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Maximizing Wellness in Successful Aging and Cancer Coping: The Importance of Family Communication from a Socioemotional Selectivity Theoretical Perspective

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Abstract

Interpersonal communication is a fundamental part of being and key to health. Interactions within family are especially critical to wellness across time. Family communication is a central means of adaptation to stress, coping, and successful aging. Still, no theoretical argument in the discipline exists that prioritizes kin communication in health. Theoretical advances can enhance interventions and policies that improve family life. This article explores socioemotional selectivity theory (SST), which highlights communication in our survival. Communication partner choice is based on one's time perspective, which affects our prioritization of goals to survive—goals sought socially. This is a first test of SST in a family communication study on women's health and aging. More than 300 women of varying ages and health status participated. Two time factors, later adulthood and late-stage breast cancer, lead women to prioritize family communication. Findings provide a theoretical basis for prioritizing family communication issues in health reform.

"The interpersonal communication that fuels our social world is as essential to our survival as any biological or physical process that keeps us alive" (Hummert, Nussbaum, & Wiemann, 1994, p. 3). Communication is a fundamental part of being. The communication we experience within our family helps us build relationships, maintain social networks, and contributes to life satisfaction. Healthy family interaction is one key to a high quality of life across the life span. The importance of family communication is further heightened during life experiences that are more challenging or stressful, such as entering old age or being diagnosed with a life-threatening illness like cancer. Family members are often a critical source of social support and impact whether they manage stress, cope with traumatic challenges, and adapt to new circumstances in a healthy manner.

Health practitioners involved in geriatric medicine or oncology care recognize the important role family members play in patients' ability to adapt and maximize their well-being. Yet, typically family is not directly integrated into health care practice. No health policy or systematic practices in health care exist that prioritize family communication as a vital component of quality care and patients' coping. This is of concern because not all families communicate in healthy ways. Individuals are not born with the ability to communicate competently (Pecchioni, Wright, & Nussbaum, 2005). It is not unexpected then that those diagnosed with cancer have reported that kin can be unhelpful, unsupportive, or upsetting (Helgeson & Cohen, 1999) or that older adults sometimes describe distressful family interactions related to health (Hummert, 2007). These divergent experiences are, no doubt, tied to variance in individuals' communicative competence. Even though the experience of health and illness is largely situated within the family environment, patients and families need help learning healthy ways to adjust. As John Rolland, M.D., an expert in family health psychiatry and co-director and co-founder of the Chicago Center for Family Health, declared at the National Cancer Institute and American Cancer Society's co-sponsored 2002 meeting on cancer survivorship, "Most families enter the world of illness and disability without a psychosocial map. Appropriate clinical intervention, family education, and national policies to support these families is lacking" (Rolland, 2005, p. 2584). Families need assistance in learning healthy communication practices.

This study is a first step in this agenda. To integrate older adults' and cancer patients' family interaction needs into health practice and policy, we must recognize kin communication as core to adaptation and survival. While research in aging and cancer suggests kin behavior is central to adaptability, a theoretical argument is needed. Health intervention scholars claim that studies must incorporate theory to generate the type of knowledge needed to create interventions and ensure their efficacy in helping families. Theories provide an explanation for "psychological processes accounting for the initiation, re-direction or cessation of behaviour achieved by the intervention" (Michie & Abraham, 2004, p. 33). Still, to increase the likelihood of ever effecting changes in policy and practice, health scholars and analysts contend that

> [Theory is] the most fundamental prerequisite of a policy science ... the absence of theory and effective theory building are serious weaknesses of much of the existing research available for the policy making process for improving the health of populations. (Dean, 1996, p. 20)

We seek to establish a theoretical argument that places family communication as central to successful aging and cancer adjustment to increase the understanding of those practitioners, policy-makers, and scholars working to enhance life in later adulthood and in the wake of cancer. Prior to explicating the utility of socioemotional selectivity theory (SST) in this regard, we begin by demonstrating the intersection of family communication to health in successful aging as well as after a challenging health transition like a cancer diagnosis.

Family Communication and Successful Aging

A broad spectrum of research has shown that in older adulthood, family communication is integral to quality of life, particularly healthy emotional aging. Therefore, kin communication is essential to successful aging, meaning these interactions contribute to older adults' ability to achieve goals central to their quality of life and healthy adaptation (Kryla-Lighthall & Mather, 2009). As individuals enter later adulthood, their social networks become smaller, though more emotionally meaningful, as they progressively prioritize interaction within intimate, familiar bonds like family (Fredrickson & Carstensen, 1990; Lang & Carstensen, 1994). Studies suggest that 60% and as many as 75% of older adults interact with their family members on at least a weekly or semi-weekly basis (Lawton, Silverstein, & Bengtson, 1994; Troll, Miller, & Atchley, 1979). Many of these interactions center on issues central to older adults' emotional well-being (e.g., like caregiving needs in later life) (Hummert & Morgan, 2001), as older adults increasingly depend on family for assistance. Such decision-making often occurs collectively in aging families, but especially in the parent- child bond, and involves careful negotiations of autonomy that ultimately can influence older adults' well-being (Hummert & Morgan, 2001).

