table 5.8, conversational satisfaction (*H3*) in Table 5.9, relational distancing (*H4*) in Table 5.10, and concordance change (*H5*) in Table 5.11. The next two tables display the associations between rated communication sophistication and self-reported (Table 5.12) and partner-reported (Table 5.13) perceived goals (*H6*). The last set of tables shows correlations for the associations between perceived goals and conversational assessment, including emotional response (*H7*), decision-making efficacy (*H8*), conversational satisfaction (*H9*), relational distancing (*H10*), and concordance change (*H11*) in Tables 5.14, 5.15, 5.16, 5.17, and 5.18, respectively. These preliminary analyses suggested support for a number of the associations predicted in the hypotheses.

Table 5.7

*Correlations between Rated Communication Sophistication and Reported Emotional Response (*H1*)*

Communication sophistication	Burden		Distress		Hurt		Hopefulness	
	Self-report	Partner-report	Self-report	Partner-report	Self-report	Partner-report	Self-report	Partner-report
Attention to positive face	.02	.00	-.06	-.09	-.06	-.12	.11	.13*
Attention to negative face	-.01	.01	-.05	-.08	-.07	-.12	.11	.10
Attention to relationship	-.01	.01	-.03	-.02	-.06	-.11	.16*	.18**
Avoidance	.01	-.01	-.07	-.03	.09	.11	-.13*	-.07
Elaboration	.04	.02	.08	.03	-.09	-.11	.12	.07
Attention to multiple goals	.02	-.05	-.03	-.05	-.08	-.16*	.18**	.14*

$* p < .05, ** p < .01.$

Table 5.8

*Correlations between Rated Communication Sophistication and Reported Decision-making Efficacy (*H2*)*

Communication sophistication	Decision-making efficacy	
	Self-report	Partner-report
Attention to positive face	.08	.09
Attention to negative face	.03	.08
Attention to the relationship	.06	.05
Avoidance	-.13*	-.03
Elaboration	.10	-.01
Attention to multiple goals	.13	.05

* *p* < .05.

Table 5.9

*Correlations between Rated Communication Sophistication and Reported Conversational Satisfaction (*H3*)*

Communication sophistication	Conversational satisfaction	
	Self-report	Partner-report
Attention to positive face	.22***	.23***
Attention to negative face	.21**	.12
Attention to the relationship	.19**	.19**
Avoidance	-.11	-.15*
Elaboration	.14*	.11*
Attention to multiple goals	.21**	.16*

* *p* < .05, ** *p* < .01, *** *p* < .001.

Table 5.10

Correlations between Rated Communication Sophistication and Reported Relational Distancing (H4)

	Relational distancing	
Communication sophistication	Self-report	Partner-report
Attention to positive face	-.20**	-.15*
Attention to negative face	-.09	-.03
Attention to the relationship	-.18**	-.15*
Avoidance	.06	.07
Elaboration	-.04	-.02
Attention to multiple goals	-.18**	-.11

* *p* < .05, ** *p* < .01.

Table 5.11

Correlations between Rated Communication Sophistication and Reported Concordance Change (H5)

	Concordance change	
Communication sophistication	Predicting own preferences	Predicting partner preferences
Attention to positive face	.01	.00
Attention to negative face	-.04	-.06
Attention to the relationship	.01	-.03
Avoidance	-.01	.02
Elaboration	.07	.01
Attention to multiple goals	.03	.04

Table 5.12

*Correlations between Rated Communication Sophistication and Self-reported Perceived Interaction Goals (*H6*)*

Communication sophistication	To attend to positive face		To attend to negative face		To attend to the relationship		To avoid		To provide support		To influence	
	Own goal	Perception of partner's goal	Own goal	Perception of partner's goal	Own goal	Perception of partner's goal	Own goal	Perception of partner's goal	Own goal	Perception of partner's goal	Own goal	Perception of partner's goal
Attention to positive face	.06	.09	.08	.25***	.07	.14*	-.15*	-.10	.05	.23***	-.23***	-.11*
Attention to negative face	.10	.08	.10	.29***	.13	.14*	-.08	-.13*	.06	.15*	-.21**	-.09
Attention to relationship	.10	.20**	.12	.26***	.14*	.21**	-.10	-.09	.08	.19**	-.03	-.09
Avoidance	-.01	.04	-.10	.00	-.01	.03	.34***	.26***	-.01	-.04	.00	.19**
Elaboration	.00	-.02	.05	.00	.00	.00	-.33***	-.20**	-.05	.01	.04	-.18**
Attention to multiple goals	.00	.04	.11	.15*	.04	.05	-.26***	-.23***	-.01	.12	-.13	-.21**

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.13

*Correlations between Rated Communication Sophistication and Partner-reported Perceived Interaction Goals (*H6*)*

Communication sophistication	To attend to positive face		To attend to negative face		To attend to the relationship		To avoid		To provide support		To influence	
	Partner's goal	Perception of own goal	Partner's goal	Perception of own goal	Partner's goal	Perception of own goal	Partner's goal	Perception of own goal	Partner's goal	Perception of own goal	Partner's goal	Perception of own goal
Attention to positive face	.09	.09	.20**	.14*	.17**	.13	-.10	-.18**	.18**	.05	-.22***	-.10
Attention to negative face	-.12	-.08	-.02	-.01	-.02	-.09	-.05	-.24***	.02	-.07	-.16*	-.12
Attention to relationship	.20**	.08	.23***	.15*	.18**	.09	-.12	-.11	.20**	.10	-.12	-.06
Avoidance	.00	.02	-.06	-.10	-.07	-.07	.29***	.26***	-.08	-.01	.15*	.08
Elaboration	-.11	-.11	-.04	.02	.06	-.03	-.23***	-.30***	.00	-.09	-.13*	-.13*
Attention to multiple goals	.01	.00	.07	.13	.12	.06	-.27***	-.26***	.12	.02	-.19**	-.14*

* *p* < .05, ** *p* < .01, *** *p* < .001.

Table 5.14

Correlations between Reported Perceived Interaction Goals and Reported Emotional Response (H7)

Perceived interaction goal	Burden	Distress	Hurt	Hopefulness
Own goal to attend to partner's positive face	.03	.06	.04	.11
Own goal to attend to partner's negative face	.00	-.02	-.10	.16*
Own goal to attend to the relationship	.17**	.14*	.06	.10
Own goal to avoid	.24***	.19**	.28***	-.18**
Own goal to provide support	.01	.00	-.07	.15*
Own goal to influence	.27***	.25***	.28***	-.07
Partner's goal to attend to own positive face	-.01	.01	.01	.16*
Partner's goal to attend to own negative face	-.04	-.07	-.05	.17**
Partner's goal to attend to the relationship	.14*	.12	.10	.06
Partner's goal to avoid	.30***	.21**	.21**	-.14*
Partner's goal to provide support	-.10	-.14*	-.16*	.22**
Partner's goal to influence	.17*	.18**	.27***	-.07

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.15

*Correlations between Reported Perceived Interaction Goals and Reported Decision-making Efficacy (*H8*)*

Perceived interaction goal	Decision-making efficacy
Own goal to attend to partner's positive face	.00
Own goal to attend to partner's negative face	.03
Own goal to attend to the relationship	-.09
Own goal to avoid	-.27***
Own goal to provide support	.03
Own goal to influence	-.22**
Partner's goal to attend to own positive face	.10
Partner's goal to attend to own negative face	.09
Partner's goal to attend to the relationship	-.04
Partner's goal to avoid	-.19**
Partner's goal to provide support	.10
Partner's goal to influence	-.27***

** *p* < .01, *** *p* < .001.

Table 5.16

Correlations between reported perceived interaction goals and reported conversational
*satisfaction (*H9*)*

Perceived interaction goal	Conversational satisfaction
Own goal to attend to partner's positive face	.23***
Own goal to attend to partner's negative face	.23***
Own goal to attend to the relationship	.17*
Own goal to avoid	-.23***
Own goal to provide support	.25***
Own goal to influence	-.19**
Partner's goal to attend to own positive face	.28***
Partner's goal to attend to own negative face	.31***
Partner's goal to attend to the relationship	.22**
Partner's goal to avoid	-.12
Partner's goal to provide support	.40***
Partner's goal to influence	-.23***

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.17

*Correlations between Reported Perceived Interaction Goals and Reported Relational Distancing (*H10*)*

Perceived interaction goal	Relational distancing
Own goal to attend to partner's positive face	-.31***
Own goal to attend to partner's negative face	-.25***
Own goal to attend to the relationship	-.17**
Own goal to avoid	.15*
Own goal to provide support	-.37***
Own goal to influence	.19**
Partner's goal to attend to own positive face	-.43***
Partner's goal to attend to own negative face	-.35***
Partner's goal to attend to the relationship	-.16*
Partner's goal to avoid	.18**
Partner's goal to provide support	-.50***
Partner's goal to influence	.16*

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.18

*Correlations between Reported Perceived Interaction Goals and Reported Concordance Change (*H11*)*

Perceived interaction goal	Concordance change
Own goal to attend to partner's positive face	.00
Own goal to attend to partner's negative face	-.10
Own goal to attend to the relationship	.06
Own goal to avoid	-.02
Own goal to provide support	.00
Own goal to influence	.09
Partner's goal to attend to own positive face	.04
Partner's goal to attend to own negative face	-.01
Partner's goal to attend to the relationship	.02
Partner's goal to avoid	-.01
Partner's goal to provide support	.07
Partner's goal to influence	.08

Communication Sophistication and Conversational Assessment

Given the evidence of nonindependence in the dependent variables, it was important to use a statistical technique that did not assume independent cases. Thus, the main analyses utilized multilevel linear modeling (MLM), a maximum likelihood analytic method designed to deal with nonindependent data through nesting techniques (Hox, 2002; Raudenbush & Bryk, 2002; Snijders & Bosker, 1999). In MLM, not only is the nonindependence of observations accounted for, it is modeled as a substantive component of the analysis (Park, Eveland, & Cudeck, 2008). MLM handles nesting by treating the data at two levels. In this study, the dependent variables were nested within dyads. The Level 1 model calculated empirical Bayes estimates for the assessments of individuals that are adjusted for other cases within the same

group so that interdependencies between scores for dyads are taken into account. The Level 2 model specified which participants belonged in dyads, creating a between-subjects model in which the Level 1 outcomes are explained by variables that differ across dyads. The analyses thus accounted for the correlations between parent and child scores within each conversation as well as the correlations of the variables across the conversations.

A preliminary step was to examine an unconditional model in which the lowest (nested) level of data (Level 1) was modeled without any predictors. In the unconditional model, only the mean level of the outcome variable, the variance among intercepts, and the within-dyad variability were modeled. The results of the baseline model indicated whether a model with predictors should be pursued. To the extent there was significant variance in the unconditional model, it was reasonable to think that predictors would likely help to explain this variance.

For the main MLM analyses, the full model was calculated by including the independent variables (i.e., sophistication of communication, perceptions of goals) as predictors (Level 2). The direction of the effect was determined by examining the slope for the independent variables, and the size of the effect (i.e., the proportion of variance accounted for) was determined by examining changes in standardized within-groups variance. For the main analyses, separate models were constructed for each dependent variable (i.e., perceptions of goals, emotional response, decision-making efficacy, conversational satisfaction, relational distancing, concordance change).

Results are presented in separate tables for each dependent variable. The first row in each table represents the baseline model, which includes no predictors of the dependent variable. The baseline model provides information regarding the variance in the dependent variable. This information is important because there must be significant variation between the dyads in terms

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of the dependent variable to reasonably explain variation in that variable. The baseline model also provides a benchmark with which to compare models that include predictors. The estimate for the fixed effect in each baseline model represents the grand mean of each dependent variable for participants across all the dyads. The t statistic in the baseline model is not repeated because it merely indicates if the estimate is significantly different from zero (which is not meaningful because the minimum value on the scales was typically 1.00).

In each table, each row represents a separate analysis and describes a model in which a single aspect of the independent variable was entered as a Level 2 predictor in the analyses (e.g., the second row in Table 5.19 pertains to the association between attention to positive face and burden). The coefficient estimate (b) is a slope that indicates the unit change in the independent variable for every unit change in the dependent variable (e.g., according to Table 5.19, every point increase in attention to positive face results in an increase of .07 points of own burden). The t statistic indicates if the slope coefficient is significantly different than zero. (Not surprisingly, the slope of .07 for attention to positive face in Table 5.19 is not statistically significant.) A significant t value shows that the independent variable is significantly related to the dependent variable. Finally the proportion of variance accounted for shows how much variance in the dependent variable between dyads is accounted for by the independent variable, as calculated by the decrease in variance between the baseline model and the model with the predictor variable added (see Bryk & Raudenbush, 1992).

The first set of hypotheses (*H1*, *H2*, *H3*, *H4*, *H5*) predicted that outside ratings of communication sophistication would be associated with participant assessments of the conversation. Results related to each hypothesis are considered in turn.

Hypothesis 1

The first hypothesis proposed that individuals' communication sophistication would predict their own and their partner's emotional response to a conversation about end-of-life health decisions. This study included four indicators for emotional response, including burden, distress, hurt, and hopefulness. The results for burden are summarized in Table 5.19, for distress, in Table 5.20, for hurt, in Table 5.21, and for hopefulness, in Table 5.22. Overall, there was significant amount of variation in all four measures of emotional response, including burden (χ^2 = 702.94, df = 3, $p < .001$), distress (χ^2 = 654.91, df = 3, $p < .001$), hurt (χ^2 = 527.13, df = 3, $p < .001$), and hopefulness (χ^2 = 909.50, df = 3, $p < .001$). There were no significant associations between the ratings of communication sophistication and reported burden (see Table 5.19). Similarly, no significant associations emerged between attention to goals and distress (see Table 5.20) or between attention to goals and self-reported hurt (see Table 5.21). There was, however, one significant predictor of partner-reported hurt feelings: Partner hurt was negatively associated with ratings of individuals' attention to multiple goals (Table 5.21). In addition, self-reported hopefulness was positively associated with ratings of attention to the relationship and to multiple goals, but negatively associated with avoidance, and partner hopefulness was positively associated with attention to the relationship (Table 5.22). Although there were a number of significant associations between the communication sophistication ratings and reported hurt and hopefulness, the proportion of variance in the dependent variables that was accounted for was small, ranging from 0% to 2% for the individual emotional responses. In sum, the results of the MLM analyses provided partial support for the first hypothesis. Although there was no indication that communication sophistication was associated with burden or distress, there was evidence that various aspects of goal attention were related inversely to hurt and positively to hopefulness.

Table 5.19

Rated Communication Sophistication Predicted Reported Burden

Model	Self-reported burden				Partner-reported burden			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	1.73	.08			1.73	.08		
Attention to positive face	.07	.19	.36	.00	-.03	.19	-.14	.00
Attention to negative face	-.04	.24	-.15	.00	.04	.24	.17	.00
Attention to the relationship	-.09	.35	-.25	.00	.11	.35	.30	.00
Avoidance	.02	.08	.21	.00	-.02	.08	-.26	.00
Elaboration	.04	.06	.65	.00	.01	.06	.15	.00
Attention to multiple goals	.03	.04	.68	.01	-.05	.04	-1.07	.01

Table 5.20

Rated Communication Sophistication Predicted Reported Distress

Model	Self-reported distress				Partner-reported distress			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	1.54	.07			1.54	.07		
Attention to positive face	-.07	.17	.39	.00	-.24	.17	-1.37	.00
Attention to negative face	-.08	.21	-.35	.00	-.24	.21	-1.10	.00
Attention to the relationship	-.15	.32	-.46	.00	-.04	.32	-.13	.00
Avoidance	-.09	.07	-1.20	.01	-.01	.07	-.10	.00
Elaboration	.08	.06	1.36	.01	.00	.06	-.01	.00
Attention to multiple goals	.04	.04	.96	.01	-.05	.04	-1.18	.02

Table 5.21

Rated Communication Sophistication Predicted Reported Hurt

Model	Self-reported hurt				Partner-reported hurt			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	1.28	.05			1.28	.05		
Attention to positive face	-.10	.13	-.78	.01	-.23	.13	-1.81	.01
Attention to negative face	-.14	.16	-.86	.01	-.29	.16	-1.75	.00
Attention to the relationship	-.15	.23	-.67	.01	-.39	.23	-1.69	.01
Avoidance	.07	.05	1.30	.01	.09	.05	1.70	.00
Elaboration	-.05	.04	-1.16	.01	-.07	.04	-1.58	.00
Attention to multiple goals	-.03	.03	-.98	.01	-.07	.03	-2.51*	.02

* $p < .05$.

