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Self-Assessed Health in the Context of Daily Life

Allyson S. Graf

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Self-Assessed Health in the Context of Daily Life

Allyson S. Graf, M.A., M.S.

**Dissertation submitted
to the Eberly College of Arts and Sciences
at West Virginia University**

in partial fulfillment of the requirements for the degree of

**Doctor of Philosophy in
Psychology**

**Julie Hicks Patrick, Ph.D., Chair
Amy Gentzler, Ph.D.
JoNell Strough, Ph.D.
Barry Edelstein, Ph.D.
Laurie Theeke, Ph.D.**

Department of Psychology

**Morgantown, West Virginia
2015**

KEYWORDS: self-assessed health, uplifts, hassles, positive affect, change, adults

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Abstract

Self-Assessed Health in the Context of Daily Life

Allyson S. Graf

Little research has examined short-term change in self-assessed health (SAH), limiting what is known about the influence of daily life on these personal health evaluations. Investigating short-term change in SAH can add to our understanding of the ways in which SAH relates to future health outcomes. Therefore, the current study sought to examine change and stability in SAH across the day and across the week in an age-diverse community sample ($n = 57$, ranging in age from 25 - 71 years, 52.6% female). Age, gender, and neuroticism were hypothesized to systematically influence short-term fluctuation in SAH. Daily hassles and uplifts represented contextual influences on SAH and were investigated using an experience sampling approach. Participants responded to short surveys four times per day for 14 days ($M = 46.82$ time points completed, $SD = 6.66$, range = 34 - 56). SAH did modestly fluctuate throughout the day for the majority of participants (73.7%; M daily fluctuation = 0.24 standard units). Neuroticism, but not age or gender, was negatively related to mean levels of SAH ($r(n = 57) = -.34, p = .009$), but not stability ($r(n = 57) = -.045, p = .74$). In regard to context, the results suggested that the relations among daily events and SAH are complex. Patterns of relations among hassles, uplifts, and SAH were inconsistent across the day and across participants. There was, however, more compelling evidence to support the influence of uplifting events on SAH compared to events perceived as hassles. Affect (positive and negative) may contribute to the relation by influencing the interpretative context in which uplifts are evaluated and translated into SAH. Future research should determine whether stability and minor daily fluctuations in SAH have repercussions for other health outcomes. Factors that may alter the association between SAH and uplifts, such as preoccupation with earlier events, should also be examined.

Dedication

I dedicate this dissertation to my past, present, and future.

To my parents, John and Patricia Graf, for their unwavering support and encouragement. Although they may claim I never needed a “push,” I also never needed to be “pulled” because of the values they imparted and the curiosity they cultivated.

To my husband, Gerard Nielsen, for his wit, generosity, and love. With him beside me, I know I can overcome any challenge and be better than I ever imagined I could be.

To my nephews, Hunter and Peter Vega; godchildren, Charlie and Alice LaVenía Russell; and the many students I hope to positively influence across my lifetime as an educator and mentor.

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Self-Assessed Health in the Context of Daily Life

Self-assessed health (SAH), a personal assessment of how healthy or unhealthy individuals perceive themselves to be, is one of the most widely-used measures to gauge health status (Jyhlä, Guralnik, Ferrucci, Jokela, & Heikkinen, 1998). As a single-item measure, individuals are asked to rate their health on a 5-point scale ranging from “poor” to “excellent” (Bowling, 2005; Idler & Benyamini, 1997). Although longer survey and objective measures are available, the single SAH item is quick, easy to administer, and accounts for variance in health outcomes, including morbidity, healthcare utilization, and even mortality, above and beyond that accounted for by other known predictors (DeSalvo, Fan, McDonell, & Fihn, 2005; Mossey & Shapiro, 1982). Therefore, even though SAH is a subjective measure, it may offer valuable insight into health that other conventional medical assessments miss (Schüz, Wurm, Schöllgen, & Tesch-Römer, 2011).

Evidence shows that the predictive utility of SAH is not uniform across individuals, varying greatly as a function of individual characteristics, such as age, gender, race, and socioeconomic status (SES; Benyamini, Blumstein, Murad, & Lerner-Geva, 2011). There is recent evidence, however, to suggest SAH is becoming more useful among younger cohorts. Data from the General Social Survey, an ongoing national social and political opinion study, show that improvements in prediction may stem from younger cohorts having greater access to medical information and a more holistic approach to health than previous cohorts (Schnittker & Bacak, 2014).

Most research suggests that SAH is generally reflective of physical health states and conditions (Benyamini, 2008; Layes, Asada, & Kephart, 2012), but discrepancies between the two become increasingly apparent in older adulthood when physical health declines (Cheng, Fung, & Chan, 2007; Chipperfield, 1993; Henchoz, Cavalli, & Girardin, 2008; Löckenhoff &

Carstensen, 2004; Sargent-Cox, Anstey, & Luszcz, 2012; Sneed & Whitbourne, 2005; Whitbourne & Sneed, 2002). Therefore, identifying which additional factors contribute to SAH is important to understanding discrepancies between actual and perceived health. Additionally, for some population subgroups (e.g., women, Hispanics, those of low SES), incongruence between SAH and objective health occurs earlier in the life span, which can undermine efforts to promote health and health behavior change early in adulthood (Griffith, Lovett, Pyle, & Miller, 2011; Salomon, Nordhagen, Oza, & Murray, 2009). Several individual differences alter how and whether certain influences relate to SAH, including person characteristics such as age, gender, personality, cognitive processing biases, affective states, and self-regulatory processes.

Because SAH is believed to be influenced by core traits, such as neuroticism, and cognitive-affective tendencies of individuals, such as attention and recall of negative or positive information, some have tried to tease apart how much SAH is a stable, health-related identity versus a momentary judgment reflecting current circumstances and conditions (Bailis, Segall, & Chipperfield, 2003; Boardman, 2006). Proponents who view SAH and health-related self-concepts as conceptually equivalent often cite as evidence the stability in SAH ratings across time despite changes in influential health factors. The limited response range of the 5-point scale has the potential to cause floor and ceiling effects, however, which would not allow for the adequate appraisal of change across time (Choi, 2002). An additional problem noted with this item is insensitivity to small changes within categories, which results in the appearance of stability despite possible health change (Gunasekara, Carter, & Blakely, 2012). As a solution, some researchers have adopted visual analog scales of SAH (Bowling, 2005; de Boer et al., 2004). Visual analog scales have been demonstrated to be a valid substitute for Likert-type items, displaying convergent validity with multi-item health perception measures, discriminant validity

with quality of life measures, and responsiveness to change in post-operative patients. Therefore, studies trying to differentiate stability versus change in SAH evaluations have been somewhat limited conceptually and methodologically. To truly examine whether SAH is a stable or flexible construct, it is necessary to include measures that are capable of capturing that change.

Longitudinal studies of SAH often span large expanses of time with months or years separating assessment periods (Choi, 2002; Choi, 2003; Idler & Benyamini, 1997; Sargent-Cox et al., 2012). Little is known about how SAH may fluctuate in response to daily events and interactions. Evidence of this sort might lend credibility to the conceptualization of SAH as a spontaneous assessment, but understanding the mechanisms linking daily events and change in SAH might also expose self-regulatory processes that limit the extent to which SAH fluctuates. There are studies that support short-term fluctuations in relation to daily events and activities among other previously assumed stable self-evaluations, such as self-esteem (Butler, Hokanson, & Flynn, 1994; Nezlek, 2005; Nezlek et al., 2008) and domain-specific competencies (Amorose, 2001). Furthermore, these fluctuations have been linked to important outcomes, such as motivation to engage in related activities among adolescents (Amorose, 2001) and depression in young adult samples (Nezlek & Plesko, 2003). Therefore, SAH may not only fluctuate in response to daily events, but that fluctuation may also be linked to health and well-being outcomes. In one study examining weekly change in SAH among older adults in the United States, those who were more variable had higher likelihoods of mortality five years later (Ghisletta, Nesselroade, Featherman, & Rowe, 2002).

The current study aimed to better understand SAH in the context of daily life. This included identifying person characteristics (i.e., age, gender, neuroticism) and aspects of daily life (i.e., hassles and uplifts) that might relate to SAH fluctuation or stability. There is both

theoretical and empirical evidence to suggest that certain person characteristics may not only directly influence SAH, but also exposure to and perception of positive and negative daily events. Two different pathways, affective states and acute symptoms, have received the most attention in relating daily events to other health and well-being outcomes (Affleck, Tennen, Urrows, & Higgins, 1994; Nezlek & Plesko, 2003; Piazza, Charles, Sliwinski, Mogle, & Almeida, 2013; Stone, Neale, & Shiffman, 1993). Affective states and symptom reports are also commonly found to relate to SAH in cross-sectional studies (Benyamini, Idler, Leventhal, & Leventhal, 2000a; Henchoz et al., 2008; Idler & Benyamini, 1997; Mora, DiBonaventura, Idler, Leventhal, & Leventhal, 2008; Pinquart, 2001). Finally, there is evidence to support a temporal, and possibly, interactive relation between daily affect, daily symptom reports, and SAH (Whitehead & Bergeman, 2013b; Winter, Lawton, Langston, Ruckdeschel, & Sando, 2007). If SAH is related to negative and positive daily events, this may have important implications for understanding how these events indirectly relate to motivation to improve one's health and actual health outcomes.

Introduction

Part I: SAH and SAH Change

Central indicators of SAH. SAH is conceptualized as a multi-dimensional construct composed of central health-related criteria and other peripheral factors that alter how health and non-health related criteria actually influence evaluations (Benyamini, 2008; Schüz et al., 2011). In quantitative (e.g., Cheng et al., 2007; Choi, 2003; Pinquart, 2001) and qualitative studies (e.g., Krause & Jay, 1994; Simon, De Boer, Joung, Bosma, & Mackenbach, 2005) alike, the “core” components of SAH most often include physical health (e.g., acute symptoms, chronic illness, bodily awareness, treatment), functional health, health risks and behaviors, and emotional well-

being. When asked to spontaneously report the most important influences on self-ratings of health, most people list multiple dimensions, but the majority (70-80%) mentions physical aspects, such as chronic illness, physical and bodily symptoms, medical treatments, or prognoses. Even cross-culturally, this “core” remains evident (French et al., 2012a; Jyhlä et al., 1998).

Simon and colleagues (2005) found that adults in the Netherlands over the age of 60 were twice as likely as those younger than 40 to mention the physical dimensions of health. A decade earlier, in an American sample, Krause and Jay (1994) only found age differences in the reporting of physical health considerations between those younger and older than 25. There was no difference between their 25 to 59 year old age group and their 60+ age group in the use of physical health information when evaluating health. Gender differences in the use of physical health as a criterion for SAH were not found in either study. The age-related differences between these findings may reflect cohort or culture differences in how health is conceptualized in relation to age. Furthermore, although Simon et al. (2005) excluded middle-aged adults from their sample as a way of maximizing the contrast between age groups, Krause and Jay (1994) collapsed young adults and middle-aged adults together, which may have obscured age differences.

Arguing that individuals are not always aware of the criteria on which they base these SAH evaluations, Benyamini, Leventhal, and Leventhal (2003) provided participants in the Rutgers Aging and Health Study (mean age = 77.53 years, $SD = 7.11$) with a list of 42 well-being indicators and asked them to rate each item in terms of how much it affected their assessments of their health. On average, participants indicated approximately 16 factors ($SD = 9.7$) as being important (a 4 or 5 on a 5-point scale ranging from *not at all important* to *very*

important) when evaluating their health. Again, the most highly-rated indicators were health-related: functional ability, energy, diagnoses, and physical activity.

Additional factors influencing SAH. Although the majority of adults indicate that physical health plays an important part in their SAH, evidence suggests that the weight of health indicators varies as a function of individual and social circumstances (Hooker & Kaus, 1994; Kaplan & Baron-Epel, 2003; Simon et al., 2005). Furthermore, from a life-span perspective, the ways in which an individual defines gains and losses across the life span functions in relation to age, culture, and historical time (Baltes, 1987; Baltes, Lindenberger, & Staudinger, 2006).

Therefore, the way health is defined and how health changes are interpreted are influenced by both time-invariant and time-variant factors. For instance, younger and healthier individuals often take more holistic approaches to their health and incorporate factors such as engagement and continued participation in age-appropriate social roles and relationships (Choi, 2003; Mora et al., 2008; Shooshtari, Menec, & Tate, 2007). As adults, women report more physical and mental health symptoms, but sometimes also report better SAH than men (Henchoz et al., 2008; Idler & Benyamini, 1997). Racial minorities have been shown to be more likely to focus on negative aspects of health, such as health problems (Krause & Jay, 1994; McMullen & Luborsky, 2006). Older adults rate positive factors (energy, happiness, etc.) as more salient to SAH than negative factors (e.g., fatigue and sadness; Benyamini et al., 2003). A variety of influences (see Layes et al., 2012 for a review) have been investigated to explain these tendencies including differences in focus and expectations (e.g., Benyamini, 2008; Moor, Zimprich, Schmitt, & Kliegel, 2006; Williams, Wasserman, & Lotto, 2003), socialization (Clarke & Bennett, 2013; McMullen & Luborsky, 2006), and adaptive strategies (Choi, 2003; Kaplan & Baron-Epel, 2003; Kotter-Grühn & Hess, 2012; Whitehead & Bergeman, 2013a).

Trajectories of SAH change across adulthood. The SAH literature is replete with longitudinal data spanning several months or years, primarily due to the minimal burden and cost required to include this single-item measure in large, ongoing panel studies. Only one study to date, conducted in the United States, has published findings on SAH trajectories spanning the entirety of adulthood (McCullough & Laurenceau, 2004). From this study and other shorter longitudinal studies, developmental patterns can be discerned. Barring any major life events, SAH remains relatively stable from adolescence throughout young adulthood in both level (*very good* to *excellent*) and the criteria used to make SAH judgments (Boardman, 2006; Park, 2006; Shooshtari et al., 2007). For example, during periods of generally good health, priority is given to different types of criteria, such as engagement in health-maintenance behaviors and age-appropriate life tasks (Choi, 2003; Piko, 2007).

Sometime after age 50, middle-aged adults generally begin to report gradual, linear declines in SAH, continuing into late life (Chen, Cohen, & Kasen, 2007; Fylkesnes & Førde, 1991; McCullough & Laurenceau, 2004; Shooshtari et al., 2007). For example, Chen and colleagues applied spline models to compare annual rates of change in SAH during certain age periods (younger than age 40 years, age 40 to 50 years, and age 50+ years) among a sample of American adults. The most rapid period of change in SAH occurred after age 50 (-1.09 percentage points per year). This age period consistently reflected the greatest declines in comparison to other age periods, even across cohorts (pre-boomers at -0.96 percentage points and boomer cohorts -1.38 percentage points).

Declines in SAH may be prompted by common health and social role changes (e.g., retirement, shifts in caregiving responsibilities, etc.) in middle age, although there is evidence to suggest that health changes alone are not enough to alter SAH (Choi, 2003). In a study assessing

perceptions of health change in middle-aged adults (51 to 61 years old) in the Health and Retirement Study, individuals who experienced changes in their physical health (i.e., new chronic condition diagnoses or major medical events) across the two-year period did not necessarily perceive their health to be any worse than it was at baseline. When physical health declines coincided with decreased functional ability, however, then health was perceived as declining.

Although declines in SAH are common into late adulthood, they do not parallel the rates of change in physical and functional health (Cheng et al., 2007; Henchoz et al., 2008; Sargent-Cox et al., 2012; Whitbourne & Sneed, 2002). Furthermore, in comparison to younger adults, older adults commonly report lower levels of SAH (French, Sargent-Cox, & Luszcz, 2012b; Liang et al., 2010; Shooshtari et al., 2007), but the differences are smaller than age-related differences in objective measures of health (Staudinger, Fleeson, & Baltes, 1999). Older adults may specify the importance of physical and functional health when asked (Krause & Jay, 1994; Simon et al., 2005), but something about the SAH processes seems to be different.

Predicting change in SAH. Longitudinal data spanning months and years have shown SAH does fluctuate in response to changes in physical health indicators; with age, the relation between SAH and change in physical health appears becomes attenuated (Bailis et al., 2003; Benyamini et al., 2011; Boardman, 2006; Wolff et al., 2012). Beginning in middle adulthood, health problems start to become somewhat inconsistently related to SAH ratings (Krause & Jay, 1994; Whitehead & Bergeman, 2013a). In light of physical and functional health changes associated with late life, one would anticipate that SAH should change the most during this age period. Among studies involving older adult samples, some indicate stability across time (Idler, 1993), others suggest linear decline (Chen et al., 2007; Fylkesnes & Førde, 1991; McCullough &

Laurenceau, 2004; Shooshtari et al., 2007), and still others suggest non-linear patterns wherein SAH rebounds in late older adulthood following a period of decline (Liang et al., 2005).

Recently, multi-wave data and trajectory modeling have allowed for the identification of distinct patterns of SAH change rather than mapping single average trajectories (Ayyagari et al., 2012).

This approach accounts for the greater heterogeneity found within the aging population and is a more appropriate tool for investigating an idiosyncratic process like SAH (Morack, Infurna, Ram, & Gerstorf, 2013).

Several explanatory mechanisms and modifiers have been explored to better understand what predicts SAH change. Often, noted changes in behavior or performance level are attributed to age rather than health (Diehl & Wahl, 2010; Fylkesnes & Førde, 1991; Miche et al., 2013).

When older adults report fewer daily symptoms in comparison to younger adults (e.g., Whitehead & Bergeman, 2013b; Winter et al., 2007; Wolff et al., 2012), researchers have speculated that older adults may be managing symptoms better or the saliency of symptoms may differ between the age groups. While this can have problematic consequences for other health outcomes, it provides a somewhat protective function for SAH. This has been posited (Lazarus, 1986) and examined (Kotter-Grühn & Hess, 2012; Moor et al., 2006) as a reason why older adults' SAH seems unaffected by rapidly changing physical and functional health. It is what they have come to expect with age.

In a repeated-measures study of adults ranging in age from 20 to 88 years, certain aspects of older adults' role-specific self-representations fluctuated more than younger and middle-aged adults' views (Diehl, Jacobs, & Hastings, 2006). Regardless of age, however, the domains of self-representation that were most central or salient to individuals displayed less fluctuation than the more peripheral domains did. Therefore, age may contribute to the slower decline in older

adults' SAH as there is evidence that health-related self-representations become more salient across adulthood (Cross & Markus, 1991; Hooker, 1992; Hooker & Kraus, 1994; Markus & Nurius, 1986).

Connections between personality, affect, and health perception are complex and likely show direct and indirect links (Löckenhoff, Terracciano, Ferrucci, & Costa, 2012; Turiano et al., 2012; Watson & Pennebaker, 1989). The sustained negative emotionality that is the hallmark of neuroticism has been documented to have direct effects on physical health including increased acute symptoms and decreased physical health status (e.g., Löckenhoff, Sutin, Ferrucci, & Costa, 2008), which then may transpire into poorer SAH. Studies of SAH in young adults often control for neuroticism (trait negative affectivity) specifically because of its systematic, negative relationship with SAH (Andersen & Lobel, 1995). In this way, neuroticism is perceived as altering the interpretative context of SAH with greater focus being placed on negative aspects of health.

Transient negative mood has been found to partially explain the effects of neuroticism on subjective health assessments (Williams & Wiebe, 2000). While the direct effects of state affect or mood on SAH are less clear, affect is also believed to alter the context in which other health-related criteria are evaluated (Mora et al., 2008; Whitehead & Bergeman, 2013a). Developmental shifts in affect integration and regulation (Labouvie-Vief, 2003, 2005; Carstensen, Isaacowitz, & Charles, 1999; Charles, 2011) may explain changes in SAH later in life. For example, older adults' preference for positive health-related information over negative health-related information (e.g., Benyamini et al., 2003) lends support to the increasingly important role of affect in the SAH process across adulthood.

Part II: Theoretical Frameworks

The proposed study is guided by the broader theoretical propositions of a life-span perspective (Baltes, 1987). From a life-span perspective, development is recognized as multiply-influenced and dynamic, characterized by gains and losses throughout the life span. When applied to the study of SAH, biological, psychological, and social influences can be integrated to comprehensively describe this process. Furthermore, age-group differences in SAH can be explained in terms of adaptation to age-related shifts in the allocation of different resources. For instance, even in the face of health declines, older adults often report “good” to “very good” SAH, a phenomenon referred to as the “paradox of well-being” (Cheng et al., 2007; Chipperfield, 1993; Henchoz et al., 2008; Löckenhoff & Carstensen, 2004; Sargent-Cox et al., 2012; Sneed & Whitbourne, 2005; Whitbourne & Sneed, 2002).

From a life-span perspective, older adults may be maintaining perceptions of their well-being by reflecting on material, social, and psychological resources (Baltes et al., 2006). This is consistent with the theoretical model of Strength and Vulnerability Integration (SAVI; Charles & Piazza, 2009; Charles, 2011), which posits that age-related improvements in the ability to attend to and appraise positive emotion-eliciting stimuli and experiences generally leads to favorable outcomes. Under circumstances when these strategies are inadequate, however, age-related vulnerabilities may exacerbate the effects of negative stimuli and events. Hence, older adults may opt to focus more on the positive aspects of their health and well-being as a way of avoiding the distress created by thinking of the many health-related losses common of older age.

Another proposition of the life-span perspective emphasizes the embeddedness of the contexts in which development occurs (Baltes, 1987). Specifically, bidirectional effects across contextual levels from the most central to the individual (proximal) to the most distant (distal) alter the interpretative context in which the individual functions (Staudinger et al., 1999). In the

SAH literature, a distinction between proximal and distal influences is generally not made, in part because the study of SAH is spread across multiple disciplines with different empirical goals.

Distal factors are those which are less specific to any one individual and remain relatively stable across periods of the life span (Jessor & Jessor, 1973; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982). These types of influences are commonly the focus within sociological and epidemiological literatures and include variables such as SES, culture/ethnicity, education, and gender-role socialization (e.g., Clarke & Bennett, 2013; Jyhlä et al., 1998; Krause & Jay, 1994; Shooshtari et al., 2007; Westerhof, Whitbourne, & Freeman, 2012). Group differences in level of SAH are often found in relation to distal influences.

Proximal influences are more central, and therefore, more specific to the individual (Jessor & Jessor, 1973). Proximal influences on SAH are more regularly investigated in the psychological literature and include considerations such as interpersonal interaction, personality, and age-related adaptive and regulatory mechanisms (e.g., Andersen & Lobel, 1995; Benyamini et al., 2000a; Schüz et al., 2011; Whitehead & Bergeman, 2013a; Williams & Wiebe, 2000). These variables and the relative influence they have on an individual's perceptive processes may be idiosyncratic, dependent on situation and timing. For the study of SAH to advance, SAH needs to be recognized as a highly individualized construct that differs based on the particular combination of distal and proximal contexts in which it is evaluated.

SAH as an identity process. Ultimately SAH is a reflection of how one conceptualizes their personal health, though debate remains regarding the extent to which this reflection is a stable, continuous representation or a momentary assessment (Bailis et al., 2003; Boardman, 2006). Regardless, a dialectical tension exists between the desire to maintain consistency in

one's self-representations and developmental and institutional challenges to this (Labouvie-Vief, Chiodo, Goguen, Diehl, & Orwoll, 1995). According to dynamic integration theory (DIT; Labouvie-Vief, 2003; 2005), the ability to integrate both positive and negative information into self-representations improves across young adulthood and into middle adulthood with advances in cognitive abilities. This results in more dynamic and complex self-representations. When applied to health perception, this aligns with the finding that younger adults tend to hold more global perspectives of their health (e.g., Shooshtari et al., 2007).

The developmental mechanisms of assimilation and accommodation have been used to describe how identity processes affect self-perceptions of aging and health (Charles & Pasupathi, 2003; Kotter-Grühn & Hess, 2012; Westerhof et al., 2012; Whitbourne & Sneed, 2002). These mechanisms represent different methods of adapting new information alongside existing self-schemas. But dynamic integration theory posits that the ability to differentiate and integrate becomes increasingly difficult with normal, age-related cognitive decline (Labouvie-Vief, 2003; 2005). With age, people rely more heavily on optimization processes, regulating affect in order to maintain positive self-perceptions (Labouvie-Vief, Diehl, Jain, & Zhang, 2007). Self-protective mechanisms, which do occur across the life span, become increasingly common as a means of maintaining consistent and positive self-views despite age-related loss (Whitbourne & Sneed, 2002). From these theoretical perspectives, age-related development and change in cognitive-affective processes are important to understanding SAH across adulthood.

Part III: Daily Events and Health

The study of health in relation to life events has a long history, but originally the focus was only on the negative influence of major life events and changes (Holmes & Rahe, 1967). Major life events, however, often failed to predict long-term health outcomes and did very little

in explaining individual differences in health (Rabkin & Streuning, 1976). Researchers (DeLongis et al., 1982; Flannery, 1986; Jandorf, Deblinger, Neale, & Stone, 1986; Kanner, Coyne, Schaefer, & Lazarus, 1981) soon recognized that more routine, everyday events and activities might account for variance in health outcomes unique from major life events. Today, the relation between everyday events and some aspects of health, including acute symptom reports and chronic conditions, is well established (e.g., Affleck et al., 1994; DeLongis, Folkman, & Lazarus, 1988; Mellers, Almeida, & Neupert, 2005; Piazza et al., 2013; Ryan, Bernstein, & Brown, 2010; Sheffield, McVey, & Carroll, 1996).

Categorizing daily event: Valence. Hassles are defined as everyday demands and upheavals, leading to agitation, frustration, and annoyance (Flannery, 1986). These resulting changes in affect are temporary in nature. In a recent experience sampling study detailing the activation and deactivation of negative affect in response to hassles (Wrzus, Luong, Wagner, & Riediger, 2014), activation was found to be highest within the first five minutes of experiencing a hassle, with deactivation occurring within 30 to 60 minutes of the event. Preoccupation with the hassle intensified this pattern among middle-aged and older adults (40-88 years); when preoccupation with an earlier hassle was high, deactivation occurred more rapidly in response to new hassles.

Hassles may be predictable (e.g., needing to mow the lawn), “hidden” (i.e., habits), or unpredictable (e.g., a quarrel with your partner; Erlandsson, Björkelund, Lissner, & Håkansson, 2010; Piazza et al., 2013). Estimates vary widely in how frequently hassles occur. Some estimates have been as high as 16 hassles per day across 20 days sampled during a six-month period (e.g., DeLongis et al., 1988). Others report hassles do not occur daily. In the daily diary

sub-study of the Midlife in the United States (MIDUS) Study spanning eight days, at least one hassle was experienced on only 40% of days (Almeida & Horn, 2004; Maller et al., 2005).

Uplifts, the positive events of daily life (DeLongis et al., 1982; Mayberry & Graham, 2001), occur with greater frequency than hassles, with some studies indicating five to six times as many (Jose, Lim, & Bryant, 2012; Zautra, Affleck, Tennen, Reich, & Davis, 2005). Despite this difference in reported frequency, much less research attention has been given to uplifts in general, but especially in relation to health. Hassles are viewed as daily stressors and stress has well-established links to biological and psychological health (see Piazza et al., 2013); therefore, hassles have received much more attention than uplifts in connection to health outcomes.

Categorizing daily events: Domains. Hassles and uplifts occur in reference to a variety of domains, including: work/school; family, including marital and parental obligations; social; environmental; practical considerations; finances; and health (DeLongis et al., 1988; Holm & Holroyd, 1992; Mayberry & Graham, 2001; Stone & Neale, 1980; Zautra, Guarnaccia, & Dohrenwend, 1986). Recent studies (e.g., Maller et al., 2005; McIntyre, Korn, & Matsuo, 2008) have found that both reported frequency and perceived severity of certain domains vary across groups of individuals. For instance, hassles and uplifts within the interpersonal domain commonly make up a large proportion of daily reports regardless of the age range of the sample. Research has indicated, however, that the interpersonal domain may be particularly salient for certain demographic groups, such as women and older adults (Almeida & Horn, 2004; Maller et al., 2005; Mayberry & Graham, 2001; McIntyre et al., 2008).

Interpersonal daily events may be more salient for women because they are socialized to more strongly value their relationships with others (Davis, Matthews, & Twamley, 1999). The increased salience may also be a by-product of work-family conflict with women negotiating

relationships across a wider variety of contexts in comparison to men (Helms, Walls, & Demo, 2010). Interpersonal events, especially with close others, are also posited to be increasingly important in later life as predicted by socioemotional selectivity theory (SST; see Carstensen et al., 1999).

Age differences in reported hassles and uplifts. When comparing reports of hassles and uplifts across developmental stages, there is variability in exposure to and relative importance of different domains of hassles and uplifts (Almeida & Horn, 2004; Lazarus, 1986; Lazarus & DeLongis, 1983; Mallers et al., 2005; Whitehead & Bergeman, 2013b). This variability can be accounted for mainly by social and psychological developmental processes. In a comparison of college students, Canadian health professionals (no ages reported), and middle-aged adults (45-64 years), some commonalities arose in the frequency of top-rated hassles and uplifts (Kanner et al., 1981; Lazarus, 1986). All three groups ranked misplacing or losing things, their physical appearance, and too many things to do within their top ten most frequent hassles. Two uplifts were shared among the groups: completing a task and relating well with friends.

Differences between the groups, however, were reflective of typical developmental shifts in daily experiences and the salience of different domains (e.g., school, work, health, family; Kanner et al., 1981; Lazarus, 1986). The middle-aged sample ranked economic concerns (e.g., inflation, property and investments, etc.) as occurring more frequently; the health professionals ranked concerns pertaining to work-life balance as occurring more frequently; and the younger group voiced more frequent hassles that corresponded with academic and social concerns (e.g., wasting time, being lonely, etc.). Similar differences were also found in uplifts with the middle-aged sample ranking health- and family-related uplifts as occurring more frequently and students reporting more uplifts from activities such as having fun and being entertained.

Older adults tend to report fewer daily events in general, even when within more salient domains (Almeida & Horn, 2004; Mallers et al., 2005). In comparing younger (25-39 year olds), middle-aged (40-59 year olds), and older (60-74 year olds) adults, Almeida and Horn found that the only domains in which older adults did not report significantly fewer hassles than younger and middle-aged adults was in network and other-focused domains (e.g., concern for others generally and specifically). In addition to reporting fewer hassles across a variety of domains, older adults also self-report less distress, rating hassles as generally less disruptive and less severe than younger and middle-aged adults both within and across domains. For example, in a daily diary study focusing on just daily interpersonal tensions, older adults were found to experience less negative affect than younger adults (Birditt, Fingerman, & Almeida, 2005).

Consistent with the tenets of the SAVI model (Charles, 2011), these differences may have to do with more efficient coping strategies and affect regulation or differences in appraisals. For instance, because many older adults have negative expectations for their health in later life, they may have altered perceptions compared to other age groups as to what constitutes a health-related hassle or uplift (Lazarus, 1986). This is evidenced by the greater frequency with which older adults report positive health-related experiences in comparison to younger age groups (e.g., Benyamini et al., 2003).

The findings regarding age differences in emotional reactivity to daily events have been mixed, however. In a large sample of adults ($n = 1012$) between the ages of 25 and 74 years, Mroczek and Almeida (2004) found older adults reported greater negative affect in response to reported daily hassles when compared to younger adults. Alternative explanations, such as older adults experiencing higher levels of negative affect or stress or being more neurotic, were excluded based on questionably low correlations and the finding was interpreted as a

neurophysiological sensitivity or “kindling effect” in reaction to stressful events. Years of exposure to daily hassles were believed to contribute to increased reactivity to such events among older adults. While other research has demonstrated similar age-related differences in reactivity to daily stress using longitudinal data (e.g., Sliwinski, Almeida, Smyth, & Stawski, 2009), alternative explanations have been put forth. For instance, the SAVI model suggests age-related physiological vulnerabilities may prolong distress when it is not successfully prevented (Charles, 2011). Still yet another study found no significant differences in emotional reactivity to daily stressors when comparing a sample of younger ($M = 20$ years) and older ($M = 80$ years) adults (Stawski, Sliwinski, Almeida, & Smyth, 2008).

With the exception of Kanner and colleagues (1981), very little research has examined age in relation to uplifts. The literature on aging and positive events focuses primarily on major life events or emotional experiences, which deal more with the emotional processes related to emotionally-charged stimuli. Borrowing from that literature, age-related increases in optimization, compensation, and regulation strategies in pursuit of achieving and maintaining positive affective states (Carstensen et al., 1999; Charles, 2011; Labouvie-Vief, 2003; 2005) suggests that older adults may seek out and be more reactive to uplifts than hassles. The positive relation that has been found between hassles and uplifts among older adults (Charles et al., 2010; DeLongis et al., 1982), however, may complicate this. In a recently-published 16 year investigation of middle-aged and older adult American men (Aldwin, Jeong, Igarashi, & Spiro, 2014), exposure to both hassles and uplifts showed similar patterns of decline in older adulthood. Uplift exposure, however, was always higher than hassle exposure. Despite this similar pattern in exposure, intensity of reported hassles decreased with age while intensity of reported uplifts increased up to age 80.

Gender differences in reported hassles and uplifts. Women and men have also been found to differ in the number and types of hassles they report (Almeida & Horn, 2004; Flannery, 1986). Less is known about gender differences in uplifts. Gender differences in hassles are hypothesized to stem from gender role socialization and contextual differences in how men and women spend their time (Davis et al., 1999; Helms et al., 2010). For example, among a sample of undergraduates asked to report on five hassles currently occurring in their lives, women reported significantly more interpersonal hassles than did men (McIntyre et al., 2008). Additionally, they perceived these hassles to be more stressful and experienced greater negative affect in response to them. The gender differences reported, however, tend to be small as is common with most psychological domains (Zell, Krizan, & Teeter, 2015). In a meta-analysis of over 100 studies comparing men and women on stress, women were found to be exposed to more hassles ($d = .12$) and to appraise hassles as more stressful ($d = .14$) (Davis et al., 1999). Women tended to report more interpersonal ($d = .12$) and work-related hassles ($d = .04$) than men, and appraised these hassles as being more stressful ($d = .09$). Based on such small effect sizes (Hyde, 2014), there appears to be more similarity than difference between men and women in their exposure to and appraisal of hassles and uplifts.

Neuroticism and reported hassles and uplifts. Individual differences in neuroticism have also been found to influence exposure and reactivity to daily events, again with much of the literature focusing on hassles. In a sample of U.S. adults who completed a six-week daily diary study, those high in neuroticism experienced significantly more distress in response to hassles than those low in neuroticism (Bolger & Schilling, 1991). Perceived intensity of hassles accounted for more variance than simply being exposed to hassles. In a more recent 30-day diary study of 505 undergraduates, neuroticism altered the relations among daily hassles, uplifts, and

negative affect (Longua, DeHart, Tennen, & Armeli, 2009). Specifically, for those higher in neuroticism, uplifts did not buffer the effect of hassles on negative affect. For those lower in neuroticism, uplifts did buffer the effects of hassles. Neuroticism, therefore, may complicate the integration of positive and negative experiences.