Moreover, in older adulthood, goals salient to emotional well-being (e.g., attaining social support, maintaining positive feelings) become most important to one's health or ability to age successfully (Carstensen, Isaacowitz, & Charles, 1999). Such goals are most likely to be fulfilled through older adults' interaction with close loved ones with whom they share an extended relational history, hence their long-time friends and family members (Antonucci, 1990, 1991; Carstensen et al., 1999; Carstensen & Lang, 1997; Fredrickson & Carstensen, 1990). As such, family communication can be essential to individuals' ability to successfully age.

Family Communication and Cancer Coping

Communication in family bonds is also critical to adapting to stressful changes, like a cancer diagnosis, at any point in the life span. Today, cancer is the second leading cause of death in the United States (American Cancer Society, 2008) and, as such, a difficult challenge facing families. Family communication is a critical component of patients' ability to adjust to the disease, maintain well-being, and manage associated stressors (Ell, 1996; Fisher, 2010; Goldsmith, Miller, & Caughlin, 2008; Pistrang, Barker, & Rutter, 1997). In comparison to patients with positive levels of family support, individuals without often have more depressive symptoms, troubled relationships, and physiological cancer-related symptoms that, ultimately, can negatively affect health (Helgeson & Cohen, 1999). Research also shows that patients often prefer interaction with family when attaining emotional needs (Rose, 1990). Some emotional support may only be effective in enhancing patients' well-being when expressed by family partners (Primomo, Yates, & Woods, 1990). In essence, having what are perceived as healthy kin interactions can enhance patients' wellness and adaptation (Suinn & VandenBos, 1999).

Theorizing Family Communication as Central to Health

As noted, a theoretical perspective that places family communication as central to health is important to aid health interventionists, practitioners, and policy-makers in attending to patients' and aging adults' psychosocial care needs. A life-span theory of behavior may be useful in this regard. Life-span perspectives propose that individuals are constantly adapting to their changing environment (Baltes, 1987), and their social lives are a critical component of their adaptability (Carstensen, 1991, 1992; Nussbaum, 1989). According to Lang and Carstensen (1994), "consistent with life-span theory is the proposition that adaptation is not simply reactive. Rather, individuals maintain a proactive role in constructing social environments such that they match and enhance individual competencies" (p. 316). According to Kahn and Antonuccci's (1980) social convoy model, individuals are embedded within a social network of close relationships. Bonds change, disappear, and reappear at later-life phases contingent upon individuals' needs and goals most important to their ability to adapt and thrive. Some life-span research indicates that family and non-family bonds differ in the roles they play in individuals' adaptation. Close family bonds are associated with more emotional involvement and, thus, a wider array of functions (Litwak, Messeri, & Silverstein, 1991; Wellman & Hall, 1986). Family is key to one's ability to adapt in ways that maximize well-being, especially emotional wellness.

Studies grounded in Laura Carstensen's (1991, 1992) socioemotional selectivity theory (SST) further suggest that communication partner choice matters. Who one chooses to interact with is one element of how an individual adapts to a changing environment in order to construct his/her social environment in a manner that enhances life. SST is a life-span theory of social motivation that explains communication as a means of survival, in that it allows a person to fulfill goals critical to well-being at various points in the life span. Moreover, this theory predicts that individuals carefully choose with whom to interact to attain these goals. It provides a framework in which we can examine how we prioritize interaction in certain bonds in an effort to maximize well-being, adaptability and, ultimately, survival. Numerous communication scholars have indicated that SST could be particularly useful in aging, health, and family scholarship and advocated for more research utilizing the framework (e.g., Afifi & Nussbaum, 2006; Nussbaum, Pecchioni, Robinson, & Thompson, 2000; Segrin, 2006). The p utility of SST in understanding why and when kin behavior is heightened in our health is explicated below.

