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**Friendship in College Students:
Examining Changes in Time Perspective and Emotional Closeness**

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Acknowledgements

There was once a time when I was facing a social beginning myself and decided to email each professor in the Denison Psychology Department to inquire about research I could engage with. To my surprise, two faculty members responded to my inquiries: Dr. Andrea Lourie and Dr. Sarah Hutson-Comeaux. Now as I approach a social ending three years after my initial email, I can't help but get nostalgic and begin to fear future research projects without their incredible talents. Dr. Lourie's ability to translate the nonsensical gibberish that I often spew into coherent, well-read sentences consistently amazes me. And Dr. Hutson-Comeaux's ability to communicate ideas regarding complex frameworks in a way that is approachable and understandable for all students is truly stunning. While I struggle to find the appropriate words to sum up our experiences over the past few years, I cannot stress enough how grateful I am of their support and the opportunities they have granted me.

I must also thank my amazing friends for being so supportive through all of my academic ventures during my time at Denison. Through celebrating my acceptances and encouraging me through my rejections, you all have been unwavering in your care. You are all extremely special to me and I am so insanely proud to have met you.

Abstract

The current study sought to determine how college students' proximity to the social ending of graduation was associated with changes in their friendship maintenance behaviors (i.e., importance of popularity, social independence, and friendship conflict) and how these changes related to an increased focus on fostering emotional closeness. The shift towards building emotional closeness was expected to result in a decrease in one's social network size but an increase in the amount of time spent with close friends. Participants included 44 senior students and 45 first year students from a private liberal arts college in the Midwest. Findings partially supported patterns consistent with SST for senior students. Specifically, senior students reported a limited time perspective compared to first year students. Senior students decreased friendship conflict related to their reports of emotional closeness. Alternatively, first year students' future opportunities' perspectives were positively related to their emotional closeness with close friends. Findings suggest college graduation is a social ending consistent with SST and that differences in students' perspectives and friendship patterns may be recognized. These findings suggest that senior students approaching a social end have vastly different perspectives from first year students experiencing a social beginning. Future research on the implications of these differences is warranted.

Friendship in College Students:

Examining Changes in Time Perspective and Emotional Closeness

The current study examined the differences in first year and senior college students' time perspectives, friendship maintenance behaviors, and characteristics of their friendships. Based on Socioemotional Selectivity Theory (SST), I was interested in whether I could predict senior reports of number of close friends and the amount of time spent with friends based on their future time perspective, friendship maintenance behaviors, and experience of emotional closeness. The literature review begins with an overview of the guiding theory, SST, focusing on its various applications and continues with a review of friendship maintenance behavior relevant to the friendship changes expected in college students.

Socioemotional Selectivity Theory (SST)

As older adults begin to approach the end of life, their priorities and social behaviors change (Carstensen, Isaacowitz & Charles, 1999). According to the Socioemotional Selectivity Theory (SST), individuals have two primary social trajectories that direct their choice of social behaviors: the knowledge and emotion trajectory. SST suggests that these two trajectories account for a majority of the motives that ultimately drive social behaviors (e.g., deciding to study rather than spend time with friends). Throughout the lifespan, the salience of these two trajectories changes as they compete with each other. One of the primary principles of SST is that an individual's assessment of time is critical in how they prioritize their behaviors to achieve the goals associated with social trajectories. SST argues that individuals early in their life span focus more on acquiring knowledge (knowledge trajectory) and place less emphasis on emotional closeness (emotion trajectory). With a recognition that the future is vast, young individuals prioritize the acquisition of novel information (knowledge trajectory) to help them

with their future needs. Alternatively, for older adults facing the end of life, there is a decreased need for novel information and new social partners as it is so closely related to future needs.

Löckenhoff and Carstensen (2004) demonstrate that alignment with the knowledge trajectory relates to individuals' choice in social partners as developing new relationships can support the pursuit of new information. Therefore, older adults are less likely to prioritize acquiring novel information and more likely to emphasize developing emotional closeness with important social partners (for a detailed review, see, e.g., Carstensen, et al., 1999; Fredrickson & Carstensen, 1990; Liao & Carstensen, 2018). As older adults shift to prioritize the emotion trajectory and achieve emotional closeness, their cognitions and behaviors also change.

Older adults' proximity to the end-of-life results in a decreased need for novel information, ultimately leading to changes in their cognitions and behaviors. SST predicts that cognitions and behaviors will shift to support the goal of increased emotional closeness with significant social partners. Carstensen and colleagues (1999) propose that these changes occur in the form of more (1) positive memory recollection, (2) shrinking social networks, and (3) a preference for more familiar social partners.

Studies analyzing these trends of changing cognitions and behaviors have found consistent support for patterns suggested by SST. First, studies analyzing memory recollection have revealed that older adults have more positive recollection of memories compared to young adults (Barber et al., 2016; Carstensen & Charles-Turk, 1994; Gallo et al., 2011). Secondly, cross-sectional studies have revealed older adults maintain considerably smaller social networks than younger people, even when accounting for deaths of social partners (Lang & Carstensen, 1994; Lee & Markides, 1990). Lastly, when young and old adults are asked if they'd rather spend time with a novel or familiar social partner, older adults report wanting to spend time with

familiar social partners significantly more than young adults (Fredrickson & Carstensen, 1990; Fung, Carstensen, & Lutz, 1999). The differences demonstrated in all of the above research suggests that older adults are more focused on achieving emotional satisfaction through both their cognitions and interactions with their social partners. While SST and the influences of the end of life have traditionally been studied in older adults, some research has been conducted to understand how these changing social trajectories can be replicated in younger samples.

SST in Younger Samples

A primary tenet of SST is that individuals recognize the amount of time they have left in a social environment, ultimately influencing the social partners they choose. To understand if this recognition of mortality occurs in younger adults, Carstensen and Fredrickson (1998) surveyed middle-aged gay men with varying HIV statuses. Their findings revealed support for SST, with men who were HIV positive and showed symptoms of AIDS prioritizing familiar partners significantly more compared to HIV positive men who were asymptomatic and HIV negative men. Due to their proximity to the end of life, these HIV positive and symptomatic men shifted their social priorities, in turn, influencing the social partners they chose to spend time with. This finding reveals that it may not be the time since birth that causes emotional selectivity but rather the time until end of life or social ending.

A social ending might also be understood as the end of one's involvement in a prominent social context (e.g., high school or college). To examine whether similar patterns of social selectivity occurred for young adults in non-fatal social endings, Fung et al. (1999) examined the social selectivity of young and old adults in Hong Kong before and after Hong Kong was returned to the People's Republic of China in 1997. The political climate of Hong Kong at the time was causing many people to emigrate to other countries and the media framed the event as

the end of Hong Kong. This unique but naturalistic social context ending allowed the researchers to examine how young and old adults' selectivity of social partners changed before, during, and after the handover of Hong Kong. After asking participants to imagine themselves emigrating from Hong Kong, Fung, and colleagues (1999) provided them with the hypothetical option to either spend time with a novel or familiar social partner. Their findings revealed that before the handover, older adults more commonly preferred familiar social partners compared to young adults. However, during the handover, there was no significant difference between the age groups, with both being significantly more selective with their social partners. A year after the handover, the pattern had returned to normal with older adults displaying more selectivity with who they spent their time with compared to younger adults. These results suggest that one's perceptions of their proximity to a social end greatly influences with whom they choose to spend time.

SST in Young Adults

The findings discussed above suggest that patterns of social selectivity brought on by social endings can also be observed in young adult populations both when a natural end of life situation occurs and when an environmental change occurs. However, there is a paucity of research investigating how young adults navigate social endings. One of the only studies analyzing non-fatalistic social endings in young adult populations was conducted by Fredrickson (1995) who examined the social preferences of college first year and graduating senior students. Students recruited were asked to keep a journal with information about their social interactions for three weeks near the end of the spring semester. Participants logged information about their interactions that included the amount of time spent and emotional involvement with their social partner. Analyses revealed that graduating senior students did not differ in the number of close

friends or the time spent with close friends and other peers but did have more emotional involvement with close friends compared to first-year students. Overall, students who faced a social end (i.e., the end of college) increased their emotional involvement with their close friends, suggesting support for patterns of SST.

While Fredrickson's (1995) research aims to understand how college students interact with close friends when a social ending is approaching, Pruzan and Isaacowitz (2006) attempted to understand how cognitions shift when young adults approach a social end. To understand these changes, first year and senior college students were presented with happy and sad faces while their eye movements were tracked. Findings indicated that senior students spent significantly less time looking at sad faces than first-year students. Alternatively, there were no age-differences in eye movement when happy faces were presented (Pruzan & Isaacowitz, 2006). These findings demonstrate a cognitive shift towards a prioritization of emotional satisfaction in college senior students that is akin to older adults (Carstensen, Gottman, & Levenson, 1995; Gallo et al., 2011). These discoveries suggest that patterns of emotional selectivity and changes in cognitive focus among young adults facing social endings may be more prevalent than previous research has revealed.

In sum, previous research (Carstensen & Fredrickson, 1998; Fung et al., 1999; Pruzan & Isaacowitz, 2006) has shown that preference for more familiar social partners can be replicated in young adult populations when natural and/or manipulated social endings occur. Across the lifespan, the most studied social ending is the end of life. However, it is possible that social endings that occur at other important transitional points throughout one's life are consistent with these shifting patterns in the knowledge and emotion trajectories. Graduation from high school

and college are important social endings to young adults. The patterns of social selectivity that occur in older adult populations can also be expected in young adult populations.

When social endings are extended to apply to the exiting of a prominent social environment (such as high school or college), it can be expected that patterns commonly observed in older adults may also occur in young adults. College is an example of a social environment that has both a distinct social beginning and social ending, with first year students experiencing a social beginning and senior students facing a social ending. If SST can be applied to the college transition, then senior students facing a social ending will prioritize the emotion trajectory more and will spend more time with emotionally close peers and limit their social circle to important friends while first year students facing a social beginning will prioritize the knowledge trajectory including expanding their social circle. However, the changes in cognitions and behaviors expressed in young adults are likely different than in older adults due to increased involvement with peers at this time in life. Ultimately, it can be expected that the student's proximity to the social ending of their college graduation will be related to similar changes in their cognitions and behaviors with their interpersonal relationships.