This process may be further complicated by age. SST (Carstensen et al., 1999) posits that older adults are generally better at regulating their emotional reactions to events because they are motivated to maintain positive emotions. Few have examined these age-related effects in concert with neuroticism. In a sample drawn from the Veteran Affairs Normative Aging Study ($M_{\text{age}} = 73.27$ years, $SD = 7.17$), older men higher in neuroticism were more variable both in their exposure to daily stressors and their cognitive reactivity as measured by reported memory failures (Neupert, Mroczek, & Spiro, 2008). Therefore, age-related shifts in emotion regulation aimed at maintaining positive well-being (as proposed by SST) may not be enough to overcome the negative reactivity associated with neuroticism.

Hassles and health. Daily hassles are frequently used as proxy measures of stress and unsurprisingly, they are commonly linked with poorer health outcomes, including increases in symptom reports (DeLongis et al., 1988; DeLongis et al., 1982; Erlandsson et al., 2010; Flannery, 1986; Mallers et al., 2005; Sheffield et al., 1996; Piazza et al., 2013; Ryan et al., 2010; Verkuil, Brosschot, Meerman, & Thayer, 2012). The strength of this association, however, may vary depending on the way hassles are measured (exposure versus intensity) and the domains of hassles assessed (Lazarus, 1986; Stone et al., 1993).

In a sample of 100 middle-aged (45-64 years) adults from California who completed monthly retrospective accounts of hassles, uplifts, and life events, hassle frequency and intensity together accounted for only 13% of the variance in overall health as assessed by multiple

indicators including chronic conditions and symptoms (DeLongis et al., 1982). Most of this contribution to overall health was made by hassle frequency ($\beta = -0.26$). Hassle frequency and intensity also accounted for significant amounts of variance in symptom reports ($R^2 = .13$), again with most of the contribution being made by hassle frequency ($\beta = 0.34$). For energy, hassle intensity made the stronger contribution ($\beta = -0.28$); less variance was accounted for in energy by both hassle frequency and intensity ($R^2 = .08$).

Given the nature of hassles and uplifts as mundane or routine events (Erlandsson et al., 2010; Flannery, 1986; Piazza et al., 2013), the retrospective accounting in reference to such a long timeframe (i.e., the past month) may have limited the findings from DeLongis and colleagues (1982). Additionally, the stronger influence from hassle frequency on overall health and symptom reports and hassle intensity on subjective energy levels may stem from the ways in which these variables were assessed. Hassle frequency, overall health (an assigned value based on chronic conditions and symptoms), and symptom reports, all involved count data. Hassle intensity and energy levels involved subjective evaluations of one's experiences. Hence, shared method variance at the level of measurement may be influencing these results.

There are also many ways in which the correspondence between daily hassles and health outcomes is modified or explained. Because age and gender may alter the frequency, intensity, and types of daily reported hassles (Aldwin et al., 2014; Almeida & Horn, 2004; Davis et al., 1999; Flannery, 1986; Lazarus, 1986; Lazarus & DeLongis, 1983; Whitehead & Bergeman, 2013b), these variables may influence how daily events relate to health and well-being outcomes. For example, interpersonal hassles mediated the negative relation between age and reported symptoms in a large sample of adult women between the ages of 25 and 74 years (Mallers et al.,

2005). This finding suggests that, at least for women, age-related exposure or reactivity to certain domains of hassles may contribute to understanding how daily events influence health outcomes.

Those higher in neuroticism, and thus more prone to focusing on negative stimuli, may also exhibit different relations between daily hassles and health (Mroczek & Almeida, 2004; Nezlek & Plesko, 2003; Sansone & Sansone, 2012). The role that neuroticism plays in the relation between daily events and health has been explored at the urging of Costa and McCrae (1990), but with mixed results. Neuroticism may influence health indirectly by altering the interpretive context in which daily events are evaluated (Löckenhoff et al., 2012). Because those higher in neuroticism tend to demonstrate stronger reactions to negative stimuli (Mroczek & Almeida, 2004; Nezlek & Plesko, 2003), the influence of hassles on health and well-being may be greater for those individuals, thus explaining the ubiquitous negative relations reported between neuroticism and SAH.

Uplifts and health. Within the last 25 years or so, the role of uplifts has been more closely examined in relation to health, although almost all of these studies focus on the resulting boost in positive affect rather than direct effects on physical health (Fredrickson, 2000; Pressman & Cohen, 2005; Salovey, Rothman, Detweiler, & Steward, 2000). Results from studies which have explored the direct relation between uplifts and health have been mixed. In one study of middle-aged adults, uplifts were not uniquely associated with overall health status, symptom reports, or reported energy, once the effects of reported hassles were partialled out (DeLongis et al., 1982). Among 82 committed couples (only 43% married; $M_{\text{age}} = 30.91$ years, $SD = 9.33$), increases in interpersonal uplifts in the form of physical intimacy were found to correspond to decreases in symptom reports across 33 days ($\beta = -0.10$; Stadler, Snyder, Horn, Shrout, & Bolger, 2012). Decreases in physical intimacy were not related to changes in symptoms.

From several theoretical standpoints, desirable events have the potential to counteract and potentially outweigh the effects of undesirable events. Specifically, Fredrickson's (1998) broaden-and-build theory postulates that experiencing positive emotions and events not only temporarily broadens one's range of responses, but also allows personal resources to be built up and reserved for future use. Therefore, positive experiences can strengthen an individual's reserve to combat negative emotions and experiences when they arise. Positive events have also been indicated as necessary for the temporal stability of self-representations across adulthood (Diehl et al., 2006). According to DIT (Labouvie-Vief, 2003; 2005), however, uplifts may be particularly important for older adults who are less able to integrate positive and negative experiences as efficiently and may optimize their well-being by focusing on positive experiences. Empirical evidence suggests the buffering effects of uplifts on hassles may vary as a function of other variables, such as personality (e.g., Longua et al., 2009).

Hassles, uplifts, and affect. Diurnal patterns of affect have been found to occur in response to different hassles and uplifts, possibly because certain events occur at greater or lesser frequencies at specific times throughout the day (Ryan et al., 2010). In an adult sample ranging in age from 18 to 62 years, data were collected three times daily for three weeks. Across the day, positive affect generally increased and negative affect generally decreased. Data from Steele (2004) show similar, but more attenuated patterns in a sample of older adult women ($M = 71.5$, $SD = 9.4$) who were assessed four times across the day. There is also theoretical (Frijda, 1988) and empirical support (e.g., Wood, Quinn, & Kashy, 2002), however, that positive and negative habitual experiences, tend to lose their poignancy with time. Therefore, it is unclear whether these diurnal patterns in affect are truly due to hassles and uplifts.

Studies examining the interplay of daily events, affect, and health generally indicate that affect does play an important function in the extent to which daily events influence health. Data from the National Study of Daily Experiences (a subset of the MIDUS data) confirmed that affect reactivity to daily hassles at T1 (measured as change in negative affect in relation to the presence of hassles) was predictive of chronic health risk ten years later regardless of chronic condition status at T1 ($\beta = 0.10$; Piazza et al., 2013). This predictive association was even stronger ($\beta = 0.34$) for those who did not originally have a chronic condition at T1.

Using a daily-diary burst design, Whitehead and Bergeman (2013a) explored how mood fluctuations influenced the experience of health events. On days when high positive affect was reported, the influence of negative health events was minimized. If negative health events coincided with high negative affect, however, the influence was exacerbated in health satisfaction ratings. Although the work by Whitehead and Bergeman suggests that affect modifies the pathway between health-related events and health satisfaction, affect can also be explored as a mechanism linking daily events to SAH, especially those events which immediately may not seem health-related.

Study Rationale

In comparison to other health outcomes, SAH has received much less attention in relation to daily events. It is logical, however, to expand the study of relations among daily hassles, uplifts, and health to include SAH. Firstly, there is substantial overlap between hassle and uplift domains and the commonly reported influences on SAH. Secondly, SAH research has also been criticized for often including only negative indicators of health (Benyamini et al., 2003), an especially detrimental limitation when assessing certain segments of the population (i.e., older adults and healthy individuals) who seem to favor positive information over negative

information. Finally, in the context of an experience sampling design, a closer approximation of real-time associations can be explored. Daily hassles and uplifts may have momentary influences on SAH that are not captured by other types of methodologies and measurement.

Statement of the Problem

With the exception of Winter and colleagues (2007), no other studies have explicitly explored daily fluctuations in SAH. Given the evidence that long-term trajectories of change (Ayyagari et al., 2012; Schmitz et al., 2013) and weekly fluctuation (Ghisletta et al., 2002) in SAH correspond to poorer health outcomes, it is reasonable to speculate that short-term fluctuations in SAH may also affect health and well-being outcomes. To begin to understand this potential association, it is important to investigate not only how SAH fluctuates within and across days, but also the person- or context-specific variables that predict the magnitude and direction of that change. If the single-item measure of SAH continues to be used to supplement and even replace more elaborate and expensive measures of health status, it is important to address why this item does not predict health outcomes equally well across groups (Benyamini et al., 2011). Identifying daily events or person characteristics that contribute to intraindividual variability in SAH can aid in this understanding.

Previously, the idea of evaluating changes in daily hassles and uplifts in relation to changes in health was believed to be unwarranted because both were assumed to be relatively stable (Lazarus, 1986). Individual and situational differences, however, such as the types of hassles and uplifts under investigation (McIntyre et al., 2008), whether hassles or uplifts are predictable or unexpected (Piazza et al., 2013), individual starting points (Amorose, 2001; Ayyagari et al., 2012; Schmitz et al., 2013), and person characteristics such as age (Almeida & Horn, 2004; Diehl et al., 2006; Wolff et al., 2012) and personality traits (Pietromonaco &

Barrett, 2010) suggest that fluctuation can and does occur. Furthermore, hassles and uplifts may follow specific patterns based on the natural flow of the day or week with distinct weekday and weekend effects (Akay & Martinsson, 2009; Ryan et al., 2010; Stone et al., 1993; Stone, Schneider, & Harter, 2012). Therefore, how daily hassles and uplifts change across the day and throughout the week may correspond with SAH change.

Many studies have connected daily hassles to poorer health (DeLongis et al., 1988; Mallers et al., 2005; Sheffield et al., 1996; Verkuil et al., 2012), but few have made the connection to SAH and even fewer have examined the influence of uplifts on health (e.g., DeLongis et al., 1982; Kanner et al., 1981). It is anticipated that uplifts should be associated with better health; however, uplifts may also coincide with negative health repercussions. For instance, interacting with loved ones or friends may involve health consequences, such as overindulging in food, drink, or activity (Skoyen, Blank, Corkery, & Butler, 2013; Taylor, Repetti, & Seeman, 1997). Therefore, it should not be assumed that more uplifts signals better health. As a multidimensional construct (Schüz et al., 2011), SAH may be influenced by both positive and negative health-related and non-health related daily events.

Person characteristics such as age, gender, and personality may also influence the extent of intraindividual variability in SAH. Because health-related self-representations become increasingly salient with increased age (Cross & Markus, 1991; Hooker, 1992; Hooker & Kraus, 1994; Markus & Nurius, 1986), and self-representations more central to individual identity tend to fluctuate less (Diehl et al., 2006), age may contribute to less fluctuation in SAH ratings. There is some evidence to suggest this. For instance across 101 days, older adults living in Germany demonstrated less variability in all but one health measure compared to younger adults (Wolff et al., 2012).

Gender differences in SAH levels have been equivocal. Women tend to be more variable both in the number and breadth of their reported health symptoms (Bossarte, Swahn, & Breiding, 2009; DeLongis et al., 1988; Henchoz et al., 2008; Idler & Benyamini, 1997), yet gender differences in SAH among middle-aged and older adults have been inconsistent (Benyamini, 2008; Henchoz et al., 2008; Moor et al., 2006). Data from qualitative studies suggest older men and women may conceptualize health and health threats differently and this may explain why different factors predict men's and women's SAH (Clarke & Bennett, 2013). In a sample of retirement community residents, women were found to incorporate a broader range of information into their health assessments than did men (Benyamini, Leventhal, & Leventhal, 2000b). Given these tendencies then, women may be expected to be more variable in their SAH ratings than men.

Personality, specifically neuroticism, is regularly considered relative to the level of SAH (e.g., Andersen & Lobel, 1995; Korotkov & Hannah, 2004; Löckenhoff et al., 2008; McCrae & Costa, 1991; Watson & Pennebaker, 1989; Williams, O'Brien, & Colder, 2004). The association between neuroticism and change in SAH is less clear. In longitudinal studies spanning several years, neuroticism predicted steeper declines in SAH (Löckenhoff et al., 2012). Within momentary assessments, however, those higher in neuroticism tend to show more consistent patterns of elevated acute symptoms across the day (Michel, 2006).

Although daily events may directly influence SAH as individuals focus on the content and valence of events taking place, there is most likely indirect influences. Changes in affect are frequently investigated as one of the mechanisms linking daily events with health and well-being outcomes (Affleck et al., 1994; DeLongis et al., 1988; Longua et al., 2009; Stone et al., 1993). In the one study exploring day-to-day change in SAH among older adults (60-89 years), increases

in positive affect predicted increases in SAH ($\beta = 0.08$), but change in negative affect was unrelated (Winter et al., 2007). Experimental research exploring the effects of induced mood on SAH in mostly college-aged samples have also resulted in mostly null findings concerning the relation between negative affect and SAH (Barger, Burke, & Limbert, 2007). Therefore, positive affect and events eliciting positive changes in affect may be the key to understanding momentary fluctuations in SAH.

Study Aims & Hypotheses

Primary Study Aim

The primary aim of the proposed study was to explore variability and change in reported SAH. Person characteristics (age, gender, neuroticism) were used as time-invariant correlates. Group- and individual-level relations among hassles, uplifts and SAH were examined.

Group-Level Hypotheses

Hypothesis 1. Age will be positively associated with SAH stability.

Rationale: With health-related self-representations becoming more central with age (Cross & Markus, 1991; Hooker, 1992; Hooker & Kraus, 1994; Markus & Nurius, 1986) and greater stability found in self-representations central to individual identity (Diehl et al., 2006), it was anticipated that increased age would correspond with greater stability (less fluctuation) in SAH.

Hypothesis 2. Men will show greater stability in SAH over brief periods of time compared to women.

Rationale: Based on literature suggesting that women incorporate a broader range of information into their health perceptions compared to men (Benyamini et al., 2000b), men were expected to show greater stability (less fluctuation) in SAH across the study period.

Hypothesis 3. Neuroticism will be positively related to SAH stability.

Rationale: Based on the work of Michel (2006) suggesting that neuroticism contributes to stability in daily symptom reporting, it was anticipated that higher levels of neuroticism would correspond with greater stability (less fluctuation) in SAH.

Hypothesis 4a. Perceived intensity of reported hassles and SAH will predict subsequent perceived intensity of reported hassles and SAH over the study period, depicting a negative, synchronous relation. Thus, more intensely-felt hassles at Time 1 will predict lower SAH at Time 2.

Hypothesis 4b. Perceived intensity of reported uplifts and SAH will predict subsequent intensity of reported uplifts and SAH over the study period, depicting a positive, synchronous relation. Thus, more intensely-felt uplifts at Time 1 will predict higher SAH at Time 2.

Rationale: Studies have explored synchronous relations among SAH, affect, and symptoms (Winter et al., 2007), but no study to date has explored daily hassles and uplifts in relation to SAH across time. Because daily hassles and uplifts are known to contribute to change in affect (Affleck et al., 1994; DeLongis et al., 1988; Longua et al., 2009; Ryan et al., 2010; Stone et al., 1993) and change in symptoms (e.g., Dahlgren, Kecklund, Theorell, & Åkerstedt, 2009; DeLongis et al., 1988; Jandorf et al., 1986), it is logical to hypothesize that these contextual features of daily life are related to SAH change also.

Individual Daily Relations

Hypothesis 5a. The perceived intensity of reported hassles will be negatively related to SAH across the study period. Thus, as in Hypothesis 4a, it was hypothesized that more intensely-felt hassles would be associated with lower reported SAH.

Hypothesis 5b. The perceived intensity of reported uplifts will be positively related to SAH across the study period. Thus, as in Hypothesis 4b, it was hypothesized that more intensely-felt uplifts would be associated with higher reported SAH.

Rationale: Consistent with evidence to support SAH as being multiply influenced by health and non-health specific factors (Schüz et al., 2011; Simon et al., 2005), it was anticipated that hassles and uplifts representing multiple domains (interpersonal relations, social role activities, and health behaviors and habits) would correspond to reported SAH.

Individual Daily Fluctuations

Hypothesis 6a. Intraindividual variability across the study period in the perceived intensity of reported hassles will be positively associated with intraindividual variability in SAH. Thus, it was hypothesized that greater daily fluctuation in the perceived intensity of reported hassles would be associated with greater daily fluctuation in SAH.

Hypothesis 6b. Intraindividual variability across the study period in the perceived intensity of reported uplifts will be positively associated with intraindividual variability in SAH. As with daily fluctuation in perceived intensity of hassles, greater daily fluctuation in the perceived intensity of uplifts would be associated with greater daily fluctuation in SAH.

Rationale: Based on evidence that a variety of individual and situational differences influence variability in reported daily hassles and uplifts as well as some health variables (e.g., Diehl et al., 2006; Lazarus, 1986; Piazza et al., 2013; Ryan et al., 2010), it was proposed that fluctuation in one would be related to fluctuation in the other.

Secondary Study Aim

Person and context characteristics may contribute to SAH change directly and also indirectly through change in intermediary variables, such as positive and negative affect.

Specifically, age differences in the maintenance of positive affect (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Charles, 2010; Labouvie-Vief, 2003) and the influence of hassles and uplifts on reported affect (Affleck et al., 1994; DeLongis et al., 1988; Longua et al., 2009; Ryan et al., 2010; Stone et al., 1993) makes positive affect an important variable to consider within the relations among age, perceived intensity of hassles and uplifts, and daily fluctuation in SAH.

Group Level Hypotheses

Hypothesis 7. The unique association between age and SAH stability will be reduced when positive affect is included. Thus, change in positive affect would partially account for age-related variance in SAH stability.

Rationale: A reduction in the association between age and SAH stability when positive affect is controlled was anticipated because change in positive affect is highly influenced by age-related processes and differences (Carstensen et al., 2000; Charles, 2010; Labouvie-Vief, 2003, 2005).

Hypothesis 8. Positive affect will play an intermediary role in the relations among daily events and SAH. Specifically, daily events will be associated with concurrent or subsequent positive affect, which will be positively associated with SAH at subsequent time points.

Rationale: Changes in affect as a result of increased hassles and uplifts are well-documented in the literature (Affleck et al., 1994; DeLongis et al., 1988; Longua et al., 2009; Ryan et al., 2010; Stone et al., 1993). Because the predicted association between positive affect and SAH has been demonstrated elsewhere (e.g., Winter et al., 2007), it was reasonable to hypothesize that positive affect may be an intermediary variable linking perceived intensity of daily events and SAH.

Research on the role of negative affect in relation to SAH is less conclusive (e.g. Barger et al., 2007). Therefore, negative affect was only explored as an intermediary variable in the relation between perceived intensity of daily events and SAH.

Method

Sample Recruitment

A power analysis, implemented in G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009), suggested a sample size of 32 to 57 participants with a minimum of 28 completed time points would be sufficient to detect small to moderate (partial $\eta^2 = .02$ to $.13$) effect sizes for repeated-measures analyses with alpha levels set at $.05$ and power set at $.80$. To detect moderate to large correlations ($r = .35$ to $.50$) under the same alpha and power levels, a sample size of 29 to 61 participants was recommended. The final sample contained 57 participants.

Participants were recruited from a variety of age-diverse locations, such as restaurants, libraries, and alumni associations (e.g., Hiram College, St. Philip's College, Cleveland State University) within three states: West Virginia, Ohio, and Texas. Some events and locations, such as the West Virginia University Retiree Association kick-off and fraternal lodges (e.g., Elks, Eagles, etc.), were targeted to increase the number of older adult participants and men. From these recruitment sources, a total of 114 participants started and completed the baseline survey. Of those, fifteen participants did not meet the screening requirements (at least 25 years of age, not currently enrolled as a full-time college student, residence in one of the three recruitment states). Eleven did not continue to the scheduling survey for Phase II. Therefore, 88 individuals entered the second part of the study, the experience sampling phase. Of the 88 participants who began the experience sampling phase, 15 participants completed ten or fewer assessments and dropped out of the study. Sixteen participants had their data removed from analyses for completing too few valid time points (< 28 out of 56 possible) or useable days (< 7 out of 14 days). Figure 1 contains a procedural flowchart and attrition rates at each phase of the study.

Participants

The 57 individuals who completed both phases of the study ranged in age from 25 to 71 years ($M = 45.67$, $SD = 13.19$), of whom 30 (52.6%) were female, 26 (45.6%) were male, and one identified as “other.” Thirty-three (57.9%) were from Ohio, 20 (35.1%) were from West Virginia, and four were from Texas (7.0%). Although no specific race-related hypotheses were posed, recruitment efforts were made in multiple states attempting to oversample members of ethnic- and racial-minority groups. Despite these efforts, only one participant identified as Hispanic. Racial diversity was also limited; one participant identified as African American or Black and one identified as “other.” The majority of the sample was coupled, with 80.7% married and 3.5% cohabitating with a partner. The remaining participants were divorced (7.0%), widowed (3.5%), or single/never married (5.3%). A little over half (57.9%) were employed full-time; 8.8% worked part time, 12.3% were fully retired, and 15.8% indicated “other” with the most frequent responses including *homemaker* or *on disability*. Highest level of education completed was distributed as such: 12.3% of the sample held a high school diploma, 24.6% had some college, 29.9% held either an Associate’s or Bachelor’s degree, and 29.8% held a post-baccalaureate degree.

Procedure and Measures

Baseline. From recruitment flyers, participants were directed to the online survey, hosted by Qualtrics, by clicking on or manually entering a study web link. They were fully advised of their rights, study requirements, and the incremental compensation system for completing different phases of the study (detailed below). Participants were advised *a priori* that they would need a smartphone or unrestricted access to another device (e.g., tablet, computer, etc.) with internet connectivity in order to complete the experience sampling portion of the study. Once

agreeing to participate, individuals completed the baseline measures. The average length of time to complete these measures was 37.43 minutes ($SD = 22.62$ minutes).

Baseline measures. A variety of measures were included at baseline (see Appendix A). Age (retained as a continuous variable), gender (coded for men = 1 and women = 2), and neuroticism were the only variables from the baseline survey necessary in the present investigation. The remaining baseline measures were included to describe participants' physical, emotional, and mental health. All reported means and standard deviations are based on the final sample ($n = 57$) unless otherwise noted. Descriptive statistics, including bivariate correlations among the baseline measures, can be found in Table 1.

Personality. Personality was assessed with the Midlife Development Inventory Personality Scales (MIDI-PS; Lachman & Weaver, 1997). The MIDI-PS has demonstrated reliability and validity in adult samples (Piazza et al., 2013; Staudinger et al., 1999; Turiano et al., 2012). Participants were asked to rate 30 individual traits according to how much those traits described them from *not at all* (1) to *a lot* (4). While the MIDI-PS contains six subscales, including the common five-factor structure of personality plus *agency*, only the 4-item *neuroticism* subscale was used for the present study. The sample mean (2.14, $SD = 0.66$) and reliability ($\alpha = .76$) were consistent with published literature (Lachman & Weaver, 1997). The 4-item *conscientiousness* subscale ($M = 3.52$, $SD = 0.39$, $\alpha = .55$) was also computed in order to examine whether those completing more time points were more conscientious.

SAH. At the beginning and end of the baseline assessment, participants were asked to rate their overall health in response to the question, "All things considered, how would you rate your health overall at this moment?" Using a continuously numbered slider scale anchored at "0" indicating the worst possible health and "10" indicating the best possible health, the sample

mean at the start of the survey was 7.26 ($SD = 1.59$, range = 1.94 - 9.49). At the end of the survey, the sample mean was 7.36 ($SD = 1.67$, range = 2.96 - 9.63). This double assessment has been used previously to gauge the reliability of responding, especially after several aspects of health and well-being are made salient with the baseline measures (Crossley & Kennedy, 2002). The traditional five-point item was assessed once as part of the Medical Outcomes Study 36-item Short Form Health Survey (MOS SF-36; Hays, Sherbourne, & Mazel, 1993; Ware & Sherbourne, 1992). On the traditional five-point item, participants rated their health as *poor*, *fair*, *good*, *very good*, or *excellent*. The mean on this item was 3.32 ($SD = 0.93$).

Physical and functional health status. The MOS SF-36 (Hays et al., 1993; Ware & Sherbourne, 1992) indexed physical and functional health status. The MOS SF-36 is widely used because of its strong psychometric properties (generally, all subscale alphas > 0.78) and multifaceted portrayal of health status across eight distinct domains. Only those domains which are indices of physical health were assessed at baseline, including the *physical functioning* subscale (10 items), the *role limitations due to physical health* (4 items), and *pain* (2 items). The 4-item *energy/fatigue* subscale, which is conceptualized as an indicator of both physical and mental health was also included. The response options vary based on the individual items so scoring involves converting all items onto a 100-point scale. Higher scores indicate better health. Participants scored above published means on the *physical functioning* ($M = 81.36$, $SD = 25.79$, $\alpha = .95$) and *role functioning-physical* ($M = 80.26$, $SD = 31.60$, $\alpha = .87$) subscales. They scored consistently with published means on the *pain* ($M = 70.26$, $SD = 22.51$, $\alpha = .88$) and *energy/fatigue* ($M = 52.19$, $SD = 22.80$, $\alpha = .92$) subscales.

Chronic conditions. From a list of 31 chronic conditions paralleling the lists provided in national health studies (i.e., Health & Retirement Study and the BRFSS), participants indicated

whether they had ever received an official diagnosis from a medical professional and if they had, they rated the difficulty they experienced due to that specific condition on a scale ranging from *none, a little, some, and quite a bit*. The average number of chronic conditions reported for the sample was 3.72 ($SD = 2.89$, range = 0 – 13). The most commonly reported conditions included: high blood pressure (42.1%), high cholesterol (40.4%), digestive disorders (35.1%), obesity (31.6%), arthritis (29.8%), and depression (24.6%). All other chronic conditions were diagnosed in less than 15.0% of the sample.

Acute symptoms. To assess the regularity of experiencing certain acute symptoms, the symptom checklist originally created by Larsen and Kasimatis (1991), but adapted for use in the National Study of Daily Experiences (Institute on Aging, 2009), was used. The original scale consisted of 24 symptoms and asked participants to indicate whether they had experienced any of the following in the past time period. To reduce participant burden for the MIDUS, the list of symptoms was pared down to 14. In the current study, participants were asked to reference the past 30 days and to indicate the frequency of experiencing each symptom on a scale ranging from *not at all* (1) to *almost every day* (6). The sample mean was 28.11 ($SD = 9.96$, range = 14 - 59). The most frequently occurring acute symptoms based on inspection of the item means were: low energy or tiredness, backache, and sore muscles.

Depressive symptoms. The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was used to assess depressive symptomology. Participants indicated how often they have felt or behaved in a particular way in the past week on a scale ranging from *rarely or none of the time* (1) to *most or all of the time* (4). Because the response categories can be vague, participants were also provided with anchors: *less than one day, one to two days, three to four days, and five to seven days*. The sample mean for the total scale was 10.63 ($SD = 8.52$, $\alpha = .91$).

While the factor structure of these 20 items is still contested (Shafer, 2006), the four original subscales identified by Radloff (1977), including *depressed affect* ($M = 2.42$, $SD = 3.69$, $\alpha = .89$), *positive affect* ($M = 2.75$, $SD = 2.82$, $\alpha = .82$), *somatic symptoms* ($M = 5.00$, $SD = 3.16$, $\alpha = .72$), and *interpersonal symptoms* ($M = .47$, $SD = .95$, $\alpha = .63$), were also calculated.

Loneliness. The Revised University of California – Los Angeles (UCLA) Loneliness Scale (version 3; Russell, 1996) was included as a general measure of participant loneliness. Participants responded to 20 items about the frequency of experiencing feelings of loneliness on a scale ranging from *never* (1) to *always* (4). High scores indicated greater loneliness. Sample scores ranged from 20 to 70 ($M = 36.81$, $SD = 11.55$, $\alpha = .95$).

Subjective well-being. Overall psychological well-being was indexed using Diener and colleagues' (2009) 8-item Flourishing Scale. Participants responded to the items detailing aspects of positive functioning on a 7-point scale from *strong disagreement* (1) to *strong agreement* (7). The scale was reverse-coded in the present study so higher scores indicate greater well-being. The sample mean was 48.25 ($SD = 7.51$, range = 21 to 56, $\alpha = .91$).

Self-rated affect. To assess positive and negative affect, the two 10-item higher-order subscales of the Positive and Negative Affect Schedule-Expanded Form (PANAS-X; Watson & Clark, 1994) were used. The PANAS-X is an expansion of the original PANAS (Watson, Clark, & Tellegen, 1988), designed to assess affect at the general-valence level (positive and negative) as well as at the level of specific emotions (e.g., joviality, sadness). Participants reported the frequency of experiencing 60 feelings and emotions *in general*. The response options range from *very slightly or not at all* (1) to *extremely* (5). The sample means for the *positive affect* ($M = 34.19$, $SD = 7.31$, $\alpha = .88$) and *negative affect* ($M = 16.98$, $SD = 5.44$, $\alpha = .87$) subscales were consistent with the previous literature using general instructions.

Scheduling survey. Upon completion of the baseline survey, participants were asked for their contact information in order to proceed to the experience sampling phase of the study. Participants were asked to verify that they had either a smartphone with internet connectivity (84.2%), some other portable device with internet connectivity (82.4%), or at the very least regular access throughout the day to a computer with internet access (91.2%). Interval-contingent sampling was planned, wherein participants would respond according to predetermined assessment schedules across the study period (Hektner, Schmidt, & Csikszentmihalyi, 2007). Participants selected a response schedule that was most convenient based on their normal waking hours. Almost a third of respondents (29.8%) selected the earliest option (7:00AM-7:00PM), 31.6% chose the next option (8:00AM-8:00PM), and 38.6% chose the latest option (9:00AM-9:00PM). This step has been taken in other experience sampling method studies (e.g., Klumb, 2001) to help minimize intrusiveness. Generally, participants were scheduled within one to two days of completing the baseline survey. Everyone who completed the baseline survey and provided contact information was compensated \$6.00 USD.

Screening. Participants had to be at least 25 years of age and not currently enrolled as a full-time college student. These sample selection criteria were based on evidence that college students generally report different daily hassles and uplifts throughout their day in comparison to other age groups (Blankstein et al., 1991; Kanner et al., 1981; Kohn, Lafreniere, & Gurevich, 1990; Lazarus, 1986; Sarafino & Ewing, 1999). Participants also had to reside in one of the three recruitment states and indicate their willingness and ability to continue with Phase II of the study, the experience sampling phase. This included having a smartphone or unrestricted access to another device (e.g., tablet, computer, etc.) with internet connectivity in order to complete the experience sampling portion of the study. Those who were ineligible to participate in the second

phase due to not meeting the screening requirements ($n = 15$) were notified by email immediately.

Experience sampling phase. Participants who entered the second phase of data collection received four survey notifications per day for a two-week period. Once the participants were scheduled, they received a scheduling notification email, which outlined the experience sampling protocol in greater detail (see Appendix B). The daily surveys started the day after receiving this notification. Each survey invitation included a web link to access a short set of questions assessing the variables of interest. Momentary surveys were expected to take less than 10 minutes to complete and averaged 6.82 minutes ($SD = 19.35$ minutes). Because the average length of time may be skewed by surveys that were opened, but not completed, the median (3.52 minutes) and mode (3.05 minutes) are more accurate depictions of the time taken to complete these momentary assessments. Participants completed an average of 46.82 time points ($SD = 6.66$, range = 34 - 56). The average number of valid days once days were removed for being incomplete (less than three time points) was 11.72 ($SD = 2.14$, range = 7 - 14). The majority of surveys were completed at home (67.4%) and at work (20.7%). A little more than half (56.9%) were completed in the presence of others.

Experience sampling measures. Appendix C contains the measures included in the daily surveys. Measures of primary interest to the present investigation included SAH, perceived intensity of hassles and uplifts, and state affect. Tables 2 through 4 include descriptive statistics collapsed by time of day, day of the week, and across the study period. An acute symptom scale and other items were included to provide additional information about the participants' day (Hektner et al., 2007).

SAH. Participants were asked to rate their health using the traditional 5-point item (*poor, fair, good, very good, excellent*) first. Across all time points, the sample mean was 3.39 ($SD = .78$, range = 1 - 5). The slider-scale item followed the traditional 5-point item and provided a continuous scale, anchored with “0 – worst possible health” at the low end and “10 – best possible health” at the high end. The sample mean across all time points was 7.65 ($SD = 1.40$, range = 1.82 - 10). At the sample level, the two measures were strongly correlated ($r (n = 57) = .74, p < .001$). Participants were also asked if they had perceived change in their health since the last time they reported. In response to the question, “Compared to the last time you responded, how would you rate your health in general now?” participants used a five-point scale ranging from *much better now* (1), *somewhat better now* (2), *about the same* (3), *somewhat worse now* (4), and *much worse now* (5). Most commonly, participants indicated that their health had stayed *about the same*.

Daily events. To reduce the burden of the daily assessments, items were selected from the revised Hassles and Uplifts Scale (Lazarus & Folkman, 1989; Mayberry & Graham, 2001). The specific items (see Appendix C under *Daily Events*) were selected because of their high relative frequency of being reported across different adult samples (see Mayberry & Graham, 2001 for a review) as well as their similarity to common SAH correlates, such as social interactions, social role activities, and health/risk behaviors (Simon et al., 2005). Based on pilot data, two independent scales were created for hassles and uplifts (see Appendix D).

Participants were asked, “Since the last time you reported, indicate how much each item listed below has been a HASSLE to you.” Participants reported not only whether a hassle had taken place in that particular domain, but also their perceived intensity of the hassle: *did not happen; happened, but not a hassle; somewhat of a hassle; quite a bit of a hassle; a major*

hassle. Higher scores, therefore, indicated greater felt-intensity from hassles. Participants received the same questions, but in reference to uplifts and how uplifting the events experienced in the past reporting time frame had been. Participants, on average across all experience sampling surveys, reported uplifts in three to four domains ($M = 3.70$, $SD = 1.95$, range = 0 - 10) at an average perceived intensity of 7.05 ($SD = 5.34$, range = 0 - 40, median $\alpha = .73$, α range = .46 - .85). The average number of hassle domains reported was also between three and four ($M = 3.56$, $SD = 2.08$, range = 0 - 10) at an average perceived intensity of 4.28 ($SD = 2.86$, range = 0 - 21, median $\alpha = .60$, α range = .28 - .79).