Table 5.22

Rated Communication Sophistication Predicted Reported Hopefulness

Model	Self-reported hopefulness				Partner-reported hopefulness			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	4.51	.12			4.51	.12		
Attention to positive face	.39	.29	1.32	.01	.53	.29	1.83	.01
Attention to negative face	.53	.37	1.44	.00	.45	.37	1.23	.01
Attention to the relationship	1.09	.52	2.08*	.02	1.37	.52	2.63**	.00
Avoidance	-.24	.12	-2.04*	.01	-.08	.12	-.71	.01
Elaboration	.17	.10	1.74	.01	.07	.10	.76	.01
Attention to multiple goals	.17	.07	2.53*	.00	.11	.07	1.71	.02

* $p < .05$, ** $p < .01$.

Hypothesis 2

The second hypothesis predicted an association between communication sophistication and individuals' beliefs about their end-of-life decision-making efficacy. Findings related to this hypothesis appear in Table 5.23. There was statistically significant variation in decision-making efficacy ($\chi^2 = 770.99$, df = 3, $p < .001$), and two predictors were significantly related to self-reported efficacy: Own decision-making efficacy was related negatively to avoidance, but related positively to attention to multiple goals. There was no evidence that communication sophistication was significantly associated with partner-reported efficacy. The various aspects of communication sophistication accounted for between 0% and 4% of the variance in decision-making efficacy. These results suggest that an individual's attention to task-related goals and attention to multiple goals are related to that individual's (but not the partner's) decision-making efficacy. Thus, the second hypothesis received partial support.

Table 5.23

Rated Communication Sophistication Predicted Reported Decision-making Efficacy

Model	Self-reported decision-making efficacy				Partner-reported decision-making efficacy			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	2.89	.09			2.89	.09		
Attention to positive face	.23	.22	1.04	.00	.24	.22	1.12	.00
Attention to negative face	.02	.28	.08	.00	.33	.28	1.19	.00
Attention to the relationship	-.33	.40	-.83	.00	.22	.40	.54	.00
Avoidance	-.20	.09	-2.28*	.04	.01	.09	.01	.00
Elaboration	.14	.07	1.86	.03	-.04	.07	-.61	.01
Attention to multiple goals	.10	.05	2.03*	.02	.01	.05	.29	.01

* *p* < .05.

Hypothesis 3

The third hypothesis anticipated that communication sophistication would predict own and partner satisfaction with the end-of-life conversation. Table 5.24 shows the results for this hypothesis. There was significant variance in conversational satisfaction ($\chi^2 = 652.77$, df = 3, $p <$ .001). Self-reported conversational satisfaction was positively associated with attention to positive face, attention to negative face, attention to the relationship, elaboration, and attention to multiple goals. Partner-reported conversational satisfaction was positively related to attention to positive face, the relationship, and multiple goals, and inversely related to avoidance. Each of the rated aspects of communication sophistication accounted for between 1% and 3% of the variance in reported conversational satisfaction. In addition, each aspect of communication sophistication was significantly related to own or partner satisfaction, providing support for the third hypothesis.

Table 5.24

Rated Communication Sophistication Predicted Reported Conversational Satisfaction

Model	Self-reported conversational satisfaction				Partner-reported conversational satisfaction			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	6.35	.07			6.35	.07		
Attention to positive face	.51	.16	3.15**	.03	.54	.16	3.34**	.02
Attention to negative face	.66	.21	3.13**	.01	.29	.21	1.35	.03
Attention to the relationship	.77	.30	2.58*	.01	.81	.30	2.70**	.01
Avoidance	-.10	.07	-1.42	.01	-.15	.07	-2.16*	.01
Elaboration	.11	.06	2.00*	.00	.08	.06	1.43	.01
Attention to multiple goals	.11	.04	3.03**	.01	.08	.04	2.03*	.02

* $p < .05$, ** $p < .01$.

Hypothesis 4

The fourth hypothesis proposed that ratings of communication sophistication would be associated with reports of relational distancing. Results related to this hypothesis are summarized in Table 5.25. There was statistically significant variation in relational distancing ($\chi^2 = 601.76$, df $= 3$, $p < .001$). Attention to positive face, the relationship, and multiple goals were each inversely associated with self-reports of relational distancing, and attention to positive face and to the relationship were inversely related to partner reports of relational distancing. The proportion of variance in relational distancing that was accounted for by communication sophistication ranged from 0% to 2%. These results provided support for the fourth hypothesis.

Table 5.25

Rated Communication Sophistication Predicted Reported Relational Distancing

Model	Self-reported relational distancing				Partner-reported relational distancing			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	1.68	.06			1.68	.06		
Attention to positive face	-.44	.15	-2.98**	.00	-.31	.15	-2.08*	.03
Attention to negative face	-.28	.19	-1.44	.01	-.05	.19	-.27	.00
Attention to the relationship	-.70	.27	-2.62*	.00	-.57	.27	-2.15*	.02
Avoidance	.05	.06	.73	.00	.06	.06	1.02	.00
Elaboration	-.03	.05	-.54	.00	-.01	.05	-.27	.00
Attention to multiple goals	-.09	.03	-2.66**	.02	-.05	.03	-1.39	.02

* $p < .05$, ** $p < .01$.

Hypothesis 5

The fifth hypothesis proposed that communication sophistication would be associated with change in concordance. The results of the hypothesis test are displayed in Table 5.26. There was statistically significant variation in concordance change (χ^2 = -162.32, df = 3, $p < .001$), but none of the aspects of communication sophistication was significantly related to concordance change for individuals or their partners. The proportion of variance in concordance change that was accounted for by communication sophistication was not greater than 1%. Given that no significant associations were found between communication sophistication and concordance change, the fifth hypothesis was not supported.

Table 5.26

Rated Communication Sophistication Predicted Reported Concordance Change

Model	Concordance change in predicting own preferences				Concordance change in predicting partner preferences			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	.05	.01			.05	.01		
Attention to positive face	.01	.03	.21	.00	.00	.03	.01	.00
Attention to negative face	-.02	.04	-.45	.00	-.03	.04	-.86	.00
Attention to the relationship	.01	.06	.22	.00	-.03	.06	-.49	.00
Avoidance	.00	.01	-.18	.00	.01	.01	.42	.00
Elaboration	.01	.01	1.11	.01	.00	.01	-.06	.00
Attention to multiple goals	.00	.01	.28	.00	.00	.01	.57	.00

Communication Sophistication and Perceived Interaction Goals

The sixth hypothesis addressed the association between communication sophistication and perceived interaction goals. Specifically, the hypothesis proposed that ratings of communication sophistication would predict participants' perceptions of their own and their partner's interaction goals as well as their partner's perceptions of own and other's goals in the conversation. For these analyses, there are actually four measures of each construct: the parent's report of own goals, the parent's report of the partner's goals, the child's report of own goals, and the child's report of the partner's goal. In reporting the results, participants' perceptions of own and other goals and partners' perceptions of own and other goals are presented in separate tables. The results for the associations between own communication sophistication and perceived positive face goals are summarized in Tables 5.27 (self-reported own and other goals) and 5.28 (partner-reported own and other goals), negative face goals, in Tables 5.29 (self-reported goals) and 5.30 (partner-reported goals), relational goals, in Tables 5.31 (self report) and 5.32 (partner report), avoidance goals, in Tables 5.33 (self report) and 5.34 (partner report), support goals, in Tables 5.35 (self report) and 5.36 (partner report), and influence goals, in Tables 5.37 (self report) and 5.38 (partner report).

There was significant variance in all measures of reported perceived interaction goals, including own goal to attend to the partner's positive face ($\chi^2 = 878.74$, df = 3, $p < .001$), own goal to attend to the partner's negative face ($\chi^2 = 782.01$, df = 3, $p < .001$), own goal to attend to the relationship ($\chi^2 = 963.49$, df = 3, $p < .001$), own goal to avoid ($\chi^2 = 767.02$, df = 3, $p < .001$), own goal to provide support ($\chi^2 = 850.15$, df = 3, $p < .001$), own goal to influence ($\chi^2 = 801.70$, df = 3, $p < .001$), partner's goal to attend to own positive face ($\chi^2 = 879.52$, df = 3, $p < .001$), partner's goal to attend to own negative face ($\chi^2 = 852.69$, df = 3, $p < .001$), partner's goal to

attend to the relationship ($\chi^2 = 935.83$, df = 3, $p < .001$), partner's goal to avoid ($\chi^2 = 756.22$, df = 3, $p < .001$), partner's goal to provide support ($\chi^2 = 821.28$, df = 3, $p < .001$), and partner's goal to influence ($\chi^2 = 798.952$, df = 3, $p < .001$).

There were no significant associations between reports of own interaction goals and own communication sophistication, but there was a positive association between one's own perception of the partner's goal to attend to own positive face and rated own attention to the relationship (see Table 5.27). Similarly, no significant associations emerged between one's own communication sophistication and reports from one's partner about the partner's goal to attend to one's own positive face, but there was an association between ratings of one's attention to the partner's negative face and the partner's perception of one's goal to attend to the relationship. However, partner perceptions of one's own goal to attend to the partner's positive face was inversely associated with one's attention to the partner's negative face (see Table 5.28).

There was no evidence of significant associations between communication sophistication and self-reported interaction goals. There were, however, three significant predictors of perceptions of the partner's goal to attend to one's own negative face: Attention to positive face, negative face, and the relationship were each positively related to perceptions of the partner's negative face goals (Table 5.29). The partner-reported goal to attend to own negative face was positively related to one's own attention to the partner's positive face and the relationship. Similarly, the partner's perception of one's own goal to attend to the partner's negative face was positively related to own attention to positive face and the relationship (Table 5.30).

Self-reports of one's own goal to attend to the relationship as well as one's perception of the partner's goal to attend to the relationship were positively associated with own attention to negative face and to the relationship (see Table 5.31). Partner reports of the goal to attend to the

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relationship were not significantly associated with communication sophistication, but the partner's perception of one's own goal to attend to the relationship was positively associated with own attention to positive face and to the relationship (Table 5.32).

An individual's report of the goal to avoid was positively related to the individual's rated avoidance, but negatively related to that individual's rated elaboration and attention to multiple goals. A person's perception of the partner's goal to avoid was positively associated with the person's avoidance, but negatively associated with the person's attention to negative face, elaboration, and attention to multiple goals (see Table 5.33). The partner-reported goal to avoid was inversely related to one's own attention to positive face, attention to negative face, elaboration, and attention to multiple goals, but positively related to one's avoidance. Partner perceptions of one's own goal to avoid were also inversely related to one's elaboration and attention to multiple goals, but positively related to rated avoidance (Table 5.34).

There were no significant predictors of self-reported perceptions of own support goals, but there were three significant predictors of self-reported perceptions of partner support goals. Specifically, one's perception of the partner's goal to provide support was positively associated with one's attention to positive face, negative face, and the relationship (see Table 5.35). Similarly, no aspect of communication sophistication significantly predicted partner-reported support goals, but partner perceptions of one's own goal to provide support were positively associated with one's attention to positive face and to the relationship (see Table 5.36).

Finally, the self-reported goal to influence was negatively associated with rated own attention to positive face, and self-reported perceptions of the partner's goal to influence was positively associated with one's avoidance but negatively associated with own elaboration and attention to multiple goals (Table 5.37). The partner's reported goal to influence was positively

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associated with one's own elaboration but negatively associated with one's attention to multiple goals, whereas the partner's perception of one's own goal to influence was negatively associated with one's attention to positive face and to multiple goals (Table 5.38).

Ratings of communication sophistication accounted for as much as 12% of the variance in the perceived interaction goals. There was consistent evidence that various aspects of goal attention were significantly associated with perceptions of each the individual goals, and thus the sixth hypothesis was supported.

Table 5.27

Rated Communication Sophistication Predicted Self-reported Perceptions of Positive Face Goals

Model	Self-reported goal to attend to partner's positive face				Self-reported perception of partner's goal to attend to own positive face			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	5.81	.10			5.55	.10		
Attention to positive face	.24	.27	.90	.01	.35	.27	1.33	.00
Attention to negative face	.54	.35	1.57	.03	.52	.34	1.53	.04
Attention to the relationship	.70	.46	.152	.01	1.41	.46	3.04**	.01
Avoidance	-.02	.11	-.21	.00	.07	.11	.65	.00
Elaboration	.00	.09	.05	.00	.00	.09	-.04	.00
Attention to multiple goals	.00	.06	.04	.00	.04	.06	.58	.00

** *p* < .01.

Table 5.28

Rated Communication Sophistication Predicted Partner-reported Perceptions of Positive Face Goals

Model	Partner-reported goal to attend to own positive face				Partner-reported perception of own goal to attend to partner's positive face			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	5.81	.10			5.55	.10		
Attention to positive face	.35	.26	1.33	.01	.25	.37	1.34	.00
Attention to negative face	-.41	.34	-1.19	.02	-.71	.34	-2.09*	.04
Attention to the relationship	.57	.46	1.24	.01	1.38	.46	2.97**	.01
Avoidance	.04	.11	.36	.00	.00	.11	-.04	.00
Elaboration	-.15	.09	-1.68	.02	-.15	.09	-1.72	.02
Attention to multiple goals	.00	.06	.00	.00	.00	.06	.00	.00

* $p < .05$, ** $p < .01$.

Table 5.29

Rated Communication Sophistication Predicted Self-reported Perceptions of Negative Face Goals

Model	Self-reported goal to attend to partner's negative face				Self-reported perception of partner's goal to attend to own negative face			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	6.16	.08			5.84	.09		
Attention to positive face	.25	.21	1.19	.01	.93	.24	3.92***	.03
Attention to negative face	.41	.28	1.50	.01	1.48	.31	4.77***	.12
Attention to the relationship	.70	.37	1.88	.02	1.76	.42	4.20***	.04
Avoidance	-.13	.08	-1.50	.01	.01	.10	.08	.00
Elaboration	.06	.07	.80	.01	.00	.08	.05	.00
Attention to multiple goals	.08	.05	1.70	.02	.13	.05	2.37*	.02

* $p < .05$, *** $p < .001$.

Table 5.30

Rated Communication Sophistication Predicted Partner-reported Perceptions of Negative Face Goals

Model	Partner-reported goal to attend to own negative face				Partner-reported perception of own goal to attend to partner's negative face			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	6.16	.08			5.84	.09		
Attention to positive face	.45	.21	2.14*	.02	.74	.24	3.11**	.01
Attention to negative face	-.06	.28	-.21	.00	-.14	.32	-.44	.02
Attention to the relationship	.85	.37	2.30*	.03	1.52	.42	3.61***	.02
Avoidance	-.13	.08	-1.53	.01	-.09	.10	-.87	.01
Elaboration	.02	.07	.35	.00	-.05	.08	-.62	.00
Attention to multiple goals	.09	.05	1.96	.02	.06	.06	1.00	.01

* *p* < .05, **p < .01, *** *p* < .001.

Table 5.31

Rated Communication Sophistication Predicted Self-reported Perceptions of Relational Goals

Model	Self-reported goal to attend to the relationship				Self-reported perception of partner's goal to attend to the relationship			
	b	SE	t	Variance accounted for	b	SE	t	Variance accounted for
Baseline	4.87	.12			4.53	.12		
Attention to positive face	.32	.32	.98	.01	.56	.30	1.84	.02
Attention to negative face	.91	.41	2.22*	.06	.92	.38	2.39*	.04
Attention to the relationship	1.24	.56	2.20*	.01	1.60	.54	2.96**	.01
Avoidance	.00	.13	-.05	.00	.11	.13	.88	.01
Elaboration	.01	.11	.08	.00	-.02	.10	-.22	.00
Attention to multiple goals	.04	.07	.53	.00	.03	.07	.37	.01

* $p < .05$, ** $p < .01$.

Table 5.32

Rated Communication Sophistication Predicted Partner-reported Perceptions of Relational Goals

Model	Partner-reported goal to attend to the relationship				Partner-reported perception of own goal to attend to the relationship			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	4.87	.12			4.53	.12		
Attention to positive face	.61	.32	1.94	.01	.71	.30	2.36*	.00
Attention to negative face	-.69	.41	-1.68	.04	-.31	.39	-.80	.02
Attention to the relationship	.75	.56	1.34	.01	1.36	.54	2.50*	.02
Avoidance	-.14	.13	-1.12	.01	-.17	.13	-1.32	.02
Elaboration	-.05	.11	-.46	.00	.09	.10	.93	.01
Attention to multiple goals	.07	.07	.97	.00	.12	.07	1.79	.01

* *p* < .05.

