The Effect of Christian Belief in Eternal Life on Age-Related Social Partner Choice

Chung C, Avalon J. Baldwin
Associate Professor of Psychology, Letts-Villard Chair in the Natural Sciences, Director of Mills Cognition Lab, Oakland, USA.

Abstract
As adults enter old age, they tend to decrease the size of their social circle; however, despite this decrease, older adults express the same or increased satisfaction in the quality of current relationships and the size of their social circle. Socioemotional Selectivity Theory (SST) suggests that older adults' perceived time left to live was the main reason for their choice of emotionally gratifying partners. In the present study, we examined how the Christian belief of eternal life might impact older adults' social partner choices. If believing in life after death was perceived as an extension of time, older adults who hold this belief should show a decreased tendency to choose family/close friend as social partners than those who do not believe in life after death. Our results showed that Christians who believed in life after death were more likely to choose family members/close friends as their social partners than Atheists. We also found evidence that older adults may not necessarily choose family/close friends more often than young adults, especially when religious beliefs and current goals were taken into account.

Keywords: Religion; Socioemotional Selectivity Theory; Aging; Social Preferences.

Introduction
As adults enter old age, they tend to decrease the size of their social circle; however, despite this decrease, older adults express the same or increased satisfaction in the quality of current relationships and the size of their social circle [10, 16]. In addition, population-based studies have shown lower rates of depression and anxiety in older adults compared to younger adults [2, 8]. The disengagement theory explains the detachment of older adults from their social sphere as preparation for the end of life. They disengage from society and quietly exit. An alternative theory calls for more involvement from government social programs, stating that older adults have smaller social circles because they are less able to interact with others and would need external aid to assist with expanding their circle if desired [10, 16]. Neither of these theories addresses the experimental finding that many older adults are in fact more satisfied with their social circumstances than their younger counterparts and show fewer negative affective symptoms.

Carstensen et al. (2003) introduced the Socioemotional Selection Theory (SST) as a framework for this age-related social partner choice phenomenon [6]. It is not disengagement or disability that causes older adults to have smaller, yet more satisfying, relationships, but improved emotional regulation. Individuals gather experience over time that increases their awareness of the finite quality of life, such as the loss of significant others, illness, children and grandchildren getting married, and physical changes in themselves and others. In their 2003 review of SST, Carstensen and colleagues described three life-span changes that contribute to emotional regulation across age: antecedent emotion regulation, or the tendency to prioritize emotionally meaningful partners over novel partners; response-focused emotion regulation, or the changes in coping strategies; and cognitive processing changes, where older people tend to better remember and attend to positive information over negative information compared to their younger counterparts. This study focuses on the first aspect of this model: antecedent emotion regulation, or regulating social contacts to maintain meaningful relationships.

In a seminal study for SST, Fung, Carstensen, and Lutz (1999) manipulated the factor of perceived time left in life to induce an aged perspective and a youthful perspective in both age groups. When asked to imagine extended futures, simulating a youthful time perspective, older adults' preference for familiar social partners was reduced. Conversely, when asked to imagine a shortened future, simulating an aged time perspective, the preference for...
novel partners in young adults was eliminated. The same findings were observed when young adults with terminal illnesses such as HIV were tested [1]. These methods were replicated in this present study, with a specific interest in the effect of religious beliefs. Like illness can restrict time perceived left to live, it is hypothesized that religious beliefs, specifically the Christian belief of eternal life after death, may extend perceived time left.

In the present study, we asked if individuals believed in life after death and to define what that is to them, in order to capture a possible perception of extended time. Based on previous literature, we hypothesized that: 1) Older adults will choose family or close friend rather than other options more than younger adults in the control condition, 2) Replicating the time condition results from Fung et al. (1999), simulating an aged time perspective will reduce the preference for novel partners in young adults, and simulating a youthful time perspective will reduce the preference for familiar partners in older adults, and 3) if an individual believes in life after death, they will have a longer sense of time remaining in life compared to those who do not, and therefore show less emotional regulation, 4) Christian older adults will choose family or close friend less than atheist older adults, but there will be no difference between Christian and atheist young adults.

Method

Participants

Our sample comprised four groups: young adult Christians (18-35 years old, $M = 22.1, SD = 3.79; n = 67), young adult atheists/agnostics (18-35 years old, $M = 23.6, SD = 4.79; n = 84), older adult Christians (55-89 years old, $M = 78.75, SD = 10.9; n = 16), and older adult atheists/agnostics (55-89 years old, $M = 64.5, SD = 7.54; n = 14). Women were 85% of the sample and all participants had over 12 years of education. Young adults were primarily recruited from Mills College and through online list serves. Older adults were recruited from Rossmoor Aging Community in Walnut Creek, California and online list serves. Participants were either tested in groups in person or completed a Survey Monkey online survey. No statistical difference was found between groups who were tested in person and online, therefore, we report collapsed data from both testing methods in the following sections. Participants tested in person were reimbursed $10, and participants who took the online survey were entered into a draw for one of four $30 gift cards.