State affect. The Scale of Positive and Negative Experiences (SPANE; Diener et al., 2010) was used to assess state affect. The SPANE is comprised of 12 items, three positive general emotions, three positive specific emotions, three negative general emotions, and three negative specific emotions. Participants responded to each item by indicating how much they have experienced a particular emotion since the last time they were asked to report, ranging from *very rarely or never* (1) to *very often or always* (5). In the current sample, the mean across all time points for the *positive* subscale was 19.61 ($SD = 5.62$, range = 6 - 30, median $\alpha = .93$, α range = .88 - .95). The mean across all time points for the *negative* subscale was 8.59 ($SD = 3.17$, range = 6 - 29, median $\alpha = .86$, α range = .72 - .93).

Acute symptoms. Momentary health was assessed with an adapted acute symptom checklist originally from Larsen and Kasimatis (1991). This measure was originally designed for use in the momentary analysis of symptom change and was adapted for use in the National Study of Daily Experiences as part of MIDUS (e.g., Mellers et al., 2005). For MIDUS, the response options were no longer yes/no, but instead asked about the frequency of experiencing symptoms (*none of the time, a little of the time, some of the time, most of the time, all of the time*). For the

current study, the MIDUS response options were used. Low energy/tiredness (which does not appear in the National Study of Daily Experiences, but was part of the original measure) was retained to round out the other seven categories of symptoms: ache (headache, backache, muscle soreness), gastrointestinal (poor appetite, nausea/upset stomach, constipation/diarrhea), cold/flu (sore throat, runny nose, congestion), cardiovascular (chest pains, dizziness), menstrual (cramps, bloating, breast tenderness), menopausal (hot flashes/flushes), and other. The sample mean across all time points was 10.93 ($SD = 3.38$, range = 8 - 28, median $\alpha = .60$, α range = .41 - .77). The low energy/tiredness symptom was supplemented with two separate items in the morning surveys addressing hours of sleep ($M = 6.68$ hours, $SD = 1.43$) and perceived quality of sleep ($M = 6.62$, $SD = 1.88$) rated on a 10-point scale ranging from *not at all restful* (1) to *very much restful* (10).

Positive and negative rumination. Participants were asked in two separate questions whether there were any unpleasant or pleasant events that had remained on their mind since the last time they were asked to report. This is similar to an approach taken by Segerstrom and colleagues (2010), but without asking participants to reference a specific event. If they responded affirmatively, they were asked follow-up questions to assess which event(s) were being referenced and how frequently (*not all that much* (1) to *constantly* (5)) they had thought about these events since their last report. Across the study period, there was a wider range of reporting repetitive thoughts about positive events (15.8% - 64.9%) than negative events (1.8% - 29.8%). The frequency or pervasiveness of the continued thoughts about pleasant ($M = 3.40$, $SD = 0.77$, range = 1 - 5) and unpleasant events ($M = 3.49$, $SD = 0.87$, range = 1 - 5) was similar, however. In the morning surveys only, participants were asked if there was anything about the day they were either looking forward to or dreading. On most study days, over a quarter of the sample

(22.8% - 70.2%) reported looking forward to some event. There were fewer reports indicating that participants were dreading an upcoming event (5.3% - 19.3%). If they responded affirmatively, they were again asked follow-up questions to assess which event(s) were being referenced.

Additional contextual items. In addition to asking participants where and in the presence of whom they completed each survey, they were asked in the morning how routine they expected the day to be on a scale ranging from *not at all routine* (1) to *very routine* (4). This question was repeated using the same scale in the evening survey, but as a retrospective account of the day. Across the study period, most people thought their days would be somewhat routine ($M = 2.77$, $SD = 0.93$) and the retrospective accounts indicated that they were close to as expected ($M = 2.61$, $SD = 0.91$). Finally, participants indicated whether they had experienced any sudden health changes or events that may have influenced their responses during that day. If participants answered affirmatively, they were asked to provide open-ended responses describing the health change or event. Across the study period, most participants (61.4% - 86.0%) did not experience any sudden health changes. The most commonly reported changes included cold/flu symptoms and migraines. On most days, over 50% of the sample (45.6% - 64.9%) did not indicate that a particular event influenced their reports that day. The open-ended responses were mixed with regard to valence as well as domains represented.

Exit survey. In the last momentary survey, participants were asked to complete an exit survey and verify their payment information. Of the 88 individuals who entered Phase II, 77 completed the exit survey. Appendix E contains the exit survey. Compensation for Phase II had been described to participants as being contingent on the number of completed surveys at a rate of \$ 0.25 per survey (maximum \$1.00 per day). A \$5.00 bonus was possible for those completing

each week's worth of time points (28). Bonus-based compensation systems have been used in other ecological momentary assessment studies (e.g., Affleck et al., 1994) and have resulted in higher completion rates. Participants who completed surveys across the two-week period and had at least seven usable days of data (three of four time points completed) were compensated the maximum honorarium amount (\$30.00). Only participants who completed fewer than 28 total time points and/or provided fewer than seven usable days received compensation consistent with the proposed compensation formula. All compensation was provided to participants no later than six weeks after they completed Phase II. Payment was sent in the form of check ($n = 68$) or Paypal transfer ($n = 37$).

Results

Treatment of Missing Data

Missingness, attrition, and adherence were assessed as part of the data cleaning process. Multi-item scales in the baseline, momentary, and exit survey with missing items were imputed if at least 75% of the items comprising the scale had been completed. The need to impute individual scale means from available data was minimal across all phases of the study. At the daily level, responses that were less than 90 minutes apart from the previous response or that were backfilled (i.e., entered at a much later time or day) were removed from analyses. After validating timestamps, days with fewer than three time points completed was invalidated. Across days, if a participant missed all daily assessment periods for two or more consecutive days, their data was excluded from analysis. Finally, consistent with recommendations from Hair, Black, Babin, Anderson, and Tatham (2006), cases with greater than 50% missing were excluded. Therefore, only individuals with at least 28 time points and seven days of useable data were included in the final sample.

Based on these guidelines, participants who started the experience sampling phase fell into one of three categories: completed, removed due to excessive missingness, and self-selected removal or dropout. Additionally, the number of valid time points completed was tallied for each participant. Patterns of missingness were assessed in relation to primary and secondary study variables as well as time of day, day of week, and study day. These relations were assessed given that certain patterns of missingness (i.e., missing not at random) can greatly bias results (Shiffman, Stone, & Hufford, 2008).

Adherence and attrition. Across all individual who entered the experiencing sampling phase, a total of 4,928 individual survey responses were possible (88 participants x 14 days x 4

surveys per day). Nearly a third of all possible surveys (32.3%; $n = 1594$) were missing. Three of these were due to a known software glitch and 270 were removed because of invalid timing. Participants were asked to complete the surveys within two hours of receiving the survey invitation email. The average latency between receiving a survey invitation and responding across all participants was 1.82 hours ($SD = 3.76$). The average latency for participants retained in the final sample was less than one hour ($M = 0.95$, $SD = 0.98$). A response was considered valid if it was within three hours of their scheduled response and at least an hour and a half from the next response. For instance, if a person scheduled to receive their earliest survey at 7:00AM did not respond until 9:30AM, and then answered their next survey at 11:00AM, both time points were retained. Only eight time points were excluded because they were too close in time to another response. The average time between responses across participants included in the final sample was 4.11 hours ($SD = 1.83$ hours).

Fifteen participants completed ten or fewer assessments ($M = 4.53$ time points, $SD = 2.75$, range = 1 – 10); they were classified as self-selecting out of the study. Five of these individuals completed the exit survey, specifying that time, scheduling, and length of the surveys were the primary issues. Sixteen participants were removed for completing too few valid time points ($n = 13$) or days ($n = 3$). These individuals were classified as removed due to excessive missingness ($M = 21.25$ time points, $SD = 6.94$, range = 6 – 30). Six of these participants appeared to have more complete data at first, but upon inspection of timestamps, many responses were invalidated for backfilling. Most participants in this category (87.5%) completed the exit survey and identified “personal obligations” as the largest barrier to completing surveys.

For the 57 participants retained in the final sample, 3,192 individual survey responses were possible. Adherence was 83.2% with only 535 missing survey responses, 99 of which were

removed for invalid times. Published attrition and adherence rates vary widely depending on the study design, including the number of time points and method of data collection (see Cain, Depp, & Jeste, 2009 for a review of ecological momentary assessment in aging studies; also Hektner et al., 2007 and Shiffman et al., 2008). The present study's attrition rate (35.2%) and adherence rate (83.2%) were within range of similar studies.

Patterns of missingness. The final sample was compared to those who entered the experience sampling phase but did not finish. Number of valid time points was also assessed in relation to primary and descriptive variables in the baseline survey. With a series of t -tests and chi-squares comparing the final sample ($n = 57$) to the dropouts and removals ($n = 31$), these two groups significantly differed on only one study variable, number of chronic conditions, at baseline (see Table 5). Those completing the study ($M = 3.72$, $SD = 2.89$) had significantly more chronic conditions than those who did not complete the study ($M = 2.26$, $SD = 2.80$), $t(86) = 2.29$, $p = .02$. Number of valid time points was significantly related to age ($r(n = 57) = .29$, $p = .03$) and conscientiousness ($r(n = 57) = .35$, $p = .01$). Specifically, more completed time points was associated with being older and more conscientious. Number of valid time points was not significantly associated with any other primary study variable, including gender, neuroticism, or either measure of SAH at baseline (see Table 1).

In the experience sampling data, missingness was not associated with any of the primary or secondary variables, including either measure of SAH, uplifts or hassles, positive and negative affect, or acute symptoms. Through a series of chi-squares and z -tests, however, missingness was found to relate to time of day, day of week, and study day. Table 6 shows the chi-square difference test results. Specifically, missingness was significantly lower in the morning, on weekdays (specifically Tuesday, Wednesday, and Thursday), and in the first few days (Day 1, 2,

and 3) of the study period. Missingness was significantly higher in the late afternoon, on the weekend (Saturday and Sunday), and toward the end of the study (Day 11, 12, and 13), although Day 5 was also significantly lower than average.

Data integrity. The baseline survey included four validity checks. As an example, participants were asked to “select the second option” from four response choices. Participants were flagged for inspection if they responded incorrectly or skipped two or more of these items. Seventeen of the 114 (11.8%) individuals who completed the baseline survey were flagged; seven of these individuals were part of the final sample. Five of these seven cases had been flagged because the participants skipped at least one validity check. Item responses immediately before and after the missed validity check were assessed and did not indicate any problematic patterns. Length of time taken to complete the baseline survey was in line with the sample average and did not indicate participants were rushing. The other two cases were flagged for incorrect responses on two of the four validity checks. For these two participants, their pattern of responses was assessed and their scale scores were compared to the sample mean. They did not significantly differ from the sample so their data were retained.

Preliminary Analyses

Data reduction and description at the group-level. Within-day individual estimates were averaged across the study period (14 days) for each daily time point of assessment (morning, early afternoon, late afternoon, and evening). Participants had to have responses for at least 50% (7 of 14) days completed for this average to be calculated. All participants had sufficient data to calculate time-of-day averages. Data were also aggregated for each day of the week (8 possible at 4/day x 2 weeks), forming a day-of-week average (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday). Participants had to have at least one time

point from each part of the day (a minimum of four) to calculate this average. Missing time points were imputed from the participant's mean for that time of day. Analyses were conducted using raw and imputed values. In all instances, the results were consistent between the two analyses; therefore, all results reported include the imputed data. Sample means and standard deviations for the time of day, day of week, and study period are found in Table 2, Table 3, and Table 4, respectively.

Average levels. Person characteristics were evaluated in relation to mean levels across the study period. Age was not significantly related to SAH ($r(n = 57) = .002, p = .99$), perceived intensity of hassles ($r(n = 57) = -.05, p = .63$), perceived intensity of uplifts ($r(n = 57) = -.07, p = .63$), positive affect ($r(n = 56) = .05, p = .71$), or negative affect ($r(n = 56) = .01, p = .97$). Neuroticism was negatively related to SAH ($r(n = 57) = -.34, p = .009$), such that higher neuroticism was associated with lower levels of SAH. Neuroticism was also significantly related to positive affect ($r(n = 56) = -.36, p = .006$). Neuroticism was not significantly related to negative affect ($r(n = 56) = .14, p = .31$), perceived intensity of hassles ($r(n = 57) = -.01, p = .93$), or uplifts ($r(n = 57) = -.17, p = .22$). Using independent samples t -tests, men and women did not significantly differ on SAH ($t(54) = 0.69, p = .49$), perceived intensity of daily events (hassles: $t(54) = .68, p = .50$; uplifts: $t(54) = -0.57, p = .57$), or levels of reported positive ($t(54) = -0.18, p = .86$) and negative affect ($t(54) = -1.59, p = .12$).

Bivariate correlations were inspected to get a sense of stability across the week as well as across the day. The bivariate correlations among days of the week for SAH ranged from .71 to .93, suggesting stability throughout the week. The bivariate correlations among morning, early afternoon, late afternoon, and evening SAH reports also suggested stability within the day (r s ranged from .94 to .97). Perceived intensity of hassles (across days r s from .58 to .81; within-day

rs from .64 to .81) and uplifts (across days *rs* from .63 to .88; within-day *rs* from .69 to .86) showed strong but more attenuated patterns of stability across the week and within the day.

Average daily fluctuation. Average daily fluctuation was calculated for each participant by first assessing how each time point varied from that day's mean. Thus, *z*-scores were calculated for each variable at each time point based on each participant's data. To do this, the mean and SD were calculated for each study day for each participant. Then, each time point was subtracted from the day's mean and divided by the day's standard deviation for each individual. This resulted in a *z*-score for each completed time of assessment that indicated the magnitude and direction of fluctuation around that day's mean. Appendix F contains an illustrative example of this process.

To assess patterns of stability in SAH, the *z*-scores were averaged across the study period for each participant. Because *z*-scores should always average to zero by definition, the absolute value was taken before averaging. Therefore, as an indicator of SAH stability, average daily fluctuation references the degree or magnitude of change regardless of direction; smaller values indicate greater stability. The average amount of daily change in SAH across the sample was .24 standard units ($SD = 0.41$, range = 0 - 1.50). This stability indicator variable was calculated for other primary and secondary study variables as well (see Table 7 for additional descriptive information). Greater fluctuation in SAH was significantly associated greater fluctuation in positive ($r(n = 57) = .46, p < .001$) and negative affect ($r(n = 57) = .48, p < .001$). Greater fluctuation in uplifts was significantly related to greater fluctuation in positive ($r(n = 57) = .40, p = .002$) and negative ($r(n = 57) = .28, p = .03$) affect. Fluctuation in hassles corresponded with greater fluctuation in negative ($r(n = 57) = .30, p = .03$), but not fluctuation in positive affect ($r(n = 57) = .16, p = .22$).

Descriptive data at the individual level. The primary hypotheses included individual-level analyses. Thus, means, standard deviations, and bivariate correlations were calculated for each individual across all valid data points. This descriptive information is found in Appendix G. At this level of analysis, each individual had a maximum of 56 available data points on each measure. This varied depending on the amount of missing data, but most cases included enough data points (> 30) to see at least moderate to large correlations. Bivariate correlations at the individual level were inspected for atypical patterns of relations: a.) among perceived intensity of hassles and uplifts and affect; and b.) between SAH and affect. These relations were of particular interest because they formed the empirically-supported basis from which the present study's hypotheses came. At the group level, all of these associations held.

Almost half of the sample (43.8%) showed some deviation from commonly found patterns of relations among perceived intensity of hassles or uplifts and affect, either in the form of no relation or opposing patterns of associations, such as greater perceived intensity of uplifts resulting in higher levels of negative affect. The patterns of relations among intraindividual variability in daily events and affect showed similar idiosyncrasies. Just over half (54.4%) of the sample had significant positive relations between daily fluctuation in uplifts and positive affect; 35.1% had significant positive relations between daily fluctuations in hassles and negative affect. Reported SAH was not significantly associated with either positive or negative affect for nearly half of the sample (56.1%). Daily fluctuation in SAH was not significantly related to daily fluctuation in either positive or negative affect for the majority of participants (66.7%).

Additionally, 12 individuals showed no change in SAH reports across the study period. They showed greater range on the slider-scale item, but the tiny standard deviations (*SD* range = .02 - .36) indicate that they were still relatively stable. This subset of individuals was comprised

of eight men and four women, ranging in age from 28 to 70 years ($M = 48.17$, $SD = 14.66$). Neuroticism scores ranged from 1.00 to 2.75 ($M = 1.85$, $SD = 0.59$). In comparison to those whose SAH level changed across the study period, those with stable SAH levels did not differ significantly by age ($t(55) = -0.74$, $p = .47$) or neuroticism ($t(55) = 1.71$, $p = .09$), nor did the group composition significantly differ by gender ($\phi = .22$, $p = .24$).

SAH 5-point versus slider scale. The slider-scale SAH item was evaluated in comparison to the traditional 5-point item in regards to the relation between the two items and with other study measures. Comparisons were made in the baseline and experience sampling phases. Inspection of the data, including the consistency of relations with the study variables of interest (age, gender, neuroticism, daily events, affect) at the group and individual levels, similar patterns of stability across days of the week and times of day, and differences in the rates of missingness (77 survey responses wherein all other measures were completed, except the slider-scale item), suggested that the 5-point item should be retained for hypothesis testing (see Appendix H for a full description).

Perceived intensity of daily events versus domain count. Prior to hypothesis testing, descriptive data and bivariate correlations were assessed to determine whether analyses completed using the perceived intensity scale scores should be repeated using the domain count totals for hassles and uplifts. Based on evidence of equivalent relations between intensity and total domain count measures with SAH, affect, and person characteristics, the perceived intensity of hassles and uplifts scales were used in the remaining analyses. Appendix I contains those results.

Hypothesis Testing- Primary Study Aims

Group-level analyses. The hypotheses pertaining to age, gender, and neuroticism in relation to SAH stability (Hypothesis 1 – Hypothesis 3) were tested using correlations and *t*-tests. In these tests, SAH stability was examined in two ways. The first method was to evaluate the person characteristics in relation to average daily fluctuation in SAH calculated as the average of intraindividual variability around one's daily means across the study period. The second method of assessing SAH stability was through examination of the autocorrelations between days of the week and times of the day. Significant reductions in the magnitude of the autocorrelations were expected with the influence of age, gender, and neuroticism partialled out. To test whether changes in the size of the correlations significantly differed, Fisher's *r*s to *z* transformations were performed with the VassarStats online calculator (Lowry, 2015).

Cross-lagged path models were used to examine the synchronous and lagged associations among SAH and perceived intensity of hassles and uplifts (Hypothesis 4a and 4b). Prior to analyzing these relations, a 7 (day of the week) x 4 (time of day) repeated measures analysis of variance was conducted to examine day-of-week and time-of-day trends in SAH and perceived intensity of hassles and uplifts. Taken together with theoretical and empirical evidence of day-of-week (Akay & Martinsson, 2009; Stone et al., 1993; Stone et al., 2012) and diurnal effects (Ryan et al., 2010; Steele, 2004), this analysis helped to inform how the models were specified for hypothesis testing.

Age and SAH stability. Age was not significantly related to the average amount of daily fluctuation in SAH ($r(n = 57) = -.18, p = .19$). Table 8 shows the autocorrelations across days of the week with and without the influence of age, gender, and neuroticism removed. Table 9 shows the same, but across times of day. Fisher's *r* to *z* transformations of the autocorrelations with and without the effects of age partialled out indicated no significant differences (Fisher's $z < 1.96$).

Gender and SAH stability. An independent samples *t*-test was conducted to test whether men ($n = 26$) have more stable SAH than women ($n = 30$). The individual who identified as “other” was excluded from analysis. The results indicate no significant difference between men ($M = 0.21$, $SD = 0.25$) and women ($M = 0.26$, $SD = 0.22$) in the average amount of daily change in SAH across the study period, $t(54) = -0.81$, $p = .42$. The autocorrelations across days of the week and across times of the day were not significantly reduced by partialling out gender.

Neuroticism and SAH stability. Neuroticism was also not significantly related to average amount of daily change in SAH ($r(n = 57) = -.04$, $p = .74$). In inspecting the partial autocorrelations between days of the week and across times of the day with the effects of neuroticism removed, no significant reduction in magnitude was found.

Preliminary examination of day and time patterns. Prior to hypothesis testing, a series of 7 (day of the week) $\times$ 4 (time of the day) within-subjects repeated measures analyses were conducted using the General Linear Model in SPSS version 21. The best fitting trend (linear, quadratic, cubic) to describe weekly and daily change in the primary study variables was determined. The results did not differ regardless of whether raw ($n = 25$) or imputed data ($n = 57$) were used, even though the sample size varied substantially; therefore, reported results are based on data containing imputed values unless otherwise noted.

Multivariate tests, which combine the study variables into a single linear composite to test the effects of day and time, indicated that SAH significantly varied by time of day ($\lambda = 0.85$; $F(3, 54) = 3.08$, $p = .03$, partial $\eta^2 = .15$), but not by day of the week ($\lambda = 0.85$; $F(6, 51) = 1.52$, $p = .19$, partial $\eta^2 = .15$). Hassles did not significantly vary by either day of the week ($\lambda = 0.81$; $F(6, 51) = 1.94$, $p = .09$, partial $\eta^2 = .19$) or time of the day ($\lambda = 0.89$; $F(3, 54) = 0.89$, $p = .10$, partial $\eta^2 = .11$). There was, however, a significant day-of-week by time-of-day interaction ($\lambda =$

0.52; $F(18, 39) = 1.97, p = .04$, partial $\eta^2 = .48$). At the multivariate level, uplifts did significantly vary by time of day ($\lambda = 0.69$; $F(3, 54) = 8.25, p < .001$, partial $\eta^2 = .31$), but not by day of the week ($\lambda = 0.85$; $F(6, 51) = 1.51, p = .19$, partial $\eta^2 = .15$).

Mauchley's Test of Sphericity indicated violations of sphericity, and therefore, the Greenhouse-Geisser correction was used for interpreting the univariate analyses (Girden, 1992). At the univariate level, SAH significantly varied by time of day ($F(2.43, 136.11) = 4.09, p = .01$, partial $\eta^2 = .07$), but not by day of week ($F(4.12, 230.88) = 0.80, p = .53$, partial $\eta^2 = .01$). Perceived intensity of uplifts significantly varied by time of day ($F(2.67, 149.73) = 9.20, p < .001$, partial $\eta^2 = .14$), but not by day of week ($F(4.88, 273.46) = 1.95, p = .08$, partial $\eta^2 = .03$). With the Greenhouse-Geisser correction, no effects, including the interaction, were significant for hassles. Figure 2 shows the daily trends for each day of the week separately for SAH, uplifts, and hassles.

Within-subjects contrasts were analyzed to determine weekly and daily trends in the data. Time of day was significantly related to SAH with significant linear ($F(1, 56) = 4.44, p = .04$, partial $\eta^2 = .07$) and quadratic trends ($F(1, 56) = 7.72, p = .007$, partial $\eta^2 = .12$). Individuals started the day lower, slowly gained across the afternoon, and then came down slightly by evening. Figure 3a depicts this relationship, by graphing the marginal means. None of the trends significantly fit the relationship between SAH and day of week (see Figure 4a).

For perceived intensity of hassles, a linear trend best described the relation with time of day ($F(1, 56) = 6.64, p = .01$, partial $\eta^2 = .16$) and day of week ($F(1, 56) = 5.25, p = .03$, partial $\eta^2 = .11$). Based on the marginal means (see Figure 3b for time of day and Figure 4b for day of week), hassles are generally more intensely felt across the day, but less intensely felt across the week. Perceived intensity of uplifts had a significant linear relation with time of day ($F(1, 56) =$

24.81, $p < .001$, partial $\eta^2 = .31$), but not with day of week ($F(1, 56) = 3.85$, $p = .055$, partial $\eta^2 = .06$). As with hassles, perceived intensity of uplifts increased across the day. Figure 3c depicts the time of day trend and Figure 4c depicts the day of week trend. As shown and indicated by significant day of week by time of day interactions for both hassles and uplifts, the time of day patterns were not consistent across days of the week.

Synchronous relations between hassles, uplifts, and SAH. Path analyses were conducted using IBM SPSS AMOS version 21 to examine the group-level hypotheses concerning the synchronous relations between intensity of reported hassles and uplifts and SAH level (Hypothesis 4a and 4b). AMOS (Analysis of Moment Structures) is a statistical program used to assess the fit of data with a conceptual or theoretical model (Arbuckle, 2012). All specified pathways were tested simultaneously, using variance-covariance matrices to produce path estimates. The overall model fit was assessed using several indices of fit. In the present study, the overall χ^2 , CMIN/df, comparative fit index (CFI), and root mean square error of approximation (RMSEA) were reported. Each index has a different cut-off for indicating good fit. If the overall chi-square is not significant; the CMIN/df is less than 3; the CFI is .95 or greater; and the RMSEA is less than .05, the conceptual model is a good fit to the data (Byrne, 2001). Adequate fit is achieved if the CFI is less than .90 and RMSEA is between .08 and .05. Within the model, the maximum likelihood estimates (MLE) for each path are tested for statistical significance using the Critical Ratio (CR = MLE/Standard Error of MLE). Similar to z -scores, CRs greater than 1.96 are interpreted as statistically significant at the $p < .05$ level (Arbuckle, 2012).

With smaller sample sizes, such as the present study, the overall χ^2 is a robust and sufficient fit index. Some researchers (see Kenny, Kaniskan, & McCoach, 2014) go as far as to

suggest that the calculation of other fit indices is unnecessary when sample size is small given that many of the other fit indices are influenced by available degrees of freedom. For example, when the chi-square statistic is less than the available degrees of freedom, a common occurrence in simpler models, the corresponding CFI value will be 1.00 and the RMSEA value will be 0.00. Therefore, while these values are reported, they do not necessarily offer additional information over the χ^2 .

Consistent with diurnal patterns found in affect (Ryan et al., 2010; Steele, 2004), time of day trends emerged for all three variables of interest (SAH, perceived intensity of hassles, and perceived intensity of uplifts). Hence, a path model was specified to examine synchronous relations within a day (morning, early afternoon, late afternoon, and evening). A separate day of week model was also specified, but based solely on theoretical justification for day-of-week effects (Akay & Martinsson, 2009; Stone et al., 1993; Stone et al., 2012). In the current study, only perceived intensity of hassles showed significant day-of-week trends. The results of the day-of-week path model are compiled in Appendix J.

The cross-lagged path model examining concurrent and synchronous relations between SAH and hassles across the day is shown in Figure 5. The model was specified with autoregressive and cross-lagged paths between each time point of the day. A lack of significant relations between SAH and perceived intensity of hassles reported concurrently suggested no need to co-vary the two measures. Based on all but one fit index, overall model fit was good (χ^2 ($df = 16, n = 57$) = 46.10, $p < .001$; CMIN/ df = 2.88; CFI = .95; RMSEA = .18; RMSEA 90% CI = .12 - .25). A high percentage of variance was accounted for in each time point for SAH (91.1% - 94.3%) and perceived intensity of hassles (53.4% - 65.7%). This was primarily due to the strong autoregressive paths between subsequent time points for both of these variables. One

cross-lagged effect was significant, however. Greater perceived intensity of hassles in the early afternoon were associated with higher levels of SAH in the late afternoon ($\beta = 0.10$). Table 10 includes the standardized and unstandardized path coefficients and the CR scores for all model paths.

A similar model was specified for SAH and perceived intensity of uplifts (see Figure 6). Again, lack of evidence in the bivariate correlations resulted in no added covariances to account for concurrent relations. The fit indices indicated that the model was poor fitting, $\chi^2 (df = 16, n = 57) = 68.12, p < .001$; $CMIN/df = 4.26$; $CFI = .92$; $RMSEA = .24$; $RMSEA\ 90\% \text{ CI} = .18 - .30$. As in the hassles model, a high percentage of variance was accounted for in SAH (90.8% - 94.3%) and perceived intensity of uplifts (49.2% - 76.0%). Table 11 includes the standardized and unstandardized path coefficients and the CR scores for all model paths. Other than strong autoregressive paths, only one cross-lagged effect was significant. Greater perceived intensity of uplifts early in the afternoon corresponded with higher levels of SAH later in the afternoon ($\beta = 0.09$).

Although perceived intensity of hassles and uplifts were not significantly associated with next day SAH in the day-of-week path models (see Appendix J), these analyses represented daily averages across all time points. To examine if the way in which individuals ended their day influenced the next morning, two additional path models were specified (see Figures 7 and 8). First, a new average had to be calculated for morning and evening time points, excluding Study Day 1 from the morning average and Study Day 14 from the evening average. Model fit for the evening-to-morning models for both the perceived intensity of hassles ($\chi^2 (df = 2, n = 57) = 2.32, p = .313$; $CMIN/df = 1.16$; $CFI = .99$; $RMSEA = .05$; $RMSEA\ 90\% \text{ CI} = 0 - .28$) and perceived intensity of uplifts models ($\chi^2 (df = 2, n = 57) = 1.72, p = .424$; $CMIN/df = .86$; $CFI = 1.00$;

RMSEA = 0.00; RMSEA 90% CI = 0.00 - .25) was excellent. The autoregressive paths were strong in both models, but with regard to the cross-lagged paths, only perceived intensity of uplifts was significantly related to morning SAH levels ($\beta = 0.15$). Thus, the previous day's uplifts seemed to set the next day's starting point for SAH.

Individual-level analyses. Regression curve estimation models were calculated for each individual to examine the relations between reported SAH with perceived intensity of hassles and uplifts across the study period (Hypothesis 5a and 5b). Twelve individuals had no variability in their SAH over the course of the study; therefore, regression curve models could not be fit. Estimation curves were based on all available points of data ($M = 46.82$ data points, $SD = 6.66$, range = 34 - 56). Linear, quadratic, and cubic models were tested; an overall F statistic indicated whether a model containing those terms accounted for a significant proportion of variance in SAH. When multiple models were significant, several checks, including the significance of the parameter estimates and visual inspection of the plots, were conducted to select the best-fitting yet also most parsimonious model.

For the 45 individual regression curve estimate models calculated, the variance accounted for in SAH by perceived intensity of reported hassles ranged from .00 to .42. The majority ($n = 35$; 77.8%) had no discernable pattern of relations between SAH and intensity of reported hassles. Ten (22.2%) held significant associations between the variables. The amount of variance accounted for in significant models ranged from $R^2 = .09$ to .42 (median $R^2 = .17$). Significant linear ($n = 5$), quadratic ($n = 2$), and cubic trends ($n = 3$) emerged. The significant linear (β range from -0.50 to 0.31) and quadratic terms (β range from -1.03 to 1.24) were mixed with regard to direction. Both positive and negative relations between perceived intensity of hassles and SAH were present. Three significant cubic terms (β range from -5.32 to 12.09) suggested that lower

and higher reported intensity of hassles corresponded with SAH differently than mid or average intensity hassles.

The amount of variance accounted for in SAH by perceived intensity of reported uplifts ranged from .00 to .53. Again, the majority of these models were not significant ($n = 33$; 73.3%). Just over a quarter (26.7%) of the participants showed evidence of significant relations between perceived intensity of uplifts and SAH levels across the study period. The amount of variance in SAH accounted for in these models ranged from $R^2 = .08$ to .53 (median $R^2 = .17$). Significant trends were mainly linear (β s ranged from 0.27 to 0.67) and quadratic (β s ranged from -0.85 to -1.79), with the exception of one cubic trend ($\beta = 7.89$). Support for a positive linear association, such that higher reported intensity of uplifts corresponded with higher levels of SAH, was apparent in all models. The quadratic terms were negative (inverted U-shaped) such that the relation between perceived intensity of uplifts was positively related to SAH to a point then became negative. One significant cubic trend indicated that mid-level intensity corresponded with lower SAH levels, but lower and higher intensity of uplifts corresponded with higher levels of SAH. Five individuals had significant relations between SAH levels and perceived intensity of both hassles and uplifts. Tables 12 - 14 contain illustrative examples of the results for linear, quadratic, and cubic trends. Table 15 contains an example of an individual regression curve estimation model with no significant trends.

To test whether daily fluctuations in SAH corresponded with daily fluctuations in hassles and uplifts intensity across the study period (Hypothesis 6a and 6b), regression curve estimation models were calculated using the daily change z -scores (described earlier) for SAH, hassles, and uplifts. Again, 12 individuals had no variability in their SAH rendering the ability to conduct analyses based on fluctuation impossible. Additionally, three additional participants who were

variable in mean levels of SAH did not fluctuate around their daily means. Therefore, 42 individual regression estimation curves were run for these analyses. Tables 16 - 18 contain illustrative examples of regression curve estimation models showing significant linear, quadratic, and cubic trends. Table 19 contains an example of an individual regression curve estimation model with no significant trends.

Across the 42 models calculated to examine the relation between intraindividual variability in reported intensity of hassles and intraindividual variability in SAH, the amount of variance in SAH that was accounted for ranged from .00 to .32. For the majority of participants, the relation between intraindividual variability in reported intensity of hassles and SAH was not significant ($n = 33$; 78.6%). Nine significant relations emerged ($R^2 = .09$ to .32; median $R^2 = .12$). Significant trends were mainly linear (β s ranged from -0.39 to 0.49) and mixed with regard to direction of the relation. Two positive quadratic trends ($\beta = 0.32$ and 0.38) indicated that the relation between perceived intensity of hassles was negative to a point, and then became positive. One significant cubic term ($\beta = 0.91$) showed a trend such that lower levels of fluctuation in perceived intensity of hassles was positively related to lower levels of fluctuation in SAH, but with greater fluctuation in perceived intensity of hassles, SAH fluctuated even less.

Variance accounted for in intraindividual variability in SAH by intraindividual variability in perceived intensity of uplifts ranged from .00 to .40. Again, the majority (69.1%) held no significant relations between these variables. Thirteen of the 42 (30.9%) individual regression curve estimations examining intraindividual variability in perceived intensity of uplifts in relation to intraindividual variability in SAH were significant. The amount of variance accounted for in the significant models ranged from $R^2 = .07$ to .40 (median $R^2 = .19$). These significant relations were primarily linear (β s ranged from 0.27 to 0.62) or quadratic (β s ranged from -0.33

to 0.44). All the linear relations were positive, indicating that greater fluctuation in intensity of reported uplifts corresponded with greater fluctuation in SAH. The quadratic trends were primarily positive wherein being below or above the daily mean on fluctuation in perceived intensity of uplifts corresponded with fluctuation in SAH above the daily mean. There was also one significant cubic trend ($\beta = 0.69$). For five individuals, daily fluctuation in SAH was significantly related to daily fluctuation in both perceived intensity of uplifts and perceived intensity of hassles.