Development of Peer Relationships

Peer relationships in early development increase quickly as young children begin to transition from exclusive relationships with caregivers to increasing time and relationships with same-aged peers. Involvement with the peer group eventually peaks in late adolescence with youth spending much of their time unsupervised with peers and away from their caregivers (Brown, 1990; Gavin & Furman, 1989). Thus, adolescence is a period during which individuals experience the greatest changes in their friendship patterns as they engage in intense exploration of new relationships (i.e., close friendships; Brown, 1999).

Exploration of or gaining knowledge about the social environment is notable because adolescents develop a sense of identity through different types of relationships and interactions (e.g., peer crowds, cliques, dyads; Smetana, 2011). Adolescents' first involvement with the peer environment is varied as they explore a range of different peer groups (Brown, 1990). As they approach late adolescence, involvement narrows to one or two peer groups as they begin to socialize with peers who are more similar to themselves and better meet their emotional needs (Brown, 1990; Gavin & Furman, 1989; Kandel, 1978). Interactions with the peer group allow adolescents to situate themselves within the peer environment and interact with adolescents similar to themselves, which further develops their sense of identity. For instance, Brown and colleagues (1986) discovered that a majority of adolescents report being affiliated with at least one peer group and that this is increasingly important to do. Social groups provide adolescents the opportunities to practice interacting with others in a reciprocal manner. Unlike the parent-child relationship which has a hierarchical power structure, peer relationships are characterized as being more equal in their power dynamics (i.e., adolescents can choose their friends) (Brown, 1990). Peer relationships also allow teens to create relationships over common interests and leisure activities. Through these reciprocal peer interactions, the adolescents begin to recognize their unique interests and attributes. As the socialization processes continue adolescents begin to form smaller friend groups called cliques, made up of three to ten individuals (Brown & Klute, 2005). Cliques provide adolescents with a refined peer group of other adolescents they perceive as most similar to themselves. As adolescents continue to socialize within cliques, they become increasingly similar to one another through processes of mutual socialization (Hartup, 1996). This process of mutual socialization allows adolescents to further develop their individual

identity as their interactions with peers are organized around common interests rather than work or other activities.

As adolescents approach the end of high school, they spend less time engaging in identity exploration and begin committing to their identity (Brown et al., 1986). As adolescents become more solidified in their identity, they place increasingly less importance on the affirmation of the peer group members (Brown et al., 1986). For instance, Gavin and Furman (1989) examined changes in the importance adolescents place on the peer group. Their findings suggest that late adolescence is a time when peer group boundaries, conformity to group norms, and negative out-group behaviors decrease (Gavin & Furman, 1989). These findings suggest that adolescents are beginning to develop both a sense of identity and independence from the peer group. By the end of high school, adolescents have a more developed identity than when they entered. However, their identity is not fully developed upon graduation from high school. One social setting that offers the opportunity to examine the continued development of emerging adults is the traditional 4-year college experience. While not all high school graduates attend traditional colleges, young adults in this setting are often engaging in behaviors to develop and maintain interpersonal relationships with similar aged peers.

One feature of a traditional college is the continuation of a rich peer environment with numerous opportunities for relationship development and peer interactions. These relationships continue the opportunity to develop one's personal identity and values (Arnett, 2016; Smetana, 2011). Arnett (2016) suggests that college is unique as it provides students the ability to independently interact with new academic and personal ideologies in an effort to inform their own worldview. This is also supported by the physical structure of college which provides young adults with the ability to be in close proximity to similar-aged peers, a component of social life

that is not necessarily guaranteed for non-enrolled young adults. The proximity of similar-aged peers all engaged in relatively similar experiences provides young adults with opportunities to continue to practice developing and maintaining friendships.

When students face the social beginning of college, developing interpersonal relationships is a priority (Arnett, 2016). During this time, there is a prioritization towards a knowledge trajectory for individuals trying to understand a new social environment. The beginning of college, similar to early adolescence, provides the opportunity to explore identity and have large social networks as students attempt to build new friendships. The interest in acquiring a larger social network may be expressed as a renewed interest in popularity as students with high status are often more visible in the peer group (Coie, Dodge, & Coppotelli, 1982), thus making it easier to create friendships. Students may also begin college with an interest in peer approval, leading to a decreased sense of social independence. Additionally, college is a time in which students may use conflict resolution as a way to maintain new and close relationships.

While there are many behaviors that can support the development and maintenance of student's friendships, these behaviors may change as a social ending approaches. Late in adolescence students demonstrate patterns of reduced interest in popularity, greater social independence, and less friendship conflict. These changes may be influenced by the approaching end of high school (Glatley, Cillessen, Lourie, 2021), similar shifts may occur in college students (Barzeva et al., 2021; Nangle et al., 2003; Roberts et al., 2009; Shulman & Laursen, 2002).

Friendship Maintenance

Importance of Popularity

As college students begin their first year, they are focused on understanding their social environment and creating relationships. This increased focus on acquiring knowledge about their social environment also likely influences the way they behave. For instance, a student's desire to be popular is likely related to how much they choose to expand their social network (Nangle et al., 2003). As defined by Bukowski (2011), popularity is how much a person is liked or disliked by their peers and the status or notoriety an individual has in a group. First-year students facing a social beginning and trying to acquire knowledge about their social environment likely prioritize popularity. Alternatively, senior students are less concerned with gaining knowledge about their environment and more focused on establishing emotional closeness with their friends as a result of the impending social end. As a result, it can be expected that senior students place less importance on popularity, similar to late adolescents.

The importance an individual places on popularity influences the way they interact with their peers. Coie, Dodge, and Coppotelli (1982) recognized that students with high status in the peer group are highly socially preferred and widely recognized in the peer environment. Additionally, popular adolescents report having significantly larger social networks than unpopular adolescents (Nangle et al., 2003; Stotsky & Bowker, 2018). Furthermore, popular students commonly affiliate with each other rather than unpopular peers (Dijkstra et al., 2010, Lansu & Cillessen, 2011). Therefore, the many appeals to being popular within the peer group may influence some adolescents to place an increased importance on this status at different times. It is expected that students' desires to be popular closely relate to the ways they engage with their peers and construct their social networks.

While much is known about the behaviors students engage in when they prioritize popularity (Dumas et al., 2019; Ellis & Wolfe, 2009; Sandstrom & Cillessen, 2010; van den Broek et al., 2016), only a handful of studies have reported on how adolescent's priorities of status and involvement in peer groups change over time. Generally, their findings have suggested a general trend of students prioritizing peer groups less and placing more importance on close friendships as they enter late adolescence. Brown et al. 's (1986) study of 7th through 12 graders was the first to recognize this pattern. Their findings revealed the importance of affiliating with a peer group declined with each successive age group and more students reported opposing group affiliation as they aged (Brown et al., 1986). A few years later, Gavin and Furman (1989) identified that reports of the importance of status and membership peaks in early adolescence but gradually declines through late adolescence.

To understand how priorities change LaFontana and Cillessen (2010) examined youth in a longitudinal study from ages 6 to 22. They discovered that prioritizing popularity peaked in late middle school and early high school but leveled off in later high school years (LaFontana & Cillessen, 2010). However, this may be due to the presence of a social end approaching. More recently, this pattern of decreasing the priority of popularity was replicated in Glatley, Cillessen, and Lourie (2021). They discovered that high school students place significantly less importance on popularity as they progress through high school and report significantly smaller social networks. Therefore, it is likely that as adolescents begin to approach the end of high school, their priorities shift and the appeal of being popular, and having the large social network associated with it, decreases. However, the desire to be popular may have a resurgence in the first years of college as students attempt to explore their social environment. This resurgence

likely relates to the social network size one maintains which may also be influenced by their social independence.

Social Independence

Social independence is a complex idea that has been defined in numerous ways such as acting autonomously from parents and making independent decisions (Patall & Yang Hooper, 2018). For the purpose of this paper, social independence is conceptualized as the confidence an individual has that their friendships will be maintained regardless of their conformity to group pressures (Mayeux, 2003). As adolescents spend more time with peers and less time with parents, many of their behaviors are influenced by their friends. Not surprisingly, peer group norms become templates for how individuals should act. These norms can have negative consequences for adolescents' behaviors. For example, Dolcini and Adler (1994) discovered that adolescents smoking habits and sexual behaviors were positively associated with their crowd affiliation. However, not all outcomes of socializing with peers are negative. Adolescents reported being less interested in spending time with peers who were less prosocial than themselves (Shin, Ryan, & North, 2019). Adolescents with friends who engage in prosocial behaviors (i.e., cooperation, helping other adolescents, sharing) were more likely to engage in prosocial acts themselves (Barry & Wentzel, 2006). Further, when peer norms are more oriented towards prosocial behaviors, individuals display greater prosocial acts in both public and private situations (Choukas-Bradley et al., 2015). Given the potential influence of peer groups, it is clear that individuals must balance their own desires and individuality against the norms of the group. A failure to do so may result in increased incidences of peer pressure and conformity to negative group norms. Throughout adolescence and young adulthood, individuals increasingly test their

own independence when navigating their social environment and balance between conforming to peer norms and expressing social independence.

Peer norms are very salient in the early adolescent years (Gavin and Furman, 1989). Yet, these norms become increasingly less important in late adolescence (Brown et al., 1986). Consistent with this change, it can be expected that conformity behaviors will decrease over this developmental phase. In fact, studies have revealed late adolescents (grades 11 & 12) report significantly lower levels of conformity to their chosen peer groups' norms compared to early adolescents (grades 6 & 9) (Berndt, 1979; Gavin & Furman, 1989). This trend indicates an increase in the social independence displayed by adolescents. Further, Costanzo and Shaw (1966) examined patterns of conformity behaviors across the adolescent years using an experimental conformity situation. Groups of adolescent participants were presented cards with various lines at differing lengths and asked to report on the longest one. However, participants were all given lines of different lengths and asked to consult with other group members. Results revealed that adolescents aged 11 to 13 conformed to the line length determined by the group significantly more than adolescents aged 15 to 21 (Costanzo & Shaw, 1966). Along with shifts in the patterns of conformity adolescents report, there are changes in the friends' adolescents choose to spend time with.