Socioemotional Selectivity Theory: Family Communication as Adaptive Behavior

Socioemotional selectivity theory assumes the following: 1) interaction is necessary for survival; 2) humans interact on the basis of personal goals; and 3) people select goals prior to interacting. According to Carstensen et al. (1999),

> Knowledge- and emotion-related goals together comprise an essential constellation of goals that motivates social behavior ... Socioemotional selectivity theory addresses the role of time in predicting the goals that people pursue and the social partners they seek to fulfill them ... to adapt effectively to their particular circumstances. (pp. 166-167)

Basically, SST posits that time drives human motivation (i.e., goals) and considers this cognitive influence in predicting how people adapt their communicative behavior to achieve their goals. The first adaptive behavior is one's choice of communication partner. It is through human interaction by which individuals ultimately can fulfill goals central to their adaptability.

Predictions of goals and subsequent communicative partner choice—Human motives most critical to an individual's survival direct his/her behavior. Individuals prioritize such goals on the basis of perceptions of time (Carstensen et al., 1999). They see time left in life as either potentially limited or unlimited. When one perceives time as unlimited, h/she also perceives the future as uninhibited. In opposition, when time appears to be limited, the future appears to be constrained in some manner. These perceptions of time direct one's prioritization of knowledge- or emotion-focused goals. Individuals perceiving an unlimited future prioritize knowledge-seeking goals, as information is a useful resource in the future. In contrast, people perceiving a limited future prioritize goals regarding emotional quality of life. They prioritize present-oriented needs because they value their present circumstances more so than the future. Although individuals with limited and unlimited time perspectives pursue both knowledge and emotional needs, their prioritization of these goals will vary in the specified manner.

Once goals are prioritized, individuals select social partners with whom to interact to achieve the goals. To maximize adaptability, they choose partners who *best* enable them to fulfill these goals (Carstensen et al., 1999). Future-oriented individuals motivated to pursue information interact with any person who can enhance their knowledge of their social and physical world. People with a limited time perspective seeking emotional stability are more selective. They are more careful about determining with whom to interact, as not everyone can help them achieve emotionally related goals. Such a person is apt to seek interaction with those h/she already has a strong relational history, thus, close familiar partners (friends and family) who have strong affective potential as they have greater potential to satisfy emotional needs.

Markers of time—As noted, an individual's goals and communicative partner choice are ultimately based on his/her perception of time. People's perspective of time is typically influenced by their place in the life cycle. In other words, chronological age determines how much time we perceive we have left in life (Carstensen et al., 1999). As Carstensen et al. note, “as people move through life they become increasingly aware that time is in some sense ‘running out’” (p. 165). Thus, older adults typically view their as more limited than young adults. As such, they prioritize emotional goals and tend to select close, familiar interactive partners (family and friends) to achieve those goals more often than do younger adults.

Carstensen and colleagues and other scholars have conducted ample research showing this theoretical prediction. Moreover, their research aimed to decouple age from time. Their findings indicate that one's sense of time can also be affected by a specific type of life event. According to Carstensen et al. (1999), “endings” are transitional events that are life-threatening in some way and can be experienced at any point in the life span. These events cause people of any age to view time as limited (or “running out”) because their end of life appears closer. When this is the case, regardless of age, individuals reprioritize emotion-related goals as older adults do and select close, familiar partners to adapt to their situation. Still, such time-sensitive transitions can be complex experiences. For instance, Carstensen and Fredrickson (1998a and 1998b) explored the impact an HIV status can have on young gay men's perception of time and how that, in turn, influenced their prioritization of goals and partner choice. They found that men who were both HIV positive *and* symptomatic (versus without disease symptoms) felt increasingly closer to the end of life. They prioritized emotional goals and friends and family communication partners. Thus, in this case, a life-threatening health diagnosis and a present-oriented reminder (disease symptoms) impacted the men's perspective of whether or not time may be running out.

Conceptualizing cancer as an "ending."—Even though the diagnosis of cancer is a traumatic transition commonly experienced in the family, this major life event has not yet been explored from this theoretical perspective. One of the most common types of cancer, breast cancer, afflicts more than 200,000 women each year, adding to more than 2 million already living with the disease (American Cancer Society, 2008). Once diagnosed, women experience drastic changes that greatly impact their social, physical, and psychological health. Women report struggling to adjust to a new self image, relational role changes, and social isolation (Oktay & Walter, 1991; Spiegel et al., 1999). They face physical challenges including complications in sexual functioning and body image (Fobair, Stewart, Chang, D'Onfronio, Banks, & Bloom, 2005) and must learn to manage intensely complex psychological changes, like increased anger, loss of control, feelings of helplessness, increased anxiety, struggles with self-esteem and identity, and feelings of betrayal (see Spira & Kenemore, 2000, for a review). Some women experience symptoms of posttraumatic stress disorder (PTSD) (feelings of threatened death, physical integrity, or injury) (Cohen, Klein, Kuten, Fried, Zinder, & Pollack, 2002; Cohen & Pollack, 2005), changes that can manifest physiologically through increased levels of stress hormones and decreased immune functioning (Cohen & Pollack, 2005). All of these outcomes may be short-term health effects or manifest for an extended period of time leading to long-term health challenges (as is seen with PTSD outcomes). Hence, breast cancer can be considered a life stressor that is not only traumatic and life-threatening, but with accompanying short- and long-term health implications. As such, patients' psychosocial needs are critical.