Secondary Study Aims and Exploratory Analyses

The secondary aims of the study were to better understand the role of positive affect as a possible intermediary in the relations between age and SAH (Hypothesis 7) and hassles/uplifts and SAH (Hypothesis 8). These hypotheses were investigated at the group level. While the primary focus was on positive affect, negative affect was also explored as potential intermediary variables given the well-supported relations among these variables. Correlations and partial correlations were used to examine Hypothesis 7 and cross-lagged path models were used to investigate Hypothesis 8.

Age, positive affect, and SAH. The correlation between age and average daily fluctuation in SAH was not significant ($r(n = 57) = -.18, p = .19$). Average daily fluctuation in positive affect was examined in relation to both of these variables. Age was not significantly associated with average daily fluctuations in positive affect ($r(n = 57) = -.24, p = .07$). Average daily fluctuation in positive affect, however, was significantly related to average daily fluctuation in SAH ($r(n = 57) = .45, p < .001$). Hypothesis 7 sought to examine whether the inclusion of positive affect would reduce the unique relation between age and SAH stability. In a partial correlation with the effects of average daily change in positive affect controlled, the correlation

between age and average daily change in SAH remained non-significant ($r (n = 57) = -.08, p = .56$) and was not significantly reduced (Fisher's $z = -0.53, p = .60$).

The same analyses were completed for negative affect. Average daily fluctuation in SAH was significantly related to average daily fluctuation in negative affect ($r (n = 57) = .46, p < .001$). Age, however, was unrelated to change in negative affect ($r (n = 57) = -.21, p = .13$). The correlation between age and average daily fluctuation in SAH was not significantly altered (Fisher's $z = -0.53, p = .60$) when average daily fluctuation in negative affect was partialled out ($r (n = 56) = -.08, p = .58$). Appendix K contains a parallel set of analyses exploring the role of affect in the relation between neuroticism and SAH stability.

Daily events, positive affect, and SAH. To test the influence of positive affect in the synchronous relations among SAH and perceived intensity of hassles and uplifts, cross-lagged path models were specified with positive affect acting as an intermediary variable. This was carried out using the within-day model (morning, early afternoon, late afternoon, and evening) tested previously. Initially, the models just contained the autoregressive and cross-lagged paths, but modification indices were used to identify necessary and theoretically-relevant covariances to account for concurrent relations among the variables. Appendix L contains a parallel set of analyses exploring the influence of negative affect.

For the model investigating the role of positive affect in the relation between perceived intensity of hassles and SAH, initial model fit was adequate ($\chi^2 (df = 39, n = 56) = 115.02, p < .001$; CMIN/ $df = 2.95$; CFI = .93; RMSEA = .19; RMSEA 90% CI = .15 - .23). The model contained several non-significant paths that were not trimmed due to theoretical constraints, but modification indices did suggest the inclusion of one theoretically-relevant covariance between morning SAH and positive affect. This covariance was added ($r = .47, p = .001$) and model fit

was assessed again. The final model fit remained adequate ($\chi^2 (df = 38, n = 56) = 100.90, p < .001$; CMIN/df = 2.67; CFI = .94; RMSEA = .17; RMSEA 90% CI = .13 - .21). Figure 9 contains the final model.

Strong autoregressive paths were indicated for perceived intensity of hassles, positive affect, and SAH across the day. Table 20 includes the standardized and unstandardized path coefficients and the CR scores for all model paths. The majority of lagged and cross-lagged paths were not significant; however, a few significant paths did emerge. Perceived intensity of hassles in the morning was negatively related to positive affect in the afternoon ($\beta = -0.11$). Perceived intensity of hassles in the early afternoon was not significantly related to late afternoon positive affect, but was significantly related to late afternoon SAH ($\beta = 0.10$). This association was positive, such that more intensely-felt hassles were linked to higher levels of SAH. Finally, late afternoon perceived intensity of hassles was positively associated with evening positive affect ($\beta = 0.13$).

Initial model fit for the perceived intensity of uplifts, positive affect, and SAH model was poor ($\chi^2 (df = 39, n = 56) = 181.08, p < .001$; CMIN/df = 4.64; CFI = .88; RMSEA = .25; RMSEA 90% CI = .22 - .29). The model contained many non-significant paths which were retained based on theory. Modification indices suggested the inclusion of two theoretically-relevant covariances. These covariances were added in separate steps with model fit assessed in-between. With the added covariance between morning SAH and positive affect ($r = .47, p = .001$), model fit was still poor ($\chi^2 (df = 38, n = 56) = 166.97, p < .001$; CMIN/df = 4.39; CFI = .89; RMSEA = .25; RMSEA 90% CI = .21 - .29). With the second covariance added between morning uplifts and positive affect ($r = .37, p = .004$), model fit remained poor ($\chi^2 (df = 37, n =$

57) = 156.21, $p < .001$; CMIN/ df = 4.22; CFI = .90; RMSEA = .24; RMSEA 90% CI = .20 - .28).

This model containing both covariances was the final model (pictured in Figure 10).

Table 21 includes the standardized and unstandardized path coefficients and the CR scores for the within-day model examining the relations among perceived intensity of uplifts, positive affect, and SAH. Strong autoregressive paths were indicated for perceived intensity of uplifts, positive affect, and SAH, yet a few significant cross-lagged paths also emerged. Morning perceived intensity of uplifts predicted early afternoon positive affect ($\beta = -0.10$), although the association was negative such that more intensely-felt uplifts in the morning was linked with lower positive affect in the early afternoon. Morning positive affect was positively associated with early afternoon uplifts ($\beta = 0.28$), which was in turn positively associated with late afternoon SAH ($\beta = 0.09$). All other cross-lagged paths were non-significant.

Given that morning positive affect started a process whereby later SAH was influenced by early afternoon uplifts, an exploratory model was specified to see if the previous evening's perceived intensity of uplifts, positive affect, or SAH had any bearing on the next morning (see Figure 11). To run these models, a new average was calculated for morning and evening time points, excluding Study Day 1 from the morning average and Study Day 14 from the evening average. The fit indices indicated poor model fit (χ^2 ($df = 6$, $n = 56$) = 42.83, $p < .001$; CMIN/ df = 7.14; CFI = .88; RMSEA = .33; RMSEA 90% CI = .24 - .43). Again, modification indices indicated that additional covariances would improve model fit. With the covariance between evening uplifts and positive affect added ($r = .52$, $p < .001$), model fit was improved (χ^2 ($df = 5$, $n = 57$) = 25.45, $p < .001$; CMIN/ df = 5.09; CFI = .94; RMSEA = .27; RMSEA 90% CI = .17 - .38), yet was still poor. The covariance between evening uplifts and SAH was added next ($r = -$

.39, $p = .003$). The final model fit was adequate ($\chi^2 (df = 4, n = 57) = 13.63, p = .009$; CMIN/ $df = 3.41$; CFI = .97; RMSEA = .21; RMSEA 90% CI = .09 - .33).

In this model, 90.7% of variance was accounted for in morning SAH, 83.7% of the variance was accounted for in morning positive affect, and 61.6% of the variance was accounted for in morning perceived intensity of uplifts. Table 22 contains the standardized and unstandardized path coefficients and the CR scores. Three lagged paths were significant in these models. More intensely-felt uplifts in the evening were associated with higher levels of SAH in the morning ($\beta = 0.17$), but also lower levels of positive affect ($\beta = -0.13$). Higher levels of SAH in the evening also were associated with lower positive affect in the morning ($\beta = -0.16$). In a parallel set of analyses (see Figure 12) using hassles instead of uplifts ($\chi^2 (df = 5, n = 57) = 13.43, p = .02$; CMIN/ $df = 2.69$; CFI = .97; RMSEA = .17; RMSEA 90% CI = .06 - .29), the only cross-lagged path that was significant was between evening SAH and morning positive affect ($\beta = -0.16$). Table 23 contains the standardized and unstandardized path coefficients and the CR scores for this model. Perceived intensity of hassles in the evening was not significantly related to SAH in the morning.

Discussion

SAH may be a reflection of perceived physical health and emotional well-being, subtly influenced more by the day's positive events than the negative. From the previous literature, SAH has predictive utility for short- and long-term health outcomes, above and beyond more objective indicators of health and wellbeing (DeSalvo et al., 2005; Mossey & Shapiro, 1982; Schüz et al., 2011). More recently, attention has shifted toward understanding whether long-term SAH trajectories, rather than single-time point assessments, can better aid prediction of health outcomes (Ayyagari et al., 2012; Schmitz et al., 2013). Little research has addressed short-term fluctuation in SAH. This may in part be due to continued debate concerning the conceptual definition of SAH (Bailis et al., 2003; Boardman, 2006). Is it a stable, health-related identity or a flexible assessment that is susceptible to momentary influences and conditions? The present study sought to examine short-term change in SAH as well as the personal and contextual variables that may contribute to stability or change.

An experience sampling approach was implemented to investigate change in SAH within and across days in an age-diverse (age range = 25 to 71 years) community sample. Person and context characteristics were hypothesized to relate to SAH stability and change. Specifically, age and neuroticism were expected to be related with greater SAH stability. Men were expected to be more stable in SAH ratings than women. Daily events, identified as hassles and uplifts, were also expected to relate to concurrent and subsequent SAH. The relation among hassles, uplifts, and SAH were predicted to be at least partially explained by positive affect. In addition to testing these hypotheses, insights were gained regarding the momentary assessment of SAH and daily events.

Discussion of the results is centered on four major themes: degree of short-term change in SAH, person characteristics in relation to SAH change and stability, context characteristics in relation to SAH change and stability, and conceptual and methodological considerations in the momentary assessment of these variables. Discussion of the possible intermediary role positive affect may play in these relations is integrated within these sections. Limitations, implications, and future directions for research will be discussed in relation to the present study design and results.

Part I: Short-term Change and Fluctuation in SAH

Change across the day and week. In preliminary analyses examining mean levels of SAH across the day, significant trends (linear and quadratic) were found to describe daily patterns of change in SAH. SAH started out lower in the morning, improved across the afternoon, and tapered off at night. Diurnal patterns have been documented for other variables that relate to SAH, including curvilinear patterns in reported symptoms (Michel, 2006), linear increases in positive affect, and linear decreases in negative affect (Ryan et al., 2010; Steele, 2004). In the present study, significant linear time-of-day trends were found for perceived intensity of hassles and uplifts. Therefore, it was reasonable to proceed with investigations to examine whether change across the day in hassles and uplifts were associated with change in SAH.

Although SAH showed significant diurnal patterns of change, no significant trends emerged to describe the relation between SAH and day of the week. Day-of-week effects have been reported for subjective well-being (i.e., mood; Akay & Martinsson, 2009; Stone et al., 2012) with the suggestion that these day-to-day fluctuations may be related to patterns of events across the week, such as the higher probability for work-related events on weekdays, but not

weekends for most employed individuals (Ryan et al., 2010; Stone et al., 1993). In the current study, day-of-week effects were replicated for positive and negative affect, but only perceived intensity of hassles, and not uplifts, displayed significant relations with day of the week. Acute symptoms also did not show significant day-of-week effects. Therefore, it is possible that the lack of day-of-week effects for SAH may be explained by the lack of day-of-week effects for acute symptoms, even though day-of-week effects for other known correlates of SAH (i.e., positive and negative affect) were present. Acute symptoms, an indicator of physical health and thus an influential factor on SAH assessments (Benyamini, 2008; Layes et al., 2012; Winter et al., 2007), may be more likely to share similar patterns across time.

Fluctuation around daily means. Each time point was assessed in relation to individuals' daily means to get a sense of intraindividual variability in SAH across the study period. The absolute value of the obtained *z*-scores, indicating fluctuation around one's own mean, were averaged across the study period as an indicator of overall degree of daily fluctuation. For the sample, SAH did show little to no fluctuation (average daily fluctuation = .24 standard units) around individuals' daily means. A subset of the sample had no variability in reported SAH at all ($n = 12$) and an additional three individuals had no fluctuation around their daily means. Efforts were made to identify distinguishing characteristics of these individuals in comparison to others. Given the group-level hypotheses that age, gender, and neuroticism would be associated with stability, the composition of this group of individuals was evaluated. No significant differences on these personal characteristics were found in comparison to the rest of the sample. These individuals did fluctuate across the study on other experience sampling measures, including those known to co-vary with SAH, such as positive affect and symptoms (Winter et al., 2007).

Measurement was also examined as a possible explanation. With the exception of one individual, floor and ceiling effects (Choi, 2002; Gunasekara et al., 2012) were not a viable explanation as participants primarily held steady at *good* or *very good* health and therefore had room to shift in either direction. To gauge whether the 5-point item was simply insensitive to change, fluctuation on the slider-scale item was assessed for these individuals. Although they did show minor changes on the slider-scale item, the tiny standard deviations (SD range = 0.02 - 0.36) indicated that they were still relatively stable in their SAH.

Conclusions about short-term change and fluctuation in SAH. Findings from the current study support diurnal patterns of change in SAH with perceptions becoming increasingly positive across the day. SAH did not show discernable patterns of change across the week, possibly because day-of-week effects for common correlates of SAH (i.e., symptoms and affect) were mixed. Most individuals (73.7%) did show minor fluctuation around their daily means, but approximately a quarter of the sample showed no daily fluctuation. More research is needed to distinguish those who fluctuate from those who do not. Furthermore, these findings should be replicated with a bigger sample and examined in relation to health outcomes.

Part II: Person Characteristics and SAH Stability

Group-level analyses were conducted to examine the relations among age, gender, neuroticism, and SAH stability. SAH stability was evaluated using two different methods: average standardized units of fluctuation across the study period and auto-correlations between times of the day and days of the week. A secondary aim of the study was to understand the role that positive affect may play specifically among the relation between age and SAH stability. Positive affect was selected as the focus of these analyses instead of other intermediary variables,

such as negative affect and acute symptoms, based on theoretical rationale (Carstensen et al., 2000; Charles, 2010; Labouvie-Vief, 2003).

Age and SAH. In preliminary analyses, age and average SAH across the study period were not significantly related. This was despite age and lower SAH being significantly related to an increased number of chronic conditions, thereby supporting the idea that SAH is multidimensional construct referencing more than just physical health conditions (Benyamini, 2008; Schüz et al., 2011). Although the literature generally suggests older age is associated with lower SAH (French et al., 2012b; Liang et al., 2010; Shooshtari et al., 2007), the discrepancy between actual and perceived health that occurs in late adulthood (the “paradox of aging”) is often put forward to explain why age differences in SAH are not as large as one might expect (Cheng et al., 2007; Henchoz et al., 2008; Staudinger et al., 1999). Furthermore, many studies that report age differences in SAH use samples with limited age ranges or purposefully exclude or collapse age groups together to maximize differences (Krause & Jay, 1994; Simon et al., 2005). Additionally, many of these results are found using large-scale, longitudinal datasets with the power to detect very small effects.

With regard to fluctuation in SAH, age was expected to be associated with less daily fluctuation (greater stability). Evidence from the current study showed that regardless of age, the sample showed little to no fluctuation in SAH as evidenced by the strong autocorrelations from time-to-time and day-to-day as well as the small average amount of daily fluctuation in SAH across the sample (.24 standard units). Therefore, although SAH did show some degree of daily fluctuation, age was not related to that fluctuation. Therefore, Hypothesis 1, that age would be positively related to SAH stability, was not supported.

Although the current study can only speak to the relation between age and short-term variability in SAH, the results do convey relevant information concerning the conceptualization of SAH as a more spontaneously-generated assessment based on current circumstances versus a stable, health-related identity (Bailis et al., 2003; Boardman, 2006). If SAH represents a health-related identity, age should have related to stability in the current sample given evidence that health-related self-representations become more salient (Cross & Markus, 1991; Hooker, 1992; Hooker & Kraus, 1994; Markus & Nurius, 1986) and thus more stable with age (Diehl et al., 2006). Perhaps the nature of the data collection method, which involved asking participants to consider their health at regular intervals, temporarily increased the saliency of health-related self-representations for all participants and hence masked a possible relation with age.

A second explanation is that SAH is both a health-related self-representation and subject to momentary influences. Using two waves of the National Population Health Survey conducted in Canada, Bailis and colleagues (2003) demonstrated that changes in adults' (18 to 65+ years) SAH across a three-year period were explained primarily by previous level of SAH and ongoing health and behavior changes. The strength of these indicators, however, was modified by the presence or absence of future health goals. These findings did not differ when compared by specific age groups or gender. Universally then, SAH may be influenced by interactions between health-related self-representations, including future self-representations, and ongoing health information and change. It is unclear whether longitudinal findings separated by years, such as these, might also transpire closer in time.

Age, SAH stability, and positive affect. In addition to no significant relation with average daily fluctuation in SAH, age was also not significantly related to average levels of positive affect or daily fluctuation in positive affect. This finding runs contrary to theory

(Carstensen et al., 2000; Charles, 2010; Labouvie-Vief, 2003) that older age corresponds with better affect regulation, maintenance, and optimization favoring positive emotions and experience. The null results may stem from the study methodology, however. In experience sampling studies, reports of positive emotions, regardless of age, have been found to be high in frequency and intensity (Carstensen et al., 2000). Furthermore, some have suggested that a greater degree of intraindividual variability is apparent in momentary assessments of affect in comparison to single time-point assessments (Cain et al., 2009). The study task (56 survey responses across 14 days) and possible generational differences in the willingness to monitor and share emotional experiences also may have washed out age differences. Finally, the power to detect these relations in the current sample may have been limited by sample size.

Average daily fluctuation in SAH was significantly related to average daily fluctuation in positive affect, which is consistent with previous research (Winter et al., 2007). Contrary to previous research (Barger et al., 2007), however, average daily fluctuation in SAH was also significantly related to average daily fluctuation in negative affect. Methodological limitations of the previous studies, including too few time points collected and the use of change scores, may have contributed to previous null findings in the literature. In light of these preliminary bivariate checks, it seemed unlikely that the association between age and daily fluctuation in SAH would change with the effects of average daily fluctuation in positive or negative affect partialled out. Counter to Hypothesis 7, which predicted that positive affect would reduce the unique relation between age and SAH stability, average daily fluctuations in positive affect did not reduce the association between age and SAH stability.

Gender and SAH. Gender differences were not found in either reported SAH or magnitude of average daily fluctuation in SAH. Gender differences in SAH levels have been

equivocal in adult samples (Benyamini, 2008; Henchoz et al., 2008; Moor et al., 2006). Women, however, are more variable in other health reports (DeLongis et al., 1988; Henchoz et al., 2008; Idler & Benyamini, 1997) and tend to incorporate a broader range of information into SAH than men (Benyamini et al., 2000b). Thus, it was expected that men would have greater stability in SAH. This hypothesis (Hypothesis 2) was not supported in the present study. These findings may be the result of low power to detect group differences ($n = 26$ men, 30 women), despite the power gained by the repeated-measures design. Consistent with the gender similarities hypothesis (Hyde, 2014), a recent meta-synthesis confirmed that gender differences overall are frequently small ($d < .20$), and that the psychological domain under study moderates these effects (Zell et al., 2015). Within the well-being domain, gender differences were particularly small ($d = .14$) in comparison to other domains. With respect to gender differences in SAH, the effects may be even smaller. Turiano and colleagues (2012) detected gender differences in SAH ($\beta = .03$), but the ability to detect such a small effect was primarily due to the large sample size ($n = 3,455$). The current study sample may have also shared more commonalities than differences in health definitions given other sample characteristics, such as education, employment, and health conditions (Clarke & Bennett, 2013).

Neuroticism and SAH. In other momentary assessment studies, high levels of neuroticism have been linked to higher levels and more consistency in reported acute symptoms (Michel, 2006). Hypothesis 3, that high levels of neuroticism would also be associated with greater stability in SAH, was an extension of this finding. The relation between neuroticism and magnitude of average daily fluctuation in SAH was not supported in the present study. Neuroticism was, however, the only person characteristic significantly related to means levels of SAH, such that higher levels of neuroticism were significantly correlated with lower SAH.

Neuroticism has been shown to influence self-reported health assessments (Andersen & Lobel, 1995; Turiano et al., 2012; Watson & Pennebaker, 1989; Williams & Wiebe, 2000), and this finding was replicated in the current study.

Thus, although Hypothesis 3 was not supported, the finding that neuroticism negatively influences reported SAH has important implications. It suggests that for those higher in neuroticism, regardless of how much or how little they fluctuate around their daily mean, they are fluctuating around lower mean levels of SAH compared to those lower in neuroticism. Maintaining low perceptions of one's health can have detrimental consequences on future health outcomes. For example, in a recent study (Schmitz et al., 2013), consistently poor SAH placed adults with diabetes at a higher risk of complications and poorer functioning, a risk rate even greater than those who started with higher SAH and declined across time. Evidence such as this supports the theory that neuroticism may indirectly relate to health outcomes by influencing the interpretative context in which health is evaluated and maintained (Löckenhoff et al., 2012).

Part III: Context Characteristics and SAH Change

The examination of context characteristics addressed the independent synchronous relations between the perceived intensity of daily events (hassles or uplifts) and SAH. These relations were examined across the day and week using cross-lagged path models. Based on the preliminary findings that SAH showed significant linear and quadratic trends with time of day, the within-day models form the basis of this discussion. The day-to-day models are presented in Appendix J. Results revealed that: 1) SAH holds a synchronous pattern of relations with perceived intensity of hassles and uplifts only at particular times of the day (i.e., morning and late afternoon); and 2) SAH may be more susceptible to influence from uplifts than influence from hassles.

To examine the role of positive affect on the relation between SAH and perceived intensity of daily events, positive affect was added to the within-day models as an intermediary variable. It was hypothesized that perceived intensity of daily events would relate to positive affect at a subsequent time point, which would in turn relate to concurrent or subsequent SAH. Positive affect was selected as the focus of these analyses instead of other intermediary variables, such as negative affect and acute symptoms, based on empirical support from the previous literature (Barger et al., 2007; Whitehead & Bergeman, 2013a; Winter et al., 2007).

Finally, given that a variety of individual and situational differences influence variability in reported daily hassles and uplifts as well as some health variables (e.g., Diehl et al., 2006; Lazarus, 1986; Piazza et al., 2013; Ryan et al., 2010), the relations among SAH and daily events was evaluated at the individual level. Consistency between group-level and individual-level results would provide support for a universal model of SAH processes; inconsistency might suggest SAH involves a more idiosyncratic process. The results suggest a more systematic relation between uplifts and SAH than between hassles and SAH.

Concurrent and synchronous relations between SAH and daily events. Focusing specifically on the within-day cross-lagged path models (morning through evening and evening to morning), large amounts of variance were being accounted for in SAH (hassles model: 87.7-94.4%; uplifts model: 90.6-94.3%) and perceived intensity of hassles (53.4-65.7%) and uplifts (49.2-76.0%). In all models, strong autoregressive effects were found for SAH. Perceived intensity of hassles and uplifts also had moderate to strong autoregressive paths. Therefore, the large amount of variance accounted for in these variables was primarily due to the stability of these constructs across the day.

Interestingly, there were no significant concurrent relations between SAH and perceived intensity of reported hassles or uplifts during any part of the day. Three significant pathways indicated subsequent relations between perceived intensity of daily events and SAH.

Specifically, more intensely-felt hassles and uplifts in the early afternoon were associated with higher levels of SAH in the late afternoon. Also, more intensely-felt uplifts in the evening were related to higher levels of SAH in the morning. The perceived intensity of evening hassles was not significantly associated with levels of SAH in the morning.

The presence of lagged, but not concurrent, associations between perceived intensity of daily events and SAH suggests that a time-lag may be required for perceived hassles and uplifts to come to bear on SAH. This may involve a process whereby perceived hassles and uplifts transpire as affective changes or acute symptoms, which in turn influences SAH. Additionally, this process may unfold differently for hassles and uplifts. In the literature, there is evidence, at least for hassles, that changes in negative affect occur very shortly following a perceived hassle and are deactivated within the hour (Wrzus et al., 2014). It is possible that participants experienced an immediate negative reaction to hassles that may have influenced SAH in the moment, but given the time-lag between surveys in the present study (an average of four hours, but a minimum of 90 minutes), this momentary relation was not captured. The influence from uplifts may be more lasting, thus the time-lag was sufficient to capture the significant positive association between time points. Additional support for the lasting effects of uplifts in comparison to hassles is garnered from the significant cross-lagged association between perceived intensity of uplifts, but not hassles, in the evening and SAH level in the morning.

The duration of these lagged relations may also vary depending on whether participants were preoccupied with experienced hassles or uplifts, thereby altering affective responses to

ongoing and new events. In the study by Wrzus and colleagues (2014), participants who were preoccupied by a hassle showed altered patterns of activation and deactivation of negative affect in response to new hassles. Thus, preoccupation or ruminative thoughts may modify these relations. The same may also be true of uplifts and positive affect (Bryant & Verhoff, 2007). Jose and colleagues (2012) reported evidence that savoring moderated the relationship between positive daily events and later reports of happiness in a sample of adults (17-53 years old). It is also interesting that significant cross-lagged effects were only found at particular times of the day. Since certain domains of events occur at greater or lesser frequencies at specific points throughout the day (Ryan et al., 2010), the domains represented during the afternoon (for hassles and uplifts) and evening (for uplifts only) may be driving these synchronous relations.

Finally, a positive association between the perceived intensity of hassles and SAH was contrary to prediction. Reactions to hassles may be integrated alongside reactions to uplifts (Labouvie-Vief, 2003; 2005), but how hassles and uplifts get integrated into self-representations may also differ. While the positive reactions to uplifts may be the salient aspect of those experiences, hassles may represent important information about one's ability and access to resources across different domains. Thus, the positive association between perceived intensity of hassles and SAH may be the result of focusing on the information gained from momentary frustrations.

Testing the concurrent and subsequent influence of positive affect. With few exceptions, positive affect was not concurrently associated with SAH in any of the models tested. From the few noted exceptions, there is evidence to suggest that concurrent relations between positive affect and SAH may not be consistent in magnitude or direction across the day. In the within-day models (from morning to evening), positive affect only related to SAH concurrently

in the morning, such that higher levels of positive affect corresponded with higher levels of SAH. In contrast, the significant concurrent relation between positive affect and SAH in the overnight models (evening to morning) was negative. This negative relation between positive affect and SAH suggests that a third variable is likely missing from consideration. For example, high amounts of acute symptoms may explain both lower positive affect and lower SAH.

No significant subsequent relations were found between positive affect and SAH at any point of the day. Therefore, although day-to-day changes in positive affect have been linked to SAH previously (Winter et al., 2007), evidence from the present study suggests that this association does not hold within more momentary timeframes, such as across parts of the day. The overwhelming lack of significant concurrent and subsequent associations between positive affect and SAH in the current study suggests positive affect may not be an important *intermediary* variable linking perceived intensity of hassles or uplifts with SAH. Rather, positive affect may set the stage for relations between daily events and SAH.

In the within-day uplifts model, there was evidence that higher levels of positive affect in the morning was related to more intensely-felt uplifts in the early afternoon, which was in turn related to higher levels of SAH in the late afternoon. Thus, starting the day feeling positive may serve as the catalyst to seeking out or at least interpreting uplifts more intensely, which has the potential to enhance perceptions of one's health later in the day. This is consistent with the idea of an upward spiral of positive emotion achieved by broadening one's focus or relying on a larger repertoire of behaviors (Fredrickson, 1998), ultimately with positive implications for health. Given that positive affect may serve as a catalyst in how uplifts are processed and incorporated into SAH, it was important to explore which factors may contribute to positive affect.

Higher levels of positive affect in the morning were associated with higher perceived intensity of uplifts and SAH in the morning, but the concurrent reporting of these variables made directionality difficult to assess. In the supplementary overnight model exploring whether the effects of perceived intensity of uplifts, positive affect, or SAH from the previous night carried over to the next morning, more intensely-felt uplifts and higher levels of SAH at night were linked with lower levels of positive affect in the morning. The negative relation between these variables in the evening and positive affect in the morning deserves greater attention. It may indicate a threshold or cap on the continuation of the upward spiral effect, thereby limiting carryover effects from day-to-day. Borrowing from behavior principles, a post-reinforcement pause (Felton & Lyon, 1966) may even occur following intense uplifts, thus resulting in a subsequent drop in positive affect. Although greater perceived intensity of uplifts negatively related to positive affect in the morning, uplifts were positively related to morning SAH levels. Thus, how the previous day ends appears to set the stage for the next day's patterns of synchronous relations.

Exploring the influence of negative affect. Because uplifts, and hassles in particular, may have also resulted in changes to negative affect (Wrzus et al., 2014), all the models were re-specified using negative affect as an intermediary variable instead. Aside from a couple significant but weak pathways between negative affect and SAH at subsequent time points (late afternoon to evening in the within-day hassles model; evening to morning in the overnight supplementary model), there was no evidence in these exploratory models to support negative affect as an intermediary variable in the relations between SAH and daily events. The null results concerning negative affect as an intermediary variable are consistent with the explanation put

forward previously concerning the quick activation and deactivation patterns of negative affect in response to hassles (Wrzus et al., 2014) and the study timeframe for sampling.

Similar to positive affect, negative affect may be better understood as a catalyst specifically in relation to seeking out or at least perceiving uplifts more intensely as a method of “undoing” negative feelings (Fredrickson, 1998). Increased negative affect in the late afternoon was associated with higher perceived intensity of uplifts in the evening. As described above, uplifts in the evening had significant influences on both positive affect and SAH in the morning. The presence of synchronous patterns between only particular times of the day deserves greater attention as it suggests that some factor specific to time of day, such as the number of hassles and uplifts, domains of daily events represented, or other unique contextual features may be driving these relations (Ryan et al., 2010).

Relation among daily events and SAH at the individual level. For the majority of the sample, intensity of reported hassles (77.8%) and uplifts (73.3%) were not significantly related to reported SAH. At first glance, these high percentages would suggest SAH is unrelated to the context of daily life for the majority of individuals. When hassles and uplifts were considered together, however, 42.2% (19 of the 45 participants for whom correlations could be calculated) of the sample held some significant relation between daily events and SAH. In these significant relations, hassles and uplifts accounted for similar amounts of variance in SAH (for hassles, 9.3-42.3%; for uplifts, 7.5-53.0%). Linear, quadratic, and cubic trends emerged, suggesting individual differences in the patterns of relations.

Specifically, among the ten individuals for whom hassles were significantly related to SAH, half displayed a linear relation between the two. The direction of those significant linear relations, however, was not consistent across individuals. Contrary to prediction, some held a

positive linear relation between intensity of reported hassles and SAH, indicating that more intense hassles related to higher SAH. For the 12 individuals with significant relations between perceived intensity of uplifts, the majority were linear. All were positive, indicating that greater intensity of uplifts was associated with higher SAH. Not all significant relations were linear. Two individuals demonstrated a quadratic relation between intensity of reported hassles and SAH and three demonstrated a cubic relation. These individual differences may explain why the group-level findings from the hassles models were limited and inconsistent with prediction. At both the group and individual levels, the findings for uplifts were more consistent with prediction.

Some individuals were solely influenced by hassles ($n = 7$) or uplifts ($n = 7$). For five individuals, SAH was related to their perceived intensity of both hassles and uplifts. Intensity of hassles and uplifts was moderately to highly correlated for these individuals, but this was true for most other participants as well. One possible explanation for the similarity found in the pattern of relations between hassles and uplifts for these participants is that valence may not matter. Most research defines hassles and uplifts as mundane or routine (DeLongis et al., 1982; Erlandsson et al., 2010; Flannery, 1986; Jandorf et al., 1986; Kanner et al., 1981; Piazza et al., 2013) by nature. Given theoretical (Frijda, 1988) and empirical support (Wood et al., 2002) that positive and negative habitual experiences lose their poignancy with time, this may result in individuals focusing on other aspects of routine daily events other than valence. A second interpretation involves the co-occurrence of hassles and uplifts and the possibility of a buffering effect (Longua et al., 2009). Such a buffering effect between hassles and uplifts has been demonstrated in relation to negative affect with neuroticism moderating the effects. Finally, consistent with theories proposing that the integration of positive and negative information into self-

representations improves up through middle age (DIT; Labouvie-Vief, 2003; 2005), intensity of hassles and uplifts may be relaying different types of useful information about access to resources and abilities that are important to health and well-being. The participants for whom similar patterns of hassles and uplifts emerged were primarily middle-aged (range = 35 to 63).

The conclusions gained from these findings indicate that for nearly two-thirds of the sample, SAH was not significantly related to the reported intensity of hassles or uplifts. This is despite quantitative and qualitative studies alike that indicate SAH is a multidimensional construct influenced not only by health-related factors, but also by non-health related factors such as interpersonal interactions and ability to perform desired tasks (Benyamini, 2008; Schüz et al., 2011). A possible explanation is that, even though the items selected to represent hassles and uplifts were informed by theory, empirical evidence, and pilot data, they may not have represented all hassles and uplifts that may relate to SAH level. Furthermore, while pilot data suggested uplifts and hassles could not be separated into interpretable factors, particular types of events may be more salient in relation to SAH. Even though most people indicate that a variety of information is incorporated into their SAH ratings (Benyamini et al., 2003), research has indicated that health-related factors tend to loom large (Chen et al., 2007; Krause & Jay, 1994; Pinquart, 2001; Simon et al., 2005). Given that the sample tended to be younger even within each age group represented, health should have been conceptualized more broadly (Choi, 2003; Mora et al., 2008; Shooshtari et al., 2007). Other individual variables, such as personal health history and education, may have also affected how health was defined.

Another possible explanation for the null results was the degree of deviation in the sample from the two well-supported claims originally forming the basis of this hypothesis. First, personal perceptions of one's health have been linked to affect with more consistent relations

found between SAH and positive affect (Whitehead & Bergeman, 2013a ; Winter et al., 2007) than SAH and negative affect (Williams & Wiebe, 2000; Barger et al., 2007). Secondly, at the very least, hassles were expected to coincide with negative affect and uplifts with positive affect (DeLongis et al., 1982; 1988; Flannery, 1986; Mayberry & Graham, 2001), although reactivity to hassles and uplifts does vary on a variety of person (e.g., age, gender, neuroticism) and context factors (e.g., co-occurrence and social support; Affleck et al., 1994; Aldwin et al., 2014; Davis et al., 1999; Longua et al., 2009).

These assumed patterns of relations among SAH, affect, hassles, and uplifts held at the group level. Inspection of the bivariate correlations at the individual level, however, suggests that these relations are not ubiquitous at all levels of analysis. Nearly half of the sample (43.8%) did not show typical patterns of relations among hassles, uplifts, and affect. Coupled with evidence that SAH was not significantly related to positive or negative affect for over half of participants (56.1%), these departures from the published literature may also explain why SAH level was not more closely associated with hassles and uplifts in the sample. These findings are important in their own right as they support the subjectivity and highly individualized nature not only of SAH (Benyamini et al., 2011), but also of how hassles and uplifts are experienced. Caution is warranted in interpreting these data, however. The range of hassles and uplifts included in this investigation were limited and the particular affect measure used (the SPANE; Diener et al., 2010), while valid, has had limited use in experience sampling studies (Doherty, Lemieux, & Canally, 2014).