As adolescents' approach the end of high school, they begin to become more socially independent. As the importance of peer norms and clique affiliation decreases throughout adolescence (Brown, Eicher, & Petrie, 1986; Gavin & Furman, 1989). Adolescents seem to become more confident that their friendships will be maintained regardless of their conformity to group pressures. While adolescents' social independence may be high, especially towards the

end of high school, it likely changes as they enter an unfamiliar social environment because of the increased desire to develop friendships and acquire knowledge about their surroundings.

When first-year students enter college and face a social beginning, they are tasked with exploring a new social environment and expected to create interpersonal relationships with their peers. In fact, the extent to which students can successfully develop friendships in the first year of college is positively related to their academic, social, and emotional adjustment (Swenson, Nordstrom, & Hiester, 2008). Due to the increased pressure of developing new relationships, it is likely that first-year students may feel it is necessary to conform to peer group behaviors in an effort to develop and maintain friendships. For example, in research with first year college students, alcohol consumption behavior increases when students believe it is valued by the group or when they are faced with threats to their existing friendships (Hamilton & DeHart, 2017; Prentice & Miller, 1993; Schall, Kemeny, & Maltzman, 1992). A sense of belonging is extremely important in the first year of college (Freeman, Anderman, & Jensen, 2010), and so conformity behaviors may be higher with the motivation to develop belongingness. Additionally, first year students facing a social beginning are more likely to focus on acquiring knowledge, potentially through friendships (Löckenhoff & Carstensen, 2004). As a result, students may be more susceptible to peer influences, ultimately leading to a decreased assertion of the individual's social independence. As students spend time in the college environment developing their identity it is likely that they will again become less concerned with conforming to group norms and, in turn, will have a higher sense of social independence towards the end of senior year. As students become more socially independent as social endings approach, they may handle conflict differently.

Friendship Conflict

The amount of conflict (defined as interpersonal disagreement; Laursen, 1995) an individual engages in first begins to increase in early adolescence but begins to level off in late adolescents and young adulthood. As adolescents begin puberty and spend more time with the peer group, they begin challenging the authority of those around them (i.e., parents, siblings, teachers), ultimately leading to increased conflict with both peers and adults (Laursen 1995). Support for this is shown in the markedly higher rates of conflict in the parent-child relationship during the adolescent years (Furman & Buhrmester, 1985, 1992; Laursen & Collins, 1994). In contrast, early and late adolescents report significantly lower rates of conflict between peers (Laursen, 1995). One reason for this difference in rates of interpersonal conflict is the more equal power structure of peer relationships that is not commonly found in parent-child relationships. Traditionally, parent-child relationships are structured so that parents hold an asymmetrical amount of social power compared to the child. This allows the child to follow instructions and learn from their parents (Laursen, Hartup, & Koplas, 1996). Alternatively, peer relationships are structured more equally than parent-child relationships. Peer conflict is commonly solved with outcomes that are balanced and favorable for each individual, unlike resolutions in the parent-child relationship. The relationship equality between peers allows adolescents to practice conflict resolution which may strengthen skills in friendship maintenance and benefit peer relationships.

While evidence has suggested that there are no changes in the rates of interpersonal conflict among peers throughout adolescence (Laursen & Collins, 1994; Berndt, 2002), conflict still occurs regularly. In fact, Laursen (1995) revealed that adolescents report an average of one peer conflict every 6 hours or once every school day. These incidences of interpersonal conflict are important as they allow adolescents to solve problems in an equitable way, supporting the

development of negotiation and social skills (Laursen, Hartup, & Koplas, 1996). Additionally, interpersonal conflict allows adolescents the opportunity to distinguish between their close and casual friendships (Raffaelli, 1997; Laursen, Finkelstein, & Townsend Betts, 2001; Berndt, 2002). For instance, when friendships are important to an individual, they are more likely to invest efforts in resolving the interpersonal conflicts that arise. However, if the relationship is not important or is a source of emotional dissatisfaction, conflicts may go unresolved. Unresolved conflicts can ultimately lead to downgrading a friendship or to the dissolution of a friendship (Bowker, 2011; Flannery & Smith, 2021; Katz, Kramer, & Gottman, 1992; Raffaelli, 1997). Regardless of the outcome, peer conflict is an important aspect of friendship as it provides individuals the opportunity to differentiate between their interpersonal relationships by choosing who they resolve conflict with.

The college years are characterized as being a difficult time (e.g., balancing academics, newfound independence, intimate relationships) for young adults and the inclusion of peer conflict provides further complications to the individual's personal well-being. For instance, increased frequency of peer conflict is linked to worse academic, social, and emotional adjustment for first-year students (Pierce, Sarason, & Sarason, 1991; Swenson et al., 2008). While much research has been done analyzing high school students' rates of interpersonal conflict with peers, parents, and siblings, and its influence on the perceived quality of the relationship, there is a paucity of work with college students. However, similar patterns can be expected. As students facing a social ending (i.e., senior students) begin prioritizing emotional closeness with their friends, conflict resolution, or lack thereof, may be an opportunity to end friendships that don't provide emotional closeness. Alternatively, the resolution of conflict may be a way to foster emotional closeness within a friendship as it shows commitment to the friend.

College students who perceive greater conflict in relationships would likely report less satisfaction and, if continued, the relationship would be downgraded or dissolve (Rose, 1984). Therefore, conflict can be viewed as an obstacle in maintaining friendship as the resolution of conflict takes a considerable amount of time and energy. As such, individuals who engage in resolving conflict may do so with peers they view as important and are willing to spend their time and energy on the resolution process in an effort to maintain the friendship. Alternatively, individuals deemed less important to an individual may not experience resolutions when conflicts do arise and the relationship between two individuals would likely dissolve. For the current study, it is expected that senior students will report less feelings of conflict with close friends compared to first year students due to senior students approaching a social end. The approach of a social end likely has broad sweeping influences on behaviors as individuals begin to focus more on establishing emotional closeness with their friends.

Overview of the Present Study

As older adults begin to approach the end of life, their priorities and behaviors shift to a focus on emotional closeness with friends and family rather than prioritizing new knowledge acquisition (i.e., meeting new people to help with future experiences; Carstensen et al., 1999). This phenomenon is explained by the Socioemotional Selectivity Theory (SST) which posits that the proximity to a social ending is related to changes in individuals' social priorities, thus influencing social behaviors related to obtaining emotional closeness (Fredrickson & Carstensen, 1990; Fung, Carstensen, & Lutz, 1999). According to SST, as older adults approach their social end, the need for new knowledge diminishes and the desire for emotional closeness increases. This shift towards a prioritization of emotional closeness influences the way individuals choose social partners and their cognitive processing (Lockenhoff & Carstensen, 2004; van der Groot,

Bol, & van Weert, 2021). Although the presence of social endings has often been studied as older adults approach the end of life, similar patterns of changing social priorities have been identified in younger adult populations (Fredrickson, 1995; Pruzan & Isaacowitz, 2006). Young adults face social endings when they exit a prominent social environment (e.g., large societal shifts like the transition of power in Hong Kong or school graduations). College is an example of a social environment that has both a distinct social beginning and social ending, with first year students experiencing a social beginning and senior students facing a social ending. As senior students approach the social ending, it's likely that they begin to prioritize emotional closeness with their friends, and ultimately that they change the way they interact with those around them as would be predicted by SST.

Prioritizing emotional closeness with friends as predicted by SST may also be consistent with some of the changes to friendship networks described in the research literature during late adolescence. Patterns of decreasing the size of one's social network and increasing the amount of time spent with close friends remaining in that network have been documented (Barzeva et al., 2022; Bowker, 2011; Brown, Eicher, & Petrie, 1989; Gavin & Furman, 1986). These changes likely occur as a result of shifts in the behaviors and attitudes of the individual. For instance, early in adolescence students broadly seek friendships and connection to many social networks. Lockenhoff and Carstensen (2004) suggests that seeking new friendships may be associated with knowledge acquisition that may help the individual throughout their time in the social environment. Over time as they place less importance on being popular, students are less likely to attempt to meet more people and will maintain a smaller social network (Coie, Dodge, & Coppotelli, 1982; Nangle et al., 2003). Further, students with confidence in their ability to navigate a social environment are less likely to feel the need to conform to unappealing activities

or behaviors to maintain peer relationships (social independence) and are more likely to maintain small social networks with more emotionally satisfying relationships (Ennett & Bauman, 1996; Shrum & Cheek, 1987). Lastly, conflict patterns change as students' perceptions of the importance of friendships shift. When conflict occurs between less important friends or acquaintances it is more likely that their friendships are dissolved, ultimately leading to a smaller social network filled with friends that are more important to the student (Bowker, 2011; Katz, Kramer, & Gottman, 1992; Raffaelli, 1997). These patterns of change seen in late adolescence: reduced interest in popularity, increased social independence, and reduced conflict are not well studied in the transition to college. Based on SST theory it is plausible that students begin college with an interest in broadly connecting with peers (popularity), conforming to peer groups (reduced social independence) and managing peer conflict to fit in and establish relationships (higher conflict). As students reach senior year and the end of college, it can be expected that the friendship maintenance behaviors will mirror the changes described at the end of high school such that senior students will be less focused on popularity as they are more confident in the environment, they will express their social independence instead of conforming to peer groups and they will report less conflict because they are selecting to spend time only with close friends.