Table 5.33

Rated Communication Sophistication Predicted Self-reported Perceptions of Avoidance Goals

Model	Self-reported goal to avoid				Self-reported perception of partner's goal to avoid			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	1.67	.09			1.63	.08		
Attention to positive face	-.39	.22	-1.82	.02	-.28	.21	-1.33	.00
Attention to negative face	-.05	.27	-.17	.01	-.52	.27	-1.98*	.01
Attention to the relationship	-.51	.40	-1.28	.01	-.43	.38	-1.13	.01
Avoidance	.44	.08	5.20***	.04	.32	.08	3.87***	.02
Elaboration	-.33	.07	-4.84***	.03	-.19	.07	-2.74**	.03
Attention to multiple goals	-.18	.05	-3.68***	.02	-.15	.05	-3.25**	.04

$* p < .05, ** p < .01, ***, p < .001.$

Table 5.34

Rated Communication Sophistication Predicted Partner-reported Perceptions of Avoidance Goals

Model	Partner-reported goal to avoid				Partner-reported perception of own goal to avoid			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	1.67	.09			1.63	.08		
Attention to positive face	-.52	.21	-2.43*	.01	-.27	.21	-1.28	.01
Attention to negative face	-1.01	.27	-3.81***	.05	-.11	.27	-.40	.01
Attention to the relationship	-.59	.40	-1.47	.00	-.70	.38	-1.84	.01
Avoidance	.30	.09	3.48***	.07	.35	.08	4.34***	.01
Elaboration	-.29	.07	-4.14***	.07	-.23	.07	-3.41***	.01
Attention to multiple goals	-.17	.05	-3.62***	.03	-.18	.05	-3.97***	.00

* $p < .05$, ***, $p < .001$.

Table 5.35

Rated Communication Sophistication Predicted Self-reported Perceptions of Support Goals

Model	Self-reported goal to provide support				Self-reported perception of partner's goal to provide support			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	5.95	.09			5.82	.10		
Attention to positive face	.17	.25	.68	.00	.77	.24	3.26**	.00
Attention to negative face	.34	.32	1.07	.02	.75	.30	2.48*	.03
Attention to the relationship	.51	.44	1.16	.00	1.12	.43	2.59*	.02
Avoidance	-.01	.10	-.12	.00	-.03	.10	-.31	.00
Elaboration	-.06	.08	-.74	.00	.01	.08	.11	.00
Attention to multiple goals	-.01	.06	-.11	.00	.09	.06	1.56	.01

$* p < .05, ** p < .01.$

Table 5.36

Rated Communication Sophistication Predicted Partner-reported Perceptions of Support Goals

Model	Partner-reported goal to provide support				Partner-reported perception of own goal to provide support			
	b	SE	t	Variance accounted for	b	SE	t	Variance accounted for
Baseline	5.95	.09			5.82	.10		
Attention to positive face	.18	.25	.73	.00	.56	.24	2.35*	.03
Attention to negative face	-.38	.32	-1.20	.02	-1.0	.31	-.33	.01
Attention to the relationship	.64	.44	1.45	.00	1.21	.43	2.80**	.01
Avoidance	-.01	.10	-.09	.00	-.12	.10	-1.19	.01
Elaboration	-.11	.08	-1.33	.00	-.01	.08	-.08	.00
Attention to multiple goals	.01	.06	.26	.00	.09	.06	1.60	.01

$* p < .05, ** p < .01.$

Table 5.37

Rated Communication Sophistication Predicted Self-reported Perceptions of Influence Goals

Model	Self-reported goal to influence				Self-reported perception of partner's goal to influence			
	b	SE	t	Variance accounted for	b	SE	t	Variance accounted for
Baseline	2.00	.09			2.08	.09		
Attention to positive face	-.82	.22	-3.66***	.05	-.23	.23	-.99	.03
Attention to negative face	-.93	.29	-3.22	.01	-.27	.29	-.92	.02
Attention to relationship	-.14	.42	-.34	.00	-.41	.42	-.98	.01
Avoidance	-.02	.09	-.16	.00	.26	.09	2.78**	.01
Elaboration	.07	.08	.91	.02	-.21	.08	-2.69**	.01
Attention to multiple goals	-.09	.05	-1.75	.01	-.16	.05	-3.08**	.00

** $p < .01$, ***, $p < .001$.

Table 5.38

Rated Communication Sophistication Predicted Partner-reported Perceptions of Influence Goals

Model	Partner-reported goal to influence				Partner-reported perception of own goal to influence			
	b	*SE*	*t*	Variance accounted for	*b*	*SE*	*t*	Variance accounted for
Baseline	2.00	.09			2.08	.09		
Attention to positive face	-.24	.23	-1.07	.03	-.78	.23	-3.46***	.04
Attention to negative face	-.43	.29	-1.46	.03	-.65	.29	-2.24	.00
Attention to relationship	-.37	.42	-.89	.00	-.76	.42	-1.80	.01
Avoidance	.13	.09	1.40	.02	.18	.09	1.89	.02
Elaboration	-.18	.08	2.29*	.05	-.12	.08	-1.59	.02
Attention to multiple goals	-.11	.05	-2.08*	.00	-.13	.05	-2.50**	.03

* $p < .05$, ** $p < .01$, ***, $p < .001$.

Perceived Interaction Goals and Conversational Assessment

The last set of hypotheses (*H7*, *H8*, *H9*, *H10*, *H11*) dealt with the association between perceptions of own and partner interaction goals and conversational assessment. Results are presented in separate tables for each dependent variable.

Hypothesis 7

According to the seventh hypothesis, people's perceptions about their own and their partner's interaction goals predict their own and their partner's emotional response to the conversation about end-of-life health decisions. Results related to burden, distress, hurt, and hopefulness are summarized in Tables 5.39, 5.40, 5.41, and Table 5.42, respectively. There was a significant positive association between an individual's reported burden and the individual's reported goals to attend to the relationship, to avoid, and to influence. There also was a positive association between an individual's burden and the individual's perceptions of the partner's goals to avoid, and to influence (see Table 5.39). Distress was related positively to perceptions of own and partner's goal to avoid and to influence, but related inversely to perceptions of the other person's goal to provide support (Table 5.40). Hurt was associated positively with self-reports of one's own goals to avoid and to influence. Hurt was also associated positively with perceptions of the partner's goals to avoid and to influence, but associated negatively with perceptions of the partner's goal to provide support (Table 5.41). Finally, hopefulness was related positively to perceptions of one's own and the partner's goals to attend to negative face and to provide support, but related negatively to perceptions of one's own and the partner's goal to avoid (Table 5.42). Although there were a number of significant associations between the perceived goals and each emotional response, the proportion of variance accounted for was relatively small, ranging from 0% to 6% for the individual emotions.

To summarize, there was consistent evidence that perceptions of positive face, negative face, relationship, and support goals were related negatively to burden, distress, and hurt, but related positively to hopefulness; by contrast, perceptions of avoidance and influence goals were related positively to burden, distress, and hurt, but related negatively to hopefulness. These findings provided support for the seventh hypothesis.

Table 5.39

Reported Perceived Interaction Goals Predicted Reported Burden

Model	b	SE	t	Variance accounted for
Baseline	1.13	.08		
Own goal to attend to partner's positive face	.01	.04	.15	.01
Own goal to attend to partner's negative face	.02	.05	.40	.00
Own goal to attend to the relationship	.08	.04	2.08*	.02
Own goal to avoid	.20	.05	3.61***	.03
Own goal to provide support	.01	.05	.26	.01
Own goal to influence	.20	.05	3.98***	.02
Partner's goal to attend to own positive face	.00	.04	.11	.00
Partner's goal to attend to own negative face	-.03	.05	-.70	.00
Partner's goal to attend to the relationship	.07	.04	1.68	.01
Partner's goal to avoid	.26	.05	4.66***	.06
Partner's goal to provide support	-.06	.05	-1.29	.01
Partner's goal to influence	.11	.05	2.19*	.01

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.40

Reported Perceived Interaction Goals Predicted Reported Distress

Model	b	SE	t	Variance accounted for
Baseline	1.54	.07		
Own goal to attend to partner's positive face	.02	.04	.54	.01
Own goal to attend to partner's negative face	-.02	.05	-.44	.00
Own goal to attend to the relationship	.05	.03	1.48	.02
Own goal to avoid	.14	.05	2.85**	.02
Own goal to provide support	-.01	.04	-.29	.00
Own goal to influence	.15	.05	3.31**	.02
Partner's goal to attend to own positive face	.01	.04	.36	.00
Partner's goal to attend to own negative face	-.03	.04	-.83	.01
Partner's goal to attend to the relationship	.05	.04	1.29	.02
Partner's goal to avoid	.15	.05	3.03**	.02
Partner's goal to provide support	-.09	.04	-1.99*	.00
Partner's goal to influence	.12	.05	2.57*	.00

$* p < .05, ** p < .01.$

Table 5.41

Reported Perceived Interaction Goals Predicted Reported Hurt

Model	b	SE	t	Variance accounted for
Baseline	1.28	.05		
Own goal to attend to partner's positive face	.02	.03	.50	.02
Own goal to attend to partner's negative face	-.06	.04	-1.71	.02
Own goal to attend to the relationship	.02	.03	.64	.02
Own goal to avoid	.16	.04	4.41***	.05
Own goal to provide support	-.04	.03	-1.32	.01
Own goal to influence	.15	.03	4.39***	.01
Partner's goal to attend to own positive face	.00	.03	.12	.01
Partner's goal to attend to own negative face	-.02	.03	-.60	.01
Partner's goal to attend to the relationship	.04	.03	1.42	.01
Partner's goal to avoid	.13	.04	3.21**	.02
Partner's goal to provide support	-.08	.03	-2.45*	.01
Partner's goal to influence	.14	.03	4.15***	.02

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5.42

Reported Perceived Interaction Goals Predicted Reported Hopefulness

Model	b	SE	t	Variance accounted for
Baseline	4.51	.12		
Own goal to attend to partner's positive face	.09	.07	1.27	.02
Own goal to attend to partner's negative face	.18	.08	2.24*	.01
Own goal to attend to the relationship	.08	.06	1.36	.01
Own goal to avoid	-.20	.09	-2.39*	.01
Own goal to provide support	.15	.07	2.13*	.00
Own goal to influence	-.05	.08	-.65	.02
Partner's goal to attend to own positive face	.13	.07	1.91	.02
Partner's goal to attend to own negative face	.16	.07	2.24*	.02
Partner's goal to attend to the relationship	.03	.06	.53	.01
Partner's goal to avoid	-.18	.09	-2.00*	.00
Partner's goal to provide support	.24	.08	3.18**	.03
Partner's goal to influence	-.07	.08	-.82	.01

* $p < .05$, ** $p < .01$.

Hypothesis 8

The eighth hypothesis predicted an association between perceived interaction goals and participants' beliefs about their end-of-life decision-making efficacy. The findings related to this hypothesis appear in Table 5.43. Decision-making efficacy was negatively associated with perceptions of one's own and the partner's goals to avoid and to influence. The proportion of variance in decision-making efficacy accounted for by perceived goals ranged from 0% to 3%. Thus, the eighth hypothesis received partial support.

Table 5.43

Reported Perceived Interaction Goals Predicted Reported Decision-making Efficacy

Model	b	SE	t	Variance accounted for
Baseline	2.89	.09		
Own goal to attend to partner's positive face	.03	.05	.56	.00
Own goal to attend to partner's negative face	.02	.06	.36	.01
Own goal to attend to the relationship	-.07	.04	-1.56	.01
Own goal to avoid	-.25	.06	-3.92***	.01
Own goal to provide support	.00	.05	.04	.01
Own goal to influence	-.20	.06	-3.36**	.02
Partner's goal to attend to own positive face	-.04	.05	-.83	.01
Partner's goal to attend to own negative face	-.04	.05	-.72	.01
Partner's goal to attend to the relationship	-.05	.05	-1.12	.02
Partner's goal to avoid	-.16	.07	-2.42*	.03
Partner's goal to provide support	.06	.06	.98	.01
Partner's goal to influence	-.23	.06	-3.97***	.01

* $p < .05$, ** $p < .01$, *** $p < .001$.

Hypothesis 9

The ninth hypothesis proposed that perceived goals would be associated with conversational satisfaction. Results for this hypothesis appear in Table 5.44. Conversational satisfaction was directly related to self-reported positive face, negative face, relationship, and support goals, but inversely related to one's own goals to avoid and to influence. Satisfaction also was positively associated with perceptions of the partner's positive face, negative face, relationship, and support goals, but negatively associated with perceptions of the partner's goal to influence. Perceived goals accounted for up to 10% of the variance in conversational satisfaction. Overall, the results supported the ninth hypothesis.

Table 5.44

Reported Perceived Interaction Goals Predicted Reported Conversational Satisfaction

Model	b	SE	t	Variance accounted for
Baseline	6.35	.07		
Own goal to attend to partner's positive face	.15	.04	3.85***	.06
Own goal to attend to partner's negative face	.17	.05	3.52***	.03
Own goal to attend to the relationship	.09	.03	2.86**	.04
Own goal to avoid	-.17	.05	-3.35**	.02
Own goal to provide support	.18	.04	4.34***	.10
Own goal to influence	-.12	.05	-2.58*	.03
Partner's goal to attend to own positive face	.18	.04	4.62***	.08
Partner's goal to attend to own negative face	.19	.04	4.75***	.01
Partner's goal to attend to the relationship	.12	.03	3.46***	.04
Partner's goal to avoid	-.08	.05	-1.60	.01
Partner's goal to provide support	.27	.04	6.56***	.08
Partner's goal to influence	-.14	.05	-3.11**	.05

** $p < .01$, ** $p < .01$, *** $p < .001$.

Hypothesis 10

The tenth hypothesis predicted an association between perceived interaction goals and relational distancing. Results are summarized in Table 5.45. Relational distancing was negatively associated with perceptions of one's own and the partner's goals to attend to positive face, to attend to negative face, to attend to the relationship, and to provide support. However, distancing was positively associated with perceived own and partner goals to avoid and to influence. Perceptions of goals accounted for between 0% and 11% of the variance in relational distancing. The tenth hypothesis was supported.

Table 5.45

Reported Perceived Interaction Goals Predicted Reported Relational Distancing

Model	b	SE	t	Variance accounted for
Baseline	1.68	.06		
Own goal to attend to partner's positive face	-.17	.03	-4.97***	.02
Own goal to attend to partner's negative face	-.17	.04	-3.95***	.03
Own goal to attend to the relationship	-.08	.03	-2.71**	.01
Own goal to avoid	.10	.04	2.23*	.01
Own goal to provide support	-.21	.04	-5.97***	.07
Own goal to influence	.12	.04	2.81**	.01
Partner's goal to attend to own positive face	-.24	.03	-7.22***	.11
Partner's goal to attend to own negative face	-.21	.04	-5.80***	.10
Partner's goal to attend to the relationship	-.07	.03	-2.30*	.00
Partner's goal to avoid	.12	.05	2.67**	.01
Partner's goal to provide support	-.32	.04	-8.97***	.11
Partner's goal to influence	.10	.04	2.33*	.01

* $p < .05$, ** $p < .01$, *** $p < .001$.

Hypothesis 11

The final hypothesis predicted that perceived goals would be associated with change in concordance rates. Results related to this hypothesis are presented in Table 5.46. There were no significant associations between concordance change and perceptions of interaction goals. The proportion of variance in concordance change accounted for by perceived goals ranged from 0% to 3%. These results provided no support for the eleventh hypothesis.

Table 5.46

Reported Perceived Interaction Goals Predicted Reported Concordance Change

Model	b	SE	t	Variance accounted for
Baseline	.05	.01		
Own goal to attend to partner's positive face	.00	.01	-.16	.00
Own goal to attend to partner's negative face	-.02	.01	-1.80	.03
Own goal to attend to the relationship	.00	.01	.78	.00
Own goal to avoid	.00	.01	-.41	.00
Own goal to provide support	.00	.01	-.42	.00
Own goal to influence	.01	.01	1.27	.01
Partner's goal to attend to own positive face	.01	.01	.78	.01
Partner's goal to attend to own negative face	.00	.01	-.05	.00
Partner's goal to attend to the relationship	.00	.01	.21	.00
Partner's goal to avoid	.00	.01	-.23	.01
Partner's goal to provide support	.01	.01	1.00	.01
Partner's goal to influence	.01	.01	1.44	.02

CHAPTER SIX: Discussion and Conclusion

This investigation was designed to fill some of the gaps in the current literature on family communication about end-of-life health decisions. Previous research has demonstrated that end-of-life talk is complex and difficult, and that it has important implications for the quality of people's end-of-life medical care as well as people's psychological and relational well-being. A great deal of research is predicated on the reasoning that conversations with family members are critical to the delivery of effective end-of-life care (e.g., Cherlin et al., 2005; Csikai, 2009; Gessert, Forbes, & Bern-Klug, 2000-2001; King & Quill, 2006), but a number of studies have found that such conversations have no impact (or worse, a detrimental effect) on the quality of a person's end-of-life experience (Ditto et al., 2001; Hines et al., 2001). The foundation for the present project was formed by seeking to explain these discrepant findings through the examination of end-of-life decision making from a communication perspective.