Intraindividual variability in hassles, uplifts, and SAH. The previous set of findings addressed the relation between intensity of reported hassles and uplifts and reported SAH. To examine how intraindividual variability in these constructs was related, the same analyses were

completed, but using daily change z -scores as indicators of fluctuation around one's daily means. Nine (21.4%) participants had significant relations between daily fluctuation of hassle intensity and daily fluctuation in SAH. Most were linear, but again mixed patterns of association emerged. Daily fluctuation in uplifts was significantly related to daily fluctuation in SAH for 13 individuals, again showing linear or quadratic trends. All the linear and most of the quadratic trends were positive. Daily fluctuations in hassles and uplifts accounted for a wide range of variance in daily fluctuation in SAH (hassles: 8.6 - 32.3%; uplifts: 7.4 - 39.6%).

Daily fluctuations in perceived intensity of hassles and uplifts and SAH did not significantly relate to one another for the majority of the sample (59.5%). The limited previous research concerning short-term fluctuations in SAH has suggested that daily fluctuation is primarily linked to changes in positive affect and acute symptoms (Winter et al., 2007). Therefore, the higher number of significant relations found between intraindividual variability in uplifts and SAH than with intraindividual variability in hassles partially coincides with these findings. Even then, however, the direct relation between daily fluctuation in positive affect and SAH was not universal with only 29.3% of the sample holding significant relations. Contrary to other studies that have found no relation between change in negative affect and SAH (Barger et al., 2007), some participants (17.1%) held a significant association between daily fluctuation in SAH and negative affect.

Again, the findings of the current study may be limited by the lack of correspondence among daily fluctuation in uplifts, hassles, and affect. Inspection of the bivariate correlations showed better correspondence in the change relations than the level relations. Just over half of the sample (55.4%) had significant relations between intraindividual variability in uplifts and intraindividual variability in positive affect and 32.1% had significant relations between

intraindividual variability in hassles and intraindividual variability in negative affect. A positive relation between uplifts and positive affect and hassles and negative affect is well-supported in the literature (Affleck et al., 1994; DeLongis et al., 1988; Longua et al., 2009; Ryan et al., 2010; Stone et al., 1993) so the fact that these relations did not hold for a high percentage of the sample is curious.

Another possible explanation is the difference between assessing change in intensity, which may be more stable if habituation has occurred in response to certain daily events, and change in amount. In relation to other health outcome variables (i.e., symptoms and chronic conditions), DeLongis and colleagues (1982) found that while both frequency and intensity accounted for variance in health outcomes, the stronger contribution was made by hassle frequency. Hassle frequency, however, was only the strongest predictor of health outcomes also based on amounts, such as assigned health status (based on presence of chronic conditions and symptoms) and acute symptoms, and not subjective appraisals. Frequency was not assessed in the current study, but a tally of the number of domains represented at each survey response was calculated and explored in relation to the study aims. No different or new relations emerged when using total domains of hassles and uplifts in place of the perceived intensity reports. Again, these findings should be interpreted cautiously as not all possible domains were represented.

Part IV: Conceptual and Methodological Insights

The strengths of the present study include the use of an experience sampling methodology, consideration of both personal and contextual influences on SAH, and group- and individual-level analyses. From these strengths, however, important conceptual and methodological questions arose regarding the variables of interest and the methods of assessment.

The factor structure of hassles and uplifts. Results from pilot data suggested the occurrence of daily events perceived to be hassles and uplifts were best represented as two independent factors. Although there is evidence to support greater frequency and increased salience of certain types of daily events (i.e., interpersonal; Almeida & Horn, 2004; Maller et al., 2005; Mayberry & Graham, 2001; McIntyre et al., 2008), it does not necessarily mean that those events co-occur or are perceived equally with regard to intensity. Electing to focus on a single domain of events without first investigating how those events fit within the context of other events threatens the ecological validity of those findings. This is especially apparent in experience sampling studies where the reports of hassles and uplifts are not as heavily biased by recall (Shiffman et al., 2008). The low scale reliabilities for some individual time points throughout the study period suggest that the experience of hassles and uplifts are not consistent, and only when aggregated across multiple time points do these coefficients stabilize. Therefore, future research assessing hassles and uplifts should not arbitrarily divide hassles and uplifts into distinct domains without considering how hassles and uplifts may collectively contribute to the outcomes of interest.

The co-occurrence of hassles and uplifts. Just as certain domains of hassles and uplifts should not be studied in isolation, results from the current study suggest hassles should not be considered without regard to uplifts, and vice versa. A consistently moderate to strong correspondence between perceived intensity of hassles and uplifts across days of the week ($r = .30$ to $.55$, excepting one uncharacteristically low correlation, $.17$ for Thursday) and times of the day ($r = .39$ to $.61$) suggests those who are reactive to hassles are similarly reactive to uplifts. In examining the correspondence between total number of domains represented and perceived intensity, however, the associations for hassles and uplifts significantly differ (Fisher's $r > 1.96$).

The disparity in the strength of these correlation coefficients suggests uplifts are appraised with greater intensity than hassles. This may explain why the relation between uplifts and SAH is more apparent if uplifts are buffering or masking the effects of hassles on SAH. Although the idea of buffering effects of uplifts on hassles is not new (Longua et al., 2009), the application of these effects to health variables, such as SAH, would be.

Utility of the 5-point SAH item to assess change. The traditional 5-point item of SAH has received a great deal of criticism as a longitudinal measure, believed to be susceptible to floor and ceiling effects and insensitive to small changes within categories (Choi, 2002; Gunasekara et al., 2012). As a solution, some researchers have adopted visual analog scales of SAH (Bowling, 2005; de Boer et al., 2004). The present study results indicated the 5-point item was sufficient for capturing momentary change in SAH in an age-diverse sample. Only one participant showed signs of ceiling effects. An 11-point, continuously-measured slider scale was included as a plausible alternative. For those who showed no variability on the 5-point item, variability on the slider-scale item was evaluated, but the very small range of responses on this item indicated these individuals were maintaining stable perceptions of their health.

The similarity in performance between the 5-point and slider-scale item was not specific to these individuals, but observed across the sample with regard to stability across the day and week and relations with other study variables. The two items, however, were not a complete mirror of one another. At the individual level, correlation coefficients between the two measures ranged from $-.25$ to $.95$ with only about 60.0% of individuals holding a significant relation between the two. This suggests potential reporting biases in SAH when using scales labeled with conceptually-meaningful terms versus applying numerical values with only the high and low points anchored (Layes et al., 2012). Furthermore, for nearly two-thirds of the sample (64.4%)

inconsistencies were apparent in how these items related to other study variables. Therefore, caution should be used when considering which item is more appropriate to use in future research. The idea that the slider-scale will accommodate the proposed flaws of the 5-point item was not supported in the current study. Furthermore, the two items may be conceptually different from the perspective of respondents.

Experience sampling methodology. With experience sampling, closer approximations of real time associations are possible (Hektner et al., 2007), but a careful balance must be struck between obtaining realistic portrayals of life and participant burden. Four surveys, taking approximately three to five minutes to complete, proved to be burdensome for a mostly-employed sample of adults, given that the average number of completed survey responses ranged from 34 to 56 time points. More time points appeared to be completed, but upon inspection of the time stamps, several of these were invalidated because they were backfilled. Finally, participants showed a consistent pattern of lower response rates later in the study, which begs the question of whether two weeks of assessments were necessary and if follow-ups would have prompted better adherence to the study protocol.

The two-week period of the present study was necessary to determine consistency in these constructs across time, given that this was the first study to address short-term stability and change in SAH. The high correspondence from week to week, however, suggests that seven days would be sufficient in future studies. Furthermore, if the lack of day-of-week effects were replicated, the study duration could be even further reduced. Based on evidence in the present study and literature (Wrzus et al., 2014), the number of time points could actually stand to be increased to better capture the time frame in which hassles may be most influential on SAH. Electronic methods of data collection were sufficient for assessing these types of variables and

probably resulted in fewer instances of backfilling than paper data collection methods would have (Shiffman et al., 2008). An improvement could be made by controlling the length of time survey signals remain open to participants.

Part V: Study Summary, Limitations, and Future Directions

The present study contributed to the literature by examining SAH stability and change across and within days. No previous study had taken an experience sampling approach because few studies (see Ghisletta et al., 2002 and Winter et al., 2007 as exceptions) have conceptualized SAH as a construct susceptible to momentary influence. To recap the study findings, SAH does modestly fluctuate throughout the day for the majority of participants. Similarly, at the group level, SAH shows very modest degrees of change across the day and across the week. Distinct linear and quadratic trends were demonstrated for SAH and time of day; however, there were no distinct trends to describe the relation between SAH and day of the week. Person characteristics, such as neuroticism, may be related to momentary assessments of SAH, but not necessarily change. With regard to context, the results suggest the relations among daily events and SAH are complex. At both the group and individual levels, uplifts related to SAH in ways mostly consistent with prediction, although not for all participants and not across all times of the day. Agreement between group- and individual-level analyses does suggest a more systematic relation between uplifts and SAH than between hassles and SAH. Differences between individual- and group-level findings in relation to hassles lend support to the conceptualization of SAH as an idiosyncratic process. Affect (positive and negative) showed evidence of influencing the interpretative context in which uplifts are evaluated, which had repercussions for later SAH.

Future research should address whether stability or minor changes in SAH have repercussions for other health outcomes. Long-term trajectories of SAH change (Ayyagari et al.,

2012; Schmitz et al., 2013) and even weekly fluctuations (Ghisletta et al., 2002) have been associated with differential health outcomes so it is plausible that SAH fluctuation across shorter durations may also matter. Furthermore, the individual-level analyses revealed some people are completely unchanged in their SAH levels, despite fluctuation in other relatable constructs, such as affect and symptoms. Complete stability in SAH levels across the study period may simply be a reporting bias (Layes et al., 2012), but if these are true reflections of how individuals view their health, the repercussions for other health outcomes need to be examined. Reduced rates of long-term decline in older adults' SAH despite vast changes in other health measures have been described as serving a protective purpose for maintaining positive self-representations and affect (Kotter-Grühn & Hess, 2012; Lazarus, 1986; Moor et al., 2006). Maintaining stability in perceptions despite actual change in health circumstances, however, may also prevent or at least delay individuals from recognizing the need for medical care or health behavior changes in order to prevent further decline. More work is needed to understand the implications of remaining stable in SAH for other health outcomes.

The goals of the present study were to understand what influences change or stability in SAH with a focus on theoretically-relevant person factors (age, gender, and neuroticism) and context (perceived intensity of hassles and uplifts). Age, gender, and neuroticism were not directly related to SAH stability in the present study. Much of the evidence on which these hypotheses were based, however, point to ways in which person characteristics interact with daily events, in terms of both valence and specific domains, as well as positive and negative affect. Therefore, person characteristics may be better represented as moderators in future studies examining the predictors of SAH stability. A larger sample than the present study would be required to detect moderation effects.

At the group level, there was stronger evidence to support a role for uplifts in relation to SAH. This was corroborated by findings at the individual level. The patterns were mostly consistent across individuals and in the expected directions. In comparison, group-level findings suggest a very limited influence of hassles on SAH, and even then, in unexpected ways. The inconsistent and mixed directionality of the individual-level regression curves between hassles and SAH suggest a more complicated, and perhaps more individualized, examination should be undertaken to better understand the role of hassles in relation to SAH.

At the group level, positive affect was tested as a likely intermediary variable linking age and daily events to SAH given theoretical (Carstensen et al., 2000; Charles, 2010; Labouvie-Vief, 2003) and empirical rationale (DeLongis et al., 1988; Longua et al., 2009; Ryan et al., 2010; Winter et al., 2007). Negative affect was also explored as a viable alternative. Affect (positive and negative) influenced the relation between uplifts and SAH, but not as an intermediary variable. Rather, at different points in the day including the previous evening, affect influenced the perceived intensity of uplifts which then eventually influenced SAH. Neither positive nor negative affect had this catalyst effect on perceived intensity of hassles. These findings support the premise that affective experiences and states can alter the interpretative context in which SAH is evaluated (Mora et al., 2008; Whitehead & Bergeman, 2013a), but also extends this to include how positive, non-health related daily events are processed in relation to SAH.

These findings also imply that hassles and uplifts may relate to affect and SAH on different time lags. The lack of findings in the hassles models coupled with previous research concerning the swift negative affective response cycle to hassles (Wrzus et al., 2014) suggests that the time-lag used in the current study may have been inadequate to capture the momentary

influence of hassles. Based on previous literature (Cain et al., 2009; Hektner et al., 2007; Shiffman et al., 2008; Steele, 2004), the time-lag and number of survey signals (four times per day set four hours apart) seemed sufficient to meet the needs of the study aims while balancing concerns about participant burden.

Based on the high number of missing time points and qualitative input received during exit interviews, four reports a day was burdensome, although the average length of time to complete the surveys was under five minutes. Few mentioned the length of the study as problematic, but missingness was higher toward the end. Therefore, future investigations of daily events might utilize response-contingent sampling, where participants trigger the surveys when they encounter specific events (Hektner et al., 2007). This alternative approach to interval-contingent sampling would permit even more momentary inspection of these relations. The routine and mundane nature of some hassles and uplifts may result in their being underreported, however. These reports would also run the risk of being systematically different based on between-subject factors, such as age, gender, and neuroticism. A measurement burst design (Sliwinski et al., 2009) provides another alternative. Participants would report at closer intervals, thus potentially capturing more momentary relations, but would only do so for a day or two at a time with weeks or months separating bursts.

The length of included measures was another decision influenced by the goal of reducing participant burden that may have contributed to the null and mixed findings. Some measures, such as the SPANE (Diener et al., 2010) were selected because they were specifically developed as a viable alternative for lengthier measures. While the psychometric properties have been demonstrated to be equivalent to other measures, their application in experience sampling studies may have been limited (e.g., Doherty et al., 2014). The hassles and uplifts items were selected

from a much larger inventory of daily events (Lazarus & Folkman, 1989; Mayberry & Graham, 2001), chosen specifically for their alignment with known SAH correlates (Simon et al., 2005). Although the selection of these items was supported by theory, empirical evidence, and pilot data, other hassles and uplifts may also contribute to SAH. Another limitation of this measurement was the question format. It did not allow participants to specify the frequency of a particular type of hassle or uplift during the reporting timeframe. Rather, participants answered either negatively or affirmatively that at least one instance from a particular domain took place since they last reported. Then, they indicated the degree to which they perceived that event to be a hassle or uplift. Valence and perceived intensity may be relatively unchanging for routine or mundane everyday events (Frijda, 1988; Wood et al., 2002); instead, accumulation of several hassles or uplifts throughout the day may more strongly influence aspects of health (DeLongis et al., 1982).

A final consideration in relation to participant burden that may have limited the findings was the ability to respond from any personal electronic device with internet connectivity. Some participants did not have mobile devices and completed all survey signals from home and work computers, thus contributing to missingness when they did not have immediate access to these locations. From inquiries made during the study and the types of suggestions made in the exit interview, participants seemed variable in their ability, and possibly motivation, to troubleshoot technological difficulties, such as increasing the size and accuracy of their responses when viewing surveys on small screens; checking other email folders when surveys did not seem to arrive on time; and management and organization of incoming study emails. Preventative efforts were made to minimize the occurrence of technological issues both in design and instructions provided to participants, including how best to orient and zoom in mobile devices for optimal

viewing and how to prevent survey emails from being sent to spam folders. Additional safeguards and resources (e.g., such as providing a pen stylus) should be provided to participants in future studies employing electronic data collection methods.

Participant burden likely contributed to the number of participants who a.) were unwilling to take part in the experience sampling phase ($n = 11$); b.) self-selected out of the study early in the experience sampling phase ($n = 15$); or c.) did not complete a sufficient number of data points ($n = 16$). Therefore, the sample size included 57 participants who completed at least 28 time points or seven useable study days. The only distinguishing factor between these individuals and those who completed the study was the number of chronic conditions they had. Those with more chronic conditions were more likely to be included in the final sample based on their adherence rates. Repeated measures are a powerful design for evaluating within-subject factors and models, even when the data is collapsed into averages because sampling error is reduced. The power to detect small to moderate between-subject differences and associations (age, gender, and neuroticism), however, may have been limited by the small sample size.

In association with power constraints, the nature of SAH as a multidimensional construct requires models that can accommodate both between- and within-subject variables. The findings support the complexity of the SAH process and suggest still more variables that should be worked into these models, such as momentary reports of symptoms and preoccupation that may prolong the effects of daily events. At baseline, moderate to strong associations with variables, such as chronic conditions ($r(n = 57) = -.40, p < .001$), depression ($r(n = 57) = -.57, p < .001$), and loneliness ($r(n = 57) = -.37, p = .01$), suggests that these variables should be accounted for not only for their direct relation to SAH, but also for the influence they may have on day-to-day life. Structural equation modeling was proposed as a solution to increase power through the

creation of latent variables, but collapsing several assessments without theoretical or empirical rationale is inappropriate and defeats the purpose of collecting multiple points of measurement. Thus, the present study ran separate models for hassles and uplifts and positive and negative affect. The alpha level (.05) was not adjusted to accommodate the number of analyses conducted. This may have inflated the probability of committing Type I errors; although, adjusting alpha levels also affects power, and may thereby increase the likelihood of committing Type II errors. Furthermore, examining hassles and uplifts in isolation from one another limits the ecological validity of the findings. Hassles and uplifts do naturally co-occur and may amplify or counteract one another (Longua et al., 2009).

Adding to the critique that ecological validity may be reduced, asking participants to continually monitor their daily events, affect, and subjective health may have inadvertently altered their perceptions (Crossley & Kennedy, 2002; Shiffman et al., 2008). This is in spite of the fact that there may be generational differences already in comfort with monitoring and reporting ones' changing state of affairs so openly. Asking participants for repeated assessments of their health may have affected responses by broadening participant's focus. One participant, a 63-year old female remarked, "Your survey helped put more of my life into perspective." Furthermore, habituation to the response task and appraisal or reporting biases may have artificially inflated stability across time points (Layes et al., 2012). This was echoed in the exit survey by participants indicating they had become bored or wished they could copy their answers over from previous time points. A 30-year old female said, "It would be nice if tech would allow for previous answers to be prepopulated or [for] a no change option."

Part VI: Concluding Statements

The findings from this study support future investigation of short-term fluctuation and stability in SAH. Although most of the hypotheses were unsupported, there is valuable information and ideas for future directions gained from these null results. Age and neuroticism, which have been consistently found to relate to SAH reports, had no significant relation to SAH stability evaluated in relation to daily averages. Maybe by influencing reported SAH, person characteristics are indirectly influencing fluctuation or stability. Their influence, along with gender, may also operate to modify other correlates of SAH stability. These are questions yet to be examined.

Generally consistent findings between group- and individual-level analyses regarding the relation between uplifts and SAH suggest that the influence of positive daily events is more systematic than the influence of negative daily events or hassles on SAH. Therefore, SAH in relation to hassles can be described as more idiosyncratic and should be evaluated as such. Positive and negative affect appeared to set the stage for how uplifts were perceived, which had implications for SAH at later time points. Since there was no evidence to suggest this happens with hassles, additional explanatory or contextual factors should be explored. With the results of this study suggesting SAH shows at least minor fluctuations around a daily mean for nearly three out of every four individuals studied, the next step before investigating additional influences on stability or fluctuation is to examine whether these minor fluctuations actually matter in relation to health outcomes, especially everyday health decisions. The implications of finding such relations are vast in regard to health promotion and interventions targeting incremental health behavior changes.

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Table 1.

Descriptive Statistics and Bivariate Correlations among the Baseline Variables ($n = 57$)

<i>Person Characteristics</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>range</i>	2	3	4	5	6
1. Age ^a	57	45.67	13.19	25-71	-.13	-.11	.12	-.09	.17
2. Sex	57	52.6% female			1.00	.22	.29*	-.16	-.12
3. Neuroticism	57	2.14	0.66	1.00-4.00		1.00	-.21	-.21	-.22
4. Conscientiousness	57	3.52	0.39	2.50-4.00			1.00	.17	.10
<i>SAH</i>									
5. 5-item	57	3.32	0.93	1.00-5.00				1.00	.74***
6. Slider Scale T1	55	7.26	1.59	1.94-9.49					1.00
7. Slider Scale T2	54	7.36	1.67	2.96-9.63					
<i>Physical Health</i>									
8. MOS SF-36 Physical Functioning	57	81.36	25.79	10-100					
9. MOS SF-36 Role Functioning-Physical	57	80.26	31.6	0-100					
10. MOS SF-36 Pain	57	70.26	22.51	10-100					
11. MOS SF-36 Energy/Fatigue	57	52.19	22.8	0-90					
12. Chronic Conditions	57	3.72	2.89	0-13					
13. Acute Symptoms	57	28.11	9.96	14-59					
<i>Emotional Health</i>									
14. CES-D Total	57	10.63	8.52	0-36					
15. CES-D Positive Affect	57	2.75	2.82	0-12					
16. CES-D Interpersonal Symptoms	57	0.47	0.95	0-4					
17. CES-D Somatic Symptoms	57	5.00	3.16	0-15					
18. CES-D Depressed Affect	57	2.42	3.69	0-15					
19. UCLA Loneliness	57	36.81	11.55	20-70					
20. Psychological Well-being	55	48.25	7.51	21-56					
21. Positive Affect	57	34.19	7.31	16-48					
22. Negative Affect	57	16.98	5.44	10-35					
<i>ESM</i>									
23. Completed Time Points	57	46.82	6.66	34-56					

a. Age was distributed as follows: 36.8% were 25-39 years, 31.6% were 40-54 years, 31.6% were 55-71 years; * $p < .05$, ** $p < .01$, *** $p < .001$

<i>Person Characteristics</i>	7	8	9	10	11	12	13
1. Age ^a	.15	-.25	-.15	-.10	.22	.46***	-.08
2. Sex	-.14	.04	-.17	-.09	-.29	.03	.33*
3. Neuroticism	-.29*	-.15	-.08	-.33**	-.50***	.22	.46***
4. Conscientiousness	.12	.10	.19	-.09	.27*	.08	.02
<i>SAH</i>							
5. 5-item	.79***	.22	.32**	.39***	.52***	-.40***	-.36**
6. Slider Scale T1	.87***	.23	.39***	.38***	.52***	-.38**	-.33**
7. Slider Scale T2	1.00	.36**	.49***	.53***	.61***	-.40***	-.47***
<i>Physical Health</i>							
8. MOS SF-36 Physical Functioning		1.00	.52***	.44***	.29*	-.25	-.08
9. MOS SF-36 Role Functioning-Physical			1.00	.42***	.40**	-.40**	-.22
10. MOS SF-36 Pain				1.00	.40***	-.50***	-.51***
11. MOS SF-36 Energy/Fatigue					1.00	-.26*	-.61***
12. Chronic Conditions						1.00	.37***
13. Acute Symptoms							1.00
<i>Emotional Health</i>							
14. CES-D Total							
15. CES-D Positive Affect							
16. CES-D Interpersonal Symptoms							
17. CES-D Somatic Symptoms							
18. CES-D Depressed Affect							
19. UCLA Loneliness							
20. Psychological Well-being							
21. Positive Affect							
22. Negative Affect							
<i>ESM</i>							
23. Completed Time Points							

a. Age was distributed as follows: 36.8% were 25-39 years, 31.6% were 40-54 years, 31.6% were 55-71 years; * $p < .05$, ** $p < .01$, *** $p < .001$

<i>Person Characteristics</i>	14	15	16	17	18	19
1. Age ^a	-.01	.14	-.16	-.05	-.05	.03
2. Sex	.30*	.21	.14	.16	.38**	.20
3. Neuroticism	.57***	.49***	.36**	.41***	.50***	.63***
4. Conscientiousness	-.23	-.14	.04	-.27*	-.19	-.15
<i>SAH</i>						
5. 5-item	-.57***	-.58***	-.13	-.35**	-.52***	-.37**
6. Slider Scale T1	-.59***	-.60***	-.31*	-.37*	-.50***	-.43***
7. Slider Scale T2	-.67***	-.63***	-.29*	-.41***	-.64***	-.47***
<i>Physical Health</i>						
8. MOS SF-36 Physical Functioning	-.36**	-.38***	-.10	-.25	-.31**	-.26*
9. MOS SF-36 Role Functioning-Physical	-.37**	-.40***	.02	-.33**	-.26*	-.23
10. MOS SF-36 Pain	-.48***	-.42***	-.20	-.36**	-.42***	-.41***
11. MOS SF-36 Energy/Fatigue	-.74***	-.60***	-.31*	-.61***	-.64***	-.59***
12. Chronic Conditions	.30*	.42***	.09	.10	.26*	.39***
13. Acute Symptoms	.57***	.44***	.10	.59***	.44***	.45***
<i>Emotional Health</i>						
14. CES-D Total	1.00	.83***	.45***	.74***	.92***	.72***
15. CES-D Positive Affect		1.00	.40***	.40***	.71***	.68***
16. CES-D Interpersonal Symptoms			1.00	.01	.48***	.64***
17. CES-D Somatic Symptoms				1.00	.54***	.39***
18. CES-D Depressed Affect					1.00	.64***
19. UCLA Loneliness						1.00
20. Psychological Well-being						
21. Positive Affect						
22. Negative Affect						
<i>ESM</i>						
23. Completed Time Points						

a. Age was distributed as follows: 36.8% were 25-39 years, 31.6% were 40-54 years, 31.6% were 55-71 years; * $p < .05$, ** $p < .01$, *** $p < .001$

<i>Person Characteristics</i>	20	21	22	23
1. Age ^a	-.17	-.04	-.06	.29*
2. Sex	-.22	-.22	.19	-.11
3. Neuroticism	-.37**	-.30*	.74***	-.05
4. Conscientiousness	.25	.29*	-.12	.35**
<i>SAH</i>				
5. 5-item	.55***	.52***	-.24	.10
6. Slider Scale T1	.53***	.48***	-.37**	.12
7. Slider Scale T2	.57***	.54***	-.47***	.07
<i>Physical Health</i>				
8. MOS SF-36 Physical Functioning	.40***	.31*	-.35**	-.11
9. MOS SF-36 Role Functioning-Physical	.40***	.35**	-.31*	.10
10. MOS SF-36 Pain	.41***	.30*	-.40***	-.11
11. MOS SF-36 Energy/Fatigue	.64***	.68***	-.55***	.13
12. Chronic Conditions	-.37**	-.21	.35**	.19
13. Acute Symptoms	-.36**	-.32**	.48***	.16
<i>Emotional Health</i>				
14. CES-D Total	-.63***	-.60***	.63***	-.06
15. CES-D Positive Affect	-.73***	-.61***	.59***	.02
16. CES-D Interpersonal Symptoms	-.33*	-.21	.38***	-.11
17. CES-D Somatic Symptoms	-.36**	-.42***	.41***	-.06
18. CES-D Depressed Affect	-.52***	-.50***	.55***	-.09
19. UCLA Loneliness	-.63***	-.48***	.71***	-.14
20. Psychological Well-being	1.00	.75***	-.36**	.004
21. Positive Affect		1.00	-.32*	-.08
22. Negative Affect			1.00	.03
<i>ESM</i>				
23. Completed Time Points				1.00

a. Age was distributed as follows: 36.8% were 25-39 years, 31.6% were 40-54 years, 31.6% were 55-71 years; * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2

Descriptive Statistics for Experience Sampling Variables Collapsed by Time of Day

Variable	Time of Day	<i>n</i>	<i>M</i>	<i>SD</i>	<i>range</i>
SAH 5-point	Morning	691	3.34	0.80	1-5
	Early Afternoon	652	3.41	0.77	1-5
	Late Afternoon	642	3.40	0.78	1-5
	Evening	672	3.40	0.77	1-5
SAH Slider Scale	Morning	667	7.58	1.45	1.89-10.00
	Early Afternoon	639	7.64	1.39	1.82-10.00
	Late Afternoon	623	7.70	1.35	2.99-10.00
	Evening	651	7.69	1.38	1.93-10.00
Total Uplift Domains	Morning	690	3.42	2.07	0-10
	Early Afternoon	654	3.71	1.87	0-10
	Late Afternoon	640	3.75	1.80	0-10
	Evening	671	3.91	2.01	0-10
Intensity of Uplifts	Morning	690	6.29	4.93	0-28
	Early Afternoon	654	6.86	5.26	0-32
	Late Afternoon	640	7.12	5.36	0-32
	Evening	671	7.95	5.67	0-40
Total Hassle Domains	Morning	691	3.32	2.16	0-10
	Early Afternoon	653	3.50	1.95	0-10
	Late Afternoon	640	3.64	1.99	0-10
	Evening	671	3.77	2.16	0-10
Intensity of Hassles	Morning	691	4.04	3.08	0-19
	Early Afternoon	653	4.26	2.64	0-15
	Late Afternoon	640	4.42	2.76	0-16
	Evening	671	4.43	2.91	0-21
Positive Affect	Morning	674	19.35	5.68	6-30
	Early Afternoon	642	19.52	5.53	6-30
	Late Afternoon	625	19.47	5.65	6-30
	Evening	655	20.10	5.59	6-30
Negative Affect	Morning	674	8.78	3.26	6-27
	Early Afternoon	642	8.66	3.03	6-24
	Late Afternoon	624	8.63	3.34	6-27
	Evening	654	8.27	3.04	6-29
Acute Symptoms	Morning	677	11.25	3.62	8-28
	Early Afternoon	641	10.77	3.33	8-26
	Late Afternoon	626	10.78	3.26	8-27
	Evening	659	10.89	3.27	8-26

Table 3

Descriptive Statistics for Experience Sampling Variables Collapsed by Day of the Week

Variable	Day of the Week	<i>n</i>	<i>M</i>	<i>SD</i>	<i>range</i>
SAH 5-point	Monday	387	3.36	0.82	1-5
	Tuesday	404	3.33	0.79	1-5
	Wednesday	395	3.40	0.77	2-5
	Thursday	402	3.35	0.79	1-5
	Friday	387	3.40	0.77	1-5
	Saturday	324	3.46	0.77	2-5
	Sunday	358	3.42	0.75	1-5
SAH Slider Scale	Monday	373	7.61	1.46	1.82-10.00
	Tuesday	388	7.60	1.47	2.99-10.00
	Wednesday	386	7.60	1.40	2.97-10.00
	Thursday	388	7.66	1.40	2.49-10.00
	Friday	378	7.66	1.34	2.65-10.00
	Saturday	317	7.77	1.32	1.93-10.00
	Sunday	350	7.70	1.36	2.14-10.00
Total Uplift Domains	Monday	386	3.70	1.95	0-10
	Tuesday	403	3.75	1.94	0-10
	Wednesday	393	3.77	1.89	0-10
	Thursday	399	3.65	1.87	0-10
	Friday	387	3.69	1.85	0-9
	Saturday	328	3.79	2.11	0-10
	Sunday	359	3.50	2.08	0-10
Intensity of Uplifts	Monday	386	6.67	4.89	0-29
	Tuesday	403	6.96	5.24	0-32
	Wednesday	393	6.96	5.00	0-29
	Thursday	399	6.69	4.94	0-32
	Friday	387	7.09	5.18	0-32
	Saturday	328	7.96	6.30	0-40
	Sunday	359	7.16	5.86	0-32
Total Hassle Domains	Monday	389	3.56	1.97	0-10
	Tuesday	401	3.59	2.06	0-10
	Wednesday	394	3.65	2.09	0-10
	Thursday	399	3.54	1.95	0-10
	Friday	387	3.56	2.00	0-10
	Saturday	328	3.68	2.30	0-10
	Sunday	359	3.32	2.20	0-10

Intensity of Hassles	Monday	387	4.30	2.72	0-18
	Tuesday	401	4.45	3.03	0-19
	Wednesday	394	4.47	2.96	0-16
	Thursday	399	4.28	2.76	0-17
	Friday	387	4.29	2.88	0-21
	Saturday	328	4.28	2.82	0-14
	Sunday	359	3.89	2.81	0-14
Positive Affect	Monday	379	19.07	5.73	6-30
	Tuesday	395	19.57	5.67	6-30
	Wednesday	388	19.58	5.40	6-30
	Thursday	388	19.33	5.65	6-30
	Friday	376	19.65	5.52	6-30
	Saturday	320	20.23	5.55	6-30
	Sunday	350	19.97	5.77	6-30
Negative Affect	Monday	378	8.70	3.27	6-27
	Tuesday	395	8.80	3.32	6-27
	Wednesday	386	8.96	3.54	6-27
	Thursday	390	8.64	3.15	6-21
	Friday	375	8.53	2.95	6-20
	Saturday	320	8.33	3.21	6-29
	Sunday	350	8.07	2.60	6-18
Acute Symptoms	Monday	379	11.02	3.50	8-27
	Tuesday	392	11.00	3.67	8-28
	Wednesday	387	10.86	3.30	8-25
	Thursday	391	10.99	3.33	8-23
	Friday	379	10.80	3.35	8-27
	Saturday	322	10.82	3.14	8-23
	Sunday	353	10.97	3.30	8-25

Table 4

Descriptive statistics for Experience Sampling Variables Collapsed across the Study Period

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	<i>range</i>
SAH 5-point	2657	3.39	0.78	1-5
SAH Slider Scale	2580	7.65	1.40	1.82-10.00
Total Uplift Domains	2655	3.70	1.95	0-10
Intensity of Uplifts	2655	7.05	5.34	0-40
Total Hassle Domains	2655	3.56	2.08	0-10
Intensity of Hassles	2655	4.28	2.86	0-21
Positive Affect	2596	19.61	5.62	6-30
Negative Affect	2594	8.59	3.17	6-29
Acute Symptoms	2603	10.93	3.38	8-28

<i>Nominal Variables</i>	Completers (<i>n</i> = 57)	Non-completers (<i>n</i> = 31)	ϕ or Cramer's V	Valid N	<i>p</i>
	Highest Percentage	Highest Percentage			
Gender	34.1% female	20.5% female	.90	88	.70
Marital Status	52.3% married	21.6% married	.23	88	.31
Employment Status	37.5% full-time	20.5% full-time	.14	88	.94
Education	17.0% Master's degree	11.4% some college	.25	88	.59
Geographic Region	37.5% Ohioans	21.6% Ohioans	.07	88	.80

Table 6

Patterns of Missingness by Time of Day, Day of Week, and Study Day

<i>Variables</i>	χ^2	<i>df</i>	<i>p</i>	Significantly Higher Missingness	Significantly Lower Missingness
Study Day	81.43	13	< .001	Day 5, 11, 12, 13	Day 1, 2, 3
Day of the Week	78.62	6	< .001	Sat., Sun.	Tues., Wed., Thurs.
Time of Day	12.76	3	.005	Late afternoon	Morning

Table 7

Descriptive Statistics and Bivariate Correlations among Average Daily Change in Experience Sampling Variables