A significant body of research is indicative that a diagnosis of cancer is consistent with SST's definition of an ending. To begin, a cancer diagnosis is a time-centered event. Individuals experience a temporal shift that leads them to prioritize emotionally salient needs. Compas et al. (1999) note that even though an individual diagnosed with cancer may receive a favorable prognosis, the perception that life is threatened (contemplation of one's death) is inevitable for the patient and his/her family. In accord with SST, their time perspective of the patient's life becomes limited. In addition, in line with SST that one's emotional goals are prioritized when time is threatened, cancer heightens one's emotional needs. This difficult transition is characterized by overwhelming emotions that can result in distress, anxiety, and depression (David, 1999). Even though the experience of cancer may vary (e.g., stage of disease; treatment), patients have similar emotional needs. They most often pursue emotion-related goals associated with self-esteem, perceived control, feelings regarding the future, and emotional meaning and processing (Helgeson & Cohen). In line with SST, present emotional wellness is prioritized.

Finally, interaction is critical to cancer patients' adjustment. Cancer patients do not adjust to the disease and its associated challenges alone. According to Ell (1995), "Communication is a vital conduit for providing support and family communication has been shown to influence both patient and family adaptation to illness" (p. 174). Communication within a patient's social support network is a determining factor in whether or not his/her emotional goals are met (see Kahn & Antonucci, 1980). Patients typically seek support via interaction with family (Mallinger, Griggs, & Shields, 2006). Women diagnosed with breast cancer have reported their marital spouses, friends, and family as major sources of support but designate family as providing more affective support than other bonds (Primomo et al., 1990). For women with breast cancer, perceived social support is associated with positive adjustment to cancer (Holland & Holahand, 2002). Moreover, patients reportedly prefer family for emotional support (Neuling & Winefield, 1988). Emotional support is associated with patients’ positive social and emotional adjustment, specifically enhanced role functioning, self-esteem, reduced hostility, and life satisfaction (Jamison, Wellisch, & Pasnau, 1978; Zemore & Shepel, 1989). In essence, emotional support appears to contribute to better physical health (Ell, Nishimoto, Mediansky, Mantell, & Hamovitch, 1992). When a patient's mental and social health declines, his/her immunity and other biological processes often do as well, which can result in negative health outcomes (Anderson, Kiecolt-Glaser, & Glaser, 1999). Thus, in accord with SST, communication with family appears to be central to patients’ adjustment. Moreover, this communication is emotionally focused because of patients’ prioritization of emotionally related goals.

Extending SST: The Prioritization of Family Communication

Given the connections outlined above, we assert that breast cancer can be conceptualized according to SST as an “ending” transitional event that affects women's perspective of time, social goals, and, ultimately, communication needs and preferences. As noted, studies grounded in SST have shown that, regardless of age, individuals experiencing an ending mirror older adults in that they select close, familiar partners with affective potential (friends and family) to achieve emotion-focused goals critical to their adjustment (Carstensen & Fredrickson, 1998a, 1998b; Fredrickson & Carstensen, 1990). However, as mentioned, scholars testing this theoretical prediction have yet to clearly distinguish a specific desire for communication with *family* partners. We aim to further explore communication partner preference during time-limiting experiences to ascertain whether one specifically prioritizes family communication.

To further explain, in testing SST, Carstensen and colleagues have used a list of 18 potential communication partners that include both novel and familiar partners (see Fredrickson & Carstensen, 1990 and Appendix for the entire list) to examine people’ partner preference. When she and her colleagues have examined partner preference they group the potential partners into either “familiar” or “novel.” The familiar category includes familial and non-familial bonds. In the list of partners, Carstensen broadly conceptualizes family partners as biological or legal bonds (e.g., sibling, younger relative, member of immediate family, member of extended family). Thus, when scholars examine participants’ communication partner preferences, they do not distinguish between familial familiar partners and non-familial familiar partners (e.g., friends). Rather, they only distinguish between study participants’ preferences for familiar versus nonfamiliar (novel) partners. Scholars group all familiar partners (both kin and non-kin bonds). As a result, familial ties are confounded with familiarity in Carstensen's procedures. Fredrickson and Carstensen recognize this limitation in their research and even call for scholarship that differentiates familiar non-familial bonds from familial relationships in their partner list. Doing so can illuminate the importance of family communication in health and survival. Our goal was to test this particular tenet of the theory to ascertain whether individuals experiencing more time-threatening experiences (aging in later adulthood or breast cancer) prioritize kin communication. Given this is the first study to explore this distinction we felt it necessary to stay in line with previous tests of SST by using Carstensen's list of partners or conceptualization of family bonds.