The current study aims to understand how college students' proximity to the social ending of college graduation is associated with changes in friendship maintenance behaviors (i.e., importance of popularity, social independence, and friendship conflict) and how these behavioral changes relate to an increased focus on building emotional closeness. The resulting shifts towards fostering emotional closeness ultimately result in a decrease in the number of close friends but an increase in the amount of time spent with those friends. To understand the perspective and behavioral changes brought on by the proximity of graduation, first year and

senior students were administered measures assessing their future opportunities and limited time perspective, importance of popularity, social independence, friendship conflict. Additionally, participants were asked to report how emotionally close they were with close friends along with the number of close friends they have and the amount of time they spend with them in a week.

The expectations of the present study are outlined below:

First Year vs. Senior Student Differences

Experience of time is important conceptually to SST because it is the perception of the social ending that is proposed to be related to changes in individuals' social priorities. Strough et al., (2016) found that individuals closer to a social ending report having a more limited time perspective than a future opportunities perspective. In order to determine whether senior students are experiencing a social ending I first assessed whether there were differences between senior students and first year students in their experience of limited time and future opportunities at Denison.

Based on SST and given different time perspectives I expect there to be differences in the friendship maintenance behaviors (i.e., popularity, social independence, and conflict) displayed by senior and first year students. LaFontana and Cillessen (2010) found that adolescents place less importance on popularity as they approach the end of high school. Aligning with findings that adolescents who are approaching a social ending (i.e., high school graduation) place less importance on peer norms and clique membership, I expect senior students to have more social independence (Brown et al. 1989; Gavin and Furman, 1986). I expect college senior students facing a social end will have reduced conflict because they have trimmed their social networks and dissolved friendships with less important friends as a way to prioritize emotional closeness (Rose, 1984).

Hypothesis 1. Senior students will report having a more limited time perspective than a future opportunities perspective compared to first year students.

Hypothesis 2. Senior students will place less importance on popularity, be more socially independent, and have less friendship conflict with close friends than first year students.

SST predicts that when individuals approach a social ending, they begin to prioritize emotional closeness. Thus, senior students who are approaching a social ending will be more likely to show this shift than first year students. This idea was supported by Fredrickson (1995) who found that college senior students reported being more emotionally close with their close friends compared to first year students. I expect similar reports by students in our study.

Fredrickson (1995) also examined differences between senior and first year students reports of their partner selectivity (i.e., how many close friends they report) and time selectivity (i.e., how much time they spend with close friends) by having students keep a journal of their daily interactions with peers. Although she found no significant differences between class years on these variables, I anticipate differences between senior and first year students' reports on these measures. The current study uses self-report measures to assess students' social network size and the amount of time they spend with their close friends, unlike Fredrickson (1995) who calculated aspects of students' social interactions (i.e., time spent, number of interactions, emotional involvement) that were reported in journal entries. alternatively, the current study allows participants to estimate these aspects of their own social interactions.

Hypothesis 3. Senior students will report more emotional closeness with close friends than first year students will report.

Hypothesis 4. Senior students will report having fewer close friends but spending more time with their close friends than first year students will report.

Relationships between Time Perspective and Friendship Maintenance

Research has demonstrated that there are changes in certain friendship maintenance behaviors over the developmental stage of adolescence. Specifically, LaFontana and Cillessen (2010) found that the importance of popularity decreases as individuals age. In addition, Brown et al. (1989) and Gavin and Furman (1986) demonstrated that the importance of peer norms and conformity behaviors decrease through late adolescence, suggesting increased social independence. Finally, Rose (1984) confirmed that conflict is commonly used as an avenue to dissolve unwanted friendships, beginning in late adolescence. Changes in these friendship maintenance behaviors may be influenced by the individual's time perspective due to their proximity to a social ending.

Hypothesis 5. I expect a limited time perspective to be positively correlated with social independence and negatively correlated with the importance of popularity and friendship conflict.

Hypothesis 6. I expect a future opportunities perspective to be positively correlated with the importance of popularity and friendship conflict, but negatively correlated with social independence.

Relationships between Time Perspective and Friendship Outcomes

Carstensen and colleagues (1992, 1999) suggest that older adults' limited time perspective leads to an increased awareness of their emotional closeness and time with close friends. I expect similar patterns for college students. As senior students shift their focus towards having limited time left in college, it can be expected that their reports of emotional closeness, number of friends, and the amount of time spent with their friends will also change. Specifically, students with a limited time perspective will report greater emotional closeness with close friends, having fewer close friends, and spending more time with close friends.

In addition, Carstensen (1992) demonstrates that young adults who have a future opportunities perspective have categorically different social networks than older adults who have a limited time perspective. Consistent with this finding, I expect students who perceive more future opportunities to report lower levels of emotional closeness and more close friends that they spend less time with.

Hypothesis 7. I expect a limited time perspective to be positively correlated with emotional closeness and amount of time spent with close friends, but negatively correlated with the number of close friends.

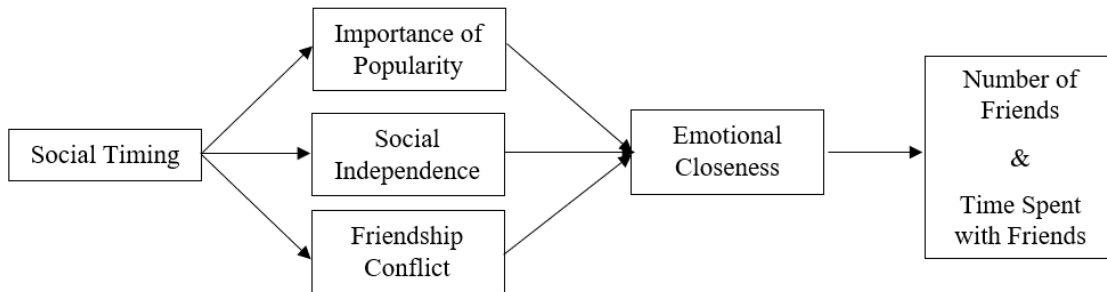
Hypothesis 8. I expect the future opportunities perspective to be negatively correlated with emotional closeness and amount of time spent with close friends, but positively correlated with the number of close friends.

SST-based Model for Predicting Friendship Changes related to a Social Ending in College

Finally, SST posits that as individuals approach a social ending their time perception changes and, in turn, their cognitions and behaviors (e.g., friendship maintenance behaviors) shift to support the goal of increased emotional closeness with important relationships (Carstensen et al., 1999). As a result, their social networks begin to shrink, and they express a preference for spending more time with familiar social partners (Fung et al., 1999). Applying these theorized changes associated with a social ending, I proposed a model to explore whether changes in time perception may be related to changing friendship maintenance behaviors (i.e., importance placed on popularity, social independence, and friendship conflict), resulting in increased emotional closeness with close friends. In addition, I examined whether this pattern of change might then be predictive of college students' social network size and the amount of time they spend with their peers. These patterns were explored separately for senior and first year students. This model is outlined in Figure 1.

Figure 1

SST-based Model for Predicting Friendship Changes related to a Social Ending in College



Method

Participants

Participants included 121 undergraduate students from a small, private liberal arts college in the Midwest. The study recruited first year and senior students through two recruitment methods. Forty-five first-year students were recruited through Introductory Psychology courses. Forty-two senior students were primarily recruited through flyers posted around the community. Recruitment from Introductory Psychology courses included all class years, but final analyses focused on first year and senior students¹. The sample included 45 first year students and 44 senior students ($N = 89$). First year students were 69% female, 70% white, and ranged in age from 18 to 20 ($M = 18.51$, $SD = .66$). Senior students were 66% female, 61% white, and ranged in age from 20 to 23 ($M = 21.68$, $SD = .60$). See Table 1 for information regarding first year and senior students' self-reports of gender, race/ethnicity, and age.

Measures

Participants completed measures assessing their time perspectives (future opportunities and limited time), their friendship maintenance behaviors (importance of popularity, social

¹ A total of 32 sophomores and juniors' responses were removed from the analyses.

independence, and friendship conflict), and their friendship outcomes (emotional closeness, number and time spent with close friends).

Time Perspective

Future Opportunities: Participants' future opportunities perspective was measured using a revised 7-item subscale based on the Future Time Perspective Scale (FTP; Carstensen & Lang, 1996; Strough et al., 2016). The scale was originally designed to understand the perspectives of young and old adults' futures, but the wording was revised to focus students on their future at Denison by using the terms *future at Denison* or *Denison life* rather than the original's terminology of *future*. The future opportunities subscale assessed students' perceptions of the amount of time they have left in college on a 7-point Likert scale (1 = *Very untrue* to 7 = *Very true*). Sample items included "Many opportunities await me in my future at Denison" and "My Denison future is filled with possibilities". The future opportunities subscale items were averaged, with total scores ranging from 1 to 7, with acceptable internal consistency reliability ($\alpha = .91$). Higher scores reflect an increased focus on the future .

Focus on Limited Time: Participants' focus on limited time was measured using a revised 3-item subscale based on the Future Time Perspective Scale mentioned above (FTP; Carstensen & Lang, 1996; Strough et al., 2016). Similar to the Future Opportunities subscale, wording was revised to focus students on their limited time at Denison by using the terms *future at Denison* or *Denison life*. The focus on limited time subscale assessed students' perceptions of the amount of time they have left in college on a 7-point Likert scale (1 = *Very untrue* to 7 = *Very true*). Sample items included "As I get older, I begin to experience that my time at Denison is limited" and "I have the sense that my time at Denison is running out". The focus on limited

time subscale items were averaged, with total scores ranging from 1 to 7, with acceptable internal consistency reliability ($\alpha = .69$). Higher scores reflect an increased focus on limited time.

Friendship Maintenance

Importance of Popularity: The importance of popularity was measured using the 8-item Importance of Popularity subscale from the Adolescent Peer Influence Inventory (APII; Mayeux, 2003). Responses were made on a 7-point Likert scale (1 = *Not at all true* to 7 = *Always true*). Wording was revised to focus on Denison friendships rather than general friendships. Sample items included “It is very important to me to be popular at Denison” and “I don’t care if I am popular with the people I hang out with at Denison.” Four of the 8 items were reverse scored. After reverse scoring, all items were averaged, with final total composite scores ranging from 1 to 7, with acceptable internal consistency reliability ($\alpha = .78$). Higher scores reflect a greater importance placed on popularity.