Average Daily Fluctuation	<i>n</i>	<i>M</i>	<i>SD</i>	<i>range</i>	2	3	4	5	6	7	8	9
1. SAH 5-point	2624	0.24	0.41	0-1.50	.20	.13	.14	-.02	.003	.46***	.48***	.49***
2. SAH Slider Scale	2539	0.70	0.43	0-3.60	1.00	.14	-.01	-.02	-.13	.32*	.20	.14
3. Total Uplift Domains	2623	0.72	0.43	0-1.50		1.00	.55***	.66***	.40**	.34**	.38**	.16
4. Intensity of Uplifts	2623	0.72	0.42	0-1.71			1.00	.50***	.60***	.40**	.28*	.04
5. Total Hassle Domains	2623	0.71	0.44	0-1.50				1.00	.71***	.15	.24	-.07
6. Intensity of Hassles	2623	0.70	0.43	0-1.50					1.00	.16	.30*	.08
7. Positive Affect	2563	0.60	0.46	0-3.03						1.00	.67***	.41**
8. Negative Affect	2559	0.55	0.47	0-1.50							1.00	.56***
9. Acute Symptoms	2566	0.55	0.47	0-3.11								1.00

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

Table 8

Day-of-week Auto-correlations with the Influence of Person Characteristics Removed

Auto-correlations	2	3	4	5	6	7
1. Monday SAH5	.90***	.90***	.82***	.84***	.86***	.94***
2. Tuesday SAH5	1.00	.94***	.83***	.87***	.88***	.88***
3. Wednesday SAH5		1.00	.87***	.87***	.90***	.90***
4. Thursday SAH5			1.00	.93***	.84***	.85***
5. Friday SAH5				1.00	.85***	.86***
6. Saturday SAH5					1.00	.92***
7. Sunday SAH5						1.00
Age Partialled Out	2	3	4	5	6	7
1. Monday SAH5	.90***	.90***	.82***	.84***	.86***	.94***
2. Tuesday SAH5	1.00	.94***	.83***	.87***	.88***	.88***
3. Wednesday SAH5		1.00	.87***	.86***	.90***	.90***
4. Thursday SAH5			1.00	.93***	.84***	.85***
5. Friday SAH5				1.00	.85***	.86***
6. Saturday SAH5					1.00	.92***
7. Sunday SAH5						1.00
Gender Partialled Out	2	3	4	5	6	7
1. Monday SAH5	.90***	.90***	.82***	.84***	.86***	.94***
2. Tuesday SAH5	1.00	.93***	.83***	.87***	.88***	.87***
3. Wednesday SAH5		1.00	.87***	.86***	.90***	.89***
4. Thursday SAH5			1.00	.93***	.84***	.85***
5. Friday SAH5				1.00	.84***	.86***
6. Saturday SAH5					1.00	.92***
7. Sunday SAH5						1.00
Neuroticism Partialled Out	2	3	4	5	6	7
1. Monday SAH5	.89***	.89***	.80***	.82***	.85***	.93***
2. Tuesday SAH5	1.00	.93***	.82***	.85***	.87***	.86***
3. Wednesday SAH5		1.00	.86***	.85***	.89***	.88***
4. Thursday SAH5			1.00	.93***	.82***	.84***
5. Friday SAH5				1.00	.83***	.85***
6. Saturday SAH5					1.00	.91***
7. Sunday SAH5						1.00

*** $p < .001$

Table 9

Time-of-day Auto-correlations with the Influence of Person Characteristics Removed

Auto-correlations	2	3	4
1. Morning SAH5	.95***	.95***	.94***
2. Early Afternoon SAH5	1.00	.97***	.96***
3. Late Afternoon SAH5		1.00	.97***
4. Evening SAH5			1.00
Age Partialled Out	2	3	4
1. Morning SAH5	.95***	.95***	.94***
2. Early Afternoon SAH5	1.00	.97***	.96***
3. Late Afternoon SAH5		1.00	.97***
4. Evening SAH5			1.00
Gender Partialled Out	2	3	4
1. Morning SAH5	.95***	.95***	.94***
2. Early Afternoon SAH5	1.00	.96***	.96***
3. Late Afternoon SAH5		1.00	.97***
4. Evening SAH5			1.00
Neuroticism Partialled Out	2	3	4
1. Morning SAH5	.95***	.94***	.93***
2. Early Afternoon SAH5	1.00	.96***	.96***
3. Late Afternoon SAH5		1.00	.97***
4. Evening SAH5			1.00

*** $p < .001$

Table 10

Standardized and Unstandardized Path Coefficients for Time-of-day Hassles Model

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Early Afternoon SAH $\leftarrow$ Morning SAH	0.86 (0.04)	0.95	23.73
Late Afternoon SAH $\leftarrow$ Early Afternoon SAH	0.98 (0.03)	0.97	30.50
Evening SAH $\leftarrow$ Late Afternoon SAH	0.94 (0.03)	0.97	30.25
<i>Hassles</i>			
Early Afternoon Hassles $\leftarrow$ Morning Hassles	0.59 (0.07)	0.73	8.00
Late Afternoon Hassles $\leftarrow$ Early Afternoon Hassles	0.75 (0.07)	0.81	10.37
Evening Hassles $\leftarrow$ Late Afternoon Hassles	0.91 (0.09)	0.79	9.74
Cross-lagged Paths			
Early Afternoon SAH $\leftarrow$ Morning Hassles	-0.02 (0.01)	-0.06	-1.45
Early Afternoon Hassles $\leftarrow$ Morning SAH	0.07 (0.24)	0.03	0.31
Late Afternoon SAH $\leftarrow$ Early Afternoon Hassles	0.03 (0.01)	0.10	3.11
Late Afternoon Hassles $\leftarrow$ Early Afternoon SAH	0.08 (0.21)	0.03	0.36
Evening SAH $\leftarrow$ Late Afternoon Hassles	-0.001 (0.01)	-0.004	-0.13
Evening Hassles $\leftarrow$ Late Afternoon SAH	0.14 (0.25)	0.05	0.58

Note. CR = Critical ratio; $CR > 1.96, p < .05$

Table 11

Standardized and Unstandardized Path Coefficients for Time-of-day Uplifts Model

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Early Afternoon SAH $\leftarrow$ Morning SAH	0.87 (0.04)	0.95	23.46
Late Afternoon SAH $\leftarrow$ Early Afternoon SAH	0.96 (0.03)	0.96	29.32
Evening SAH $\leftarrow$ Late Afternoon SAH	0.93 (0.03)	0.97	29.91
<i>Uplifts</i>			
Early Afternoon Uplifts $\leftarrow$ Morning Uplifts	0.81 (0.11)	0.70	7.35
Late Afternoon Uplifts $\leftarrow$ Early Afternoon Uplifts	0.93 (0.07)	0.87	13.28
Evening Uplifts $\leftarrow$ Late Afternoon Uplifts	0.86 (0.08)	0.84	11.20
Cross-lagged Paths			
Early Afternoon SAH $\leftarrow$ Morning Uplifts	0.01 (0.01)	0.03	0.61
Early Afternoon Uplifts $\leftarrow$ Morning SAH	0.26 (0.54)	0.05	0.48
Late Afternoon SAH $\leftarrow$ Early Afternoon Uplifts	0.01 (0.01)	0.09	2.64
Late Afternoon Uplifts $\leftarrow$ Early Afternoon SAH	0.04 (0.43)	0.01	0.09
Evening SAH $\leftarrow$ Late Afternoon Uplifts	0.01 (0.01)	0.03	0.99
Evening Uplifts $\leftarrow$ Late Afternoon SAH	-0.36 (0.51)	-0.05	-0.71

Note. CR = Critical ratio; $CR > 1.96$, $p < .05$

Table 12

Example Regression Curve Estimation Model Displaying a Significant Linear Trend between Daily Events and SAH

Significant Linear Trends in SAH Level and Uplifts (<i>n</i> = 49)						
Function	<i>F</i> -test	<i>p</i>	<i>R</i> ²	<i>B</i>	<i>SE B</i>	<i>β</i>
<i>Linear</i>	<i>F</i> (1, 47) = 38.43	< .001	.45			
Uplifts				0.09	0.01	0.67*
<i>Quadratic</i>	<i>F</i> (2, 46) = 18.84	< .001	.45			
Uplifts				0.10	0.05	0.73*
Uplifts*Uplifts				-.0004	0.002	-0.07
<i>Cubic</i>	<i>F</i> (3, 45) = 13.97	< .001	.48			
Uplifts				0.27	0.11	1.96*
Uplifts*Uplifts				-0.02	0.01	-3.10
Uplifts*Uplifts*Uplifts				0.001	0.0003	1.92

Table 13

Example Regression Curve Estimation Model Displaying a Significant Quadratic Trend

between Daily Events and SAH

Significant Quadratic Trends in SAH Level and Uplifts ($n = 43$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 41) = 0.84$	.36	.02			
Hassles				-0.03	0.04	-0.14
<i>Quadratic</i>	$F(2, 40) = 5.20$	.01	.21			
Hassles				0.19	0.08	0.79*
Hassles*Hassles				-0.04	0.01	-1.02**
<i>Cubic</i>	$F(3, 39) = 13.97$	.02	.22			
Hassles				0.07	0.15	0.31
Hassles * Hassles				0.02	0.07	0.46
Hassles * Hassles* Hassles				-0.01	0.01	-1.08

Table 14

Example Regression Curve Estimation Model Displaying a Significant Cubic Trend between Daily Events and SAH

Significant Cubic Trends in SAH Level and Uplifts ($n = 33$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 31) = 0.66$	.42	.02			
Hassles				0.02	0.03	0.14
<i>Quadratic</i>	$F(2, 30) = 1.70$	.20	.10			
Hassles				-0.13	0.09	-0.85
Hassles*Hassles				0.02	0.01	1.03
<i>Cubic</i>	$F(3, 29) = 5.04$	.01	.34			
Hassles				0.38	0.18	2.52*
Hassles * Hassles				-0.12	0.04	-7.58**
Hassles * Hassles* Hassles				0.01	0.003	5.47**

Table 15

Example Regression Curve Estimation Model Displaying No Significant Trends between Daily Events and SAH

No Significant Trends in SAH Level and Uplifts ($n = 55$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 53) = 1.15$	.29	.02			
Uplifts				-0.03	0.03	-0.15
<i>Quadratic</i>	$F(2, 52) = 0.66$	.52	.02			
Uplifts				-0.0001	0.08	-0.001
Uplifts*Uplifts				-0.01	0.01	-0.16
<i>Cubic</i>	$F(3, 51) = 1.29$	.29	.07			
Uplifts				-0.25	0.18	-1.11
Uplifts*Uplifts				0.12	0.08	3.32
Uplifts*Uplifts*Uplifts				-0.01	0.01	-2.49

Table 16

Example Regression Curve Estimation Model Displaying a Significant Linear Trend between
Daily Fluctuation in Daily Events and SAH

Significant Linear Trends in SAH Fluctuation and Uplifts Fluctuation ($n=52$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 50) = 13.39$	.00	.21			
Uplifts				0.44	0.12	0.46**
<i>Quadratic</i>	$F(2, 49) = 6.60$	.00	.21			
Uplifts				0.45	0.13	0.47**
Uplifts*Uplifts				0.04	0.16	0.03
<i>Cubic</i>	$F(3, 48) = 4.54$	.01	.22			
Uplifts				0.66	0.32	0.69*
Uplifts*Uplifts				0.01	0.17	0.01
Uplifts*Uplifts*Uplifts				-0.17	0.23	-0.25

Table 17

Example Regression Curve Estimation Model Displaying a Significant Quadratic Trend between Daily Fluctuation in Daily Events and SAH

Significant Linear Trends in SAH Fluctuation and Uplifts Fluctuation ($n=52$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 50) = 0.66$	.42	.01			
Uplifts				0.08	0.10	0.11
<i>Quadratic</i>	$F(2, 49) = 5.04$	.01	.17			
Uplifts				-0.05	0.10	-0.07
Uplifts*Uplifts				0.41	0.13	0.44**
<i>Cubic</i>	$F(3, 48) = 3.50$	.02	.18			
Uplifts				-0.21	0.23	-0.28
Uplifts*Uplifts				0.39	0.14	0.42**
Uplifts*Uplifts*Uplifts				0.12	0.16	0.24

Table 18

Example Regression Curve Estimation Model Displaying a Significant Cubic Trend between
Daily Fluctuation in Daily Events and SAH

Significant Linear Trends in SAH Fluctuation and Uplifts Fluctuation ($n= 56$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 54) = 0.39$	.54	.01			
Uplifts				0.04	0.06	0.08
<i>Quadratic</i>	$F(2, 53) = 3.48$	.04	.12			
Uplifts				0.01	0.06	0.02
Uplifts*Uplifts				0.20	0.08	0.33*
<i>Cubic</i>	$F(3, 52) = 4.05$	.01	.19			
Uplifts				0.28	0.15	-0.60
Uplifts*Uplifts				0.18	0.08	0.30*
Uplifts*Uplifts*Uplifts				0.22	0.10	0.69*

Table 19

Example Regression Curve Estimation Model Displaying No Significant Trends between Daily Fluctuation in Daily Events and SAH

No Significant Trends in SAH Fluctuation and Hassles Fluctuation ($n=47$)						
Function	F -test	p	R^2	B	$SE\ B$	β
<i>Linear</i>	$F(1, 45) = 1.11$	.30	.02			
Hassles				0.09	0.09	0.15
<i>Quadratic</i>	$F(2, 44) = 1.25$	.30	.05			
Hassles				0.03	0.10	0.05
Hassles*Hassles				-0.17	0.15	-0.20
<i>Cubic</i>	$F(3, 43) = 0.84$	.48	.05			
Hassles				-0.03	0.24	-0.05
Hassles*Hassles				-0.14	0.17	-0.17
Hassles*Hassles*Hassles				0.06	0.21	0.13

Table 20

Standardized and Unstandardized Path Coefficients for Time-of-day Hassles Model with Positive Affect as an Intermediary Variable

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Early Afternoon SAH ← Morning SAH	0.85 (0.04)	0.94	20.70
Late Afternoon SAH ← Early Afternoon SAH	0.97 (0.04)	0.96	27.71
Evening SAH ← Late Afternoon SAH	0.94 (0.03)	0.97	27.64
<i>Positive Affect (PA)</i>			
Early Afternoon PA ← Morning PA	0.99 (0.04)	0.99	24.08
Late Afternoon PA ← Early Afternoon PA	0.89 (0.04)	0.95	21.69
Evening PA ← Late Afternoon PA	0.91 (0.05)	0.92	17.02
<i>Hassles</i>			
Early Afternoon Hassles ← Morning Hassles	0.59 (0.07)	0.73	7.99
Late Afternoon Hassles ← Early Afternoon Hassles	0.75 (0.07)	0.81	10.35
Evening Hassles ← Late Afternoon Hassles	0.91 (0.09)	0.79	9.85
Cross-lagged Paths			
Early Afternoon PA ← Morning SAH	-0.56 (0.32)	-0.07	-1.76
Early Afternoon Hassles ← Morning SAH	0.02 (0.27)	0.01	0.08
Early Afternoon Hassles ← Morning PA	0.02 (0.04)	0.04	0.41
Early Afternoon SAH ← Morning PA	0.003 (0.01)	0.03	0.64
Early Afternoon SAH ← Morning Hassles	-0.02 (0.01)	-0.06	-1.50
Early Afternoon PA ← Morning Hassles	-0.25 (0.09)	-0.11	-2.93
Late Afternoon PA ← Early Afternoon Hassles	0.12 (0.11)	0.05	1.12
Late Afternoon SAH ← Early Afternoon Hassles	0.03 (0.01)	0.10	3.08
Late Afternoon Hassles ← Early Afternoon PA	-0.001 (0.03)	-0.003	-0.04
Late Afternoon SAH ← Early Afternoon PA	0.004 (0.004)	0.03	0.86
Late Afternoon Hassles ← Early Afternoon SAH	0.08 (0.23)	0.03	0.35
Late Afternoon PA ← Early Afternoon SAH	0.15 (0.35)	0.02	0.43
Evening SAH ← Late Afternoon PA	-0.001 (0.004)	-0.01	-0.21
Evening Hassles ← Late Afternoon PA	0.04 (0.03)	0.11	1.23
Evening PA ← Late Afternoon SAH	-0.03 (0.42)	-0.004	-0.07
Evening Hassles ← Late Afternoon SAH	-0.01 (0.27)	-0.004	-0.04
Evening PA ← Late Afternoon Hassles	0.36 (0.14)	0.13	2.53
Evening SAH ← Late Afternoon Hassles	-0.001 (0.01)	-0.004	-0.13

Note. CR = Critical ratio; CR > 1.96, $p < .05$

Table 21

Standardized and Unstandardized Path Coefficients for Time-of-day Uplifts Model with Positive Affect as an Intermediary Variable

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Early Afternoon SAH ← Morning SAH	0.86 (0.04)	0.95	20.20
Late Afternoon SAH ← Early Afternoon SAH	0.96 (0.04)	0.97	26.98
Evening SAH ← Late Afternoon SAH	0.95 (0.03)	0.98	28.16
<i>Positive Affect (PA)</i>			
Early Afternoon PA ← Morning PA	1.03 (0.05)	1.03	22.23
Late Afternoon PA ← Early Afternoon PA	0.88 (0.05)	0.94	19.40
Evening PA ← Late Afternoon PA	0.88 (0.06)	0.90	14.83
<i>Uplifts</i>			
Early Afternoon Uplifts ← Morning Uplifts	0.70 (0.12)	0.60	6.00
Late Afternoon Uplifts ← Early Afternoon Uplifts	0.92 (0.08)	0.86	11.98
Evening Uplifts ← Late Afternoon Uplifts	0.87 (0.08)	0.85	10.62
Cross-lagged Paths			
Early Afternoon PA ← Morning SAH	-0.62 (0.33)	-0.08	-1.87
Early Afternoon Uplifts ← Morning SAH	-0.46 (0.59)	-0.08	-0.78
Early Afternoon Uplifts ← Morning PA	0.20 (0.08)	0.28	2.44
Early Afternoon SAH ← Morning PA	0.002 (0.01)	0.02	0.32
Early Afternoon SAH ← Morning Uplifts	0.004 (0.01)	0.02	0.42
Early Afternoon PA ← Morning Uplifts	-0.15 (0.07)	-0.10	-2.38
Late Afternoon PA ← Early Afternoon Uplifts	0.03 (0.06)	0.03	0.56
Late Afternoon SAH ← Early Afternoon Uplifts	0.02 (0.01)	0.09	2.56
Late Afternoon Uplifts ← Early Afternoon PA	0.02 (0.06)	0.02	0.31
Late Afternoon SAH ← Early Afternoon PA	-0.001 (0.01)	-0.01	-0.32
Late Afternoon Uplifts ← Early Afternoon SAH	-0.02 (0.47)	-0.003	-0.04
Late Afternoon PA ← Early Afternoon SAH	0.13 (0.35)	0.02	0.36
Evening SAH ← Late Afternoon PA	-0.004 (0.01)	-0.03	-0.81
Evening Uplifts ← Late Afternoon PA	-0.02 (0.08)	-0.02	-0.26
Evening PA ← Late Afternoon SAH	0.01 (0.44)	0.001	0.01
Evening Uplifts ← Late Afternoon SAH	-0.30 (0.55)	-0.04	-0.55
Evening PA ← Late Afternoon Uplifts	0.07 (0.07)	0.06	1.03
Evening SAH ← Late Afternoon Uplifts	0.01 (0.01)	0.04	1.29

Note. CR = Critical ratio; CR > 1.96, $p < .05$

Table 22

Standardized and Unstandardized Path Coefficients for Overnight Uplifts Model with Positive Affect as an Intermediary Variable

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Morning SAH $\leftarrow$ Evening SAH	1.06 (0.05)	0.93	20.35
<i>Positive Affect (PA)</i>			
Morning PA $\leftarrow$ Evening PA	1.00 (0.08)	0.89	13.03
<i>Uplifts</i>			
Morning Uplifts $\leftarrow$ Evening Uplifts	0.65 (0.08)	0.80	8.31
Cross-lagged Paths			
Morning PA $\leftarrow$ Evening Uplifts	-0.16 (0.08)	-0.13	-1.99
Morning SAH $\leftarrow$ Evening Uplifts	0.03 (0.01)	0.17	3.57
Morning Uplifts $\leftarrow$ Evening PA	-0.02 (0.08)	-0.03	-0.31
Morning SAH $\leftarrow$ Evening PA	-0.01 (0.01)	-0.03	-0.67
Morning Uplifts $\leftarrow$ Evening SAH	-0.29 (0.48)	-0.06	-0.60
Morning PA $\leftarrow$ Evening SAH	-1.29 (0.48)	-0.16	-2.68

Note. CR = Critical ratio; CR > 1.96, $p < .05$

Table 23

Standardized and Unstandardized Path Coefficients for Overnight Hassles Model with Positive Affect as an Intermediary Variable

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Morning SAH $\leftarrow$ Evening SAH	1.08 (0.06)	0.97	18.71
<i>Positive Affect (PA)</i>			
Morning PA $\leftarrow$ Evening PA	0.94 (0.07)	0.83	13.85
<i>Hassles</i>			
Morning Hassles $\leftarrow$ Evening Hassles	0.92 (0.10)	0.76	8.94
Cross-lagged Paths			
Morning PA $\leftarrow$ Evening Hassles	-0.17 (0.15)	-0.06	-1.09
Morning SAH $\leftarrow$ Evening Hassles	-0.01 (0.02)	-0.04	-0.80
Morning Hassles $\leftarrow$ Evening PA	-0.02 (0.05)	-0.04	-0.42
Morning SAH $\leftarrow$ Evening PA	0.01 (0.01)	0.07	1.35
Morning Hassles $\leftarrow$ Evening SAH	0.18 (0.34)	0.05	0.53
Morning PA $\leftarrow$ Evening SAH	-1.34 (0.50)	-0.16	-2.70

Note. CR = Critical ratio; CR > 1.96, $p < .05$

Figure 1. Procedural Flowchart with Attrition Rates

Figure 1. This flowchart presents the breakdown of procedural steps (recruitment, baseline, scheduling for experience sampling, experience sampling, and exit survey) and attrition over the course of the study.

Figure 2. Daily Trends in SAH, Perceived Intensity of Hassles, and Perceived Intensity of Uplifts by Day of the Week

Figure 2. Daily trends in SAH (a.), perceived intensity of hassles (b.), and perceived intensity of uplifts (c.) by day of the week are shown. Perceived intensity of hassles and uplifts had significant interaction terms (day of week x time of day), suggesting that daily patterns were not consistent across the week.

Figure 3. Group-level Means for SAH, Perceived Intensity of Hassles, and Perceived Intensity of Uplifts by Time of Day

Figure 3. Group-level means for SAH (a.), perceived intensity of hassles (b.), and perceived intensity of uplifts (c.) by time of day are shown. All three variables showed positive linear trends across the day, although the quadratic trend was also significant for SAH.

Figure 4. Group-level Means for SAH, Perceived Intensity of Hassles, and Perceived Intensity of Uplifts by Day of the Week

Figure 4. Group-level means for SAH (a.), perceived intensity of hassles (b.), and perceived intensity of uplifts (c.) by day of week are shown. Only hassles showed a significant trend (linear) across the week.

Figure 5. Cross-lagged Path Models for Time-of-Day Relations between Perceived Intensity of Hassles and SAH

Figure 5. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles across the day. Only one cross-lagged pathway was significant. More intensely-felt hassles in the early afternoon were associated with higher levels of SAH in the late afternoon.

Figure 6. Cross-lagged Path Models for Time-of-Day Relations between Perceived Intensity of Uplifts and SAH

Figure 6. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and uplifts across the day. Only one cross-lagged pathway was significant. More intensely-felt uplifts in the early afternoon were associated with higher levels of SAH in the late afternoon.

Figure 7. Cross-lagged Path Models for Overnight Relations between Perceived Intensity of Hassles and SAH

Figure 7. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles from evening to morning. No cross-lagged effects were significant, indicating that the effect of evening hassles does not carry over to morning SAH.

Figure 8. Cross-lagged Path Models for Overnight Relations between Perceived Intensity of Uplifts and SAH

Figure 8. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles from evening to morning. More intensely-felt uplifts in the evening were significantly associated with lower SAH in the morning.

Figure 9. Time-of-Day Model for Perceived Intensity of Hassles and SAH with Positive Affect as an Intermediary Variable

Figure 9. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH, positive affect (PA in the model), and hassles across the day. Positive affect and SAH were concurrently related in the morning. Three cross-lagged pathways were significant. Perceived intensity of hassles was subsequently related to positive affect and SAH at different points throughout the day, but the direction of the relations were mixed.

Figure 10. Time-of-Day Model for Perceived Intensity of Uplifts and SAH with Positive Affect as an Intermediary Variable

Figure 10. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH, positive affect (PA in the model), and uplifts across the day. Positive affect was concurrently related with both uplifts and SAH in the morning. Three cross-lagged pathways were significant. Perceived intensity of uplifts and positive affect also related to one another subsequently, but only from morning to early afternoon. Again, more intensely-felt uplifts in the early afternoon were associated with higher levels of SAH in the late afternoon. Positive affect in the morning may be a catalyst to this cross-lagged relation.

Figure 11. Overnight Model for Perceived Intensity of Uplifts and SAH with Positive Affect as an Intermediary Variable

Figure 11. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH, positive affect (PA in the model), and uplifts from the evening to the morning. Positive affect was concurrently related with both uplifts and SAH, but the association was negative between positive affect and SAH. More intensely-felt uplifts and higher levels of SAH in the evening were associated with lower levels of positive affect in the morning. More intensely-felt uplifts were also associated with higher levels of SAH in the morning.

Figure 12. Overnight Model for Perceived Intensity of Hassles and SAH with Positive Affect as an Intermediary Variable

Figure 12. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH, positive affect (PA in the model), and hassles from the evening to the morning. Perceived intensity of hassles had no carryover effects on positive affect or SAH from evening to morning.

Appendix A. Baseline Measures

Self-Assessed Health

Using a scale from 0 to 10 where 0 means the "worst possible health" and 10 means the "best possible health," how would you rate your health at this moment?*

When asked to evaluate your health like this, what types of things come to mind?

* The slider item will be assessed twice, once at the beginning of the baseline survey and again near the end.

Affect: The Positive and Negative Affect Schedule-Expanded Form

(PANAS-X; see Watson & Clark, 1994 for original scale)

Chronic Conditions

Conditions	Has a doctor or other health professional EVER told you that you had any of the following?		If YES, how much difficulty does this condition cause you?			
	No	Yes	None	A little	Some	Quite a bit
High blood pressure or hypertension						
High cholesterol						
Diabetes or high blood sugar						
Obesity						
Heart attack or myocardial infarction						
Coronary heart disease						
Angina						
Congestive heart failure						
Abnormal heart rhythm						
Stroke						
Skin Cancer						
Other types of cancer or malignancies						
Asthma						
Chronic Obstructive Pulmonary Disease (COPD), emphysema or chronic bronchitis						
Ulcers, including stomach, duodenal or peptic						

Digestive tract disorders, including acid reflux (Heartburn), gallstones, and irritable bowel disease (IBD)						
Some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia						
Osteoporosis						
Any emotional, nervous, or psychiatric problems						
Depressive disorder, including depression, major depression, dysthymia, or minor depression						
Alzheimer's disease						
Dementia, senility or any other serious memory impairment						
Kidney disease (Does NOT include kidney stones, bladder infection or incontinence)						
Urinary problems such as incontinence, frequent or slow urination or infections						

Are there any medical diseases or conditions that are important to your health now, which are not included above? Please specify the condition below and respond as you did above.

Other conditions (PLEASE SPECIFY)	Has a doctor, nurse, or other health professional EVER told you that you had any of the following?		If YES, how much difficulty does this condition cause you?			
	No	Yes	None	A little	Some	Quite a bit

Acute Health Symptoms

During the **past 30 days**, how often have you experienced each of the following?

	Almost every day	Several times a week	Once a week	Several times a month	Once a month	Not at all
Headache						
Backache						
Muscle Soreness						
Cough						
Sore throat						
Runny nose						
Fever/chills						
Nausea/upset stomach						
Diarrhea or constipation						
Poor appetite						
Chest pain						
Dizziness						
Hot flushes or flashes						
Low energy or tiredness						

Subjective Well-being: Flourishing Scale

(Diener et al., 2009)

Below are 8 statements with which you may agree or disagree. Using the 1–7 scale below, indicate your agreement with each item by indicating that response for each statement.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

_____ I lead a purposeful and meaningful life

_____ My social relationships are supportive and rewarding

_____ I am engaged and interested in my daily activities

_____ I actively contribute to the happiness and well-being of others

_____ I am competent and capable in the activities that are important to me

_____ I am a good person and live a good life

_____ I am optimistic about my future

_____ People respect me

Personality: Midlife Development Inventory Personality Scales

(MIDI-PS; Lachman & Weaver, 1997)

Please indicate how well each of the following describes you:

	A lot	Some	A little	Not at all
Outgoing				
Helpful				
Moody				
Organized				
Self-confident				
Friendly				
Warm				
Worrying				
Responsible				
Forceful				
Lively				
Caring				
Nervous				
Creative				
Assertive				
Hardworking				
Imaginative				
Softhearted				
Calm				
Outspoken				

Intelligent				
Curious				
Active				
Careless				
Broad-minded				
Sympathetic				
Talkative				
Sophisticated				
Adventurous				
Dominant				

Depressive Symptoms: Center for Epidemiological Studies Depression Scale

(CES-D; Radloff, 1977)

Below is a list of ways you might have felt or behaved. Please indicate how often you have felt this way during the past week.

	Rarely/none of the time	Some/a little of the time	Occasionally/a moderate amount of the time	Most or all of the time
	(less than 1 day)	(1-2 days)	(3-4 days)	(5-7 days)
1. I was bothered by things that usually don't bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family or friends.				
4. I felt I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				

11. My sleep was restless.				
12. I was happy.				
13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people disliked me.				
20. I could not get going.				

Loneliness: Revised UCLA Loneliness Scale (version 3)

(Russell, 1996)

The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described using the rating scale below.

Never Rarely Sometimes Always

1. How often do you feel you are “in tune” with the people around you?
2. How often do you feel you lack companionship?
3. How often do you feel that there is no one you can turn to?
4. How often do you feel alone?
5. How often do you feel part of a group of friends?
6. How often do you feel that you have a lot in common with the people around you?
7. How often do you feel that you are no longer close to anyone?
8. How often do you feel that your interests and ideas are not shared by those around you?
9. How often do you feel outgoing and friendly?
10. How often do you feel close to people?
11. How often do you feel left out?
12. How often do you feel that your relationships with others are not meaningful?
13. How often do you feel that no one really knows you well?
14. How often do you feel isolated from others?
15. How often do you feel you can find companionship when you want it?
16. How often do you feel that there are people who really understand you?
17. How often do you feel shy?
18. How often do you feel that people are around you, but not with you?
19. How often do you feel that there are people you can talk to?
20. How often do you feel that there are people you can turn to?

Health Behaviors

1. Have you smoked at least 100 cigarettes (approximately 5 packs) in your entire life?

Yes No Don't know / not sure

2. Do you currently use cigarettes?

Every day Some days Not at all

3. Do you currently use chewing tobacco, snuff, or snus?

Every day Some days Not at all

4. Do you currently use e-cigarettes?

Every day Some days Not at all

5. During the past 30 days, how many days did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?

_____Number of days

6. One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?

_____Number of drinks ____Did not drink in the past 30 days

7. Considering all types of alcoholic beverages, how many times during the past 30 days did you drink 5 or more (for men) or 4 or more (for women) drinks on an occasion?

_____Number of times ____Did not drink in the past 30 days

8. How often **per week or per month** do you do **VIGOROUS** leisure-time physical activities for **AT LEAST 10 MINUTES** that cause **HEAVY** sweating or **LARGE** increases in breathing or heart rate?

_____Times per week _____Times per month

9. **In minutes or hours**, about how long do you do these vigorous leisure-time physical activities each time?

_____Minutes _____Hours

10. How often **per week or per month** do you do LIGHT OR MODERATE LEISURE-TIME physical activities for AT LEAST 10 MINUTES that cause ONLY LIGHT sweating or a SLIGHT to MODERATE increase in breathing or heart rate?

_____Times per week

_____Times per month

11. **In minutes or hours**, about how long do you do these light or moderate leisure-time physical activities each time?

_____Minutes

_____Hours

12. How often **per week or per month** do you do LEISURE-TIME physical activities specifically designed to STRENGTHEN your muscles? (Do NOT count aerobic activities like walking, running, or bicycling. Count activities using your own body weight like yoga, sit-ups or push-ups and those using weight machines, free weights, or elastic bands.)

_____Times per week

_____Times per month

13. How often do you use seat belts when you drive or ride in a car?

Always

Nearly always

Sometimes

Seldom

Never

14. Do you make a conscious effort to avoid consuming foods and drinks that contain fat and cholesterol?

Always

Nearly always

Sometimes

Seldom

Never

15. Do you make a conscious effort to avoid consuming foods and drinks high in sodium?

Always

Nearly always

Sometimes

Seldom

Never

16. Do you make a conscious effort to avoid consuming foods and drinks high in added sugar?

Always

Nearly always

Sometimes

Seldom

Never

17. Do you make a conscious effort to consume foods and drinks that are high in fiber?

Always

Nearly always

Sometimes

Seldom

Never

18. During the past 12 months, how many times have you had sunburn?

_____Number of sunburns

19. During the past 12 months, how many times have you used an indoor tanning device such as a sunlamp, sunbed, or tanning booth? Do not include a spray-on tan.