Research Inquiries

We sought to explore the utility of SST in prioritizing family communication in older women's aging and breast cancer patients' disease adjustment and coping. To examine women's partner preferences within the SST theoretical framework, this required examination under the following two conditions: 1) a healthy context: healthy women aging and not coping with breast cancer or any other ending; and 2) an ending context: women diagnosed with breast cancer. As chronological age influences one's time perspective, decoupling age from time was necessitated in each condition following three age groups: 1) young; 2) middle; and 3) later adulthood.

Given prior research grounded in SST, women in Condition 1 (healthy women) presumably would exhibit age differences in partner preferences. Tests of SST indicate that individuals in later adulthood prefer communication in familiar bonds (a group that included family) more so than women in young or middle adulthood (Fredrickson & Carstensen, 1990). In accordance with SST, this prioritization is key to adaptability. Therefore, it is likely that healthy later-adult women would also prefer communication with family partners more so than younger generations. Hence, the following hypothesis was posited in an attempt to extend the theory:

> H1: Older healthy women will prefer to interact with family partners more than young or middle-adult healthy women.

We also sought to extend this theoretical tenet of communication partner preference by exploring a currently unexplored ending experience and health context: breast cancer. We raised the question of whether a breast cancer diagnosis leads women of any age to prefer communication in kin bonds. Thus, the following research question was proposed:

> RQ1: Does breast cancer function in women's lives as an ending transition by leading them to have time-limited perspectives and, thus, prioritize kin communication partners, regardless of age?

Methods

Sampling

Recruited women represented the two previously described conditions: 1) healthy and not coping with breast cancer or any other ending experience and 2) diagnosed with breast cancer. Condition 2 only included women diagnosed with breast cancer who had received treatment (e.g., surgery, radiation, or chemotherapy) within 36 months to ensure their ending experience was still salient. Decoupling age and time required a cross-sectional design. Thus, women in each condition represented three age groups: 1) young adulthood (age 18-39); 2) middle adulthood (age 40-56); and 3) later adulthood (age 57+). Sampling was purposive since predefined groups of women were needed and proportionality was not the primary concern.

Recruitment

Following IRB approval, selection occurred in numerous ways. A communication department database from a large northeastern university was used to recruit participants for Condition 1. These women received research credit, which involved asking their mothers and/or grandmothers to participate. Recruitment for women representing Condition 2 was expansive and involved the same department database, a multitude of web sites, state-wide flyer postings, a university newswire, support groups, and medical institution collaboration with two hospitals, both affiliated with a network of medical institutions providing cancer care in rural areas. These two recruitment efforts required additional IRB applications with each hospital's board.

Participants

For Condition 1, 303 women qualified. Of these, 125 women were young adults. Average age was 19.99 (*SD* = 1.88) and ranged 18-33. Nearly 100 (*N* = 98) were in middle adulthood, average age of 49.40 (*SD* = 3.54) and ranging from 40-56. Finally, 80 women were in later adulthood. Average age was 74.73 (*SD* = 6.74) and ranged from 60-94. For Condition 2, 39 women qualified. Nine were young adults. Average age was 34.63 (*SD* = 3.34) ranging from 30-39. Another 18 women were in middle adulthood. Mean age was 48.16 (*SD* = 3.11) and ranged from 42-52. Finally, 12 women were in later adulthood. Average age was 61.92 (*SD* = 4.48) and ranged from 57-69. Time since treatment varied: 28% were in treatment, 37.5% had treatment within a year, and 35% had treatment within 12-36 months. They also varied in diagnosis stage: 41% stages 0-I, 27.5% stage II, 25% stage III, and 5% stage IV. Four had a recurrence.