Social Independence: Social independence was measured using the 4-item Social Independence subscale from the Adolescent Peer Influence Inventory (APII; Mayeux, 2003). Responses were made on a 7-point Likert scale (1 = *Not at all true* to 7 = *Always true*). Wording was revised to focus on Denison friendships rather than general friendships. Sample items included “I choose what I want to do, no matter what my friends at Denison think” and “I do what I think is best, no matter what my friends at Denison say.” Responses to the four items were averaged, with final total composite scores ranging from 1 to 7, with acceptable internal consistency reliability ($\alpha = .84$). Higher scores reflect greater social independence. Two additional subscales of the APII measuring susceptibility to positive and negative peer influence were included as filler items, but not used in final analysis. All items from the 4 APII subscales were presented in a randomized order.

Friendship Conflict: Friendship conflict was measured using a revised 14-item Conflict subscale of the Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991). The Conflict subscale assessed students' perceptions of their conflict with or in close friendship and were rated on a series of 4-point Likert scales (1 = *Not at all* to 4 = *Very much*). The scale was originally designed to understand the conflict in specific relationships (e.g., mother, father, sibling, etc.), but the wording and instructions were revised to focus on conflict in college students' friendships. Sample items included "How angry do your friends make you feel?" and "How often do problems that occur in your friendships get resolved?". Responses to the 14 items were averaged, with final total composite scores ranging from 1 to 4, with acceptable internal consistency reliability ($\alpha = .75$). Higher scores reflect greater perceived conflict with friends.

Friendship Outcomes

Number and Time Spent with Close and Casual Friends: Participants reported the number of close and casual friendships they have as well as how much time they spend with each type of friend. The specific items were, "How many close friends do you have at college?" and "In an average week, what percentage of your time is spent with close friends?". Responses were measured with text entry and percentage sliders (0-100), respectively. Two similar items were included about casual friends.

Emotional Closeness with Close and Casual Friends: Emotional closeness with friends was measured using a 13-item revised scale from the Friendship Closeness Inventory (FCI; Polimeni, Hardie, & Buzwell, 2002). These questions assessed students' perceptions of their emotional closeness with their friends on a series of 7-point Likert scales (1 = *Not at all true* to 7 = *A great deal*). These questions were presented two times with similar wording that only differed by friendship type: close and casual friendships. Sample items from the emotional

closeness subscale included “I feel I can express my innermost feelings to my *close friends*” and “I feel that my *close friends* care for me”, with underlined words being repeated and replaced with casual friends. Items from close and casual scales were averaged separately, with final total composite scores ranging from 1 to 7, with acceptable internal consistency reliability for Close Friends ($\alpha = .92$) and Casual Friends ($\alpha = .94$). Higher scores reflect greater emotional closeness with friends.

Future Contact with Close and Casual Friends: Future contact with friends was measured by asking participants to report “How many of your close friends do you plan on being in regular contact with in 5 years?” and “How many of your casual friends do you plan on being in regular contact with in 5 years?”. Participants estimated the number of friends that pertained to this question

Procedure

This cross-sectional study received full Institutional Review Board (IRB) approval before data collection began. Data was collected over a period during the spring semester. As previously mentioned, participants were recruited through Introductory Psychology courses and community flyers. Participants recruited through Introductory Psychology were linked to the study through their course system with the study being described as a 25-minute survey that was concerned with aspects of friendship in college students. Participants recruited through Introductory Psychology were informed that they’d receive course credit upon completion. Participants recruited through community flyers were linked to the study through QR codes included on the flyers posted around senior housing. The flyers described the study as a 25-minute survey interested in aspects of friendship in college senior students. Participants recruited through flyers were informed they’d be entered into a raffle for one of four \$50 Amazon gift cards. Participants

from each recruitment method were sent to different Qualtrics survey links that were identical except for the compensation process.

On Qualtrics, participants were provided with an informed consent that outlined steps taken to ensure confidentiality, which included not recording IP addresses and redirecting respondents reporting their email for the Amazon raffle to a separate Qualtrics so data would not be linked. The informed consent also stated how long the survey would take to complete and who to contact with questions. The only information that differed for the two recruitment groups was in the informed consent regarding the compensation process. Finally, participants were asked to confirm that they were at least 18 years old and interested in participating.

After providing consent, participants were asked to write a paragraph reflecting on their time remaining in college. Specifically, they were prompted with the following question: “What are you looking forward to doing with your friends at Denison, given the time you have before you graduate? Please write at least a paragraph below.” This question was designed to focus participants on the amount of time they have remaining in college. Next, participants were asked to report on their demographic information, including their class year, gender, race/ethnicity, and age. Then, participants were asked to respond to questionnaires measuring their time perspectives and how abundantly they view their future at college using questions based on the Future Time Perspectives scale (Carstensen & Lang, 1996; Strough et al., 2016).

Participants were asked about three aspects of their friendship maintenance behaviors. First, participants were asked how important being popular in college is to them using the Importance of Popularity subscale from the Adolescent Peer Influence Inventory (APII; Mayeux, 2003). Next, participants were asked about how socially independent they were from their peers using the Social Independence subscale from the APII (Mayeux, 2003). Lastly, participants

reported on their perceptions of their conflict with their close friends using the Conflict subscale from the Quality of Relationships Inventory (Pierce, Sarason, Sarason, 1991). Following the questions regarding friendship maintenance behaviors, participants were asked questions regarding the outcome variables: number of friends and amount of time spent with friends. First, participants reported on their emotional closeness with their close friends on the Friendship Closeness Inventory (FCI: Polimeni, Hardie, & Buzwell, 2002). Then, participants were asked how many close friends they have and how often they spend time with them using self-developed questions. Following this, participants reported on their emotional closeness with their casual friends using the FCI (Polimeni et al., 2002). Then, participants were asked how many casual friends they have and how often they spend time with them using self-developed questions. Lastly, participants were asked how many close and casual friends they would be in contact with in five years.

After completing the survey participants were provided a debriefing form that outlined the intention of the study, the methodology and concepts measured, research articles that could be accessed to learn more, and contact information for the researchers. Similar to the informed consent, debriefing forms for first year students and senior students only differed in their descriptions of the compensation. After reading the debriefing form, students recruited through Introductory Psychology were redirected to their online research system to receive credit. Before the debriefing was presented to participants recruited via flyers, participants were asked if they would like their name entered into the raffle for an Amazon gift card. If they responded in the affirmative, participants were redirected to a separate Qualtrics survey to collect their email addresses to maintain confidentiality and then were provided the debriefing form. If they were not interested in the raffle, participants immediately received the debriefing form. Within two

weeks following the data collection phase, winners of the Amazon gift card raffle were randomly selected and notified via email.

Results

First Year vs. Senior Student Differences

To determine differences between first year and senior students time perception, friendship maintenance behaviors, emotional closeness, and friendship outcomes, a series of independent-samples t-tests were conducted. Table 2 presents senior and first year students' mean (and standard deviations) for all measures.

The first set of analyses examined differences for both the limited time and future opportunities perspectives. As predicted (H1), senior students reported a more limited time perspective, $t(87) = -11.85, p < .001$, and fewer future opportunities regarding their college future than first year students reported, $t(87) = 10.51, p < .001$. Findings partially supported class year differences for ratings of importance of popularity, social independence, and friendship conflict (H2). As expected, senior students reported having significantly more social independence than first year students reported, $t(77.12) = -2.14, p = .04^2$. However, senior students reported similar levels of importance placed on popularity, $t(87) = 1.27, p = .21$, and perceived amount of friendship conflict, $t(87) = -1.07, p = .29$.

Finally, results regarding class year differences in friendship outcomes were contrary to our predictions (H3 & H4). Surprisingly, senior and first year students reported similar levels of emotional closeness with their close friends, $t(79.06) = -1.09, p = .28^2$. In addition, senior students tended to report more close friends than first year students, $t(85) = -1.90, p = .06$,

²The independent-samples t-test assessing differences between students' reports of emotional closeness with close friends violated the assumption of homogeneity of variances and the reported statistic has been corrected.

although this effect did not reach traditional levels of significance. And senior students did not report spending more time with their close friends compared to first year students, $t(86) = 1.72$, $p = .09$.

To understand how time perspectives relate to friendship maintenance behaviors as well as the friendship outcome measures, a series of Pearson Product-Moment correlations were computed separately by class year. Correlation coefficients are presented in Table 3 and 4 for senior students and first year students, respectively.

Relationships between Time Perspective and Friendship Maintenance

First, I examined the relationships between students' limited time perspective and friendship maintenance behaviors (i.e., importance of popularity, social independence, and friendship conflict; H5). For senior students, their limited time perspective was not correlated with any of the three friendship maintenance behaviors: importance of popularity, $r(44) = .002$, $p = .99$, friendship conflict, $r(44) = .23$, $p = .14$, and social independence, $r(44) = -.15$, $p = .34$. For first year students, their limited time perspective was positively and significantly related to friendship conflict, $r(45) = .36$, $p = .02$, indicating that as first year students perceive their time on campus to be limited, the more they report conflict in their friendships. However, the limited time perspective was not related to the importance of popularity, $r(45) = .22$, $p = .15$, and social independence, $r(45) = -.18$, $p = .23$. Second, I examined the relationships between perceived future opportunities on campus and the same three friendship maintenance behaviors (H6). In contrast to prediction, no significant relationships were found for both senior and first year students.