Procedure

Participants were given three separate scenarios at the beginning of the survey asking with whom they would spend a half hour of their free time under different conditions [5]. The three choices were: 1) a family member or close friend, 2) an acquaintance with whom they seem to have much in common with, and 3) an author of a book they have read. The three scenarios were modeled after Fredrickson and Carstensen’s (1990) study with a few modifications: 1) an open-ended scenario, with no time modification; 2) a longevity scenario, where their life has now been extended by 30 years; and 3) a time restriction scenario, where they were participating in developing a Mars Colony and will be leaving earth to emigrate to Mars permanently within the month. Participants were shown a video on the Mars Colony [12] in the third condition and were asked to recall information and thoughts at the end. This video was approximately 4 minutes long and involved a detailed plan for a Mars Colony to be built in the next decade.

Following administration of these scenarios, participants completed the Functional Social Support Questionnaire (3), a 4-Item Subjective Happiness Scale [11], and answered questions about their religion, including identity and frequency of church attendance. Participants who identified as Christians also completed the Post-Critical Belief Scale [4].

Results

Social Choice and Religion

For our final analyses, participants were excluded if their belief in life after death did not coincide with their religious affiliation, i.e., atheists who believed in life after death and Christians who did not believe in life after death were filtered out. All results are presented in Figure 1.

Open Condition: In the open condition, participants were given no time modification. Contrary to previous findings, young adults chose family member or close friend more frequently than older adults in the open condition without any time modification, $\chi^2(2, 181) = 6.36, p = 0.04$. Similarly, Christians chose family member or close friend more frequently than atheists in general in the open condition, $\chi^2(2, 181) = 7.84, p = 0.02$. Young Christians chose family member or close friend significantly more frequently than young atheists, $\chi^2(2, 151) = 10.81, p < 0.01$.

Figure 1. Percentage of young and old atheists and Christians who chose family member/close friend in the open, longevity and restricted time (Mars) scenario.
Christians chose family member or close friend significantly more frequently than older atheists in the condition without any time modification, $\chi^2 (2, 81) = 15.48, p < 0.01$.

**Longevity Condition:** In this condition, participants were told that their life has been extended by 30 years. Young Christians chose family member or close friend marginally more frequently than young atheists, $\chi^2 (2, 151) = 5.30, p = .07$. Young Christians chose family member or close friend significantly more frequently than older Christians in the longevity condition, $\chi^2 (2, 83) = 12.61, p < .01$.

**Restricted Condition:** All groups chose family member/close friend more frequently than other choices in this scenario and performance did not significantly differ among groups (all $p$’s > .30).

**Social Support & Happiness**

We conducted two separate 2 (Age: Young vs. Old) x 2 (Christian vs. Atheist) ANOVAs for social support and happiness ratings. We observed a marginally higher level of social support in Christians than in atheists, $F (1, 172), p = .12, \eta^2 = .01$ (Figure 2); and a marginally higher level of happiness in older than in young adults, $F (1, 177), p < .06, \eta^2 = .02$ (Figure 3).

**Discussion**

This study aimed to examine how religious beliefs of life after death might affect young and older adults’ socioemotional selection. Our findings diverged from our original hypotheses, but can still be interpreted with the Socioemotional Selectivity Theory (SST) framework. Our results across age did not match the literature, with younger adults choosing family member or close friend more frequently than older adults in the open condition (Hypothesis 1). The conditions of longevity (adding 30 years) and time restriction (emigrating to Mars) showed comparable findings to Fredrickson and Carstensen (1990) (Hypothesis 2) – almost all participants chose to spend time with family/close friends in the time restriction condition, and fewer chose family member/close friend with extended time. However, contrary to Hypotheses 3 and 4, Christians in most conditions and across age chose family member/close friend more often than atheists.

SST has been tested in various contexts, for example in cross-cultural studies [9, 17], with people who suffer from terminal illnesses [1], and with participants who are facing a social ending [13]. The circumstances in which one observes changes in emotional regulation are becoming more understood, and it is clear that changes are directly related to motivation and perceived ending. In Carstensen and Reed (2012), as well as Fung (2013), the authors emphasized that emotional regulation is the key to this...
theory, but emotional regulation may manifest in different ways in different settings or cultures.

In healthy young adults, emotional regulation tends to be poor [15, 18] and the focus is on expansive goals, larger social networks, and gathering information [1, 5]. In older adults, emotional regulation is more refined and the focus is on their most valuable relationships. However, in unhealthy young adults, such as those with symptomatic HIV where the perceived time left in life is more restrictive, the focus mirrors those of the older adults [1]. Furthermore, differences in the way people from independent and interdependent cultures appraise emotional material could play a role in emotional processing. Most studies on the SST was conducted in the US and have found an age-related positivity effect, mainly because positive emotions are usually interpreted to be the most meaningful. However, in interdependent cultures, such as East Asian countries, both positive and negative emotions may be considered meaningful, as it would be equally important to recognize positive and negative emotion in others when trying to maintain social harmony [17, 10, 16]. This motivational difference between independent and interdependent cultures may have been the driving force behind the different emotional memory patterns observed in several cross-cultural studies [9, 17].