Procedures & Measures

This study was part of a larger study. Only those measures pertinent to the present analysis are included. All participants completed a questionnaire concerning their partner preference and basic demographic information that also served to ensure that no women in Condition 1 were experiencing any type of ending. For those women in Condition 2, this questionnaire also called for information about their breast cancer experiences. To obtain information about women's communicative partner preferences, this involved slight modifications of procedures used by Carstensen and colleagues to test SST. In their studies, they presented participants with an 18-card set consisting of a potential partner (either novel or familiar) on each card. Four of the 18 potential partners represent kin relationships and these bonds are conceptualized as familial biological or legal bonds. Each description of a potential partner is kept general so as to apply across ages (e.g., Carstensen uses “a younger relative” as opposed to “a grandchild”). Participants identified on the cards with whom they most liked to spend their time. The investigator then divided responses into one of two categories: familiar, affective partners or novel partners. For the current study, the same question approach was engaged for consistency but the list of partners was incorporated into a questionnaire for convenience. This modification ensured that women not residing in the area could participate and was essential in increasing sample size. To examine communication partner preference, procedures testing SST involve asking participants with whom they most like to spend time, which permits the idea that social interaction or communication is both verbal and nonverbal. In accord with this approach, women in both conditions wrote on the questionnaire three individuals from the list (e.g., “grandchild”) with whom they most liked to spend their time, in order of preference (as is done in SST testing procedures). Only women's first choices were grouped into one of two categories: family or non-family partners.

Data Analysis

Previous SST studies employed chi-square statistical analyses. Chi-square tests of association revealed whether frequency distributions of women's social partner preferences of kin bonds differed by age groups and across conditions. Such tests of association are appropriate for assessing the relationship between two categorical variables (Field, 2005).

Results

Results ostensibly extended SST by confirming that women with a limited time perspective (due to age or breast cancer) prioritize communication with kin bonds.

Hypothesis 1

Hypothesis 1 concerned the communication partner preferences of 303 women in Condition 1 (healthy women) representing three age groups. The hypothesis was that healthy older women prefer communication with kin more than young- or middle-adult women. Results provided support. Women in Condition 1 had significantly different interactive partner preferences based on the participant's age, $\chi 2$ (2, N = 303) = 50.04, $\rho < .001$. A moderately strong relationship between partner preference and age emerged for healthy women (V = .406). Only 43.2% of young-adult women reported a kin member as their first partner choice in comparison to 76.5% of women in midlife and 87.5% of women in later life.

Research Question 1

Research Question 1 focused on partner preferences of 39 women diagnosed with breast cancer (Condition 2) in three age groups. It was expected that age would decouple from time in this ending context and no age differences would exist. Interestingly, however, there were still age differences in communicative partner preferences, $\chi 2$ (2, N = 39) = 7.23, $\rho < .05$, with a moderately strong relationship between partner preference and age (V = .431). Only 44.4% of young-adult women identified a family member as their first choice in comparison to 83.3% of women in middle adulthood and 91.7% of women in later adulthood. These results led to additional analyses. Research in psycho-oncology suggests that cancer affects women's time perspective upon diagnosis and makes it more limited. Moreover, cancer fits within the SST conceptualization of an ending experience, suggesting a preference for family partners. Still, the unique nature of this diagnosis as a time-centered event is unclear. Cancer is not a terminal diagnosis in the sense that not all individuals diagnosed with cancer will die of the disease. The diagnosis itself causes individuals to consider their mortality but the extent of time perspective change is not fully understood (nor was it tested here).

Carstensen and Fredrickson's (1998a and 1998b) exploration of HIV status as an ending experience showed that time-sensitive contexts are complex and that disease-related factors may impact one's perspective of life being threatened or not. Two factors could affect the magnitude and length of women's time perspective change in a cancer context: disease stage and time since treatment.

Stage at diagnosis—The stage at diagnosis (0-4) is an indicator of the disease severity or how threatening it is to one's life. The stage could affect women's perspective of time left in life. According to the National Cancer Institute, "early stage" breast cancer includes stages 0-II and one type of stage III (A). It is most likely that a woman diagnosed in later stages will feel that her life is more threatened in comparison to one diagnosed in earlier stages. Hence, it is plausible that women in later stages will have a more limited time perspective and, in turn, prefer communication with kin more than women diagnosed in the earlier stages. To explore this, women in Condition 2 were divided into two groups: 1) women diagnosed in stages 0-II ($N = 25$); and 2) women diagnosed in stages III-IV ($N = 13$). We included stage III in the later stage group given there are three types of stage III cancer (A-C), and only one is considered "early". Moreover, we did not ask women for the type of stage (e.g., A, B or C) and not all women knew this. One woman in later adulthood was excluded because she could not provide information about her stage. Because two categorical variables (each with two categories) were used (a 2×2 contingency table), Yates' correction was also employed to control for a Type I error (Field, 2005). A significant difference between the two groups, $\chi 2$ (1, $N = 38$) = 6.13, $\rho < .05$, surfaced. A moderately strong relationship between partner preference and stage at diagnosis was found ($V = .402$). All women (100%) diagnosed in stages III or IV preferred family partners in comparison to only 64% of women diagnosed in earlier stages (0-II). As 100% of women diagnosed in the later stages (Group 2) preferred family partners, no age differences were evident among the three age groups (4 women in young adulthood, 4 in midlife, and 5 in later adulthood). Regardless of age, women diagnosed in stages III-IV appeared to experience a time perspective shift that presumably led them to prioritize communication in kin bonds. Additional analyses involving age differences in Group 1 (5 in young adulthood, 14 in middle adulthood, and 6 in later adulthood) indicated that when women were diagnosed in earlier stages, age-related differences still existed in partner preferences, $\chi 2$ (2, $N = 25$) = 11.15, $\rho < .01$, ($V = .668$). No women diagnosed in young adulthood preferred kin communication partners, in comparison to 78.6% diagnosed in middle adulthood, and 83.3% diagnosed in later adulthood. Hence, when women are diagnosed in earlier stages, their time perspective is not necessarily limited. Collectively, these findings suggest that the stage does affect time perspective and partner preference.