Relationships between Time Perspective and Friendship Outcomes

First, I assessed the relationships between students' limited time perspective and friendship outcomes (i.e., emotional closeness, number of close friends, time spent with close friends; H7). For senior students, their limited time perspective was not correlated with any of the three friendship outcomes: emotional closeness, $r(44) = .14, p = .37$, number of close friends, $r(44) = .13, p = .40$, and amount of time spent with close friends, $r(44) = .17, p = .28$. For first year students, their limited time perspective was also not significantly related to any of the friendship outcomes: emotional closeness, $r(45) = .07, p = .67$, number of close friends, $r(43) = .07, p = .65$, and the amount of time spent with close friends, $r(44) = .09, p = .57$. Second, I examined students' perceptions of future opportunities on campus in relation to the same friendship outcome variables (H8). In contrast to our prediction, only one significant relationship was found. Specifically, as first year students perceived a higher number of future opportunities, they reported greater emotional closeness with their close friends, $r(45) = .36, p = .01$. No other significant relationships were found between the future opportunities' perspective and friendship outcomes for senior and first year students.

Hierarchical Regressions for SST-based Model

To assess the proposed model of changes in friendship patterns (see Figure 1) based on SST, I conducted a series of hierarchical regressions separately for senior students and first year students. In addition, the larger model was examined in two parts to fully capture the unique predictors for senior and first year students. First, I examined whether any friendship maintenance behaviors (i.e., importance of popularity, social independence, and friendship conflict; Step 2) predicted emotional closeness after accounting for students' time perspective (i.e., future opportunities and limited time; Step 1). This first hierarchical regression used a

stepwise procedure in order to only include those factors that contributed significantly to the prediction of emotional closeness. Then, I regressed each resulting model onto both the number of close friends and time spent with close friends reported by the students. The second hierarchical regression used a forced entry procedure, including those factors that were predictive of emotional closeness.

The first hierarchical regression revealed that at Step 1, neither the future opportunities ($p = .40$) nor limited time ($p = .74$) perspectives significantly contributed to the prediction of emotional closeness. However, when friendship maintenance behaviors were considered in Step 2, friendship conflict ($\beta = -.40, p = .007$) contributed significantly to the prediction of senior students' emotional closeness with their close friends. None of the other friendship maintenance variables (i.e., importance of popularity, $p = .61$, social independence, $p = .30$) significantly predicted senior students' emotional closeness. In sum, this hierarchical regression produced a significant model predicting senior students' greater emotional closeness based strictly on their lowered levels of friendship conflict, $F(1,42) = 8.10, p = .007$, and accounted for 16.2% of the variance.

Next, I examined whether the revealed pattern of relationships was predictive of senior students' social network size and the amount of time they spent with peers. Specifically, I regressed friendship conflict (Step 1) and emotional closeness (Step 2) on both the number of close friends and time spent with close friends in the follow-up hierarchical regression analyses. While the regression model predicting senior students' number of close friends was not significant ($F = 0.55, R^2 = .03$; see Table 5), the model predicting senior students' time spent with close friends was significant, $F(2,41) = 4.20, p = .02$. Together, friendship conflict ($\beta = .95, p = .54$) and emotional closeness ($\beta = .44, p = .007$) accounted for 17% of the variability in the

amount of time senior students report spending with close friends. While included, it is important to note that friendship conflict ($t = 0.61, p = .54$) did not contribute significantly to the regression model (see Table 6).

Following the same process used for senior students, I conducted a series of hierarchical regressions on responses from first year students. The first hierarchical regression revealed that at Step 1, the future opportunities perspective ($\beta = .36, p = .01$) significantly contributed to the prediction of emotional closeness, while the limited time perspective did not ($p = .16$). Additionally, none of the friendship maintenance variables (i.e., importance of popularity, $p = .38$, social independence, $p = .83$, friendship conflict, $p = .42$) significantly predicted first year students' emotional closeness with their close friends. In sum, this hierarchical regression generated a significant model predicting first year students' greater emotional closeness based strictly on their increased perception of future opportunities, $F(1,43) = 6.53, p = .01$, and accounted for 13.2% of the variability.

Next, I regressed future opportunities (Step 1) and emotional closeness (Step 2) onto both the number of close friends and time spent with close friends in the follow-up hierarchical regression analysis. While the regression model predicting first year students' number of close friends did not reach significance ($F(2,40) = 0.18, R^2 = .01$; see Table 7), the model predicting first year students' time spent with close friends was significant, $F(2,41) = 4.80, p = .01$. Together, the future opportunities perspective ($\beta = .04, p = .81$) and emotional closeness ($\beta = .42, p = .006$) accounted for 19% of the variability in the amount of time first year students report spending with close friends. It is of note that the future opportunities perspective ($t = 0.24, p = .81$) did not contribute significantly to the regression model (see Table 8).

Discussion

The current study sought to determine how college students' proximity to the social ending of graduation was associated with changes in their friendship maintenance behaviors (i.e., importance of popularity, social independence, and friendship conflict) and how these changes related to an increased focus on fostering emotional closeness. According to SST, the shift towards building emotional closeness should result in a decrease in one's social network size but an increase in the amount of time spent with friends in that social network. Analyses were conducted on senior and first year students time perspectives (i.e., limited time and future opportunities), friendship maintenance behaviors (i.e., importance of popularity, social independence, and friendship conflict), and friendship outcomes (i.e., emotional closeness, social network size, and time spent with friends) to understand relationships between these constructs. The findings of the current study are discussed below, and future research is suggested.

First Year vs. Senior Student Differences

Based on Socioemotional Selectivity Theory and previous work examining the impact of individuals' time perspectives (Carstensen et al., 1999; Strough et al., 2106), I expected senior students would have more limited time perspectives and would perceive fewer future opportunities compared to first year students. The results supported this hypothesis, as senior students reported significantly higher limited time perspectives and first year students reported significantly higher future opportunities perspectives.

The fact that senior students report having more of a limited time perspective and less of a future opportunities' perspective indicates that college students view graduation as a social ending. This difference in perspective implies that young adults recognize their proximity to social endings and potentially shift their behaviors in ways similar to older adults approaching

the end of life. Senior students are closer in proximity to the social ending of college and understandably perceive their time on Denison's campus as being limited. This result aligns with Fredrickson's (1995) conclusion that senior students are aware of the approaching social ending. This also provides support for previous research examining the Future Time Perspective scale (FTP; Strough et al., 2016) and suggests that the FTP can accurately be used with young adult populations as well. Also consistent with SST, first year students reported more future opportunities compared to senior students. Again, this is understandable as first year students are facing a social beginning, implying that they are aligned with the knowledge trajectory. Therefore, they are more likely to seek out opportunities for new friendships (Löckenhoff & Carstensen, 2004) and likely view their social environment as vast and full of opportunities (Fung et al., 1999). The fact that our findings revealed senior and first year students having different time perspectives suggests that differences may also exist in their friendship maintenance behaviors.

Senior students reported significantly more social independence than first year students, but there were no differences in perceptions of the importance of popularity and friendship conflict. Senior students reporting more social independence is in line with the expectations of previous research that suggests that individuals facing a social end will become less concerned about peer norms and more focused on establishing emotional closeness with their friends (Strough et al., 2016). Social independence, the confidence to retain individuality despite group pressures (Mayeux, 2003), has been shown to increase in late adolescence (Berndt, 1979; Brown et al., 1989; Costanzo & Shaw, 1966; Gavin & Furman, 1989). This suggests that adolescents collectively become less concerned with the expectations of others as they progress through their high school years. This pattern of decreasing social independence over time seems to be

replicated in college. First year students' lower rating of social independence suggest that they may be engaging in more conforming behaviors in an effort to develop new friendships

(Freeman, Anderman, & Jensen, 2010; Hamilton & DeHart, 2017; Prentice & Miller, 1993).

Alternatively, senior students' confidence in their friendships and a familiar social environment may lead them to engage in less conformity with peers' expectations and have more confidence that their friendships will be maintained.

Importance of popularity did not differ between senior and first year students as expected. There may be several explanations for this finding. Most of the research on the importance of popularity has been conducted with children and adolescents (Brown et al., 1986; Gavin & Furman, 1989; Glatley et al., 2021; LaFontana & Cillessen, 2010). One of the few studies that analyzed young adults' desires to be popular was LaFontana & Cillessen (2010). Their findings suggest that young adults placed significantly less importance on popularity compared to their reports in late adolescence. While it was expected that students experiencing a social beginning would utilize popularity to gain knowledge of their social surroundings, this may not be the case. It was expected that as first year students shift their focus to acquire knowledge, being popular within the peer group would be one way to create a larger social network and meet a wide range of peers (Nangle et al., 2003; Stotsky & Bowker, 2018). However, this pattern was not evident in the present study. Popularity may not be the focus for young adults as they restructure their social status, especially in college settings where there are a variety of other areas they may be focusing their attention (e.g., transition to college, academics, extracurriculars). Therefore, while college students may be aware of popularity in their social environment, it may not be nearly as salient as it is for adolescents.

In addition, reports of friendship conflict did not differ between senior and first year students, suggesting that both first year and senior college students feel emotionally close to their current close friends. However, friendship conflict seemed to be differentially related to emotional closeness. For senior students, it seems as if a lower friendship conflict is tied to the development of emotional closeness, especially for students facing a social ending. This finding is consistent with our predictions related to SST. However, this pattern was not present for first year students. This may mean that first year students' reports of emotional closeness with their friends reflects feelings of closeness associated with the early stages of their friendships, rather than emotional closeness that develops over time. If true, this likely skews the responses of students facing a social beginning as emotional closeness is not being accurately assessed. As first year students in the early stages of their friendships are still exploring their social environment, they may feel that their friendships are emotionally close but have not yet given time for the friendship to develop emotional closeness. In fact, time (as well as social network size) is yet another way I expected students to differ.

However, my expectations about time and number of close friends for senior students were not supported. In contrast to my expectation, senior students tended to report having more close friends than first year students, although this finding was marginal. I expected that senior students would have significantly fewer close friends in an effort to shrink their social network, however our findings paralleled Fredrickson (1995). While it would be expected that senior students close in proximity to a social end would begin to shrink their social network as they work towards fostering emotional closeness, this may not be the case. It is possible that my friendship measure missed the ways that senior students are actively trimming their social networks because I only measured at one point in time. It may be that senior students' social

networks were significantly larger than first year students and have been trimmed significantly making it difficult to identify changes measured at one assessment time. Understanding how the social networks of college students change would benefit from following students longitudinally to better understand how they might grow and shrink their social networks over the college years.