The research question and hypotheses proposed in this study addressed how the quality of communication affects perceptions of interaction goals and conversational outcomes. Much of the existing work on end-of-life communication assumes that more communication is better communication (e.g., Hines et al., 2001; SUPPORT Principal Investigators, 1995). The current study sought to challenge this assumption by demonstrating that the *quality* of communication about end-of-life decisions matters. More specifically, the investigation used a multiple goals theoretical perspective to explain how different ways of talking about end-of-life health decisions can yield better or worse results. In this chapter, the results of the study are summarized and discussed, the theoretical and practical contributions of the results are considered, and the limitations and future opportunities for research are described.

The conceptual model that guided the current study is reproduced in Figure 6.1. Based on this model, three sets of hypotheses were tested, including hypothesized associations between communication sophistication and conversational outcomes, communication sophistication and perceived interaction goals, and perceived interaction goals and conversational outcomes. The paths representing each set of hypotheses are labeled numerically in the figure.
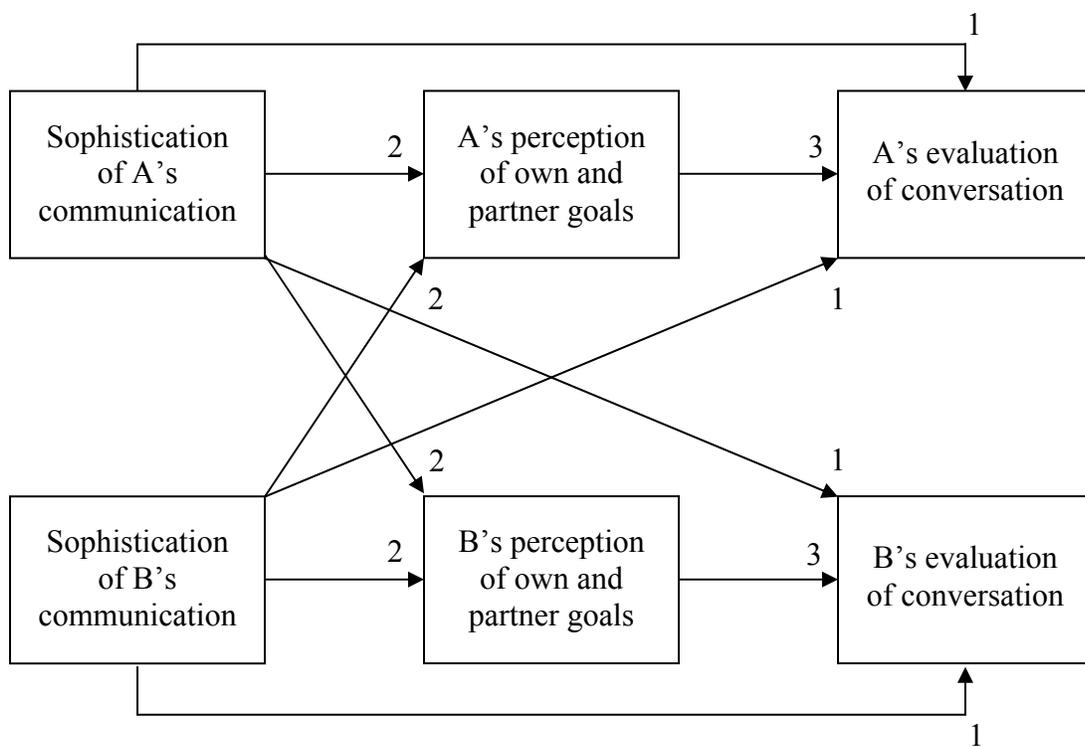
Figure 6.1. General conceptual model of the current study.

Several notable patterns of results emerged in the current study. The findings related to the research question and the three sets of hypotheses are discussed in the sections that follow. The findings for the three sets of hypotheses are also depicted in Tables 6.1, 6.2, and 6.3.

Table 6.1

Statistically Significant Associations between Rated Communication Sophistication and Reported Conversational Assessment

Communication sophistication	Burden	Distress	Hurt	Hopefulness	Decision-making efficacy	Conversational satisfaction	Relational distancing	Change in concordance
Attention to positive face						O (+), P (+)	O (-), P (-)	
Attention to negative face						O (+)		
Attention to the relationship				O (+), P (+)		O (+), P (+)	O (-), P (-)	
Avoidance				O (-)	O (-)	P (-)		
Elaboration								
Attention to multiple goals			P (-)	O (+)	O (+)	O (+), P (+)	O (-)	

Note. "O" indicates self-reported outcome, "P" indicates partner-reported outcome, "+" indicates a significant positive association, "-" indicates a significant negative association.

Table 6.2

Statistically Significant Associations between Rated Communication Sophistication and Reported Perceived Interaction Goals

Communication sophistication	To attend to positive face		To attend to negative face		To attend to the relationship		To avoid		To provide support		To influence	
	Own perception	Partner's perception	Own perception	Partner's perception	Own perception	Partner's perception	Own perception	Partner's perception	Own perception	Partner's perception	Own perception	Partner's perception
Attention to positive face			P (+)	O (+), P (+)		O (+)		P (-)	P (+)	O (+)	O (-)	O (-)
Attention to negative face		O (-)	P (+)		O (+), P (+)		P (-)	P (-)	P (+)			
Attention to relationship	P (+)	O (+)	P (+)	O (+), P (+)	O (+), P (+)	O (+)			P (+)	O (+)		
Avoidance							O (+), P (+)	O (+), P (+)			P (+)	
Elaboration							O (-), P (-)	O (-), P (-)			P (-)	P (+)
Attention to multiple goals			P (+)				O (-), P (-)	O (-), P (-)			P (-)	O (-), P (-)

Note. "O" indicates own goal, "P" indicates partner's goal, "+" indicates a significant positive association, "-" indicates a significant negative association.

Table 6.3

Statistically Significant Associations between Reported Perceived Interaction Goals and Reported Conversational Assessment

Perceived interaction goal	Burden	Distress	Hurt	Hopefulness	Decision-making efficacy	Conversational satisfaction	Relational distancing	Change in concordance
Own goal to attend to partner's positive face						+	-	
Own goal to attend to partner's negative face				+		+	-	
Own goal to attend to the relationship	+					+	-	
Own goal to avoid	+	+	+	-	-	-		+
Own goal to provide support				+		+	-	
Own goal to influence	+	+	+		-	-		+
Partner's goal to attend to own positive face						+	-	
Partner's goal to attend to own negative face				+		+	-	
Partner's goal to attend to the relationship						+	-	
Partner's goal to avoid	+	+	+	-	-			+
Partner's goal to provide support		-	-	+		+	-	
Partner's goal to influence	+	+	+		-	-		+

Note. "+" indicates a significant positive association, "-" indicates a significant negative association.

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Assessing Communication Sophistication as Attention to Multiple Goals

The research question asked about the discursive features that characterize attention to multiple goals in family conversations about end-of-life health decisions. The results of this investigation revealed that high-quality end-of-life conversations are marked by attention to identity-related (including positive face and negative face), relationship-related, and task-related (including avoidance and elaboration) goals. This finding is consistent with a great deal of work demonstrating that identity, relational, and task goals are conventionally relevant across many kinds of interactions (e.g., Caughlin et al., 2008; Clark & Delia, 1979; Dillard et al., 1989; Donovan-Kicken & Caughlin, in press; Goldsmith, 2004; Goldsmith & Fitch, 1997; Keck & Samp, 2007; Wilson et al., 2009). The present study is among the first to demonstrate the relevance of the three broad goal types in end-of-life communication.

In addition to demonstrating the normative relevance of multiple kinds of goals, the conversations in this study showed how the identities of individuals, their relationship, and the conversational task could be affirmed or threatened in a variety of ways. Moreover, the way in which one goal was achieved (or not achieved) had implications for attention to other relevant goals. For instance, some participants avoided discussing end-of-life topics by directly refusing to engage their partner, engaging in actions such as moving to the next question before the partner was ready or refusing to continue with the conversation. This kind of avoidance may have particularly negative implications for the identities and relationship of the participants as it can cast the avoidant person as uncooperative, the avoided partner as someone not desirable to talk to, or the relationship as not important or strong enough for an end-of-life conversation. Other participants avoided discussion through more indirect means, such as by pointing out that the topic had already been discussed, by assuring each other that they were already familiar with

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one another's wishes, or by making a joke to redirect the conversation. This more subtle kind of avoidance might have more favorable implications for identities and relationships, casting the participants, for example, as ostensibly willing to talk, but not needing to because of the closeness of the relationship or because they had previously discussed end-of-life choices (see Caughlin & Scott, 2010).

The interrelated implications of the pursuit of multiple purposes illustrate how the normative relevance of multiple goals can pose dilemmas in end-of-life talk. Researchers have elucidated the numerous factors that make end-of-life communication difficult, arguing that advance care planning may not occur in families for a variety of reasons, including fear about the process of dying, not wanting to take away hope or cause pain, intense emotional reactions, anticipation of disagreement, or wanting to keep loved ones from having to engage in a challenging conversation (e.g., Csikai, 2009; Kalish, 1976; King & Quill, 2006; Larson & Tobin, 2000; Zhang & Siminoff, 2003). The results of this study suggest that part of the difficulty of discussing end-of-life choices arises from communication dilemmas in which pursuing certain interaction goals interferes with accomplishing other relevant goals, such as when the goal of avoiding a difficult topic undermines attention to relational goals, or when the goal of affirming the relationship prevents interactants from reaching a decision. It may be that not knowing how best to manage such dilemmas keeps people from talking about end-of-life health decisions.

In general, participants' perceptions of their own communication overlapped with the outside raters' assessments of participants' communication. For instance, ratings of attention to negative face significantly predicted reports of negative face goals, rated attention to the relationship was associated with reported relational goals, and rated avoidance and rated elaboration were each associated with reported avoidance goals and reported influence goals.

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The correspondence between the raters' assessments of participants' communication and participants' reports of their own communication provides evidence for the convergent validity of the measures. This suggests that the raters and the participants were tapping into the same construct in assessing interaction goals, which challenges the argument that a person's interaction goals are inaccessible to that person's consciousness (e.g., Kellermann, 1992) and instead lends support to the argument that individuals are, at least to some extent, successfully able to assess their own interaction goals and to make inferences about the interaction goals of their partner (e.g., Dillard, 2004; Wilson, 2007).

The correlations between ratings and reports of attention to goals were not so high, however, as to suggest the two measures were isomorphic. This is not surprising: There is evidence that enacted communication and people's perceptions of that communication can differ (see Goldsmith, 2004). The present study is the first to examine how perceptions of communication and outside assessments of communication are related in end-of-life conversations, and although perceptions and ratings were correlated in this study, the measures were distinct enough to suggest that having both raters' and participants' assessments was useful. Research on topic avoidance in relationships, for example, suggests that one of the ways communication effects are brought about is through the mediation of perceptions of interaction (Caughlin & Golish, 2002). Thus, fully understanding the connection between communication and its outcomes probably requires both outsider ratings of communication alongside measures of individuals' perceptions of communication.

In sum, communicating about end-of-life health decisions is a complex situation that makes multiple goals relevant (O'Keefe & Delia, 1982), and participants in this study varied in the types of relevant goals they attended to as well as the extent to which they attended to the

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various goals. This variation was reliably captured in ratings of communication sophistication, providing evidence that a multiple goals perspective is a useful theoretical framework for measuring the quality of end-of-life conversations. Furthermore, the variation in participants' goal attention highlights the practical opportunity to improve the quality of end-of-life communication in families by improving people's awareness of, and attention to, multiple purposes in advance care planning.

Communication Sophistication and Conversational Assessment

The first five hypotheses addressed the association between communication quality and outcomes of the communication. The findings related to these hypotheses demonstrated that outside ratings of a person's communication consistently predicted that person's report of conversation outcomes as well as the partner's report of outcomes.

Emotional response was positively associated with relationship-related and task-related aspects of communication sophistication, including attention to the relationship, avoidance, and attention to multiple goals (*H1*). In general, the positive emotion of hopefulness resulted from greater attention to goals, and the negative emotion of hurt resulted from less attention to multiple goals. These findings indicate that the observable quality of an end-of-life conversation affects individuals' emotional responses such that higher quality conversations prompt positive emotion, whereas lower quality conversations elicit negative emotion. These emotional responses are important in their own right, but they might also be important to the information processing aspects of these conversations. There is evidence that the experience of negative emotion reduces a person's ability to process information clearly during a conversation and can severely compromise a person's ability to make decisions, including end-of-life decisions (Tulsky, 2005; Wiegand et al., 2008). By contrast, the experience of positive emotion can make

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it less likely that a person will disengage from the interaction (Frijda et al, 1989), as the results of this study imply with the significant inverse association between rated avoidance and reported hopefulness. Thus, the current findings suggest that the quality of a person's communication in advance care planning may affect the quality of the decisions the person makes by affecting the person's emotional response to the conversation.

Participants' beliefs about their decision-making efficacy were associated with attention to task-related goals (i.e., the lack of avoidance) and with attention to multiple goals (*H2*). The extent to which a person skillfully attended to the task of discussing end-of-life health decisions predicted that person's (but not the partner's) sense of efficacy. This finding suggests that people who do a good job of engaging in the end-of-life decision-making process while also successfully attending to other relevant goals have higher perceptions of their ability to make end-of-life choices than people who do a poor job of engaging in end-of-life talk. This is consistent with recent research that has established a connection between a participatory decision-making style and efficacy (e.g., Arora, Weaver, Clayman, Oakley-Girvan, & Potosky, 2009; Frosch, Légaré, & Mangione, 2008; Maly, Stein, Umezawa, Anglin, & Leake, 2008). According to the model of shared decision making, patients should share participation in every step of the decision-making process (Moumjid et al., 2007). Many scholars and practitioners advocate this model of decision making because patients are most at risk of receiving end-of-life care inconsistent with their preferences when they do not participate in the decision making (Winzelberg et al., 2005). The results of this study, however, add an important caveat to this work on shared decision making: It may not be enough to simply participate in the decision making; rather, the quality of participation in the decision making appears to differentiate those who develop a greater sense of efficacy from those with a lower sense of efficacy.

Conversational satisfaction was related to each aspect of communication sophistication in this study. Consistent with previous research (Harwood, 2000), the quality of a person's talk was associated with the person's own satisfaction with the conversation as well as their partners' satisfaction. More specifically, the association between conversational satisfaction and attention to identity goals found in this study supports previous work in which interactions were found to be more satisfying when individuals validated one another's positive identities, such as by discouraging negative self-perception (Ting-Toomey, 1986). These findings are also congruent with research showing that interactions tend to be less satisfying when individuals reinforce negative identities, such as by using patronizing talk or criticism (La Tourette & Meeks, 2000; Martin, Weber, Anderson, & Burant, 2004; Ryan, Hamilton, & See, 1994). Similarly, the association between conversational satisfaction and attention to relational goals in this study is consistent with research showing that messages of relational commitment from a partner predict a person's communication satisfaction (Myers & Bryant, 2008). Additionally, as the results of the present study also suggest, previous research has shown that conversational satisfaction is associated with attention to task-related goals. For instance, conversations tend to be less satisfying when the interactants do a poor job of engaging one another (La Tourette & Meeks, 2000; Williams & Harwood, 2004) or when the interactants are avoidant (Giles, Makoni, & Dailey, 2005). Furthermore, the significant associations between attention to multiple goals and own and partner satisfaction extend the body of work on conversational satisfaction by providing evidence that, in addition to specific attention to individual goals, broader attention to multiple goals also corresponds to greater satisfaction with communication.