Time lapse since treatment—Women continue to have regular follow-up appointments and tests for five years after treatments end. However, the salience of diagnosis and implications it has on their perspective on how threatened their lives are likely dissipates once they are "in remission" or "survivors" of the disease or when they have less frequent reminders of the diagnosis. The time-centered nature of this factor is somewhat abstract though it is possible that time since last treatment affects one's time perspective. It is likely that those either recently diagnosed or in treatment feel that their lives are under greater threat than ones not in treatment. To explore this, women were divided into into two groups: 1) currently in treatment (*N* = 11); and 2) treatment ended (*N* = 28). Although the two groups did not significantly differ, $\chi2$ (1, *N* = 39) = .21 ρ = .65, the direction of the finding could suggest that women in treatment may prioritize communication with family slightly more (81.8%) than women not in treatment (75%). Still, given the small sample and insignificant results, more research is needed.

Discussion

This study explored the significant role family communication can play in both women's successful aging and adjustment to a breast cancer diagnosis from a socioemotional selectivity theoretical perspective. The results advance theoretical knowledge by expanding the utility of SST but also add to existing literature on aging, family communication, health communication, and psycho-oncology in a manner that poses practical value in health practice and policy.

The results extend SST by demonstrating that two time factors, aging or being diagnosed with late-stage breast cancer, lead women to give priority to communication in family bonds. First, the results pertaining to Hypothesis 1 extend the utility of SST in family communication and aging contexts. The theory had not yet been used to explore a specific preference for family partners. Previous studies had only examined and confirmed that as healthy individuals age their time perspective becomes more limited and, as a result, they prefer communication in close, familiar bonds, a group that included non-kin. The current study extends these findings by demonstrating that healthy older women specifically prefer *family* partners. From the perspective of SST, this communication preference is an important aspect of healthy older adult women's ability to adapt socially to the aging process in a manner that maximizes quality of life. Second, these results reinforce the utility of SST in family communication and cancer contexts, areas in which the theory had not yet been applied. In so doing, these findings expand our understanding of the role family communication can play after women are diagnosed with a late-stage of breast cancer. The results reveal the complex nature of cancer as a time-centered event. At least one factor, stage at diagnosis, ostensibly affects women's cancer experiences. It also appears that time since treatment may be a moderating variable. Yet, more research with a larger sample is needed given the findings were not statistically significant.

In using socioemotional selectivity theory, the results provide a theoretical explanation as to why kin interaction could impact breast cancer care as well as successful aging for women. As a woman ages or is faced with a life-threatening illness, emotional needs are prioritized and she will seek to fulfill these needs through her interactions with close loved ones, particularly family relationships. The theoretical implications ultimately imply practical value for professionals working to improve the lives of these subpopulations. As noted previously, theoretically grounded research is necessary to influence change in the healthcare system. As such, these findings offer a framework that health professionals and interventionists can utilize to advocate for integrating kin interaction into care.

Practical Implications

Currently, family communication is not always integrated into cancer care or geriatric care. While, some practitioners, medical practices, and social services encourage family involvement or offer psychosocial support, no policy or systematic practice highlighting family across care settings yet exists. Scholars of aging have long argued the importance of family interaction in older adults' care (Nussbaum et al., 1996, 2000). In addition, psycho-oncology researchers are advocating for integrating kin communication into care (e.g., Rolland, 2005). Under the auspices of an SST perspective, integrating family communication into care can be done in a number of ways. Practitioners could require patients to bring a family member to critical appointments (e.g., care decisions, test results) or provide support services geared to both the patient and his/her selected family member(s). Doing so could stimulate family communication for patients. In addition, interventions could be integrated into care to ensure families are communicating about important issues in healthy ways.