Senior students also reported spending similar amounts of their time with friends compared to first year students. While this does not align with my expectation, it again parallels the findings of Fredrickson (1995). Both our study and Fredrickson (1995) failed to find significant time differences between class years. Senior students may spend less time with friends because they have better time management skills and understand the need for balance between academics and friendship. In addition, it may be that senior students are taking more difficult courses and may have more responsibilities on campus in extracurriculars and/or work, and in the spring semester may be working on applications for graduate school or searching for post graduate career opportunities. These activities leave less time overall to spend with close friends.

Physical proximity in living spaces on campus may also account for the perception of time spent with friends. Many senior students live in apartments at a distance from their close friends. Alternatively, first year housing promotes closer physical proximity to peers. Many first year students live in dormitories on campus with their friends, resulting in more interactions throughout the day. As proximity to peers is one of the main factors in developing friendships (Kandel, 1978), this may explain why first year students report spending more time with their close friends.

In sum, senior students have more limited time perspectives, aligning with ideas proposed by SST. Senior students are more socially independent than first year students. However, senior students' friendship maintenance behaviors may not shift as much as they near a social ending as predicted. Specifically, senior students do not differ from first year students in their desire to be popular, friendship conflict, emotional closeness, social network size, and the amount of time they spend with close friends. While senior students are aware of the approaching social end, it seemingly does not change their friendship maintenance behaviors and social network characteristics.

Relationships between Time Perspective, Friendship Maintenance, and Friendship Outcomes

I expected that time perspective would be correlated with friendship maintenance behaviors. However, the only significant relationship was a positive correlation between limited time perspective and friendship conflict for first year students. This suggests that first year students who have a limited perspective of their time at Denison (i.e., they might be transferring or dropping out), may be engaged in more conflict behaviors with their friends. Overall, students' time perspectives are not related to their friendship maintenance behaviors.

As college students develop and maintain their friendships, it may be the case that the friendship maintenance variables I measured may play a minimal role. Much of the research reviewed found general trends of changing maintenance behaviors towards the end of high school. For instance, late adolescents have reported decreasing their desire to be popular (LaFontana & Cillessen, 2010), placing lessened importance on affiliating with the peer group (Brown et al., 1999), and using conflict to end less important friendships (Bowker, 2011). I predicted that some of these patterns would recur within a college sample and be shaped by the

approaching social end. While all of these trends were expected to be related to the students' time perspective, this was not the case.

While the approaching social end may have been more salient for senior students, as is seen in their increased limited time perspective, it may not have an impact on the measured behaviors. It is possible that senior students are particularly aware of their time left at college but continue to engage in similar patterns of friendship behavior. Future research may analyze more general friendship behaviors of senior students (i.e., value similarity, social self-efficacy, engagement in relational aggression and prosocial behaviors) further to determine whether there are any changes that may be influenced by the approaching social end.

Lastly, there were very few significant differences by class year in the reports of the friendship maintenance behaviors. Had there been more distinct differences in reports of the various friendship maintenance behaviors by class year, it's likely that there would have been more significant correlational relationships. While there may be relationships between these ideas conceptually, they were not detected based on the measures used in the current study's findings. Future research may benefit from reanalyzing these relationships with a larger sample and using a variety of measures to assess behaviors of interest. Although there were very few friendship maintenance behaviors related to students' time perspective, I expected relationships between students' time perspectives and their emotional closeness, number of close friends and time spent with them.

I expected the limited time perspective to be positively correlated with emotional closeness and amount of time spent with close friends and negatively correlated with the number of close friends. The inverse of these relationships was expected for the future opportunities' perspective. Only first year students' future opportunities perspective was significantly and

positively related to their emotional closeness with close friends. This finding suggests that first year students who expect to be at Denison for an extended period of time are fostering emotionally close friendships. While this may be what is occurring, the emotional closeness measure used in the current study may have been assessing the perception of emotional closeness rather than the actual closeness between two friends, thus explaining why the findings failed to align with our expectation. Regardless, these findings overall suggest that students' time perspectives are not related to their emotional closeness with close friends, their number of close friends and time spent with their close friends.

The current study built upon the design of Fredrickson (1995) by including the Future Time Perspectives scale to understand how first year and senior students' perspectives differed. As expected, I found first year students had significantly higher future opportunity perspectives and senior students had significantly higher limited time perspectives. In turn, I expected these differing perspectives to be related to the emotional closeness, number of close friends and time spent with close friends. However, I failed to find support for these relationships. These findings partially parallel the results of Fredrickson's (1995) study. She found no significant difference in first year and senior students' number of close friends or the amount of time they spend with them. Therefore, it is not necessarily surprising that I failed to find a relationship between student's time perspectives and these variables. However, Fredrickson (1995) did find significant differences in students' emotional closeness with close friends. Therefore, it is surprising that I failed to find a relationship between student's time perspectives and their emotional closeness with close friends, although there were differences in the measurements used to assess emotional closeness. This failure to find similar patterns is elaborated upon below.

Hierarchical Regressions for SST-based Model

Our model explains a few things, specifically about the patterns associated with emotional closeness. Emotional closeness is important for developing and maintaining friendships and is proposed to be strongly influenced by one's time perspective (Fung et al., 1999). In the current study, senior students' time perspective was not predictive of their emotional closeness, but friendship conflict was. This indicates that senior students are more emotionally close due to the lack of conflict present in the friendship. As senior students approach the social end of college, it's likely they begin to prioritize emotional closeness with their friends (Fredrickson, 1995). As a result, they likely decrease their incidences of conflict with close friends and friendships characterized by high levels of conflict are ended (Bowker, 2011). Alternatively, first year students' future opportunities perspective resulted in reports of more emotional closeness with their friends. This suggests that first year students who recognize an expansive future with their friends are more likely to perceive their friendships as emotionally close. First year students may be aware of the time remaining with their friends as they are facing a social beginning. In turn, they may inflate feelings of emotional closeness in an effort to feel connected with people they hope to remain close with for the foreseeable future (i.e., remainder of college). Additionally, first year students may be struggling through difficult transitions throughout their first year and turn to their friends for support, ultimately making them more emotionally close. Friendships are crucial for the transition into college (Swenson et al., 2008). It may be the case that first year students with a future opportunities' perspective view their peers as more emotionally close if they support them throughout their transition and feel as if they can rely on them in the future.

Together, these disparate regression patterns for senior students and first year students suggest that emotional closeness with their close friends involves different components. Specifically, senior students' decreases in conflict promote emotional closeness with their friends while first year students' expansive future opportunities supports their emotional closeness. This pattern suggests that senior students' conceptions of emotional closeness differ from first year students. Specifically, senior students with perceptions of limited time likely don't have any desire to be involved in conflicts. Therefore, friendships that are viewed as highly conflictual are seen as less emotionally close. This aligns with SST as students are exhibiting a prioritization of emotional closeness (Fung et al., 1999) and further conflict may lead to friendship dissolution (Bowker, 2011). Although different factors predicted emotional closeness by class year, it was important for determining the amount of time students spent with friends.

Senior and first year student's reports of emotional closeness significantly predicted the amount of time spent with close friends. These patterns suggest that emotional closeness is an important component in how much time students chose to spend with their close friends. Specifically, students who feel more emotionally close to their friends will spend more time with them. This is not particularly surprising. A primary tenet of SST is that individuals facing a social ending are more likely to prioritize spending time with familiar social partners rather than building new friendships (Fung et al., 1999; Löckenhoff & Carstensen, 2004; van der Groot, Bol, & van Weert, 2021). However, I found this pattern to be true for students who reported higher scores on either the limited time or future opportunities perspective. This suggests that time perspectives may not relate to a difference in the amount of time spent with friends but rather the closeness one feels with a friend is a more powerful predictor.

While emotional closeness was an important factor in predicting the amount of time spent with close friends, no significant predictors were found for the number of close friends' students reported. This is consistent with findings from Fredrickson (1995). While the current study implemented different measures than Fredrickson (1995) to assess students' social network size, it is very possible that students don't change their social network sizes as their time perspectives change. This lack of change in social network sizes may also be due to some of the limitations of the current study.

Study Limitations

The current study had a variety of limitations, both in its design and measurement. Most of the measurements were altered to reframe the focus of the questions to the participants' time in college. Although this alteration was important as it assisted participants to focus on their time at Denison, it may have influenced the validity of the measures. Additionally, our measure of limited time perspective was made up of only three questions. Furthermore, the internal consistency reliability of this measure was unexpectedly low ($\alpha = .69$). Many of these findings may have been strengthened or reached significance had the limited time perspective included more items and had a higher reliability.

Another primary limitation surrounded the timing of data collection. Data for the current study was collected in the middle of the spring semester. While senior students may have been aware of the approaching social end of college at this time, the strength of this awareness may have been lessened. Fredrickson (1995), who also analyzed social endings in college students, conducted data collection within the final three weeks of the semester. This likely strengthened the results of her study as the approaching social end was more imminent. Additionally, the current study assessed the number of close friends and time spent with friends using a self-report

survey. While this may be an accurate way of assessing one's social network, Fredrickson (1995) had participants log journal entries after every social interaction. This method likely allows students to report their number of friends and the amount of time spent with them more accurately. Assessing students' number of close friends and amount of time they spend together with self-reports requires them to estimate the answer. On the other hand, using a journal provides students the opportunity to mark all of their social interactions and have an accurate reflection of one's social patterns throughout the day.