_____Number of times

20. On average, how many hours of sleep do you get in a 24-hour period? _____Hours

21. During the **past 30 days**, have you used any of the following non-prescription (over-the-counter) medicines?

	If YES, how often?						
	No	Yes	Daily	A few times a week	Once a week	A few times a month	Once this month
Aspirin (e.g. Anacin, Ascriptin, BC Powder, Bufferin, Ecotrin, Pain-relief Tablets, Stanbach Powder, Vanquish)							
Acetaminophen (e.g. Aspirin-free Excedrin, No Aspirin, Non-aspirin, Pergo-gesic, Tylenol)							
Ibuprofen (e.g. Advil, Motrin, Nuprin)							
Naproxen sodium (e.g. Aleve, Naprosyn, Naprelan, Anaprox)							

22. Please check below any of the following vitamin, mineral, or herbal supplements you take regularly--that is, at least a couple of times a week

☐ a. Multi-vitamins	☐ i. Feverfew
☐ b. Vitamin C	☐ j. Ephedra or Ma Huang
☐ c. Iron	☐ k. Saw Palmetto
☐ d. Calcium	☐ l. Glucosamine/Chondroitin
☐ e. St. John's Wort	☐ m. Fish Oil (Omega 3 Fatty Acids)
☐ f. Ginkgo Biloba	☐ n. Flaxseed
☐ g. Echinacea	☐ o. Any others
☐ h. Garlic	

Please specify:

Health Status: The Medical Outcomes Study 36-item Short Form Health Survey

(MOS SF-36; Hays et al., 1993; Ware & Sherbourne, 1992)

1. In general would you say your health is:

Excellent Very good Good Fair Poor

2. Compared to one year ago, how would you rate your health in general now?

Much better now Somewhat better now About Somewhat worse now Much worse now
than one year ago than one year ago the same than one year ago than one year ago

The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all
3. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports			
4. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf			
5. Lifting or carrying groceries			
6. Climbing several flights of stairs			
7. Climbing one flight of stairs			
8. Bending, kneeling, or stooping			
9. Walking more than a mile			
10. Walking several blocks			
11. Walking one block			
12. Bathing or dressing yourself			

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

	Yes	No
13. Cut down the amount of time you spent on work or other activities		
14. Accomplished less than you would like		
15. Were limited in the kind of work or other activities		
16. Had difficulty performing the work or other activities (for example, it took extra effort)		

17. How much bodily pain have you had during the past 4 weeks?

None Very mild Mild Moderate Severe Very severe

18. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all A little bit Moderately Quite a bit Extremely

These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the past 4 weeks . . .

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
19. Did you feel full of pep?						
20. Did you have a lot of energy?						
21. Did you feel worn out?						
22. Did you feel tired?						

Demographics

Please indicate your age (in years; e.g. "22") _____

Please indicate your sex: ☐ Male ☐ Female ☐ Other

Please indicate your ethnicity:

☐ Hispanic or Latino

☐ Not Hispanic or Latino

☐ Prefer not to answer

Please indicate your race:

☐ White or Caucasian

☐ Black or African-American

☐ Asian

☐ American Indian or Alaska Native

☐ Native Hawaiian or Other Pacific Islander

☐ Biracial or Multi-racial

☐ Other

☐ Prefer not to answer

Please indicate your marital status:

☐ never married

☐ married

☐ not married, but cohabitating

☐ widowed/widower

☐ divorced

☐ other (please specify _____)

☐ prefer not to answer

What is your current employment status?

- ☐ Employed full time
- ☐ Employed part time
- ☐ Partially retired (retired, but working part-time)
- ☐ Fully retired (no longer working)
- ☐ Unemployed
- ☐ Other (please specify _____)
- ☐ prefer not to answer

Please indicate your highest level of education:

- ☐ Did not graduate high school
- ☐ High school diploma or GED
- ☐ Some college
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctoral degree
- ☐ prefer not to answer

How much financial difficulty do you have paying your bills?

- ☐ a great deal of difficulty
- ☐ some difficulty
- ☐ a little difficulty
- ☐ no difficulty
- ☐ prefer not to answer

Please estimate your gross income from the past 12 months (including wages, social security earnings, tips, etc.)

- ☐ Less than \$10,000

___ \$10,000-19,000

___ \$20,000-29,000

___ \$30,000-39,000

___ \$40,000-49,000

___ \$50,000-59,000

___ \$60,000-69,000

___ \$70,000 or more

___ prefer not to answer

Please indicate the number of people who live with you for each:

___ Spouse/partner

___ Biological children

___ Step or adopted children

___ Parents or in-laws

___ Other family (by blood or marital union)

___ Other non-relatives

In order to link your data across phases of the study and ensure proper compensation, you will need a unique identification code. To generate this user code, please start with your middle initial, followed by your day of birth, followed by your favorite vacation destination.

For example, my middle name is **Stella**, my birth day is the **24th**, and my favorite place to vacation is California so my user code would be **S_24_California**.

Your user code:

	—		—	
Middle Initial		DAY of birth		Vacation Spot

Conclusion

This completes Phase I of study. Please click here [insert Qualtrics link to Scheduling Survey] to provide your contact information (for compensation) and to register for Phase II.

Sources of Support

If you would like specific information about physical and emotional well-being, you can consult the following resources:

1. <http://www.nimh.nih.gov/health/topics/index.shtml> National Institute of Mental Health
2. <http://www.nih.gov/> National Institutes of Health
3. <http://www.suicidepreventionlifeline.org/> National Suicide Prevention Life Line
4. Or check your local phone directory for services in your community

Appendix B. Scheduling Verification Email

Hello!

Thank you for registering to participate in Phase II of the *Self-Assessment of Health in Daily Life* study. This email is to verify your scheduling preferences and provide some important reminders. You DO NOT need to reply to this email unless the information is incorrect.

Your participant ID is: **[insert participant ID]**

You have selected to receive survey signals to: **[insert email address]**

Survey signals will be sent according to the following schedule: **[insert schedule times selected]**

Survey signals will begin **[insert tomorrow's date]** and continue until **[insert 2-week end date]**

Reminders

- Don't spend too much time thinking about your answer. Give the first natural answer as it comes to you.
- Be honest about what is true for you. Your name will not be directly associated with your survey and results are reported in the aggregate.
- You are free to skip over any questions you do not want to answer. You may choose not to answer any of the questions. However, please try to answer as many of the items as you can.
- The Internet connection you have may not always be ideal; this is unfortunate, but common with technology. If the survey freezes or you receive an error message, try to reload the page or use the back button. If you continue to have problems, skip that survey and take the next survey sent. Please feel free to contact me if you have continuous problems.
- Not all cellphones will display the survey equally well. One thing you can do to improve the display is to turn your smartphone sideways (Figure 1 below). You may also zoom in or out as you see fit. Most phones will allow you to use two fingers to pinch and spread the screen (Figure 2 below).

[Image removed]

Figure 1. Cellphone orientation.

[Image removed]

Figure 2. Zoom feature.

- You have up to two hours after each survey alert to respond. If you miss a survey signal window, you can still continue participation by responding to the next alert. However, please try to respond to as many survey alerts as you can.
- Compensation will be adjusted based on the number of survey signals completed. Up to \$1.00 per day can be earned and each week completed will result in a \$5.00 bonus (\$10.00 max). For the two weeks, up to \$24.00 can be earned, plus the \$6.00 for the baseline survey for a total of \$30.00 for completing both phases. Payment will be distributed in one lump sum following Phase II.
- Participation in this study is voluntary. You are free to withdraw your consent to participate in this study at any time without penalty. To discontinue the delivery of survey signals, please contact Allyson Graf at agraf@mix.wvu.edu. You will be asked to verify your contact information for delivery of payment.

Should you have any questions or technological difficulties please do not hesitate to contact the research team. We greatly appreciate your participation!

Sincerely,

Allyson S. Graf, M.S., M.A.

Doctoral Candidate

Department of Psychology

West Virginia University

agraf@mix.wvu.edu

Julie Hicks Patrick, Ph.D.

Supervising Faculty Member

Department of Psychology

West Virginia University

julie.patrick@mail.wvu.edu

Appendix C. Experience Sampling Measures

User code:

	—		—	
Middle Initial		DAY of birth		Vacation Spot

Which of the following BEST describes your current location?

Home

Work

Others residence

Public place

Are you currently in the presence of others? Y/N

If yes: please select the relationship of the individuals with you. CHECK ALL THAT APPLY.

Partner/Significant Other/Spouse

Family

Friends

Coworkers

Acquaintances

Strangers

Self-Assessed Health

In general, how would you rate your health now?

POOR FAIR GOOD VERY GOOD EXCELLENT

Compared to the last time you responded, how would you rate your health in general now?

Much better now Somewhat better now About the same Somewhat worse now Much worse now

Using a scale from 0 to 10 where 0 means "worst possible health" and 10 means "best possible health," how would you rate your health at this moment?

A horizontal slider scale from 0 to 10. The number 0 is at the left end and 10 is at the right end. A vertical line marks the 0 position. A slider knob is positioned at approximately 6.5 on the scale.

Daily Events

(adapted from Lazarus & Folkman, 1989; Mayberry & Graham, 2001)

UPLIFTS are events that make you feel good; they can make you joyful, glad, or satisfied. HASSLES are irritants—things that annoy or bother you; they can make you upset or angry. Some hassles and uplifts occur on a fairly regular basis and others are relatively rare. Some have only a slight effect, others have a strong effect. During the course of a day some of these things will have been only a hassle for you and some will have been only an uplift. Others will have been both a hassle AND an uplift.

UPLIFTS. Since the last time you responded, how much has each item been an UPLIFT to you:

	Did not occur	Occurred, not an uplift	Occurred, was somewhat of an uplift	Occurred, was quite a bit of an uplift	Occurred, was a major uplift
Interacting with someone you love?	☐	☐	☐	☐	☐
Interacting with someone you consider a friend (but don't love)?	☐	☐	☐	☐	☐
interacting with others?	☐	☐	☐	☐	☐
family-related or household activities or obligations?	☐	☐	☐	☐	☐
work-related or volunteer activities or obligations?	☐	☐	☐	☐	☐
social activities or commitments?	☐	☐	☐	☐	☐
leisure or recreation activities or commitments?	☐	☐	☐	☐	☐
an event or interaction that brought attention to your health behaviors (such as drinking, smoking, exercising, or sleeping)?	☐	☐	☐	☐	☐
an event or intereaction that brought attention to your physical appearance or weight?	☐	☐	☐	☐	☐
an event or interaction that brought attention to your physical abilities?	☐	☐	☐	☐	☐

HASSLES: Since the last time you responded, how much has each item been a HASSLE to you:

	Did not occur	Occurred, not a hassle	Occurred, was somewhat of a hassle	Occurred, was quite a bit of a hassle	Occurred, was a major hassle
Interacting with someone you love?	☐	☐	☐	☐	☐
Interacting with someone you consider a friend (but don't love)?	☐	☐	☐	☐	☐
interacting with others?	☐	☐	☐	☐	☐
family-related or household activities or obligations?	☐	☐	☐	☐	☐
work-related or volunteer activities or obligations?	☐	☐	☐	☐	☐
social activities or commitments?	☐	☐	☐	☐	☐
leisure or recreation activities or commitments?	☐	☐	☐	☐	☐
an event or interaction that brought attention to your health behaviors (such as drinking, smoking, exercising, sleeping)?	☐	☐	☐	☐	☐
an event or interaction that brought attention to your physical appearance or weight?	☐	☐	☐	☐	☐
an event or interaction that brought attention to your physical abilities?	☐	☐	☐	☐	☐

Affect: The Scale of Positive and Negative Experiences

(SPANE; Diener et al., 2010)

Please think about what you have been doing and experiencing since the last time you responded. Then report how much you experienced each of the following feelings, using the scale below.

	Very rarely or Never	Rarely	Sometimes	Often	Very often or Always
Positive					
Negative					
Good					
Bad					
Pleasant					
Unpleasant					
Happy					
Sad					
Afraid					
Joyful					
Angry					
Contented					

Health: Acute Symptom Checklist
(adapted from Larsen & Kasimatis, 1991)

Since you last responded, how much of the time did you have:

	None of the time / Does not apply	A little of the time	Some of the time	Most of the time	All of the time
A headache, backache, or muscle soreness?					
A cough, sore throat, fever, chills, or other cold and flu symptoms?					
Nausea, diarrhea, poor appetite, or other stomach problems?					
Any chest pain or dizziness?					
Any menstrual-related symptoms such as cramps, bloating or breast tenderness?					
Hot flashes or flushes?					
Low energy/tiredness?					
ANY OTHER physical symptoms or discomforts?					

Episodic Rumination & Savoring

(adapted from Segerstrom et al., 2010)

Has there been any pleasant event(s) that has remained on your mind since the last time you responded?

YES

NO

Which category best fits the event(s) that has been on your mind? Check all that apply.

Work Family Social Activities Weather/Environment

Time/Logistics Finances Health Other

How frequently have you thought about the event(s) since the last time you responded?

Hardly at all Rarely Some Often Constantly

Has there been any unpleasant event(s) that has remained on your mind since the last you responded?

YES

NO

Which category best fits the event(s) that has been on your mind? Check all that apply.

Work Family Social Activities Weather/Environment

Time/Logistics Finances Health Other

How frequently have you thought about the event(s) since the last time you responded?

Hardly at all Rarely Some Often Constantly

Contextual Details: Morning Time Assessments ONLY

Regarding your sleep last night,

How routine do you anticipate today will be?

Not at all routine Somewhat not routine Somewhat routine Very routine

Is there anything about today you are DREADING? YES NO

If yes, which best describes this event? CHECK ALL THAT APPLY.

Work Family Social Activities Weather/Environment
Time/Logistics Finances Health Other

Is there anything about today you are LOOKING FORWARD TO? YES NO

If yes, which best describes this event? CHECK ALL THAT APPLY.

Work Family Social Activities Weather/Environment
Time/Logistics Finances Health Other

Contextual Details: Evening Time Assessments ONLY

Thinking about the day as a whole, how routine would you describe the day as?

Not at all routine Somewhat not routine Somewhat routine Very routine

Did you experience any sudden changes in your health today?

YES

NO

If yes, please describe:

Did any particular event(s) take place today that may have influenced your reporting?

YES

NO

If yes, please describe:

Final Assessment Only (end of two week protocol)

We genuinely appreciate the time and effort you have put in the past several weeks. You are almost done! Tomorrow, you will receive an exit survey with just a few more questions.

Sources of Support

If you would like specific information about emotional well-being and daily hassles and uplifts, you can consult the following resources:

1. <http://www.nimh.nih.gov/health/topics/index.shtml> National Institute of Mental Health
2. <http://www.nih.gov/> National Institutes of Health
3. <http://www.suicidepreventionlifeline.org/> National Suicide Prevention Life Line
4. Or check your local phone directory for services in your community

Appendix D. Results of the Pilot Study

Method

Participants & Procedure

Participants ($N = 579$) were recruited through Amazon's Mechanical Turk (MTurk; Amazon, 2013) to complete an online survey of daily experiences. MTurk is an online venue wherein adults can register as "workers" to complete a variety of tasks, including research studies, for Amazon credit. Studies have investigated the scope and quality of participants recruited through MTurk in comparison to other recruitment venues and found the data are equivalently reliable and valid (Buhrmester, Kwang, & Gosling, 2011; Johnson & Borden, 2012; Mason & Suri, 2012). Compensation for completing the brief survey was \$0.25 USD.

Data were screened for excessive missingness and failure to accurately complete several validity checks. Twenty-seven participants completed less than 50% of the survey and were excluded for excessive missingness. A total of 48 participants did not report demographic information. Ten more participants failed three or more of the five validity-check items. Thus, 494 cases were retained for analyses.

The sample consisted of 206 men (42.3%), 283 women (57.5%), and one person who identified as "other" between the ages of 18 and 79 ($M = 36.03$, $SD = 13.17$). The majority were Caucasian/White (79.1%), 8.9% were African American/Black, 5.9% were Asian, and 5.4% identified as "other." Just over ten percent (11.2%) identified as Hispanic. Most of the sample (87.7%) was college-educated with 33.3% holding a Bachelor's degree and 11.9% holding post-baccalaureate degrees.

Measures

Daily hassles and uplifts. The main purpose of the pilot study was to assess the factor structure of the items selected to represent hassles and uplifts for the dissertation study. Items were selected from the revised Hassles and Uplifts Scale (Lazarus & Folkman, 1989; Mayberry & Graham, 2001) with the intent of reducing participant burden in the momentary assessments. Items were selected to represent three domains (interpersonal interactions, social role activities, and health behaviors/habits) commonly associated with SAH. These domains have a high relative frequency of being reported across different adult age groups (see Mayberry & Graham, 2001 for a review).

To assess *hassles*, participants were instructed, “Hassles are defined as everyday demands and upheavals, leading to agitation, frustration, and annoyance. In the past 24 hours, how much has each item been a HASSLE to you?” They indicated whether each of the events had taken place and their perception of the events that had occurred (*occurred, but not a hassle; somewhat of a hassle; quite a bit of a hassle; a major hassle*). A parallel process was used to assess *uplifts*. Participants received the instructions, “These questions are about uplifts. Uplifts are the positive events of everyday life. In the past 24 hours, how much has each item been an UPLIFT to you.” They indicated whether the particular events had taken place and their perception of the events that had occurred (*occurred, but not an uplift; somewhat of an uplift; quite a bit of an uplift; a major uplift*).

For each scale, responses were summed; higher *hassle* ($M = 11.58$, $SD = 5.07$, range = 0 - 32, $\alpha = .77$) and *uplift* ($M = 17.06$, $SD = 7.12$, range = 0 - 40, $\alpha = .82$) scores indicated greater felt intensity. Hassles and uplifts were also counterbalanced to account for order effects. Participants whose birthdays fell in the first half of a month (1st - 15th; $n = 222$) reported hassles

then uplifts. Those whose birthdays fell in the second half of the month (16th -31st; $n = 272$) reported uplifts then hassles.

Affect. *Negative affect* and *positive affect* were measured with the two 10-item subscales from the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Additional items from the Profile of Mood States (POMS; McNair, Lorr, & Droppelman, 1971) were also included. Participants indicated the extent to which they experienced particular feelings and emotions in the past 24 hours on a 5-point scale ranging from “very slightly or not at all” (1) to “extremely” (5). Higher scores indicated greater affect. Both subscales demonstrated good internal consistency (PA $\alpha = .92$; NA $\alpha = .95$). The *positive affect* scale consisted of the PANAS PA subscale and two POMS items ($M = 34.78$, $SD = 9.12$; range = 13 - 56); the negative affect scale consisted of the PANAS NA subscale and five POMS items ($M = 26.18$, $SD = 11.37$; range = 15 - 70).

Results

Factor Structure of Uplifts & Hassles

The 20 items selected to represent hassles and uplifts were subjected to a principal components analysis using SPSS version 21. The suitability of factor analysis was first evaluated by inspecting the bivariate correlations among the items. Table D1 (below) contains these values. Although many of the correlations were significant, few were over the recommended $r = .30$ threshold (Pallant, 2010). The Kaiser-Meyer-Olkin value (.77) and statistically significant Bartlett’s Test of Sphericity ($p < .001$) indicated the items were suitable for factor analysis.

Six components were revealed with eigenvalues greater than 1. The first explained 22.9% of the variance, the second 14.7%, and the third 7.27%. The three remaining components accounted for less than 6.0% each. The six component solution explained a total of 61.6% of the

variance. To aid interpretation of the factors, a Varimax rotation was performed. This orthogonal technique was selected over oblique techniques because of the likelihood of uncorrelated components (Tabachnick & Fidell, 2013). Table D2 below contains the structural coefficients and commonalities. Uplifts and hassles did separate into distinct components with the exception of work hassles and uplifts, which loaded together. The first (health and household) and second (social/interactive) components represented uplifts. The third (health behaviors and habits), fourth (social/recreational), and fifth (interactive and household) components represented hassles.

The principal components analysis was repeated, this time constraining the number of components to be extracted to two in order to confirm the presence of two distinct subscales distinguishable by valence. As requested two components were extracted with eigenvalues greater than 1 and inspection of the scree plot confirmed this decision. The first component explained 22.9% of the variance and the second 14.7%. The two-component solution explained a total of 37.6% of the variance. A Varimax rotation was performed. Table D3 below contains the structural coefficients and commonalities. Although some of the commonalities were low and removing those items may have increased the variance being accounted for by the components (Pallant, 2010), doing so would have further limited the domains represented by the measure. In the rotated solution, all uplift and all hassle items loaded appropriately ($> .40$) onto their respective components.

Given the difficulty of interpreting the extracted components from the exploratory factor analysis, it was decided that the items should be retained as two independent subscales, hassles and uplifts. As subscales, these measures were related to measures of positive and negative affect in ways that are consistent with the literature. Specifically, reported intensity of hassles was

positively related to negative affect ($r = .33, p < .001$) and negatively related to positive affect ($r = -.21, p < .001$). Reported intensity of uplifts was positively related to positive affect ($r = .57, p < .001$) and not significantly related to negative affect ($r = .01, p = .88$).

Order Effects

The presentation order of hassles and uplifts was also investigated given previous literature suggesting possible order effects (Mayberry et al., 2002). An independent samples t -test was used to evaluate whether hassle and uplift scale scores significantly differed based on the order of presentation. Reported intensity of hassles did not significantly differ between individuals who reported hassles first and those who reported uplifts first ($t(485) = -0.08, p = .94$). They also did not differ on reported intensity of uplifts ($t(485) = -1.36, p = .17$). Therefore, the need to counterbalance in the dissertation study was deemed unnecessary.

Table D1.

Bivariate correlations among the uplift and hassle items

[illegible]

Table D2.

Structural coefficients and communalities for exploratory principal components analysis with Varimax rotation

[illegible]

7. Leisure/Recreation activities-hassle	.12	.07	.31	.75	.11	-.13	.71
6. Social activities or commitments-hassle	.10	.12	.11	.75	.13	.15	.64
2. Interactions with friends-hassle	-.02	.06	.01	.57	.38	.28	.55
4. Family-related or household activities-hassle	.03	-.02	.21	.08	.71	.00	.56
1. Interactions with loved ones-hassle	-.07	.10	.09	.04	.70	-.05	.51
3. Interactions with others-hassle	-.03	-.05	.05	.17	.65	.19	.49
5. Work-related or volunteer activities-hassle	.05	.00	.11	.11	.32	.75	.69
15. Work-related or volunteer activities-uplift	.25	.24	.15	.08	-.14	.71	.68

Table D3.

Structural coefficients and communalities for confirmatory principal components analysis with Varimax rotation

Item	Structural Coefficients		Communalities
	Component 1	Component 2	
20. Attention to physical abilities-uplift	.73	-.09	.54
19. Attention to weight and appearance-uplift	.68	-.11	.48
16. Social activities or commitments-uplift	.68	.19	.50
13. Interactions with others-uplift	.68	-.04	.46
18. Attention brought to health behavior-uplift	.67	.09	.45
17. Leisure/Recreation activities-uplift	.64	.13	.42
12. Interactions with friends-uplift	.60	.11	.37
14. Family-related or household activities-uplift	.55	-.04	.30
15. Work-related or volunteer activities-uplift	.51	.20	.30
11. Interactions with loved ones-uplift	.48	.04	.24
8. Attention brought to health behavior-hassle	.00	.69	.47
9. Attention brought to weight and appearance-hassle	-.04	.68	.46
10. Attention brought to physical abilities-hassle	.02	.58	.34
7. Leisure/Recreation activities-hassle	.27	.56	.39
4. Family-related or household activities-hassle	-.07	.56	.32
2. Interactions with friends-hassle	.19	.55	.34
3. Interactions with others-hassle	-.05	.52	.27
6. Social activities or commitments-hassle	.36	.52	.39
5. Work-related or volunteer activities-hassle	.19	.47	.26
1. Interactions with loved ones-hassle	-.07	.46	.22

Appendix E. Exit Survey

Thank you for the time and effort you have committed in answering our surveys over the past couple of weeks. In this last survey, we have just a few more questions we would like for you to complete. Because these questions are not time sensitive, you may complete this survey at your earliest convenience. It would be best completed on a computer.

We will also verify your information for compensation purposes and ask you to share how enjoyable you feel this overall experience has been.

Health Beliefs from The Medical Outcomes Study 36-item Short Form Health Survey

(MOS SF-36; Hays et al., 1993; Ware & Sherbourne, 1992)

How TRUE or FALSE is each of the following statements for you.

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
I seem to get sick a little easier than other people					
I am as healthy as anybody I know					
I expect my health to get worse					
My health is excellent					

Major life events: Schedule of Recent Experiences

(Holmes & Rahe, 1967)*

For the following, please indicate whether you have experienced the event described in the last 12 months. Choose all that apply.

Life Event	Life Change Units
Death of spouse	100
Divorce	73
Marital Separation	65
Imprisonment	63
Death of close family member	63
Personal injury or illness	53
Marriage	50
Dismissal from work	47
Marital reconciliation	45
Retirement	45
Change in health of a family member	44
Pregnancy	40
Sexual difficulties	39
Gain a new family member	39
Business readjustment	39
Change in financial state	38
Change in frequency of arguments	35
Major mortgage	32
Foreclosure of mortgage or loan	30

Change in responsibilities at work	29
Child leaving home	29
Trouble with in-laws	29
Outstanding personal achievement	28
Spouse starts or stops work	26
Begin or end school	26
Change in living conditions	25
Revision of personal habits	24
Trouble with boss	23
Change in working hours or conditions	20
Change in residence	20
Change in schools	20
Change in recreation	19
Change in church activities	19
Change in social activities	18
Minor mortgage or loan	17
Change in sleeping habits	16
Change in number of family reunions	15
Change in eating habits	15
Vacation	13
Christmas alone	12
Minor violation of law	11

*Life unit weights are based on the Social Readjustment Rating Scale

Trait Savoring: The Savoring Beliefs Inventory

(SBI; Bryant, 2003)

For each statement listed below, please indicate the response on the scale provided that best indicates how true the particular statement is for you. There are no right or wrong answers. Please be as honest as you can.

Strongly disagree

Strongly agree

1 2 3 4 5 6 7

1. Before a good thing happens, I look forward to it in ways that give me pleasure in the present.	1	2	3	4	5	6	7
2. It's hard for me to hang onto a good feeling for very long.	1	2	3	4	5	6	7
3. I enjoy looking back on happy times from my past.	1	2	3	4	5	6	7
4. I don't like to look forward to good times too much before they happen.	1	2	3	4	5	6	7
5. I know how to make the most of a good time.	1	2	3	4	5	6	7
6. I don't like to look back at good times too much after they've taken place.	1	2	3	4	5	6	7
7. I feel a joy of anticipation when I think about upcoming good things.	1	2	3	4	5	6	7
8. When it comes to enjoying myself, I'm my own "worst enemy."	1	2	3	4	5	6	7
9. I can make myself feel good by remembering pleasant events from my past.	1	2	3	4	5	6	7
10. For me, anticipating what upcoming good events will be like is basically a waste of time.	1	2	3	4	5	6	7
11. When something good happens, I can make my enjoyment of it last longer by thinking or doing certain things.	1	2	3	4	5	6	7
12. When I reminisce about pleasant memories, I often start to feel sad or disappointed.	1	2	3	4	5	6	7
13. I can enjoy pleasant events in my mind before they actually occur.	1	2	3	4	5	6	7
14. I can't seem to capture the joy of happy moments.	1	2	3	4	5	6	7
15. I like to store memories of fun times that I go through so that I can recall them later.	1	2	3	4	5	6	7
16. It's hard for me to get very excited about fun times before they actually take place.	1	2	3	4	5	6	7
17. I feel fully able to appreciate good things that happen to me.	1	2	3	4	5	6	7
18. I find that thinking about good times from the past is basically a waste of time.	1	2	3	4	5	6	7
19. I can make myself feel good by imagining what a happy time that is about to happen will be like.	1	2	3	4	5	6	7
20. I don't enjoy things as much as I should.	1	2	3	4	5	6	7
21. It's easy for me to rekindle the joy from pleasant memories.	1	2	3	4	5	6	7
22. When I think about a pleasant event before it happens I often start to feel uneasy or uncomfortable.	1	2	3	4	5	6	7
23. It's easy for me to enjoy myself when I want to.	1	2	3	4	5	6	7
24. For me, once a fun time is over and gone, it's best not to think about it.	1	2	3	4	5	6	7

Healthcare Utilization & Access

(adapted from the National Health Interview Study)

1. Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare, or Indian Health Service?

Yes No Don't know/not sure

2. Is there a place that you USUALLY go to when you are sick or need advice about your health?

Yes No Don't know/not sure

3. What kind of place do you go to MOST OFTEN when you are sick or need advice about your health?

Clinic or health center

Doctor's office or HMO

Hospital emergency room

Hospital outpatient department

Some other place (please specify): _____

Don't go any one place most often

4. Is there a place that you USUALLY go to for routine or preventive care, such as physical examinations or check-ups?

Yes No Don't know/not sure

5. What kind of place do you USUALLY go to when you need routine or preventive care, such as physical examinations or check-ups?

Clinic or health center

Doctor's office or HMO

Hospital emergency room

Hospital outpatient department

Some other place (please specify): _____

Don't go any one place most often

Don't get preventative care anywhere

6. About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

Within the past year (anytime less than 12 months ago)

Within the past 2 years (1 year but less than 2 years ago)

Within the past 5 years (2 years but less than 5 years ago)

5 or more years ago

Don't know / Not sure

Never

7. There are many reasons people delay getting medical care. Have you delayed getting care for any of the following reasons in the PAST 12 MONTHS?

	Yes	No
You couldn't get through on the phone.		
You couldn't get an appointment soon enough.		
Once you get there, you have to wait too long to see the doctor.		
The (clinic/doctor's) office wasn't open when you could get there.		
You didn't have transportation.		
Other (please specify):		

8. DURING THE PAST 12 MONTHS, was there any time when you needed any of the following, but didn't get it because you couldn't afford it?

	Yes	No
Prescription medicines.		
Mental health care or counseling.		
Dental care (including check-ups).		
Eyeglasses or contacts.		
To see a specialist.		
Follow-up care.		

Social support: items adapted from the **Positive and Negative Social Exchanges**

(PANSE; Newsom, Rook, Nishishiba, Sorkin, & Mahan, 2005)

Positive social exchanges

In general, please indicate how satisfied you have been in the past MONTH by...

Not at all satisfied A little satisfied Moderately satisfied Quite a bit satisfied Very satisfied

1. . . . **informational support** from others (i.e., helpful advice when needed, practical suggestions, and ways of handling difficulties or problems).
2. . . . **instrumental support** from others (i.e., favors, aid and assistance, help or support with important tasks or things you could not do on your own).
3. . . . **emotional support** from others (i.e., kind words, lifting spirits, sensitive and supportive of personal matters).
4. . . . **companionship** from others (i.e., keep good company, makes you feel included, engages with you in activities).

Negative social exchanges

In general, please indicate how bothered you have been by...

Not at all bothered A little bothered Moderately bothered Quite a bit bothered Very bothered

5. . . . **unwanted advice or intrusions** from others (i.e., unsolicited advice, judgment of your decisions, interfering with your personal matters).
6. . . . **others failing to provide help** (i.e., let you down, rely too heavily on you for help, do not follow through on offers to help).
7. . . . **unsympathetic and insensitive behavior** from others (i.e., leaving you out of activities, forgetting or ignoring you, not spending enough time with you).
8. . . . **rejection or neglect** from others (i.e., thoughtless or inconsiderate behavior, expressions of hostility, judgmental about your concerns and worries).

Trait Rumination: Rumination scale of the Rumination-Reflection Questionnaire

(RRQ; Trapnell & Campbell, 1999)

For each of the statements, please indicate your level of agreement or disagreement. Use the scale as shown.

Strongly disagree Disagree Neutral Agree Strongly agree

1. My attention is often focused on aspects of myself I wish I'd stop thinking about.
2. I always seem to be rehashing in my mind recent things I've said or done.
3. Sometimes it is hard for me to shut off thoughts about myself.
4. Long after an argument or disagreement is over with, my thoughts keep going back to what happened.
5. I tend to "ruminate" or dwell over thing that happen to me for a really long time afterward.
6. I don't waste time rethinking things that are over and done with.
7. Often I'm playing back over in my mind how I acted in a past situation.
8. I often find myself reevaluatig something I've done.
9. I never ruminate or dwell on myself for very long.
10. It is easy for me to put unwanted thoughts out of my mind.
11. I often reflect on episodes in my life that I should no longer concern myself with.
12. I spend a great deal of time thinking back over my embarrassing or disappointing moments.

If any of your contact information has changed, please email Allyson Graf (agraf@mix.wvu.edu) to avoid delays in the delivery of your compensation.

Next, we hope that you enjoyed this research experience. We have a few more questions in hopes of gaining insight into how participants felt about this method of research (called experience sampling). Please answer the following questions.

Did you complete the full two week protocol? YES NO

If no, how many time assessments did you miss? _____ Number of missed surveys

Briefly describe the MAIN reasons for missing assessments

How satisfied were you with the:

	Extremely unsatisfied	Somewhat unsatisfied	Neither satisfied or unsatisfied	Somewhat satisfied	Extremely satisfied
Overall research experience?					
Baseline survey?					
Daily surveys?					
Study organization?					
Study flexibility?					
Communication by the research team?					
Compensation?					

How likely are you to:

	Extremely unlikely	Somewhat unlikely	Neither likely or unlikely	Somewhat likely	Extremely likely
Participate in other research studies?					
Participate in other research studies like this one?					
Recommend others participate in research studies?					

Did you experience any difficulties during the two-weeks of receiving daily surveys?

What should be done differently in future studies using daily surveys?

Your feedback will be helpful in informing future scientists about the utility of this method.

Thank you!!