Relational distancing was inversely associated with attention to positive face, the relationship, and multiple goals. The finding that distancing was related to attention to positive

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face (but not to attention to negative face) is similar to previous findings that have established a connection between relational distancing and affirmation or disregard for a person's desire to be liked and accepted. Specifically, there is evidence that distancing occurs when an individual's desire to be valued by a relational partner is obstructed (McLaren & Solomon, 2008; Vangelisti & Young, 2000). There is also evidence that the distancing effect can be amplified when a person perceives a conversational partner's disregard for the person to be intentional (Mills, Nazar, & Farrell, 2002; Vangelisti & Young, 2000). Although such findings are congruent with the results of the present study, existing research on relational distancing has largely examined hurtful communication, which often involves specifically identity-focused or relationally-focused talk. The results of the present study provide evidence for distancing effects in the context of end-of-life communication. Conversations about end-of-life issues may not pertain specifically to identities or relationships, but the current findings suggest that such conversations can nevertheless be hurtful and can have important identity and relational implications.

No aspect of communication sophistication was significantly related to changes in concordance between one's beliefs about the partner's end-of-life preferences and the partner's reported end-of-life preferences. There are a number of possible explanations for the lack of significant findings. It could be that a floor effect occurred: The mean scores and standard deviations for concordance change were relatively low, leaving little variance in the dependent variable to explain. It is possible that a single conversation, especially one that did not specifically address all of the end-of-life preferences assessed in the preferences measure, is not sufficient to improve rates of concordance. It is also possible that the lack of significant findings related to concordance change may be due to the way end-of-life preferences were measured in this study. When completing the preconversation measure of their partner's end-of-life

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preferences, a number of participants expressed uncertainty about their yes/no answers. If participants correctly guessed their partner's preferences in the preconversation questionnaire, the concordance rate might not have changed significantly, but participants' confidence in their answers may have been stronger after conversing. This possibility cannot be verified with the data from the present study, but it suggests that, in addition to assessing people's predictions, future examinations of family members' concordance in predicting one another's end-of-life preferences should be augmented by assessing people's confidence in the predictions.

Overall, the results related to the first set of hypotheses demonstrated that people who more effectively attended to individual types of goals (i.e., identity, relational, task), as well as to multiple types of goals, experienced more favorable outcomes than people who did not as effectively attend to relevant goals. In addition, the quality of a person's attention to individual and multiple goals differentiated better from worse outcomes for the person's conversational partner. All of the associations found between communication sophistication and conversational assessment were in the desirable direction, indicating that goal attention consistently predicted favorable outcomes.

Communication Sophistication and Perceived Interaction Goals

The next hypothesis predicted an association between communication sophistication and perceived interaction goals (*H6*). Results related to this hypothesis revealed that the quality of individuals' communication was related to their perceptions of their own and their partner's interaction goals as well as the partner's perceptions of interaction goals. One explanation of these findings is that people's perceptions of their own goals are influenced by what they say and that their perceptions of their partner's goals are influenced by what the partner says. However, perceptions of one's own goals also were associated with the other person's communication, and

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one's perceptions of the other's goals were associated with one's own communication. Such findings demonstrate that self-perception (e.g., Bem, 1972) is not the only mechanism that gives rise to interpreting communication. Rather, the associations found in this study suggest that the meaning of communication is also shaped by people's perceptions of their partner's goals.

This relationship between enacted goal attention and perceived goal attention is suggested by Caughlin and Scott (2010), who argued that individuals sometimes infer their partner's goals based on their own communication and they sometimes infer their own goals based on their partner's communication. For instance, the current results suggest that people who avoided discussing end-of-life issues tended to perceive that their partner was trying to influence them. It could be that perceiving oneself to be avoidant may lead a person to think that the other person was trying to exert influence. The results of this study also provide some evidence that people may infer their partner's goals through some form of projection, which involves processes by which people use information about their own behaviors and internal states to make assumptions about others' thoughts or feelings (Fagerlin, Ditto, Danks, Houts, & Smucker, 2001; G. Marks & Miller, 1987; Mullen & Hu, 1988). For example, individuals who attended to negative face in the conversations tended to believe that their partner strongly attended to negative face (even though rated attention to negative face was not associated with people's reports of their own attention to negative face). This suggests that individuals' perceptions of their partner's interaction goals may be based at least in part on their own enacted communication (but not necessarily their perceptions of their own communication). In general, the numerous significant associations between communication sophistication and perceived interaction goals in this study provide initial evidence of how enacted attention to multiple goals shapes perceived attention to multiple goals in end-of-life conversations.

Perceived Interaction Goals and Conversational Assessment

The third set of hypotheses proposed that perceived interaction goals would predict conversational assessments. Testing these hypotheses revealed that individuals' perceptions of own and partner interaction goals predicted their reports of the outcomes of the interaction.

Emotional response was associated with each perceived interaction goal except own goal to attend to the partner's positive face (*H7*). Perceptions of own and partner negative face goals and own and partner support goals demonstrated desirable associations with the individual emotions: The perceived goals were negatively related to distress and hurt, but positively related to hopefulness. By contrast, perceptions of relational goals, avoidance goals, and influence goals exhibited unfavorable associations: The goals were positively related to burden, distress, and hurt, but inversely related to hopefulness. The undesirable outcomes of perceived avoidance and influence are not surprising. There is ample evidence that transparent attempts to disengage from a conversation or to exert influence often are evaluated negatively (e.g., Caughlin & Scott, 2010; Caughlin, Scott, Miller, & Hefner, 2009; Quick, Scott, & Ledbetter, in press; Quick & Stephenson, 2008; Roloff & Ifert, 2000); however, the finding that perceived relational goals were positively associated with feeling burdened was not anticipated. The finding was even more puzzling given that ratings of attention to the relationship were negatively associated with negative emotion and positively associated with positive emotion in this study. Two bodies of work may help explain the different effects of enacted and perceived attention to relational goals.

First, research on invisible support provides insight into how enacted and perceived communication can function differently. Considerable research demonstrates that perceiving social support is available is related to desirable outcomes (e.g., S. Cohen, 1992; Sarason, Sarason, & Gurung, 1997; Stroebe & Stroebe, 1996), but actually recognizing the receipt of

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support is often unrelated to favorable outcomes, or worse, associated with undesirable outcomes (e.g., Coyne & Bolger, 1990; Kaul & Lakey, 2003). Bolger, Zuckerman, and Kessler (2000) have argued that these mixed findings highlight the emotional cost entailed by enacted support and suggest that providing "invisible support," or support that is enacted by a provider but not perceived by the recipient, represents a way of minimizing the cost of receiving support (p. 954). This work on invisible support suggests that social support is most effective when it is accomplished outside a recipient's awareness or with sufficient subtlety that it is not interpreted as support. There is growing evidence to support this claim. Invisible support has been associated with lower levels of depression, anxiety, sadness, and emotional reactivity (Bolger et al., 2000; Bolger & Amarel, 2007; Maisel & Gable, 2009). The results of the current study suggest that, like invisible support, enacted attention to the relationship can be beneficial, but awareness of the relational goal attention can entail an emotional cost. It appears, then, that relational work happens best when it is not visible and thus not interpreted as relational work.

Second, the differing implications of strategic and routine relational maintenance provide a way to explain the different functions of rated versus perceived attention to the relationship found in this project. Although both strategic and routine relational maintenance behaviors are important in predicting favorable outcomes, routine maintenance has been found to be a stronger predictor than strategic maintenance (Dainton & Aylor, 2002). There is evidence that stable relationships are ones in which little cognitive energy is expended in enacting or interpreting communication (Surra & Bohman, 1991), and some scholars have suggested that the absence of explicit support may attest to the strength of a close relationship (e.g., Coyne & Bolger, 1990). Furthermore, as Caughlin et al. (2009) have argued, believing that one's relationship requires work or protection can focus attention on any weaknesses in the relationship and thus be hurtful.

Explicit relational affirmation from a partner therefore may be interpreted as reparative work, indicating problems in the relationship. This research suggests that the present results could mean that perceptions of intentional effort being spent to affirm the relationship lead a person to believe that the relationship is not as stable, close, or satisfactory as it could be, which results in the experience of negative emotion. When the relational work is not perceived as specifically oriented toward relational goals, however, negative emotion does not ensue.

Perceptions of interaction goals were significantly associated with other conversational outcomes as well. Decision-making efficacy was inversely related to perceptions of own and partner avoidance and influence goals, which suggests that, like enacted attention to task-related goals, perceived attention to task goals affects a person's sense of efficacy in making end-of-life decisions. Conversational satisfaction was related to perceived positive face goals, negative face goals, relational goals, and support goals, but negatively related to perceived influence goals, demonstrating that perceiving attention to identity, relational, and task goals makes for a more satisfying conversation.

Relational distancing was negatively associated with perceptions of own and partner positive face, negative face, relational, and support goals, but positively associated with perceived avoidance and influence goals. These results diverge from previous research in several ways. First, the finding that perceived attention to the relationship was related to less distancing differs from extant work that has found that perceiving a partner's goal of protecting the relationship was positively associated with distancing (Caughlin et al., 2009). One possible explanation for the discrepant findings is that the primary task of the communication differed in the two studies. In Caughlin et al. (2009), the perceptions of relational goals were examined in the context of secret keeping, whereas in this study, the perceptions were assessed in the context

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of end-of-life decision making. It is possible that perceptions of relational goals function differently depending on the particular communicative situation. Second, the present study found that perceived attention to the relationship was associated positively with negative emotion, but negatively associated with relational distancing. This runs counter to previous research on distancing, which suggests that relational distancing and negative emotion tend to be affected by interaction in similar ways (e.g., Caughlin et al., 2009; Vangelisti & Young, 2000). One possible explanation for the current finding is that people experience negative emotion at the perception that a relationship needs attention, but they might ultimately believe that engaging in a difficult conversation in which relational attention is necessitated makes the relationship closer. This suggests that relational distancing and negative emotion may not always function similarly.

The final outcome, concordance change, was not associated with perceived interaction goals. It may be that perceptions of goals in end-of-life conversations over time are more closely associated with concordance rates, but the results of this study suggest that perceived interaction goals in a single conversation do not have predictive power in improving concordance in family members' predictions of one another's end-of-life preferences.

In sum, the results related to the third set of hypotheses demonstrate that people's perceptions of their own as well as their partner's interaction goals shape the conversational outcomes. Specifically, perceptions of attention to identity, relational, and task goals generally resulted in more favorable outcomes than perceptions of poor attention to these relevant interaction goals. Not all of the associations between perceived interaction goals and conversational assessment were in the desirable direction, however, indicating that perceptions of goal attention may function differently than enacted goal attention in the context of end-of-life communication.

Theoretical Implications

The findings in this study serve to reinforce and extend theory in a number of ways. Specifically the results have implications for multiple goals theories and for perceptual and interpersonal explanations of communication.

Multiple Goals Theoretical Perspective

End-of-life decision making in families is a theoretically distinct and important context for studying attention to multiple goals because it raises the question of how goal attention operates in difficult conversations in close relational contexts. This study refines scholarly understanding of how attention to multiple goals brings about better or worse personal, relational, and health-related outcomes. Previous theoretical contributions have been made in developing the body of knowledge on multiple goals by examining goal attention in diverse communicative contexts such as conflict interactions (Caughlin & Scott, 2010; Keck & Samp, 2007), supportive interactions (Goldsmith, 1992, 2004), romantic interactions (Wilson et al., 2009), influence interactions (Dillard et al., 1989; O'Keefe & McCornack, 1987), and interactions about a problematic event (Samp & Solomon, 1998, 1999). The present research represents an examination of goal attention in a new and socially meaningful context.

To begin, the current investigation provides empirical support for the assumptions of a multiple goals theoretical perspective. One assumption of multiple goals theories is that individuals work to accomplish multiple purposes simultaneously in interaction, and the present results demonstrate that people pursue identity, relational, and task goals in conversations about end-of-life health decisions. This is consistent with longstanding views that these three genres of interaction goals are essentially ubiquitous in interpersonal interactions (Clark & Delia, 1979).

Moreover, the present findings demonstrate that individuals are aware of their own pursuit as well as their partner's pursuit of these three broad types of goals in end-of-life conversations.

A second assumption of some multiple goals theories is that communication that attends to more goals is more sophisticated than communication that attends to fewer goals (e.g., Goldsmith, 2004; O'Keefe, 1988). This assumption has been supported empirically by studies in which attention to more goals or certain combinations of goals yielded more desirable effects than attention to fewer goals (e.g., Caughlin et al., 2008; Donovan-Kicken & Caughlin, in press; O'Keefe, 1988). The current findings add to this evidence by confirming that conceptualizing communication quality as attention to multiple goals is a reliable and useful means of explaining how outcomes of communication about end-of-life health decisions are brought about.

In addition to confirming that enacted attention to multiple goals yields better outcomes, the present results also demonstrate that, in general, perceived attention to multiple goals yields better outcomes. Such findings reinforce the utility of a multiple goals perspective as a theory of message interpretation. Most research on multiple goals has focused on explaining how interaction goals shape message production (e.g., Dillard et al., 1989; Samp & Solomon, 2005; Wilson et al., 2009). Far less work has utilized multiple goals perspectives to explain how perceptions of interaction goals also affect how people interpret communication (for a recent exception, see Caughlin et al., 2009). What research has examined inferences related to goals in interaction has tended to focus on global constructs, such as intentionality or self-serving attributions (e.g., Sillars, Roberts, Dun, & Leonard, 2001; Vangelisti, 2001), rather than on how the specific content of goal perceptions shape meaning in communication. As Caughlin (in press) has argued, the notion that goal perceptions shape meaning "is crucial for expanding the traditional focus of multiple goals theories to help us understand the connections among message

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production, communication, and relational outcomes" (p. 12). The current investigation

represents a first step toward this expansion as it provides empirical evidence for how messages

can be interpreted in various ways and how perceptions of goals are key predictors of those

assessments. Such findings tap into the largely unrealized potential of multiple goals

perspectives to explain interpretive processes.

In addition to supporting and extending multiple goals theoretical perspectives in general,

the findings of this study also have implications for specific multiple goals theories, including

Goldsmith's (2001, 2004) normative approach and Caughlin's (in press) model of multiple goals

in interaction. First, the results give concrete expression to the dilemmas that arise when multiple

goals are pursued in interaction. For instance, enacting attention to the relationship consistently

yielded positive outcomes (i.e., greater hope, greater conversational satisfaction, less relational

distancing), but perceiving attention to the relationship yielded mixed results (i.e., greater

burden, greater conversational satisfaction, less distancing). These associations demonstrate that

end-of-life talk is a complex communicative situation in which the pursuit and perception of

some goals may conflict with the pursuit and perception of other goals. According to a normative

perspective, the quality of a person's communication is represented by the extent to which the

person is able to artfully manage such dilemmas by drawing on specific discursive resources

(Goldsmith, 2001, 2004). The present study provides evidence that politeness, relational

maintenance, avoidance, and elaboration are several discursive features that individuals utilize to

address communication dilemmas in end-of-life conversations. Enacting relational maintenance

in a way that is perceived as routine or unintentional, for example, allows a person to effectively

attend to relational goals without drawing attention to the need for such goals to be pursued. It is

likely that other discursive features facilitate the effective management of communication

dilemmas in end-of-life talk, and the results of the present research establish a foundation on which future work on normative goal attention in end-of-life decision making can build.

A second implication of the current study is it provides an initial test of part of Caughlin's (in press) model of multiple goals in interaction. Although there is ample evidence for how people's goals shape their communication (e.g., Brown & Levinson, 1979; Dillard, 2004; Samp & Solomon, 1999; Wilson, 2002), there is far less empirical evidence for how people's goal attention shapes their perceptions of goals, and how both attention to goals and perceptions of goals shape conversational outcomes. The results of this project demonstrate that the theoretically-grounded connections in Caughlin's (in press) model hold true in actual interactions.

Perceptual and Interpersonal Explanations of Communication

One of the primary goals of communication research is to explain how the effects of communication are brought about. One limitation of existing research on the association between people's communication and the outcomes of that communication is most studies focus on only one individual. Focusing on just one person's perspective prevents researchers from examining if one person's communication behavior is related to personal and relational outcomes for that person's interaction partners. Without utilizing a dyadic design and analysis, it is impossible to learn the extent to which one individual's communication is perceived by others or the extent to which the individual's communication is associated with outcomes related to others. In the current study, the use of interactional data presents the opportunity for examining perceptual and interpersonal explanations for the associations between communication and outcomes.