Future Directions

These practical implications highlight the need for additional research on *how* families communicatively adapt as they age or encounter cancer. While the current theoretically informed findings provide support that family communication is a component of survival—the communicative *enactment* of this coping and adjustment is vital, particularly in developing interventions that actually meet families' needs. As noted, families do not always communicate in a manner that maximizes their wellness. Some patients even describe their kin members avoiding any communication or time together. When patients do not have communication partners in the family with whom they can adjust and cope, they may feel a sense of increased isolation during a time they need connection (Barnard, 2003), which has been shown to impede health (Northouse & Northouse, 1987). The current study offers a framework in which to argue that family communication is core to women's ability to successfully age and adapt to breast cancer. In recognizing that such communication can function both adaptively and maladpatively, the socioemotional selectivity theoretical perspective can be very valuable in moving this research agenda further. The findings herein present scholars and interventionists with a framework from which to examine the potential adaptive or maladaptive functioning of kin communication in aging and adjusting to cancer and, ultimately, produce knowledge for intervention-making that more aptly attends to families psychosocial needs.

Limitations

Even though the findings were significant, this study included a notably small sample of diagnosed women. This can be a difficult sample to recruit in the community. Nonetheless, larger sample sizes in studies replicating the one presented herein can increase validity of the findings. In addition, further exploration of factors that influence cancer as a time-sensitive experience should be investigated. While stage at diagnosis was an influential factor, the severity of cancer is also a subjective experience. As such, patient's individual perceptions of disease severity should not be overlooked. Also, diversity in treatment regimen increases variation in women's cancer experiences, which may account for the inconclusive results of the additional analyses. For instance, women sometimes only had a lumpectomy. Other women also underwent a mastectomy, radiation, chemotherapy, projected five years of hormonal prevention treatment, genetic testing, and sometimes additional surgeries (e.g., removal of ovaries) to prevent a recurrence. To further explore these potentially influential factors in women's communication partner preferences, women representing similar cancer trajectories and treatment regimens should be sought and represent several conditions so that comparisons can be made. Moreover, a life-span perspective of cancer would suggest that women's time perspective can change across the course of treatment and transition into survivorship. A longitudinal perspective would be advantageous in appreciating how women prioritize family talk across the disease trajectory.

The results of the current study only represent the experiences of women. Women are known to play very prominent roles in the family across their life histories. They are frequently referred to as “kinkeepers” as they are often more involved in family maintenance, decision-making, support, and in keeping extended family ties together (Gerstel & Gallagher, 1993; Hagestad, 1986). As such, it is possible that interaction within kin bonds is an especially vital component of women's adaptability as opposed to men. Future studies should seek to examine men's experiences with cancer to establish whether gender differences exist. Finally, how individuals define “family” varies. The survey listing of potential partners used in SST testing that differentiates family partners only includes legal or biological kin bonds (extended and immediate family), yet individuals may also define other relationships not bound legally or biologically as family. Family is inclusive of blended families, cohabiting heterosexual couples, gay and lesbian committed families, adoptive and foster families, and, in some cultures, long-time family friends. Which criteria constitute family or what it means to “be family” varies, and this diversity must be further explored (Galvin, 2006). While our aim was to stay in accord with the original conceptualization of communication partners, we believe it will be important to more intricately examine the definition of family and the current list used in order to best serve individuals’ healthcare needs.

Moreover, the list used to explore family and nonfamily bonds needs to be revisited given the list uses unfamiliar non-kin bond choices (e.g., new neighbor, someone running for office). While some non-kin bond choices on this list may be both familiar or unfamiliar and particularly important to women coping with cancer (e.g., clergy, doctor, new acquaintance such as someone from a support group or at chemotherapy treatment), the remaining list of nonkin bonds may be expanded in a manner more in tune with this particularly context of coping. Using more familiar non-kin choices may indicate the diversity of partner choice in this context. Conducting focus groups with this population may be helpful in ascertaining the various types of familiar non-kin bonds (other than close friend, clergy, doctor) that one may seek out for support.

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Appendix

Carstensen's List of Potential Communication Partners (*indicates a family partner)

- **a.** Close friend of yours
- **b.** Recent acquaintance with whom you seem to have nothing in common
- **c.** Your doctor
- **d.** Member of your immediate family*
- **e.** Casual acquaintance of yours
- **f.** Person that you know but dislike
- **g.** Attractive person that you do not know
- **h.** Relative not in your immediate family*
- **i.** Recent acquaintance with whom you seem to have much in common
- **j.** Sales representative
- **k.** New neighbor
- **l.** Author of a book you've read
- **m.** Your sibling*
- **n.** Poet or artist whose work you like
- **o.** Stranger about your age
- **p.** Clergy member (e.g., pastor, rabbi, priest)
- **q.** Younger relative (e.g., niece, nephew, cousin)*
- **r.** Person running for a local political position

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