The last major limitation of the current study involved the analyses. While the model outlined in Figure 1 would have been best analyzed through a Structural Equation Modeling (SEM) program, it was not in the researchers' capabilities to do so. Therefore, sets of hierarchical regressions were conducted in an effort to understand the various paths of the model. Although using hierarchical regression provided us with the information that was necessary to understand the patterns between the variables, using an SEM program would've allowed for two important improvements. First, an SEM program would allow us to properly structure our model and analyze specific pathways rather than running sets of hierarchical regressions. Second, using an SEM program would've allowed me to test all parts of the full model in one analysis rather than in steps. While there were limitations to the current study, there are quite a variety of possible directions that future research can go with these findings

Future Directions

Very little work has been conducted analyzing patterns of Socioemotional Selectivity Theory (SST) in young adult populations and there are still some unanswered questions. Specifically, it is of importance to understand how senior students shift their attitudes and behaviors as they approach the social end of college. While using a survey to understand these

changes has certain benefits, it may be valuable to apply an experimental approach of SST to college students. For example, Fung and colleagues (1999) were able to manipulate participants' time perspectives with the use of vignettes. By using an approach that primes participants' time perspectives to be either limited or focused on the future, a better understanding of the cognitions and behaviors associated with a social ending can be gathered. For instance, using the method implemented by Fung et al., (1999) researchers could use all college class years and be able to influence senior students into having a future opportunities perspective and first year students into having a limited time perspective. Due to the fact that the presence of a social ending would be manipulated, data collection could occur at any point throughout the semester and the strength of the manipulation would likely be the same across participant conditions. By using Fung et al.'s (1999) method, the timing of data collection (e.g., last week of the semester compared to the middle of the semester) would not be nearly as salient and could, ideally, isolate the effects of a social ending. Further research should attempt to understand these patterns as understanding students' time perspectives may help college administrators better implement programs for both the transition in and out of college. While the method to assess the students' time perspectives is key, understanding what behaviors may be influenced by these time perspectives is also important.

While the current study set out to understand how students' time perspectives were related to their friendship maintenance behaviors, there were very few significant relationships. Previous research was vital in informing the current examination of friendship maintenance behaviors. As was outlined above, students approaching the end of high school begin to reduce their desire to be popular, become more socially independent, and engage in less conflict (Brown et al., 1989; Gavin & Furman, 1986; LaFontana and Cillessen, 2010; Rose, 1984). Therefore, I

expected similar patterns to occur as students approached the end of college. However, our findings did not support this conclusion. While the above-mentioned friendship variables were not influenced by the approaching social end, there may be other friendship behaviors that undergo a shift. For instance, social self-efficacy may play a role in the way students interact with their close friends and may be influenced by an approaching social end. Connolly (1989) suggests that students with more social self-efficacy are better at socially adjusting to new situations, a skill that is important when transitioning to college. It can be expected that one's social self-efficacy is also related to the way they navigate social endings, especially when they are determining who to spend their limited time with. Another factor to consider is an individual's satisfaction with the college. Students who are more satisfied with their college life may be more willing to interact with those around them compared to students who are dissatisfied. In fact, DeWitz and Walsh (2002) discovered that students who reported more college satisfaction were more self-efficacious and had better relationships with both faculty and students. Therefore, it can be expected that both social self-efficacy and college satisfaction may play a role in the development and maintenance of friendships and may differ as an individual approaches a social end. These patterns should be examined further as understanding a student's time perspective and the behaviors that relate to it can be vital in helping college administrators support their students through the various transitions that occur throughout and at the end of college. Along with understanding how these patterns change, it would be wise to provide updates to the model presented in the current study (Figure 1).

First, there would be benefits to placing emotional closeness alongside the outcome variables. Fredrickson (1995) analyzed three types of social selectivity in her foundational study: partner selectivity, time selectivity, and emotional selectivity. While partner and time selectivity

were analyzed as outcome variables, emotional selectivity was expected to play a different role in the model. And it did. Senior and first year students' emotional closeness was explained differently. Additionally, emotional closeness was important in predicting the amount of time students spent with their close friends. However, as the current study parallels many of her ideas it would be wise to use a model that is more similar to her conceptual framework. Second, it would be wise to use a variety of different friendship maintenance variables in further iterations of the proposed model. There is a plethora of literature on the changing friendship characteristics in late adolescents and the beginning of college (Bowker, 2011; Brown et al., 1990; Gavin & Furman, 1989; LaFontana & Cillessen, 2010; Nangle et al., 2003). However, there is a paucity of research connecting these changes to temporal changes. While some social behaviors may be best explained as a result of biological or social reasons, there are likely certain friendship maintenance behaviors that shift as a result of an approaching social end. Therefore, future iterations of the current model should account for students' friendship maintenance behaviors when analyzing the relationship between their time perspective and friendship outcomes. While many of the patterns suggested in the current study's model failed to reach significance, there are quite a few adjustments that can be made to better understand students' friendships and their relation to an approaching social ending.

Conclusion

In sum, students' differences in time perspective by class year suggested support for the Socioemotional Selectivity Theory (SST). There were minimal findings in the relationships between students' time perspectives and their friendship maintenance behaviors. Further, students' time perspectives did not relate to their emotional closeness with friends or the number of close friends and time they spent with them. Although the exploratory analyses of my

proposed model were not significant, I did find patterns of conflict and the future opportunities perspective predicting senior and first year students' emotional closeness, respectively. When these significant variables were used to predict students' number of close friends and the time spent with them, only students' emotional closeness accounted for the amount of time they spent with their close friends. Altogether, these findings suggest support for patterns of SST occurring in young adults although the friendship maintenance behaviors may not play as large a role in these processes as first thought. Despite this, these findings suggest that senior students approaching a social end have vastly different perspectives from first year students experiencing a social beginning and future research on the implications of these differences is warranted.

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Table 1*Sociodemographic Characteristics of Participants*

	First-Year Students		Senior Students		Full Sample	
	n	%	n	%	n	%
Gender						
Female	31	69	29	66	60	67
Male	14	31	14	32	28	32
Non-Binary	0	0	1	2	1	1
Race/Ethnicity						
White	31	70	27	61	58	66
Black	1	2	4	9	5	6
Asian	6	14	3	7	9	10
Hispanic	3	7	4	9	7	8
Multiracial	3	7	6	13	9	10
Age						
18	26	58	0	0	26	30
19	15	33	0	0	15	17
20	4	9	1	2	5	6
21	0	0	14	32	14	16
22	0	0	27	61	27	30
23	0	0	2	5	2	2

Table 2*Scale Means & Differences by Class Year*

	First Year Students		Senior Students		<i>t</i> (87)	<i>p</i>	Cohen's <i>d</i>
	M	SD	M	SD			
Time Perspectives							
Limited Time	3.24	1.04	5.73	0.95	-11.85	<.001	-2.51
Future Opportunities	5.63	1.04	3.22	1.12	10.51	<.001	2.23
Friendship Maintenance							
Importance of Popularity	3.09	0.95	2.84	0.93	1.27	.21	0.27
Social Independence	5.24	1.17	5.69	0.79	-2.15 ^a	.04	-0.45
Friendship Conflict	1.84	0.40	1.92	0.36	-1.07	.29	-0.23
Friendship Outcomes							
Emotional Closeness	5.72	1.11	5.93	0.78	-1.09 ^b	.28	-0.23
Number of Friends	5.56	3.58	7.20	4.43	-1.90	.06	-0.41
Time Spent with Friends	67.11	20.84	59.05	23.01	1.72	.09	0.37

Note. ^aLevene's Test for Equality violated ($p = .013$), $df = 77.123$; ^bLevene's Test for Equality violated ($p = .047$), $df = 79.058$

Table 3

Correlations of Between Time Perspective and Friendship Measures for First Year Students

Variable	FO	IP	SI	FC	EC	#	TIME
Limited Time (LT)	-.34*	.22	-.18	.36*	.07	.07	.09
Future Opportunities (FO)		-.16	.23	-.15	.36*	.004	.16
Importance of Popularity (IP)			-.12	.10	.07	.25	-.02
Social Independence (SI)				-.20	.11	-.20	.06
Friendship Conflict (FC)					-.17	.03	.21
Emotional Closeness (EC)						.09	.43**
Number of Friends (#)							.07
Time Spent with Friends (TIME)							

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

Table 4

Correlations Between Time Perspective and Friendship Measures for Senior Students

Variable	FO	IP	SI	FC	EC	#	TIME
Limited Time (LT)	-.37*	.002	-.15	.23	.14	.13	.17
Future Opportunities (FO)		.04	.12	.03	.11	.05	.04
Importance of Popularity (IP)			-.46**	-.08	.11	.38*	.11
Social Independence (SI)				.19	.07	-.04	-.11
Friendship Conflict (FC)					-.40**	.000	.08
Emotional Closeness (EC)						.15	.40**
Number of Friends (#)							.17
Time Spent with Friends (TIME)							

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

Table 5

Hierarchical Regression Results predicting Senior Student's Number of Close Friends

Variable	β	t	ΔR^2	R^2	F
Step 1			-.02	.000	0.000
Friendship Conflict	.000	-.003			
Step 2			-.02	.03	0.55
Friendship Conflict	.07	.42			
Emotional Closeness	.18	1.05			

Note. $N = 44$; * $p < .05$, ** $p < .01$

Table 6

Hierarchical Regression Results predicting Senior Student's Time Spent with Close Friends

Variable	β	t	ΔR^2	R^2	F
Step 1			-.02	.007	0.29
Friendship Conflict	-.08	-.54			
Step 2			.13	.17	4.20
Friendship Conflict	.10	.61			
Emotional Closeness	.44	2.84**			

Note. $N = 44$; * $p < .05$, ** $p < .01$

Table 7

Hierarchical Regression Results predicting First Year Student's Number of Close Friends

Variable	β	t	ΔR^2	R^2	F
Step 1			-.02	.000	0.001
Future Opportunities	.004	.03			
Step 2			-.04	.01	0.18
Future Opportunities	-.02	-.14			
Emotional Closeness	.10	.59			

Note. N = 43; * $p < .05$, ** $p < .01$

Table 8

Hierarchical Regression Results predicting First Year Student's Time Spent with Close Friends

Variable	β	t	ΔR^2	R^2	F
Step 1			.001	.02	1.05
Friendship Conflict	.16	1.02			
Step 2			.15	.19	4.78
Friendship Conflict	.04	.24			
Emotional Closeness	.42	2.89**			

Note. N = 44; * $p < .05$, ** $p < .01$