Broadly, the results of this study demonstrate that the effects of communication can be explained by both perceptual and interpersonal processes. This research found associations

between people's perceptions of their own interaction goals and their own reports of emotional response, decision-making efficacy, conversational satisfaction, and relational distancing. Furthermore, results demonstrated associations between people's perceptions of their partner's interaction goals and their own reported outcomes. These findings indicate that one way to explain how communication effects occur is through perceptual processes, or through people's perceptions of their own and their partner's communication. This study also found that people's enacted attention to multiple goals predicted their own emotional response, decision-making efficacy, conversational satisfaction, and perceptions of relational distancing. In addition, people's enacted goal attention predicted their partner's emotional response, conversational satisfaction, and perceptions of relational distancing. These results demonstrate that communication effects are also brought about through interpersonal processes.

The simultaneous operation of both perceptual and interpersonal processes in predicting communication outcomes has been found in previous work on avoidance and relational satisfaction. In a study of dating partner dyads and parent-adolescent dyads, Caughlin and Golish (2002) found support for perceptual as well as interpersonal connections between topic avoidance and relational dissatisfaction. The findings of the current investigation are congruent with this previous work and build on this work by demonstrating that understanding other facets of communication beyond avoidance (including attention to positive face, attention to negative face, attention to the relationship, information elaboration, and attention to multiple goals) requires examination of both perceptual and interpersonal processes.

Finally, the current results suggest that, in addition to the separate perceptual and interpersonal pathways linking communication to its effects, there are likely interconnections between the interpersonal and perceptual processes during conversations about end-of-life

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decisions. In addition to predicting outcomes of the communication, people's attention to goals predicted their perceptions of their interaction goals, which in turn also predicted the outcomes of the communication. This significant connection between communication sophistication and perceived interaction goals provides evidence that perceptual and interpersonal explanations of communication are not separate; instead, perceptual and interpersonal processes may interact in bringing about communication effects.

Practical Implications

One reason why studying goal attention in communication is important is because, unlike many factors that influence end-of-life decision making (e.g., precipitating medical condition, family structure, financial stability, socioeconomic status, ethnicity, age, and sex; Bookwala et al., 2001; Borum, Lynn, & Zhong, 2000; Chang & Sambamoorthi, 2009; Fried et al., 2002; Hinkka et al., 2002; Hopp & Duffy, 2000; Tilden et al., 2001), it is possible for communication and perceptions of communication to be successfully adapted (Pistrang & Barker, 1995). The findings of the present project give rise to a number of specific implications for communication practice.

The current study represents a step toward extending research on multiple goals into applications that can benefit families who are making end-of-life decisions. A great deal of end-of-life research has examined people's end-of-life preferences (e.g., L. L. Emanuel, Alpert, Baldwin, & Emanuel, 2000; Rietjens, van der Heide, Onwuteaka-Philipsen, van der Maas, & van der Wal, 2005; Rurup et al., 2006; Singer et al., 1999; Steinhauser et al., 2000; Teno, Casey, Welch, Edgman-Levitan, & Fowler, 2001; Vohra et al., 2004) and their reasons for engaging in or avoiding discussions about these preferences (e.g., Chittenden, Clark, & Pantilat, 2006; Csikai, 2009; Deep, Green, Griffith, & Wilson, 2007; Hamel et al., 2002; Hawkins et al., 2005;

Inman, 2002; Larson & Tobin, 2000; Morrison, 1998; Zhang & Siminoff, 2003), and the present investigation was designed to build upon this research by considering what makes conversations about end-of-life preferences go well or poorly. An important goal of communication research is to provide a basis for recommendations about how interactants can achieve desirable outcomes. End-of-life discourse is among the most consequential communication that individuals and their families may enact, and determining what discursive qualities make conversations about advance care decisions go well or poorly provides a basis for advice about how people can more successfully engage in such interaction.

Furthermore, the analytic method used in this study lends itself to practical application. The most common method of analyzing communication in terms of multiple goals is to identify a common repertoire of various types of goals (e.g., Dillard et al., 1989; Sabee & Wilson, 2005; Samp & Solomon, 1998) or strategies available for managing various types of goals (e.g., Keck & Samp, 2007; Wilson et al., 2009). By contrast, the current study examined how individuals in a particular communicative situation employed a common repertoire of goals and strategies and to what effect (e.g., O'Keefe & Shepherd, 1989). This kind of analytic focus advances empirical understanding of how family members address multiple goals during end-of-life conversations beyond typological claims to include normative conclusions, such as those discussed below.

To begin, the results of this study underscore the complexity of communication about end-of-life issues. The topic of advance care poses potentially conflicting interaction goals that can be challenging to manage. Thus, to aid family members faced with end-of-life conversations, it may be useful to simply validate the experience of goal dilemmas and help people who interpret end-of-life talk in one way to realize that their family members may understand the interaction in a different way (e.g., Goldsmith et al., 2006).

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Beyond the general utility of understanding the dilemmas, the current research also implies some potentially useful communication recommendations. One specific recommendation for engaging in end-of-life conversations suggested by this study is that individuals would benefit themselves as well as their conversational partners by attending well to the primary goal of engaging in the end-of-life conversation. The results of this study suggest, for example, that elaborating on one's logic for end-of-life choices can make for a good conversation. Talking about what specific decisions would be made in specific hypothetical situations (e.g., "Once I start having to wear diapers, that's the time to put me in a nursing care facility") or real life third-party situations (e.g., "If I ever get to the point where I'm like Uncle James, don't take me out in public") and explaining what factors might change a specific decision (e.g., "Right now I'm okay with being put on a mechanical ventilator, but if I ever get Alzheimer's, then I wouldn't want to be on the ventilator") can provide family members with a substantial basis from which to draw inferences about a person's preferences in the event that the family must make an end-of-life decision on behalf of the person. Conversations marked by skilled elaboration also tended to be satisfying for participants.

The results of this study further suggest that considering how certain end-of-life choices affect the identities and relationships of the people involved in discussing the choices will result in more favorable conversations than if identities and relationships are not considered. For instance, expressing approval of the other person (e.g., "I think your decisions make a lot of sense"), respect for the other person's autonomy in making those decisions (e.g., "I support whatever choice you make"), and affirmation of the relationship with that person (e.g., "I'm glad we're close enough to talk about this kind of thing") can provide reassurance of the person's value and of the relationship's stability and strength. Such affirmation may be particularly

effective in the context of difficult communication, such as end-of-life talk. Moreover, attention to some of these goals (e.g., relational goals) appears to be even more effectively enacted by affirming the goals in a way that does not signal to the partner that the goals are salient.

Another specific recommendation arises out of the findings related to perceptions of interaction goals. Some goal perceptions seem to be more detrimental than others. For example, it appears to be especially burdensome, distressing, hurtful, dissatisfying, and distancing when individuals seem to be trying to avoid the conversation or to influence their partner. It might be helpful, therefore, for people to check the legitimacy and motivation of such perceptions with their partner. If, for instance, a person's avoidance is motivated by sadness at contemplating life without the partner, such a reason for the avoidance may mitigate its negative effects. It could also be helpful to inform families that perceptions of people's end-of-life communication matter because they are related to people's personal, relational, and health outcomes, and therefore individuals would do well to consider how their communication might be perceived by others.

In addition, the present study demonstrates that facilitating conversations about end-of-life health decisions before such decisions are imminent can be an effective strategy. There is evidence that initiating advance care planning before advance care is necessary allows people to experience less distress when discussing difficult decisions, to make more informed choices, and thus to more effectively follow a patient's end-of-life wishes (Larson & Tobin, 2000; Quill, 2000). The current results support this reasoning and suggest that families would benefit from raising discussion of end-of-life issues earlier rather than later.

Finally, the conversational task component of this study accords to this research the advantages that accompany intervention research. Communication-focused intervention work provides scholars with an opportunity to learn what kind of interaction leads to positive or

negative outcomes and the mechanisms that give rise to those effects. The need for intervention work in the context of end-of-life decision making is growing (Hudson, Aranda, & Hayman-White, 2005), but previous research demonstrates the potentially disastrous results of implementing large-scale, atheroetical interventions for advance care planning (e.g., SUPPORT Principal Investigators, 1995). This study provides initial empirical evidence that an intervention based on multiple goals theories (e.g., Clark & Delia, 1976; Dillard, 2004; O'Keefe, 1988; Wilson, 2002) and the normative model (Goldsmith, 2001, 2004) is likely to be successful. In addition, the use of MLM analytic techniques provided a way to test the effectiveness of perceptual and interpersonal processes at work in end-of-life conversations, and the results of these analyses suggest that interventions about end-of-life decision making would be best targeted at individuals and families (or at least dyads), rather than only one or the other.

Limitations and Opportunities for Future Research

The theoretical and methodological choices in any study provide the opportunity to contribute to scholarly conversation about important issues, but they also create constraints that limit what kinds of contributions can be made. Given that scientific inquiry is inherently rhetorical (Jackson, 1989), the necessary choices about theory and method have implications for the claims that can be made from any particular study. Like all research, the current project had limitations, which arose from the philosophical assumptions, methodology, analytic techniques, design, and sample of the study, and these limitations suggest opportunities for future avenues of research on end-of-life decision making in families.

First, this study is limited by its philosophical assumptions. This study assumed that the better family members understand one another's end-of-life preferences and values, the better their end-of-life decisions for themselves and for one another will be. However, there were some

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hints in this investigation that even when people understand each other, they still may have

unproductive or unsatisfying end-of-life conversations. For instance, an adult daughter may fully

understand her mother's wishes regarding end-of-life medical treatment, but the daughter may

choose to act in ways that contradict her mother's preferences. This suggests that there may be

circumstances in which people do not want to know a family member's advance care wishes. It

is also possible that some individuals may wish to remain uncertain about a family member's

end-of-life plans because they want to be able to make choices related to the family member's

end-of-life care without feeling fettered by the family member's preferences. If a son suspects

that he will not approve of his father's end-of-life decisions, for example, he may avoid

conversation about such decisions. These possibilities are consistent with Brashers's (2001,

2007) theory of communication and uncertainty management, which proposes that, in the context

of health and illness, people do not always want to reduce their uncertainty; in some cases,

individuals may wish to maintain, or even increase, their uncertainty (e.g., Brashers et al., 2000;

Hogan & Brashers, 2009). This suggests that uncertainty goals may be conventionally relevant in

end-of-life decision making, and thus future work on advance care planning in families would do

well to account for the ways in which uncertainty goals are managed in end-of-life discussions.

The present study also made an assumption in privileging a normative sociocultural

understanding of relevant goals. In this project, effective communication was conceptualized as

attention to conventionally relevant goals, and even though attention to relevant goals yields

more desirable outcomes most of the time, there are limitations to this conceptualization. For

instance, conventionally, individuals have the right to make their own end-of-life decisions, but

this right to choose is constrained by a person's decision-making capacity (e.g., Drane, 1984), by

what is conventionally reasonable (e.g., a person may want to sleep on a bed of marshmallows,

but such a preference is arguably not rational), and by what is possible (e.g., an individual might want to preserve his or her body using cryonic freezing, but this technique is not widely available to most people). These examples illustrate how attention to certain relevant goals may not always be warranted in end-of-life conversations because not all goals are culturally relevant.

Second, the data collected in this study were affected by the methodology used, and thus the limitations inherent to elicited conversations, self reports, and rater assessments constrained the study. Utilizing elicited conversations carries several disadvantages. For example, the involvement of the researcher in prompting the discussions can cause participants to be more circumspect in their behavior or to present themselves in a more favorable light than they otherwise would (McLaughlin, 1984). Moreover, researcher involvement necessarily renders elicited conversations more artificial than naturally occurring talk. To minimize the effect of participant caution and social desirability, as well as the contrived pretense for the conversation, participants in this study were invited to choose a preferred location for the interaction, they were reminded that there was no right or wrong way to have the discussion, and they were encouraged to converse as they would normally talk with each other. The method of eliciting talk also limits the researcher's ability to examine how interaction patterns that manifest in everyday discourse affect conversations with specific topics or goals (e.g., Caughlin & Vangelisti, 1999). Given that people do not frequently discuss end-of-life issues, it is plausible that any patterns arising in such discussions would be influenced by interaction patterns that have developed for dealing with more routine issues. This connection cannot be examined in the current study, but future research could assess more global family communication patterns to determine how the communication patterns in end-of-life discourse are linked with general patterns of family communication.

The use of self-report methods in this study poses a second set of limitations, including participant error and measurement error. Self-report bias is one form of participant error. For instance, some participants may have perceived certain communication goals to be more socially acceptable (e.g., giving support) than others (e.g., exerting influence). There is evidence for self-serving bias in people's tendency to assess their own communication more favorably than they rate others' communication (e.g., Canary, 2003; Sillars, Roberts, Leonard, & Dun, 2000). Collecting responses from both members of the dyads allowed participant bias to be taken into account in interpreting the results, but future research could further minimize participant error by measuring goal perceptions in different ways, perhaps such as by rating the importance of the goal rather than by rating the extent to which the goal was pursued (which is how it was measured in this study).

Self-report measures are further limited by measurement error. Standardization forces the researcher to develop inflexible questions that are general enough to be appropriate for all participants, but this could cause the researcher to miss what is most important to some participants. In the present study, for instance, several participants expressed frustration over what they saw as irrelevant questions, especially about perceptions of goals. Survey data also can suffer from poor reliability. Researchers cannot assume a perfect correspondence between participants' answers and participants' reality (Fowler, 2002). Questionnaire items do not have the same meaning for all participants (e.g., "strongly agree" can mean different things to different people), and thus the items may not have measured the same attitude, value, belief, thought, feeling, preference, or behavior in all respondents. Such measurement error can yield artificially uneven responses, and given that reliability is a prerequisite for validity, poor reliability in questionnaire studies can compromise the accuracy of the results. Although the

reliability coefficients for all measures in this study were acceptable, not all were excellent. Part of the difficulty in achieving consistently strong reliability was the use of newly created measures. Future work would benefit from refining the instruments used in this study to craft even more sophisticated assessments of relevant constructs.

Third, the analytic techniques used in this study entail several limitations. Rating rubrics have been criticized for oversimplifying the complexity and dynamism of communication (e.g., Bochner, 1978) and thus for inaccurately representing the communication phenomena they are designed to investigate (e.g., Hirokawa, 1988). The correspondence between the outside ratings and participants' reports in the present study provides some evidence that the ratings have validity. Still, even if a scheme is "accurate," there are always multiple valid ways to assess any conversation, and there is no guarantee that the most useful scheme was applied in the current investigation. It would be interesting, therefore, to investigate other means of analyzing the end-of-life discourse in future work. In addition, using rating rubrics introduces outside raters as additional sources of error. Rating in this study was dependent on the raters' cognitive representations of the discourse under analysis. Even though the raters underwent training to calibrate their representations, this does not ensure their conceptualizations were representative of others' conceptualizations. To work against this limitation, raters who were not interpersonal communication scholars were employed, bolstering confidence that lay individuals would be able to see what the researcher saw in the data.

Fourth, limitations resulted from the study's design. Although this project examined a kind of treatment effect by measuring responses to a conversational task, the data are still correlational in nature, which limits the analytic ability to draw causal connections. The decision to treat constructs as predictors and outcomes in this study was not arbitrary, but rather based on

theoretical and empirical work. It is reasonable to assume that the outcomes explicitly related to the conversation were influenced by the conversation, but the current study cannot demonstrate this conclusively. Also, given that multiple goals research rarely has been broad enough to explain more global relational constructs (Caughlin, in press), it would be useful to know if a multiple goals perspective could explain how interaction goals are related to relationship-level outcomes (e.g., relational satisfaction, relational closeness) as well as conversation-level outcomes. However, it is likely that molar relational constructs affect how people interact just as people's interaction affects their relationship, and the cross-sectional nature of this research does not allow the effect of the end-of-life conversations on global relational constructs to be determined. The cross-sectional design also cannot rule out possible alternative explanations for the results. For instance, this research does not account for factors, such as relational conflict (e.g., Pecchioni, 2001) or control (e.g., Morgan & Hummert, 2000), that may be important in explaining variance in the outcomes measured. Assessing end-of-life talk over time in future research would allow for causal claims to be made, for the impact on global relational constructs to be ascertained, and for alternative explanations of the results to be rejected.

Additionally, the particular domain of this study imposes constraints on the conclusions that can be drawn. Given the parameters of the study's design, the findings are specific to the communication practice of end-of-life decision making in families and not generalizable beyond single (and in most cases initial) parent-child conversations about advance care choices. The results of this research cannot be used to make firm claims about, for example, other kinds of family discourse, end-of-life talk among family members other than older parents and adult children, or how parent-child advance care planning unfolds over time through a series of conversations. Although it is important to examine communication in particular contexts

(Goldsmith, 1992, 2001), it is important to acknowledge that the results of such investigations are specific to the communities and contexts studied.