This concept of independent vs. interdependent cultures could be extended to explain some of the findings in the present study. We found that Christian participants chose family and friends consistently more often than atheist participants. Christian participants also showed marginally higher level of social support. This suggests that perhaps they were more similar to the interdependent cultures mentioned in the studies mentioned above. If so, it is in fact not too surprising that social preference between Christians and atheists differed significantly in our study. Although the belief in life after death did not change Christians' way of processing social preference as we had predicted, i.e., extend perceived time to live and subsequently decrease likelihood of choosing family/close friend as social partner, being Christian did have a profound effect on emotional regulation. Christians appear to be much more interdependent than atheists, and this factor seem to have overridden the perceived extension of time, which is much more individualized. The factor that is most relevant to future studies is the interdependent self-construal measure explored in Fung, Isaacowitz, Lu, and Li (2010). In their study, they found a moderating effect of interdependent self-construal on emotional memory: older Chinese adults who had a lower level of interdependent self-construal exhibited emotional results similar to American older adults — they showed a positivity enhancement effect and a negativity reduction effect; whereas older Chinese adults who had a higher level of interdependent self-construal only showed a positivity enhancement effect, and no negativity reduction effect. Our results of marginally higher social support in Christians and a social preference for family and friends suggest that interdependent self-construal could be a potential factor for the findings observed in the present study.

Another interesting finding in our study is that older adults did not always choose family/close friends more often than young adults. Although seemingly contradictory to the original SST hypothesis, as well as Fredrickson and Carstensen's (1990) findings, we could in fact explain this finding using SST. Many of our young participants were college students who were away from home, while most of our older participants were healthy older adults who lived in an independent aging community. College students were often homesick during the semester and if given a chance to think about with whom they would spend their time, it makes sense that they would choose family/close friends that they did not see every day. Many of our older adults, however, have chosen to live independently rather than close to or with their families. This trend of independent living could have given rise to some of the results we observed. Older adults nowadays are in fact much more adventurous, independent, and perhaps "younger" than they used to be. As lifespan and the aging population increase, the definition of "old age" may also need to be revised because adults in their 60's nowadays may in fact be much more active, able, and open then people of the same age just 20-30 years ago. Socioemotional selectivity changes based on current motivational goals, so it would not be too surprising for researchers to start finding different results in emotion studies compared to the 1990's.

Although the belief in eternal life does not appear to be the likely causal factor of differences between the religious and non-religious participants, it did still have an effect. All results presented were collected from participants who had congruent beliefs, i.e., those who identified as Christian and also believed in eternal life were compared to those who identified as atheist and also did not believe in eternal life. This filter did increase the differences between groups, suggesting that the strength of one's belief in life after death or religiosity could play a role in our results. In future studies, it would be beneficial to systematically measure a more concrete definition of eternal life.

Due partly to the lack of substantial empirical research on religion, there are several methodological limitations to this study. The sample was smaller than ideal and was primarily collected in the San Francisco Bay Area, which is an infamous area for atheism and liberal beliefs. Future studies should attempt a more diverse and representative sample, including different locations, political backgrounds, education levels and religions beyond the binary used in this study.

This study design was modified based on Fredrickson and Carstensen's (1990) study, which included family member and close friend in the same category. These two social roles are similar on Dimension 1 (positive affect) of the model created in their study; however, Robertson and Hopko (2013) elucidated possible differences between 'friend' and 'family' when considered by young and older adults in an autobiographical narrative setting. Young adults, who are theoretically seeking new information and future possibilities over affective benefits, may have negative experiences with friends as they try to expand their social networks, whereas older adults, who have theoretically selected their social circle to maximize positive affect, may have particularly positive emotions towards an individual they consider friend and to their family. For these reasons, the identification of a 'close friend' may be more difficult for young adults, and may not be in the same category as family compared to older adults. Future studies should take this important concept into account.

**Conclusion**

In conclusion, our study provides support for the SST, in that situational factors may impact one's socioemotional selectivity and emotional regulation [14]. Although a very definite social ending such as moving to Mars may induce extreme emotional selectivity toward family/close friends, the effects that belief in life after death and old age have on socioemotional selectivity are more

complex than expected. Many other factors may in fact moderate socioemotional selectivity in the Christian circle and in old age, and isolating these factors would help us better understand emotional processing. For example, a future in-depth examination of interdependent and self-construal factors in relation to religiosity may shed light on the basis of the current findings.

References