Finally, the sample in this study limits the generalizability of the results. The sample was a sample of convenience rather than a random sample, and thus may be representative of only certain larger populations (Keyton, 2001). The sample also may be biased toward certain kinds of parent-child dyads. Older parents and adult children who do not get along well, who value medical privacy, or who do not want to talk about a sensitive topic probably did not participate.

One avenue for future investigation that holds particular promise is research on more or less effective ways for older adults and their adult children to initiate end-of-life discussions. In the present study, the study itself served to initiate discussion about end-of-life topics. However, the question of how best to begin such conversations apart from an external impetus remains unanswered. Thus, one possible next step would be to conduct a study to determine if different ways of initiating end-of-life conversations differ in effectiveness and appropriateness. Previous research on the tendency of older people to raise painful topics in conversation in a way that is negatively evaluated by others (e.g., Coupland et al., 1988, 1990, 1991) highlights the need for work on how difficult conversations with older adults can be effectively and appropriately initiated. One possible next step could involve asking participants to imagine that they wanted to talk to their older parent or adult child about end-of-life choices and to provide the message they would use to begin such a conversation. These messages could be coded according to a number of dimensions (e.g., multiple goals, message design logic, accommodation, functions) and could also be assessed by additional participants on several dimensions (e.g., effectiveness, appropriateness). This message-level analysis would enable connections to be drawn between

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message features and normative outcomes and would provide the basis for practical advice for beginning or responding to initiated end-of-life conversations in families.

Conclusion

Previous research on end-of-life communication has largely assumed that more communication is better communication and has found that the frequency with which people talk about end-of-life decisions has no impact (or a harmful impact) on end-of-life outcomes. The present investigation challenged this assumption by demonstrating that the *quality* of family communication about end-of-life decisions matters. This exploration of end-of-life decision making in families has yielded some useful insights into what counts as effective end-of-life communication. The findings suggest that individuals' skilled attention to multiple goals in conversations about end-of-life health decisions consistently yields favorable outcomes for the individuals and their partners. Moreover, people's perceptions of their own and their partners' interaction goals were associated with their conversational assessment. Interpreted in light of a multiple goals theoretical perspective, these findings provide insight into the discursive mechanisms through which goal attention brings about better or worse outcomes in the context of end-of-life talk. Although this study represents only a first step, it underscores the value of applying a communication perspective to research on end-of-life decision making in families.

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Recruitment Materials

Recruitment flyer

Online notice text

Seeking adults and one of their parents for a study about health decisions and getting older

Researchers in the Department of Communication at the University of Illinois are conducting a study about how adults and their parents talk about health decisions, including choices that come up near the end of life. Participation involves having a face-to-face conversation with your parent and completing two questionnaires.

To participate, adults must be at least 30 years old and able to have a face-to-face conversation with a parent. Participating dyads will receive $40 ($20 per individual). If you are interested in participating or would like to learn more, please contact Allison Scott at amscott2@illinois.edu or (217) 607-0682.

Informed Consent Document

Who is conducting this research study? This project is being conducted by Allison Scott, a PhD student in the Department of Communication at the University of Illinois at Urbana-Champaign. This research is being supervised by Dr. John Caughlin, an associate professor in the Department of Communication at the University of Illinois.

What is this study about? The goal of this study is to learn about how parents and their adult children talk about health-related decisions, including decisions people make near the end of life.

What will I be asked to do if I choose to participate? If you agree to participate, you will be asked to meet with the researcher and your parent/child at a location convenient for you. You will be asked to complete two questionnaires and to talk with your parent/child about a series of questions related to health decisions, including some decisions that can come up at the end of a person's life. The discussion will be audio recorded and transcribed. Participating in this study will take approximately one and a half hours. Also, I may call you in about a week to follow up with any questions or recommendations you might have for me.

Your participation in this study is voluntary. You may choose if you want to participate in this study. If you begin the project, you may choose to stop participating at any time, which means that you may choose to stop the discussion at any time and you may choose not to answer any question on the questionnaire. You can even call me back after you are done and tell me that you do not want me to use your data. Your decision to participate or not to participate will have no effect on any future relations you may have with the University of Illinois.

Your participation in this study is confidential. Information that you share during this study will be kept confidential. The questions you answer together with your parent/child will be private, which means the researcher will not be present during the discussion. Your discussion is also meant to be confidential, and I would ask that you do not share anything said during the study with others unless you have permission from your parent/child to do so. I will do everything I can to protect your confidentiality, but I cannot guarantee that your parent/child will not share what you have said with others. When your discussion of the questions is later transcribed, all identifying information will be left out and pseudonyms will be used in place of names so that you are not identifiable in the transcript. I will keep a digital copy of the audio-recording indefinitely, but it will be kept on a password-protected computer so it is very unlikely (although not impossible) that anyone besides me and my research collaborators would ever hear it. Your signed consent form and your completed questionnaires will be stored in two separate locked locations. The data collected from this study will be presented to other researchers and written up for publication, but no information that could identify you will be included in any reports about the study.

Are there any risks to being part of this study? The risks of participating are likely to be minimal, but you may experience some discomfort when talking about health decisions that are personal or make you feel sad. If you think answering questions with your parent/child about health and aging will be too difficult for you, it is okay for you to decide not to participate. If you do participate and experience unexpected distress, you are encouraged to call the following toll-

free numbers or visit the following websites where you can find local counseling and support services (1-888-568-1112; http://www.counselingservices.org/) or help with advance care planning (1-800-445-8106; http://www.caregiver.org/caregiver/jsp/content_node.jsp?nodeid =401). You may also contact me at any time at amscott2@illinois.edu or (402) 960-0181.

Are there any benefits to being part of this study? Researchers who have conducted similar studies have reported that people often find it interesting or helpful to have an opportunity to talk about health-related decisions with a family member. Your participation also benefits the scholarly community by helping us to better understand how families talk about health decisions, which could lead to recommendations to other people about what might be helpful when having discussions about health decisions.

Will I be compensated in any way for participating? To thank you for your participation, you will receive $20.00. You will receive this compensation even if you decide to stop participating part way through the project.

Who do I contact if I have questions or concerns? If you have any questions at a later time, you may contact me, Allison Scott, at amscott2@illinois.edu or (402) 960-0181 or my advisor, Dr. John Caughlin, at caughlin@illinois.edu or (217) 333-4340. If you have questions about the rights of research participants, you may contact the University's Institutional Review Board at irb@illinois.edu or (217) 333-2670. If you are calling from outside the Champaign-Urbana area, you may call any of these numbers collect and identify yourself as a research participant.

Agreement: The researcher has explained this research study to me, she has answered my questions and concerns, and she has provided me with a copy of this consent form. I am at least 30 years old, I have read and understand the above consent form, and I voluntarily agree to participate in this study.

_____   _____
Participant's signature   Date

_____
Participant's printed name

_____   _____
Researcher's signature   Date

Now we'd like to ask you to have a discussion with one another about health-related decisions. To make sure your conversation is audio recorded, please make sure you press the "record" button on **both** recorders before you begin talking. Even though your conversation is being audio recorded, everything you say will be kept confidential.

The goal of this study is to learn more about how parents and their adult children talk about the parent's future health decisions, including decisions about medical care at the end of life. **There is no right or wrong way to have this conversation**. We are simply interested in what goes on during these kinds of discussions, so please talk as you would if this discussion topic came up naturally during a regular conversation.

To help you begin this conversation, we have prepared six cards containing questions related to different topics. Please have one person read the first card aloud and then talk about the topic for as long as you want to. There is no time limit. When you have nothing more to say about the first topic, please have the other person read the second card aloud and talk about the second topic for as long as you want to. Continue taking turns reading the cards until all six discussion topics have been covered. Again, the goal of this part of the study is to facilitate a natural discussion about health decisions.

Card 1
As people get older, the kinds of health decisions they must make often change. What are some recent health-related decisions that each of you has had to make? Are any of these decisions related to older age? What health decisions do you anticipate making in the future as you get older?

Card 2
Do either of you know someone who has had to make decisions about medical care at the end of life? Did the person make decisions about his or her own end-of-life care, or did the person make decisions on behalf of another person's care? What was your impression of the person's experience with end-of-life decision making?

Card 3
There are several places that a person can receive medical treatment as they near the end of life. For example, a person can be treated in a hospital, a hospice, or at home. If the parent becomes seriously or terminally ill, where would each of you like for the parent to receive care? What do you see as the advantages and disadvantages to receiving end-of-life care in different facilities?

Card 4
There are many kinds of medical treatment a person can receive when a person is near the end of life. The following list includes possible treatments you may choose to accept or refuse:

- Receiving artificial nutrition or hydration if you are no longer able to eat or drink fluids on your own
- Being placed on a mechanical ventilator if you are no longer able to breathe on your own
- Receiving CPR to try to revive you if you stop breathing or your heart stops
- Receiving pain medication that reduces your pain but also reduces your level of awareness

Which of these medical treatments would be acceptable to you at the end of life? Which treatments would be unacceptable? Are there any treatments that you fear? Are there any circumstances that would change whether you would want a particular kind of treatment?

Card 5
One thing some people consider when making end-of-life health decisions is a person's quality-of-life. How would each of you define "quality-of-life"? If you were seriously or terminally ill, is there a point at which your quality-of-life would not be high enough for you to want to continue living? How would each of you define a "reasonable chance of recovery" for yourself? How would each of you define a "reasonable chance of recovery" for each other? Is there a chance of recovery that is too small for you to want to receive life-sustaining treatment at the end of life?

Card 6
Is there anything else you'd like to talk with one another about before ending the conversation? After you have completed your conversation, you may stop the audio recorder by pressing the "stop" button. Then please come and let me know that you are finished with the conversation so that we can complete the final part of the study.

Thank you for participating in this study! If you have questions or recommendations for me or would like to talk more about anything related to your experience in this research project, you are welcome to contact me, Allison Scott, at (217) 607-0682 (you may call collect) or amscott2@illinois.edu.

If you are interested in learning about local resources, such as counseling or other support services, you can contact *Counseling Services* through their toll-free phone number (1-888-568-1112) or their website (http://www.counselingservices.org) for more information.

If you are interested in learning more about planning for the end of life, you can contact the *Family Caregiver Alliance* by calling (1-800-445-8106) or going online (http://www.caregiver.org/caregiver/jsp/content_node.jsp?nodeid=401). Thank you again for your participation!

Perceptions of Interaction Goals Measure

Perceptions of Partner Interaction Goals

Whenever people have a conversation, they are not just talking—they are also trying to do things, like informing, persuading, or sharing feelings. Below we ask you about some things people might try to do in the type of conversation you just had. Please circle the appropriate number to let us know how much you agree with the following statements about what you think your <u>parent/child</u> was trying to do in the conversation. For example, if you strongly agree, circle 7. If you strongly disagree, circle 1. If you do not agree or disagree, circle 4.

<div align="center">

1   2   3   4   5   6   7

strongly disagree   strongly agree

</div>

<u>Affirming the positive face of the other</u>
1. My parent/child was trying to let me know that he/she appreciates me.
2. My parent/child was trying to let me know that he/she values me.
3. My parent/child wanted me to know that he/she accepts me.

<u>Affirming the negative face of the other</u>
4. My parent/child was trying to respect my independence.
5. My parent/child wanted to respect my choices.

<u>Maintaining the relationship</u>
6. My parent/child wanted to protect our relationship.
7. My parent/child didn't want to damage our relationship.
8. My parent/child wanted our relationship to get stronger by talking about these issues.

<u>Avoidance</u>
9. My parent/child wanted to avoid talking about end-of-life issues.
10. My parent/child wanted to shift attention away from the topic of health decisions.

<u>Support</u>
11. My parent/child was trying to be supportive.
12. My parent/child was trying to let me know that he/she supports me.

<u>Influence</u>
13. My parent/child wanted to influence me.
14. My parent/child wanted to change my mind.
15. My parent/child was trying to persuade me.

Perceptions of Own Interaction Goals

Now we'd like to know what you think about <u>your</u> goals in the conversation you just had. Please circle a number to let us know how much you agree with the following statements about what you were trying to do in the conversation.

<div align="center">
1   2   3   4   5   6   7

strongly disagree   strongly agree
</div>

<u>Affirming the positive face of the other</u>
1. I was trying to let my parent/child know that I appreciate him/her.
2. I was trying to let my parent/child know that I value him/her.
3. I wanted my parent/child to know that I accept him/her.

<u>Affirming the negative face of the other</u>
4. I was trying to respect my parent/child's independence.
5. I wanted to respect my parent/child's choices.

<u>Maintaining the relationship</u>
6. I wanted to protect our relationship.
7. I didn't want to damage our relationship.
8. I wanted our relationship to get stronger by talking about these issues.

<u>Avoidance</u>
9. I wanted to avoid talking about end-of-life issues.
10. I wanted to shift attention away from the topic of health decisions.

<u>Support</u>
11. I was trying to be supportive.
12. I was trying to let my parent/child know that I support him/her.

<u>Influence</u>
13. I wanted to influence my parent/child.
14. I wanted to change my parent/child's mind.
15. I was trying to persuade my parent/child.

Scoring
The mean score for each perceived goal was calculated. Higher scores indicate greater goal importance.

Emotional Response Measure

We'd like to know how you were feeling during the conversation you just had. Please think about the conversation as a whole, keeping in mind that you might have felt more than one way during the discussion. Please tell us how much you felt each of these emotions during the conversation by circling a number from 1 (not at all) to 7 (a lot). There are no right or wrong answers.

$$1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7$$

not at all   a lot

Burden
1. burdened
2. overwhelmed
3. weighed down

Distress
4. distressed
5. disturbed
6. troubled
7. upset

Hurt
8. disappointed
9. hurt
10. wounded

Hopefulness
11. encouraged
12. hopeful
13. optimistic
14. uplifted

Scoring
The mean score for each individual emotion were calculated. Higher scores indicate a more intense experience of the emotion.

Decision-making Efficacy Measure

You talked about some possible choices in your conversation, and you may or may not have come to some final decisions today. Obviously, you're not facing any major choices right this moment, but based on the discussion you had just now, we would like to know how you feel about health-related decisions that you will make in the future. Please tell us how much you agree with each statement by circling a number.

<div align="center">

1   2   3   4   5   6   7

strongly disagree   strongly agree

</div>

1. These decisions will be hard to make.
2. I'm unsure what to do in these decisions.
3. I feel pressure from others in making these decisions.
4. I wish someone else would decide for me.

Scoring

All items were reverse coded. The mean score was calculated. Higher scores indicate higher levels of decision-making efficacy.

Conversational Satisfaction Measure

Now we'd like to ask you about your general thoughts on the conversation. Please tell us how much you agree or disagree with these statements about the discussion you just had.

<div align="center">

1   2   3   4   5   6   7

strongly disagree   strongly agree

</div>

1. The conversation went well.
2. I'm glad I had this conversation.
3. I was pleased with the conversation.
4. The conversation was productive.
5. I was satisfied with the conversation.

Scoring

The mean score was calculated. Higher scores indicate higher levels of conversational satisfaction.

Relational Distancing Measure

Please use these words to describe the conversation with your parent/child by putting an X in the appropriate space. For example, if you think that the conversation brought you and your parent/child a lot closer, put an X in the space right next to "close."If you think the conversation made you much more distant, put an the X right next to "distant."

The conversation made us more:

1. distant: ____ ____ ____ ____ ____ ____ ____ :close

2. relaxed: ____ ____ ____ ____ ____ ____ ____ :tense

3. hostile: ____ ____ ____ ____ ____ ____ ____ :friendly

4. intimate: ____ ____ ____ ____ ____ ____ ____ :remote

5. closed: ____ ____ ____ ____ ____ ____ ____ :open

Scoring
The spaces were converted to numbers, beginning with "1" for the most left-hand space and ending with "7" for the most right-hand space. Items 1, 3, and 5 were reverse coded. The mean score was calculated. Higher scores indicate greater relational distancing.

Concordance Measure

Partner End-of-Life Preferences

People make health decisions throughout their lives, including at the end of life. There are many options for medical care at the end of life, and everyone has different preferences about what kinds of treatment they would like to get. Please let us know what you think <u>your parent/child</u> would want for himself/herself by choosing if you agree ("yes") or disagree ("no") with the following statements. Everyone has different preferences—there are no right or wrong answers.

Yes / No

1. If my parent/child's heart stops, my parent/child would want to be resuscitated (with CPR).

2. My parent/child would want to be fed artificially (through a tube) if he/she can no longer take food and drink normally.

3. If my parent/child can no longer breathe on his/her own, my child would want to be connected to a breathing machine.

4. My parent/child would want to avoid having his/her life artificially prolonged in any way.

5. My parent/child would want to be able to get enough pain treatment (even if it makes him/her die sooner than he/she might without the pain treatment).

6. My parent/child would want to be able to have the option of physician-assisted suicide.

Sometimes it's easier to think about end-of-life choices in a specific situation. Please tell us what you think your parent/child would want in these (hypothetical) situations by answering "yes" or "no."

7. Your parent/child recently suffered a major stroke, leaving him/her in a coma and unable to breathe without a machine. After a few months, the doctor decides that it is unlikely that your parent/child will come out of the coma. In this situation, if your parent/child's heart stops beating, would your parent/child want the doctor to try to revive his/her heart?

8. Your parent/child has been in a persistent vegetative state with little hope for recovering basic motor skills. Your parent/child is able to open his/her eyes, but your parent/child has no recognition of friends or family. Your parent/child is able to breathe on his/her own through a tube in his/her neck, and your parent/child is artificially fed through a tube in his/her stomach. Your parent/child recently developed pneumonia. The doctor tells you that if the pneumonia is not treated with antibiotics, he/she will die. Would your parent/child want you to tell the doctor to treat the pneumonia with antibiotics?

9. Your parent/child has been diagnosed with having a type of cancer that probably cannot be cured. Your parent/child's doctor says that chemotherapy is available. The doctor explains that the chemotherapy may help your parent/child live longer, but the side effects of chemotherapy can make him/her very sick. The side effects can include severe nausea, diarrhea, or hair loss. Would your parent/child choose to have the chemotherapy?

10. Your parent/child is unable to make health decisions for him/herself because your parent/child has developed probable Alzheimer's disease. Your parent/child has also developed diabetes, and now he/she has an infection in his/her leg that is not treatable. The doctor tells you that unless your parent/child has his/her leg removed (which will leave him/her without the ability to walk), your parent/child will die in a short time. Would your parent/child want you to tell the doctor to remove the leg?

11. Your parent/child broke his/her hip and is recovering from an operation to fix it. Since the surgery, your parent/child has had constant hip pain that cannot be treated and that will probably never go away. Your parent/child has become very socially withdrawn because of his/her pain and will not speak to anyone. Your parent/child refuses to eat, and after several days the doctor wants to feed him/her using a feeding tube placed in his/her stomach. Would your parent/child choose to have the doctor place the feeding tube in his/her stomach?

12. Your parent/child has recently experienced kidney failure that has led to a very low quality of life. The doctor tells your parent/child that he/she can be kept alive with the use of daily dialysis.

To use dialysis, your parent/child would need to spend three hours every day getting his/her blood cleaned by a machine. Would your parent/child choose to have dialysis?

Own End-of-Life Preferences

Now please let us know what you would prefer by choosing a "yes" or "no" response.

0 = no
1 = yes

1. If my heart stops, I want to be resuscitated (with CPR).

2. I want to be fed artificially (through a tube) if I can no longer take food and drink normally.

3. If I can no longer breathe on my own, I want to be connected to a breathing machine.

4. I want to avoid having my life artificially prolonged in any way.

5. I want to be able to get enough pain treatment (even if it makes me die sooner than I might without the pain treatment).

6. I want to be able to have the option of physician-assisted suicide.

7. You recently suffered a major stroke, leaving you in a coma and unable to breathe without a machine. After a few months, the doctor decides that it is unlikely that you will come out of the coma. In this situation, if your heart stops beating, would you want the doctor to try to revive your heart?

8. You have been in a persistent vegetative state with little hope for recovering basic motor skills. You are able to open your eyes, but you have no recognition of friends or family. You are able to breathe on your own through a tube in your neck, and you are artificially fed through a tube in your stomach. You recently developed pneumonia. The doctor tells your family that if the pneumonia is not treated with antibiotics, you will die. Would you want your family to tell the doctor to treat the pneumonia with antibiotics?

9. You have been diagnosed with having a type of cancer that probably cannot be cured. Your doctor says that chemotherapy is available. The doctor explains that the chemotherapy may help you live longer, but the side effects of chemotherapy can make you very sick. The side effects can include severe nausea, diarrhea, or hair loss. Would you choose to have the chemotherapy?

10. You are unable to make health decisions for yourself because you have developed probable Alzheimer's disease. You have also developed diabetes, and now you have an infection in your leg that is not treatable. The doctor tells your family that unless you have your leg removed (which will leave you without the ability to walk), you will die in a short time. Would you want your family to tell the doctor to remove the leg?

11. You broke your hip and are recovering from an operation to fix it. Since the surgery, you have had constant hip pain that cannot be treated and that will probably never go away. You have become very socially withdrawn because of your pain and will not speak to anyone. You refuse to eat, and after several days the doctor wants to feed you using a feeding tube placed in your stomach. Would you choose to have the doctor place the feeding tube in your stomach?

12. You have recently experienced kidney failure that has led to very low quality of life. The doctor tells you that you can be kept alive with the use of daily dialysis. To use dialysis, you would need to spend three hours every day getting your blood cleaned by a machine. Would you choose to have dialysis?

Scoring
Items 4, 5, and 6 were reverse coded. Accuracy was defined as the extent to which a proxy correctly predicted the answers given by the participant.

End-of-Life Conversational Experience Measure

We'd like to know about your experience talking about health decisions at the end of life. Please let us know about any discussions you've had that were like the one you just had with your parent/child.

1. Before your conversation today, about how many conversations about end-of-life choices have you had with your parent/child? Please write the number of conversations you've had here: _____

2. Now think about how many end-of-life conversations you've had with any other family member (not including your child). Please tell us your relationship with the person(s) (for example, "husband" or "daughter") and the number of times you've talked with each family member:
Person's relationship to me _____ Number of conversations: _____
Person's relationship to me _____ Number of conversations: _____
Person's relationship to me _____ Number of conversations: _____

3. Finally about how many conversations about end-of-life issues have you had with your doctor? Please write the number of conversations here: _____

Conversational Realism Measure

We'd like to know how realistic you think the conversation was. Please tell us how natural you think the conversation was by circling the appropriate number.

<div align="center">

1   2   3   4   5   6   7

strongly disagree   strongly agree

</div>

1. This conversation was realistic.
2. I could easily imagine having a conversation like this one on our own.
3. This discussion was <u>not</u> natural.
4. This conversation was typical of how we would talk about end-of-life issues apart from this research study.
5. My parent/child and I talked naturally in this conversation.

Scoring
Item 3 was reverse coded. The mean score was calculated. Higher scores indicate more realistic conversations.

APPENDIX C: Rating Materials

Transcription Conventions

M = mother

F = father

D = daughter

S = son

[…] = pause

[chuckles], [sighs] = nonverbal cues

{ } = overlapping speech

… = speech interrupted by verbal listening feedback

— = speech interrupted by a new thought

[[ ]] = speech read from conversational task card

Rating Guidebook

Items 1-4: Identity goals

Description
In general, **identity goals** have to do with how people's identities are handled in an interaction. During a conversation, a person can come off looking good (in a positive light) or looking bad (in a negative light). The person can be put in a positive or negative light through what he himself or she herself says or through what other people say. Most people want to be portrayed positively rather than negatively. People who do a good job of portraying themselves as well as others positively are successful at achieving identity goals. People who threaten a person's identity by portraying them negatively are not successful at achieving identity goals.

There are two types of identity goals that every person has. First, a person's **positive face** is the part of him/her that wants to be liked, accepted and approved by others (desire for affirmation). Second, a person's **negative face** is the part of him/her that wants others to respect what he/she does or says and that wants others to not impose on his/her independence or decision making (desire for autonomy).

How to code items 1 and 2 (positive face)
Choose 5-7 if: the person says things that show liking, acceptance, approval, or affirmation of the other person ("You're smart," "I agree with your decisions," "Good point," "You're a great daughter," "You handled that decision well," "That's a good way to put that"); the person encourages the other person's contributions; the person pays close attention to the other person
Choose 4 if: the person doesn't say anything that shows approval or disapproval; positive face doesn't seem to factor into the conversation
Choose 1-3 if: the person says things that show disliking, rejection, disapproval, or dismissal of the other person ("You're obviously not willing to talk about this," "I don't want to take care of you at home," "You liar!"); the person is stern with or scolds the other person; the person ignores the other person

How to code items 3 and 4 (negative face)
Choose 5-7 if: the person says things that show respect or deference for the other person and the other person's decisions (especially if there is disagreement on an issue) ("Well, I wouldn't have thought that, but we'll support whatever you want," "Okay, then that's what we'll do," "This is your decision to make," "It doesn't matter what I think, it's your choice"); the person mentions not wanting to impose on the other ("I don't want to be a burden on the family," "You kids shouldn't have to take care of that"); the person pays close attention to the other person
Choose 4 if: the person doesn't say anything that shows respect or imposition; negative face doesn't seem to factor into the conversation
Choose 1-3 if: the person says things that imply imposition on the other person ("It's the family's duty to take care of me," the parent talks about wanting to be cared for at home even though the child says they do not want to care for the parent at home); the person shows no consideration for the preferences of the other person ("I don't care what you say, I'm not taking you to a hospice," "I don't think you really want that"); the person questions the other person's ability to make sound decisions (in a way that is challenging) ("You are kidding! You would want that?!", "Really?! You would you choose that?!"); the person ignores or interrupts the other person; the person tells the other person what to do ("You need to get to gym more often," "You have to take your pills," "You don't want CPR, trust me")

Rules
Threats outweigh affirmation in general
The presence of threats and affirmation does not resolve to neutral

Items 5-6: Relational goals

Description
Relational goals have to do with how people manage their relationships when they talk. What people say can strengthen or threaten a relationship. Most people want positive relationships (rather than negative ones), and most people want their relationships to be maintained or even improved (rather than damaged) during conversation. People who do a good job at maintaining a positive relationship or affirming the importance of the relationship are successful at accomplishing relational goals. People who say things that create a negative tone in the

relationship or that undermine or minimize the importance of the relationship are not successful at accomplishing relational goals.

How to code items 5 and 6

Choose 5-7 if: the person says things that create or maintain a positive tone in the relationship ("I'm glad we're talking about this," "It's helpful to work through these things with you," "We've talked about this before, and we should keep having these conversations," "Our family has done a good job of talking about these things"), the person says things that affirm the importance of the relationship or show that the relationship is valued ("I'm glad we're close enough to talk about this," "I want you to be involved in these decisions," "I'm glad you'll be taking care of me," "I want you to have my power of attorney")

Choose 4 if: the person doesn't say anything that affirms or threatens the relationship; the relationship doesn't seem to factor into the conversation

Choose 1-3 if: the person says things that create or reinforce a negative tone in the relationship ("We've never been able to talk about this, but I have other people I can talk to," "I don't want to talk about this anymore"), the person says things that threaten, undermine, minimize, or challenge the importance or value of the relationship ("You won't be the one making these decisions," "I don't want to be there when you make these decisions," "I don't want to be the one to take care of you")

Rules

Threats outweigh affirmation in general

The presence of threats and affirmation does not resolve to neutral

Items 7-12: Task goals

Description

In any situation, the main purpose of the conversation is the **task goal**. In this case, the task is to have a meaningful conversation about end-of-life health decisions. Some people do a good job of engaging in these discussions. Other people do not do a good job of talking about these issues. People who take the conversation seriously, who go into some detail about what they want and why they want it, and who do not avoid talking about some of the more difficult topics are successful at achieving task goals. People who do not really take the conversation seriously, who only skim the surface of the topics without really getting into the details, or who avoid talking about some of the things they are asked to talk about (by the researcher or by their conversational partner), are not successful at achieving task goals.

Avoidance occurs when a person tries to not talk about a topic this is raised. Some people may not want to discuss end-of-life topics because they are difficult to talk about. They could avoid talking about them by explicitly saying "I don't want to talk about that," but it is more likely that the person will avoid in more subtle ways—side-stepping a question or moving on to the next conversational topic prematurely. Sometimes one person in the pair will avoid while the other person tries to get the avoider to engage. When people talk about their end-of-life preferences, they vary in the degree to which they explain their logic for their preferences. **Elaboration** occurs when a person shares why they would choose or refuse a certain treatment. A person can

elaborate on their logic by giving examples of when they would want or not want certain treatment or by using another person's experience to illustrate their decision. When a person elaborates on the logic behind his/her end-of-life choices, it provides the other person with more information to go on in predicting the person's preferences, so that even if the person does not specify what he or she would want in a particular situation, the other person can infer the preference based on the wealth of information that has been provided. When a person does not elaborate on his/her logic, it can be very difficult to accurately predict what the person would want in specific circumstances.

How to code items 7 and 8 (avoidance)
Choose 5-7 if: the person seems to be avoiding talking about the topics that are raised in the conversation; the person side-steps (or noticeably does not answer) questions that the researcher or the other person asks; the person changes the topic or moves on to the next conversational topic prematurely or before the other person is ready to move on (reading the next set of instructions instead of answering the other person's question); the person gives an "answer" to a question that is not really an answer, but instead is meant to deflect attention away from the topic (making a joke instead of talking about a topic); the person does not seem to be engaged in the conversation or to be taking the conversation seriously
Choose 4 if: the person doesn't seem to be avoidant or engaged
Choose 1-3 if: the person does not avoid talking about any of the topics; the person seems willing to talk about the topics as much as it seems possible to do so; the person is not the one signaling a desire to move to the next topic; the person checks with the other person before moving on to the next topic; the person brings up additional topics to talk about; the person seems to be fully engaged in the conversation and to be taking the conversation seriously

How to code items 9 and 10 (elaboration)
Choose 5-7 if: the person explains his or her logic for end-of-life choices (and the logic is sound); the person provides hypothetical or real-life examples end-of-life situations to illustrate what the person would want in that situation ("If I'm like Johnny and everyone is having to give up their jobs to take care of me, just let me go"); the person provides examples of circumstances that might change the person's choice ("If there was a chance that I would be able to come off the ventilator once I got over the pneumonia, then put me on the ventilator, but if I'm in a vegetative state and the only thing keeping me alive is the ventilator, take me off"); the person asks the other person to elaborate on his or her logic for end-of-life choices ("So why would you want the CPR then?"); the person checks his or her perceptions of the other person's preferences ("So, in this case you would want the artificial nutrition, but in this case you wouldn't? Is that right?")
Choose 4 if: the person provides some explanation for his or her end-of-life choices, but not a lot (or not anything helpful or informative or sound)
Choose 1-3 if: the person provides no explanation for his or her end-of-life decisions ("I want all of the treatments"); the person provides no examples to illustrate his or her choices; the person provides no examples of how circumstances might change his or her choice; the person's logic is not sound ("I wouldn't want CPR because it will turn me into a beam of light," "I don't want to go to hospice because those people try to take your organs and give them to people who need transplants")

Rating Sheet

Coder initials _____   ID _____   Section _____

	threatened face			neutral		affirmed face	
1. To what extent did the PARENT affirm the child's <u>positive</u> face?	1	2	3	4	5	6	7
2. To what extent did the CHILD affirm the parent's <u>positive</u> face?	1	2	3	4	5	6	7
3. To what extend did the PARENT respect the child's <u>negative</u> face?	1	2	3	4	5	6	7
4. To what extend did the CHILD respect the parent's <u>negative</u> face?	1	2	3	4	5	6	7

_____

	threatened the relationship			neutral		affirmed the relationship	
5. To what extent did the PARENT try to affirm the <u>relationship</u>?	1	2	3	4	5	6	7
6. To what extent did the CHILD try to affirm the <u>relationship</u>?	1	2	3	4	5	6	7

_____

	very engaged			neutral		very avoidant	
7. To what extent did the PARENT <u>avoid</u> talking about end-of-life topics?	1	2	3	4	5	6	7
8. To what extent did the CHILD <u>avoid</u> talking about end-of-life topics?	1	2	3	4	5	6	7

	no elaboration			some elaboration		a lot of elaboration	
9. To what extent did the PARENT <u>elaborate</u> on logic for end-of-life choices?	1	2	3	4	5	6	7
10. To what extent did the CHILD <u>elaborate</u> on logic for end-of-life choices?	1	2	3	4	5	6	7