Appendix F. Example of Daily Fluctuation (z-score) Calculations

Formula: (Time Point Response – Individual Day Mean) / Individual Standard Deviation

ID			Raw Data			Day Means			Day SD			z-score Calculation		
	Study Day	Time of Day	SAH5	Uplift Intensity	Uplift Domains	SAH5	Uplift Intensity	Uplift Domains	SAH5	Uplift Intensity	Uplift Domains	SAH5	Uplift Intensity	Uplift Domains
8	Day 12	AM	3.00	8.00	5.00	3.00	6.00	4.00	0.00	2.45	1.41	0.00	0.82	0.71
		EA	3.00	5.00	4.00							0.00	-0.41	0.00
		LA	3.00	3.00	2.00							0.00	-1.22	-1.41
		PM	3.00	8.00	5.00							0.00	0.82	0.71
	Day 13	AM	4.00	7.00	3.00	3.67	9.33	4.33	0.58	2.08	1.15	0.58	-1.12	-1.15
		EA	4.00	11.00	5.00							0.58	0.80	0.58
		LA												
		PM	3.00	10.00	5.00							-1.15	0.32	0.58
35	Day 12	AM	3.00	4.00	3.00	2.25	4.75	3.25	0.50	2.22	0.96	1.50	-0.34	-0.26
		EA	2.00	8.00	4.00							-0.50	1.47	0.78
		LA	2.00	3.00	2.00							-0.50	-0.79	-1.31
		PM	2.00	4.00	4.00							-0.50	-0.34	0.78
	Day 13	AM	2.00	1.00	1.00	2.00	3.33	2.67	0.00	2.08	1.53	0.00	-1.12	-1.09
		EA	2.00	5.00	4.00							0.00	0.80	0.87
		LA												
		PM	2.00	4.00	3.00							0.00	0.32	0.22

Appendix G. Individual Level Descriptive Data from Experience Sampling Phase

Participant ID	1											
Age	44											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	38	3.00	0.00	3-3	^a	^a	^a	^a	^a	^a	^a	^a
2. SAH Slider Scale	39	8.49	0.14	8.18-8.81	1.00	.09	.11	.28	.28	.04	-.13	-.46 ^{**}
3. Total Uplift Domains	40	2.88	2.07	0-8		1.00	.95 ^{**}	.72 ^{**}	.65 ^{**}	.23	-.22	.42 ^{**}
4. Intensity of Uplifts	39	7.18	4.72	0-18			1.00	.74 ^{**}	.67 ^{**}	.22	-.20	.38
5. Total Hassle Domains	40	2.65	2.07	0-8				1.00	.93 ^{**}	.12	-.11	.01
6. Intensity of Hassles	39	2.92	2.28	0-8					1.00	.14	-.13	-.03
7. Positive Affect	39	29.67	1.49	22-30						1.00	-.96 ^{**}	.08
8. Negative Affect	39	6.62	2.35	6-18							1.00	-.06
9. Acute Symptoms	39	9.49	1.35	8-14								1.00

^a. Indicates one of the variables is a constant; * $p < .05$; ** $p < .01$

Participant ID	2											
Age	58											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	35	2.89	0.40	2-4	.82**	-.17	.27	-.11	-.32	.33	-.38*	-.74**
2. SAH Slider Scale	35	7.05	0.36	6.26-7.81	1.00	-.03	.37*	.05	-.25	.34*	-.33	-.73**
3. Total Uplift Domains	35	5.40	1.85	1-9		1.00	.69**	.96**	.87**	.16	.44**	.20
4. Intensity of Uplifts	35	10.57	4.61	2-22			1.00	.74**	.41*	.59**	-.01	-.28
5. Total Hassle Domains	35	5.49	2.05	1-9				1.00	.86**	.18	.41*	.17
6. Intensity of Hassles	35	8.77	4.08	2-17					1.00	-.10	.58**	.38
7. Positive Affect	35	18.94	4.87	11-28						1.00	-.28	-.34
8. Negative Affect	35	14.66	3.30	8-27							1.00	.55**
9. Acute Symptoms	35	10.63	2.81	8-18								1.00

* $p < .05$; ** $p < .01$

Participant ID	3											
Age	55											
Gender	F											
Neuroticism	2.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	37	3.92	0.28	3-4	.56**	.11	.18	.13	.12	.28	-.09	-.18
2. SAH Slider Scale	36	7.79	0.31	7.11-8.37	1.00	-.09	-.14	-.10	.01	.16	-.09	.13
3. Total Uplift Domains	39	3.31	1.64	0-16		1.00	.73**	.97**	.74**	.24	-.07	.05
4. Intensity of Uplifts	37	4.95	3.26	0-15			1.00	.73**	.79**	.50**	-.18	-.10
5. Total Hassle Domains	39	3.41	1.63	0-6				1.00	.79**	.22	.02	.12
6. Intensity of Hassles	37	3.38	1.85	0-7					1.00	.20	.10	.11
7. Positive Affect	36	17.50	2.21	14-23						1.00	-.36*	.35*
8. Negative Affect	36	12.31	1.91	9-16							1.00	.42*
9. Acute Symptoms	36	9.33	0.89	8-11								1.00

* $p < .05$; ** $p < .01$

Participant ID	4											
Age	34											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	55	2.99	0.53	2-4	.83**	.23	.19	.21	.02	.67**	-.45**	-.63**
2. SAH Slider Scale	53	6.93	0.94	3.88-8.37	1.00	.23	.22	.24	-.09	.74**	-.77**	-.73**
3. Total Uplift Domains	56	2.82	1.67	0-8		1.00	.88**	.98**	.87**	.45**	-.08	-.07
4. Intensity of Uplifts	56	5.01	6.23	0-28			1.00	.88**	.72**	.47**	-.15	.01
5. Total Hassle Domains	56	2.82	1.67	0-8				1.00	.87**	.45**	-.13	-.08
6. Intensity of Hassles	56	3.20	1.89	0-8					1.00	.21	.27*	.19
7. Positive Affect	56	18.39	4.38	6-27						1.00	-.48**	-.64**
8. Negative Affect	56	7.66	3.28	6-21							1.00	.61**
9. Acute Symptoms	56	13.64	2.28	12-20								1.00

* $p < .05$; ** $p < .01$

Participant ID	5											
Age	46											
Gender	M											
Neuroticism	1.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	52	4.02	1.16	1-5	.91**	.28*	.61**	.22	.03	.74**	-.61**	-.87**
2. SAH Slider Scale	52	9.01	1.11	5.78-10.00	1.00	.33*	.65**	.30*	.11	.73**	-.60**	-.91**
3. Total Uplift Domains	52	5.52	1.53	2-8		1.00	.65**	.63**	.51**	.14	-.10	-.23
4. Intensity of Uplifts	52	12.94	5.91	3-26			1.00	.52**	.20	.63**	-.51**	-.61**
5. Total Hassle Domains	52	5.69	1.32	3-9				1.00	.53**	.23	-.10	-.19
6. Intensity of Hassles	52	8.64	3.40	3-19					1.00	-.06	.13	.003
7. Positive Affect	52	25.87	3.02	20-30						1.00	-.89**	-.69**
8. Negative Affect	52	8.08	1.68	6-13							1.00	.56**
9. Acute Symptoms	52	12.46	3.66	8-23								1.00

* $p < .05$; ** $p < .01$

Participant ID	6											
Age	64											
Gender	F											
Neuroticism	2.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	56	4.05	0.35	3-5	.71**	.21	.26	.14	.04	.04	.05	-.25
2. SAH Slider Scale	56	9.42	0.35	7.90-10.00	1.00	.14	.05	.08	-.06	-.05	.07	-.35**
3. Total Uplift Domains	56	5.25	1.28	3-8		1.00	.82**	.94**	.80**	.29*	-.13	-.11
4. Intensity of Uplifts	56	9.37	3.19	4-17			1.00	.83**	.61**	.50**	-.41**	-.07
5. Total Hassle Domains	56	5.14	1.35	3-9				1.00	.82**	.36**	-.25	-.11
6. Intensity of Hassles	56	5.91	1.83	3-11					1.00	.16	.10	.11
7. Positive Affect	56	20.30	2.78	14-25						1.00	-.66**	.07
8. Negative Affect	56	9.08	1.94	6-16							1.00	.11
9. Acute Symptoms	56	10.08	1.87	8-16								1.00

* $p < .05$; ** $p < .01$

Participant ID	7											
Age	40											
Gender	F											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	39	3.08	0.27	3-4	.11	.37 [*]	.53 ^{**}	.39 [*]	.27	.13	-.10	-.18
2. SAH Slider Scale	39	7.36	0.48	5.19-8.53	1.00	.12	.17	.05	.04	.12	-.20	-.26
3. Total Uplift Domains	36	4.11	2.12	2-9		1.00	.83 ^{**}	.96 ^{**}	.82 ^{**}	-.28	.13	-.17
4. Intensity of Uplifts	36	7.31	6.59	2-32			1.00	.85 ^{**}	.67 ^{**}	-.06	.02	-.20
5. Total Hassle Domains	36	4.17	2.47	1-10				1.00	.87 ^{**}	-.26	.18	-.031
6. Intensity of Hassles	36	5.14	3.55	1-15					1.00	-.46 ^{**}	.42 [*]	.01
7. Positive Affect	36	22.83	1.89	15-25						1.00	-.51 ^{**}	.08
8. Negative Affect	36	7.33	1.97	6-13							1.00	.11
9. Acute Symptoms	36	10.44	2.47	8-16								1.00

* $p < .05$; ** $p < .01$

Participant ID	8											
Age	43											
Gender	M											
Neuroticism	2.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	48	3.31	0.47	3-4	.52**	-.02	.26	.01	.07	.50**	.05	-.10
2. SAH Slider Scale	48	7.66	0.62	5.59-8.93	1.00	-.16	.08	-.21	-.21	.70**	-.41**	-.37**
3. Total Uplift Domains	48	4.71	1.47	2-10		1.00	.87**	.98**	.91**	.19	.35*	.29*
4. Intensity of Uplifts	48	8.27	3.60	3-23			1.00	.87**	.88**	.44**	.38**	.16
5. Total Hassle Domains	48	4.77	1.46	2-10				1.00	.93**	.19	.39**	.32*
6. Intensity of Hassles	48	5.06	1.99	2-13					1.00	.20	.57**	.39**
7. Positive Affect	48	21.52	2.48	16-25						1.00	-.07	-.082
8. Negative Affect	46	7.54	2.31	6-16							1.00	.36*
9. Acute Symptoms	48	8.58	0.79	8-11								1.00

* $p < .05$; ** $p < .01$

Participant ID	9											
Age	29											
Gender	O											
Neuroticism	4.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	36	2.08	0.28	2-3	.60**	.18	.15	.11	.09	.24	-.11	-.08
2. SAH Slider Scale	36	5.56	0.44	4.05-7.34	1.00	-.27	-.28	-.24	-.33*	-.34*	-.32	-.17
3. Total Uplift Domains	37	3.22	1.78	0-10		1.00	.85**	.84**	.85**	.57**	.55**	.30
4. Intensity of Uplifts	37	4.49	3.55	0-16			1.00	.63**	.64**	.73**	.37*	.33
5. Total Hassle Domains	37	3.22	2.00	0-10				1.00	.93**	.44**	.71**	.23
6. Intensity of Hassles	37	4.19	3.44	0-18					1.00	.41*	.76**	.35*
7. Positive Affect	35	7.91	2.17	6-16						1.00	.13	.020
8. Negative Affect	35	8.66	3.12	6-18							1.00	.51**
9. Acute Symptoms	36	12.67	1.35	12-16								1.00

* $p < .05$; ** $p < .01$

Participant ID	10											
Age	49											
Gender	F											
Neuroticism	3.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	54	3.04	0.58	2-4	.83**	-.10	.17	-.06	-.20	.24	.00	-.37**
2. SAH Slider Scale	54	5.82	1.04	3.77-7.86	1.00	-.09	.10	-.03	-.17	.12	-.05	-.51**
3. Total Uplift Domains	55	5.25	1.48	2-8		1.00	.78**	.79**	.75**	.13	.22	.32*
4. Intensity of Uplifts	55	7.02	2.45	2-14			1.00	.64**	.47**	.40**	-.01	.10
5. Total Hassle Domains	54	5.35	1.58	2-9				1.00	.88**	.12	.17	.15
6. Intensity of Hassles	54	6.56	2.25	2-12					1.00	.04	.23	.36**
7. Positive Affect	55	19.04	1.87	15-23						1.00	-.27*	-.02
8. Negative Affect	55	8.98	2.21	6-14							1.00	.27*
9. Acute Symptoms	55	12.24	1.62	9-17								1.00

* $p < .05$; ** $p < .01$

Participant ID	11											
Age	48											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	48	3.33	0.78	2-5	.82**	.33*	.24	-.25	-.31*	.46**	-.32*	-.60**
2. SAH Slider Scale	41	6.63	2.15	1.93-10.00	1.00	.26	.24	-.37*	-.39*	.52**	-.42**	-.58**
3. Total Uplift Domains	50	6.34	2.85	0-10		1.00	.90**	.07	.02	.03	-.12	-.25
4. Intensity of Uplifts	48	22.71	10.80	0-40			1.00	.02	.03	.08	-.20	-.07
5. Total Hassle Domains	50	0.58	1.39	0-7				1.00	.96**	-.48**	.50**	.06
6. Intensity of Hassles	48	1.69	4.23	0-21					1.00	-.51**	.52**	.12
7. Positive Affect	48	27.31	3.80	9-30						1.00	-.85**	-.10
8. Negative Affect	48	8.23	5.02	6-29							1.00	-.02
9. Acute Symptoms	48	18.23	4.46	8-25								1.00

* $p < .05$; ** $p < .01$

Participant ID	12											
Age	25											
Gender	F											
Neuroticism	3.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	33	4.06	0.35	3-5	.44 [*]	.13	.17	.16	.14	.04	-.04	-.21
2. SAH Slider Scale	34	9.25	0.42	8.08-10.00	1.00	-.18	-.14	-.12	-.10	.18	-.12	-.21
3. Total Uplift Domains	34	2.29	1.66	0-8		1.00	.92 ^{**}	.94 ^{**}	.91 ^{**}	.46 ^{**}	-.29	-.06
4. Intensity of Uplifts	34	6.50	6.06	0-29			1.00	.84 ^{**}	.77 ^{**}	.60 ^{**}	-.31	-.09
5. Total Hassle Domains	34	2.50	2.14	0-10				1.00	.95 ^{**}	.52 ^{**}	-.35 [*]	-.13
6. Intensity of Hassles	34	2.65	2.25	0-10					1.00	.40 [*]	-.23	-.13
7. Positive Affect	34	18.97	4.13	6-29						1.00	-.41 [*]	-.17
8. Negative Affect	34	9.88	4.46	6-18							1.00	-.06
9. Acute Symptoms	34	11.12	1.34	9-16								1.00

* $p < .05$; ** $p < .01$

Participant ID	13											
Age	43											
Gender	M											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	47	3.30	0.72	1-4	.88**	.00	.03	.02	-.21	.78**	-.71**	-.78**
2. SAH Slider Scale	48	8.20	1.41	1.82-9.60	1.00	.03	.04	.07	-.18	.77**	-.81**	-.72**
3. Total Uplift Domains	48	4.42	2.07	2-9		1.00	.91**	.99**	.67**	.11	-.03	.15
4. Intensity of Uplifts	48	10.58	6.82	2-30			1.00	.89**	.50**	.17	-.09	.03
5. Total Hassle Domains	48	4.46	2.09	2-9				1.00	.70**	.13	-.09	.15
6. Intensity of Hassles	48	8.10	3.81	2-16					1.00	-.12	.17	.36*
7. Positive Affect	48	18.00	3.97	6-25						1.00	-.72**	-.70**
8. Negative Affect	48	11.10	4.84	6-27							1.00	.64**
9. Acute Symptoms	48	11.31	2.52	8-22								1.00

* $p < .05$; ** $p < .01$

Participant ID	14											
Age	51											
Gender	F											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	47	2.28	0.45	2-3	.69**	.20	.27	.17	.27	.33*	-.29*	-.32*
2. SAH Slider Scale	40	4.37	0.95	2.49-6.10	1.00	.06	.11	.12	.19	.22	-.35*	-.48**
3. Total Uplift Domains	47	1.49	1.12	0-5		1.00	.91**	.93**	.85**	.62**	.02	-.03
4. Intensity of Uplifts	47	2.77	2.88	0-12			1.00	.83**	.70**	.75**	-.07	-.04
5. Total Hassle Domains	47	1.40	1.04	0-5				1.00	.92**	.61**	-.02	-.07
6. Intensity of Hassles	47	1.74	1.33	0-5					1.00	.46**	-.04	-.05
7. Positive Affect	47	9.91	2.95	6-17						1.00	-.02	-.19
8. Negative Affect	47	6.64	1.05	6-11							1.00	.13
9. Acute Symptoms	47	9.83	1.75	8-15								1.00

* $p < .05$; ** $p < .01$

Participant ID	15											
Age	34											
Gender	F											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	45	3.84	0.37	3-4	.16	-.19	-.06	-.23	-.24	.10	.17	.07
2. SAH Slider Scale	45	9.37	0.20	8.99-9.86	1.00	.01	-.07	.09	.07	-.06	.03	.05
3. Total Uplift Domains	45	2.18	1.87	0-10		1.00	.89**	.88**	.89**	.05	.29	-.16
4. Intensity of Uplifts	45	2.67	3.59	0-24			1.00	.78**	.81**	.11	.51**	-.11
5. Total Hassle Domains	45	1.89	2.13	0-10				1.00	.99**	-.03	.30*	-.12
6. Intensity of Hassles	45	1.93	2.22	0-11					1.00	-.03	.32*	-.12
7. Positive Affect	45	15.20	4.50	6-30						1.00	.11	.09
8. Negative Affect	45	7.00	2.62	6-18							1.00	.64**
9. Acute Symptoms	45	8.38	2.39	8-24								1.00

* $p < .05$; ** $p < .01$

Participant ID	16											
Age	47											
Gender	M											
Neuroticism	3.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	50	3.20	0.40	3-4	.84**	.18	.32*	.26	.28	.75**	.21	-.76**
2. SAH Slider Scale	50	6.91	0.19	6.67-7.64	1.00	.36*	.48**	.46**	.46**	.64**	.06	-.61**
3. Total Uplift Domains	50	4.44	1.61	1-10		1.00	.84**	.84**	.81**	.29*	.11	-.07
4. Intensity of Uplifts	50	6.52	3.33	2-20			1.00	.78**	.78**	.40**	.19	-.11
5. Total Hassle Domains	50	4.42	1.50	1-8				1.00	.97**	.27	.14	-.11
6. Intensity of Hassles	50	4.60	1.64	1-9					1.00	.26	.19	-.11
7. Positive Affect	50	12.34	2.45	8-20						1.00	.26	-.55**
8. Negative Affect	50	6.38	0.75	6-9							1.00	-.17
9. Acute Symptoms	50	16.66	2.30	11-20								1.00

* $p < .05$; ** $p < .01$

Participant ID	17											
Age	65											
Gender	M											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	42	3.00	0.00	3-3	a	a	a	a	a	a	a	a
2. SAH Slider Scale	42	8.62	0.16	8.23-9.09	1.00	-.22	-.19	-.29	-.30	-.10	.20	-.04
3. Total Uplift Domains	42	3.07	1.60	1-7		1.00	.93**	.93**	.84**	-.06	-.31*	.01
4. Intensity of Uplifts	42	7.50	4.20	1-18			1.00	.90**	.79**	-.09	-.40**	.09
5. Total Hassle Domains	42	3.07	1.80	1-9				1.00	.92**	.02	-.43**	.08
6. Intensity of Hassles	42	3.52	2.06	1-11					1.00	.04	-.37*	.05
7. Positive Affect	42	23.79	0.56	22-24						1.00	-.29	.31*
8. Negative Affect	42	12.29	0.97	9-15							1.00	-.20
9. Acute Symptoms	42	8.48	0.59	8-10								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	18											
Age	42											
Gender	M											
Neuroticism	2.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	47	3.00	0.00	3-3	a	a	a	a	a	a	a	a
2. SAH Slider Scale	47	6.90	0.36	5.88-7.66	1.00	.25	.29	.30*	.36*	.08	-.17	-.12
3. Total Uplift Domains	47	4.64	1.28	1-7		1.00	.73**	.73**	.65**	.15	-.11	.12
4. Intensity of Uplifts	47	11.79	3.80	2-20			1.00	.46**	.52**	.11	-.10	-.01
5. Total Hassle Domains	47	5.06	1.82	1-10				1.00	.93**	.06	-.07	.17
6. Intensity of Hassles	47	5.19	1.96	1-10					1.00	-.03	-.08	.16
7. Positive Affect	47	21.98	2.28	17-24						1.00	.14	-.01
8. Negative Affect	47	6.04	0.20	6-7							1.00	.08
9. Acute Symptoms	47	9.00	1.29	8-13								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	19											
Age	63											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	56	3.25	0.48	2-4	.54**	-.10	-.05	-.12	-.18	.45**	-.36**	-.38**
2. SAH Slider Scale	56	8.09	0.58	6.00-8.99	1.00	.20	.25	.22	.10	.22	-.53**	-.24
3. Total Uplift Domains	56	3.70	1.46	1-8		1.00	.91**	.94**	.92**	-.09	.07	.13
4. Intensity of Uplifts	56	10.21	4.22	1-22			1.00	.87**	.83**	.02	-.02	.05
5. Total Hassle Domains	56	3.52	1.68	0-8				1.00	.97**	-.11	.02	.17
6. Intensity of Hassles	56	3.70	1.83	0-9					1.00	-.17	.20	.28*
7. Positive Affect	56	22.68	2.91	15-29						1.00	-.39**	-.60**
8. Negative Affect	56	6.59	1.71	6-16							1.00	.46**
9. Acute Symptoms	56	10.73	0.82	10-13								1.00

* $p < .05$; ** $p < .01$

Participant ID	20											
Age	31											
Gender	F											
Neuroticism	3.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	48	2.90	0.31	2-3	.63**	.09	.23	.12	-.02	.60**	-.42**	-.05
2. SAH Slider Scale	48	6.86	0.68	5.29-8.65	1.00	.13	.31*	.17	.03	.60**	-.65**	-.12
3. Total Uplift Domains	48	3.96	1.30	1-8		1.00	.79**	.97**	.86**	.05	-.07	.00
4. Intensity of Uplifts	48	6.73	2.94	2-16			1.00	.76**	.60**	.20	-.02	.11
5. Total Hassle Domains	48	4.04	1.32	1-8				1.00	.87**	.06	-.09	.03
6. Intensity of Hassles	48	5.63	2.56	1-14					1.00	-.12	.12	-.01
7. Positive Affect	47	18.32	2.61	11-23						1.00	-.52**	-.06
8. Negative Affect	47	10.83	3.12	6-21							1.00	.10
9. Acute Symptoms	48	13.29	2.12	9-19								1.00

* $p < .05$; ** $p < .01$

Participant ID	21											
Age	43											
Gender	F											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	49	3.92	0.28	3-4	.89**	.15	.22	.14	.12	.28*	-.58**	-.59**
2. SAH Slider Scale	49	7.95	0.62	5.03-8.45	1.00	.11	.17	.12	.11	.26	-.46**	-.65**
3. Total Uplift Domains	49	2.82	1.13	1-6		1.00	.79**	.97**	.88**	.31*	-.05	.29*
4. Intensity of Uplifts	49	5.65	4.06	1-22			1.00	.83**	.65**	.67**	-.23	.16
5. Total Hassle Domains	49	2.78	1.10	1-6				1.00	.89**	.38**	-.08	.28
6. Intensity of Hassles	49	3.08	1.44	1-7					1.00	.25	.17	.30*
7. Positive Affect	49	20.82	4.61	12-30						1.00	-.49**	-.14
8. Negative Affect	49	7.88	2.66	6-16							1.00	.33*
9. Acute Symptoms	49	8.69	0.92	8-11								1.00

* $p < .05$; ** $p < .01$

Participant ID	22											
Age	63											
Gender	F											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	43	2.14	0.35	2-3	.78**	.16	.28	.14	.01	.13	.13	.04
2. SAH Slider Scale	19	4.94	0.56	4.33-6.89	1.00	.02	.17	.11	-.26	.26	-.33	-.54*
3. Total Uplift Domains	42	4.00	1.38	1-6		1.00	.87**	.95**	.88**	.16	.13	.39*
4. Intensity of Uplifts	42	5.57	2.46	1-10			1.00	.80**	.73**	.31*	.15	.35*
5. Total Hassle Domains	42	4.05	1.50	1-6				1.00	.90**	.19	.08	.33*
6. Intensity of Hassles	42	5.74	2.93	1-11					1.00	.03	.26	.50**
7. Positive Affect	42	17.69	1.41	14-20						1.00	-.49**	-.19
8. Negative Affect	42	11.71	2.02	8-18							1.00	.33*
9. Acute Symptoms	42	9.83	1.58	8-14								1.00

* $p < .05$; ** $p < .01$

Participant ID	23											
Age	40											
Gender	M											
Neuroticism	1.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	37	3.89	0.81	2-5	.64**	-.17	.18	-.38*	-.50**	.52**	-.56**	-.60**
2. SAH Slider Scale	37	7.30	0.88	4.09-9.50	1.00	-.22	.11	-.29	-.53**	.63**	-.63**	-.71**
3. Total Uplift Domains	36	4.44	1.56	2-9		1.00	.69**	.77**	.54**	-.06	.13	.11
4. Intensity of Uplifts	35	11.34	5.42	3-26			1.00	.61**	.23	.37*	-.23	-.22
5. Total Hassle Domains	36	4.61	1.96	1-9				1.00	.67**	-.07	.21	.10
6. Intensity of Hassles	35	5.94	3.34	1-16					1.00	-.49**	.77**	.44**
7. Positive Affect	33	24.36	4.39	12-30						1.00	-.88**	-.54**
8. Negative Affect	33	9.27	4.96	6-27							1.00	.50**
9. Acute Symptoms	34	8.32	1.01	8-12								1.00

* $p < .05$; ** $p < .01$

Participant ID	24											
Age	32											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	54	3.59	0.50	3-4	-.25	.20	.27 [*]	.20	.25	.17	-.20	.15
2. SAH Slider Scale	54	8.06	0.39	7.08-8.87	1.00	-.18	-.28 [*]	-.15	-.19	.07	-.09	-.31 [*]
3. Total Uplift Domains	54	4.81	2.12	1-10		1.00	.89 ^{**}	.97 ^{**}	.91 ^{**}	.05	-.03	-.05
4. Intensity of Uplifts	54	8.57	4.68	1-21			1.00	.88 ^{**}	.78 ^{**}	.18	-.17	.13
5. Total Hassle Domains	54	4.80	2.04	1-10				1.00	.93 ^{**}	.10	-.03	-.12
6. Intensity of Hassles	54	5.41	2.26	1-11					1.00	.00	.01	-.09
7. Positive Affect	54	22.13	2.80	17-30						1.00	-.80 ^{**}	.01
8. Negative Affect	54	11.76	2.14	7-17							1.00	-.08
9. Acute Symptoms	54	9.09	1.03	8-12								1.00

* $p < .05$; ** $p < .01$

Participant ID	25											
Age	32											
Gender	M											
Neuroticism	1.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	45	4.00	0.00	4-4	a	a	a	a	a	a	a	a
2. SAH Slider Scale	45	8.93	0.18	8.24-9.25	1.00	-.03	.11	.00	.03	.12	-.30	-.13
3. Total Uplift Domains	45	3.53	1.27	1-7		1.00	.76**	.74**	.57**	.20	.02	.01
4. Intensity of Uplifts	45	8.27	3.00	3-18			1.00	.51**	.40**	.56**	-.12	-.04
5. Total Hassle Domains	45	3.69	1.94	1-10				1.00	.79**	.02	.14	.01
6. Intensity of Hassles	45	4.67	2.41	1-12					1.00	-.06	.50**	.13
7. Positive Affect	43	20.16	3.29	16-28						1.00	-.31*	-.35*
8. Negative Affect	43	7.05	1.59	6-13							1.00	.33*
9. Acute Symptoms	44	10.41	1.99	8-15								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	26											
Age	50											
Gender	F											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	50	3.20	0.45	2-4	.76**	.31*	.39**	.36**	.31*	.61**	.34*	-.42**
2. SAH Slider Scale	50	8.76	0.43	7.19-9.65	1.00	.20	.25	.20	.14	.49**	.31*	-.43**
3. Total Uplift Domains	50	2.58	1.81	0-7		1.00	.92**	.96**	.91**	.46**	.30*	-.12
4. Intensity of Uplifts	50	4.64	4.08	0-19			1.00	.89**	.80**	.53**	.25	-.10
5. Total Hassle Domains	50	2.58	1.90	0-7				1.00	.95**	.48**	.27	-.12
6. Intensity of Hassles	50	2.86	2.28	0-10					1.00	.37**	.34*	-.15
7. Positive Affect	50	13.88	4.97	6-24						1.00	.54**	-.10
8. Negative Affect	50	8.48	3.10	6-19							1.00	.05
9. Acute Symptoms	50	8.64	0.69	8-11								1.00

* $p < .05$; ** $p < .01$

Participant ID	27											
Age	61											
Gender	F											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	46	3.96	0.21	3-4	.11	-.23	.04	-.03	-.02	.16	.09	.05
2. SAH Slider Scale	46	9.14	0.05	9.01-9.29	1.00	.03	.24	.07	.06	.18	.01	-.04
3. Total Uplift Domains	46	2.43	0.98	1-5		1.00	.75**	.55**	.51**	.34*	-.10	-.18
4. Intensity of Uplifts	44	3.98	2.44	1-13			1.00	.59**	.57**	.60**	-.06	.00
5. Total Hassle Domains	46	2.76	1.64	1-10				1.00	.99**	.41**	-.10	.04
6. Intensity of Hassles	46	2.80	1.72	1-10					1.00	.39**	-.08	.10
7. Positive Affect	46	15.17	3.55	9-24						1.00	.00	-.30*
8. Negative Affect	46	6.43	1.09	6-11							1.00	.13
9. Acute Symptoms	46	8.09	0.35	8-10								1.00

* $p < .05$; ** $p < .01$

Participant ID	28											
Age	28											
Gender	M											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	39	3.00	0.00	3-3	a	a	a	a	a	a	a	a
2. SAH Slider Scale	38	6.05	0.05	5.97-6.18	1.00	.04	.10	.00	.01	.00	.03	-.05
3. Total Uplift Domains	39	3.85	0.67	2-5		1.00	.69**	.53**	.50**	.22	.21	.06
4. Intensity of Uplifts	39	5.85	1.65	4-12			1.00	.49**	.46**	.39*	.00	-.11
5. Total Hassle Domains	39	3.95	1.23	2-10				1.00	.98**	.13	-.13	-.01
6. Intensity of Hassles	39	4.00	1.26	2-10					1.00	.13	-.11	-.03
7. Positive Affect	39	23.85	1.25	19-27						1.00	.44**	-.38*
8. Negative Affect	39	10.26	1.79	6-12							1.00	-.05
9. Acute Symptoms	39	8.36	0.71	8-10								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	29											
Age	61											
Gender	F											
Neuroticism	1.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	52	4.00	0.00	4-4	a	a	a	a	a	a	a	a
2. SAH Slider Scale	52	9.34	0.14	9.00-9.65	1.00	.05	.06	.04	.03	-.15	.18	-.12
3. Total Uplift Domains	52	3.54	2.21	0-8		1.00	.85**	.77**	.76**	-.24	-.04	.04
4. Intensity of Uplifts	52	5.27	4.30	0-19			1.00	.62**	.63**	-.35*	-.08	-.04
5. Total Hassle Domains	52	3.02	2.65	0-8				1.00	.97**	-.24	-.07	-.04
6. Intensity of Hassles	52	3.42	3.10	0-10					1.00	-.30*	-.09	.01
7. Positive Affect	49	24.00	0.20	23-25						1.00	.00	.00
8. Negative Affect	52	10.98	0.31	10-12							1.00	.34*
9. Acute Symptoms	52	8.04	0.19	8-9								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	30											
Age	25											
Gender	F											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	39	4.28	0.56	3-5	.54**	-.13	.04	-.08	.06	.04	-.21	-.21
2. SAH Slider Scale	39	8.45	0.32	7.09-8.79	1.00	.08	.11	.12	.10	.17	-.14	-.43**
3. Total Uplift Domains	39	3.36	1.81	1-9		1.00	.86**	.98**	.92**	-.31	.50**	-.46**
4. Intensity of Uplifts	39	6.90	3.99	2-19			1.00	.85**	.73**	-.13	.33*	-.40*
5. Total Hassle Domains	39	3.36	1.74	1-9				1.00	.92**	-.33*	.46**	-.46**
6. Intensity of Hassles	39	4.08	2.50	1-13					1.00	-.46**	.54**	-.41*
7. Positive Affect	39	27.38	2.34	22-30						1.00	-.78**	-.04
8. Negative Affect	39	8.08	1.74	6-14							1.00	-.11
9. Acute Symptoms	39	8.72	0.89	8-11								1.00

* $p < .05$; ** $p < .01$

Participant ID	31											
Age	60											
Gender	F											
Neuroticism	2.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	55	2.76	0.43	2-3	.70**	-.23	-.15	-.20	-.23	.02	-.28*	-.12
2. SAH Slider Scale	51	5.44	1.28	3.04-7.38	1.00	-.13	-.09	-.07	-.19	-.03	-.34*	-.45**
3. Total Uplift Domains	55	1.42	1.21	0-5		1.00	.91**	.95**	.89**	.27*	.54**	.30*
4. Intensity of Uplifts	55	1.89	1.90	0-7			1.00	.85**	.79**	.32*	.38**	.23
5. Total Hassle Domains	55	1.33	1.23	0-5				1.00	.94**	.23	.51**	.29*
6. Intensity of Hassles	55	1.51	1.73	0-9					1.00	.17	.56**	.39**
7. Positive Affect	55	15.25	4.62	6-30						1.00	.22	.06
8. Negative Affect	55	8.69	2.81	6-15							1.00	.53**
9. Acute Symptoms	54	14.69	1.82	12-23								1.00

* $p < .05$; ** $p < .01$

Participant ID	32											
Age	70											
Gender	M											
Neuroticism	1.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	46	4.00	0.00	4-4	a	a	a	a	a	a	a	a
2. SAH Slider Scale	46	8.17	0.04	8.11-8.25	1.00	-.04	-.10	-.05	-.06	-.35*	.06	-.03
3. Total Uplift Domains	46	2.22	0.96	1-5		1.00	.92**	.97**	.90**	-.08	.25	.48**
4. Intensity of Uplifts	46	3.65	1.64	1-9			1.00	.88**	.86**	-.02	.11	.40**
5. Total Hassle Domains	46	2.24	0.97	1-5				1.00	.94**	-.08	.27	.46**
6. Intensity of Hassles	46	2.41	1.31	1-7					1.00	.01	.33*	.50**
7. Positive Affect	46	20.80	0.86	16-21						1.00	-.18	.09
8. Negative Affect	45	6.31	0.76	6-9							1.00	-.03
9. Acute Symptoms	46	9.26	0.65	8-11								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	33											
Age	36											
Gender	F											
Neuroticism	2.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	41	4.00	0.00	4-4	a	a	a	a	a	a	a	a
2. SAH Slider Scale	41	7.87	0.02	7.80-7.88	1.00	-.22	-.24	-.20	-.17	.03	.09	.06
3. Total Uplift Domains	40	3.78	0.80	2-5		1.00	.80**	.98**	.69**	-.23	.10	-.03
4. Intensity of Uplifts	40	10.13	2.90	4-16			1.00	.74**	.32*	-.29	-.02	-.28
5. Total Hassle Domains	40	3.80	0.85	2-6				1.00	.72**	-.20	.09	-.02
6. Intensity of Hassles	40	4.85	1.66	2-9					1.00	-.24	.34*	.27
7. Positive Affect	40	28.10	2.76	24-30						1.00	-.34*	.20
8. Negative Affect	40	12.03	1.73	7-16							1.00	.21
9. Acute Symptoms	40	9.70	0.65	9-12								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	34											
Age	45											
Gender	F											
Neuroticism	2.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	49	2.29	0.82	1-4	.83**	.62**	.67**	.47**	.41**	.69**	-.33*	-.64**
2. SAH Slider Scale	43	5.38	1.62	1.89-8.11	1.00	.71**	.76**	.60**	.51**	.78**	-.49**	-.57**
3. Total Uplift Domains	50	3.50	2.34	0-9		1.00	.89**	.77**	.73**	.73**	-.32*	-.32*
4. Intensity of Uplifts	50	7.90	6.36	0-24			1.00	.73**	.68**	.76**	-.36*	-.46**
5. Total Hassle Domains	50	3.66	3.46	0-10				1.00	.97**	.52**	-.24	-.30*
6. Intensity of Hassles	50	4.04	3.53	0-10					1.00	.45**	-.07	-.28*
7. Positive Affect	50	17.34	5.38	6-27						1.00	-.45**	-.37**
8. Negative Affect	50	7.26	2.46	6-16							1.00	.13
9. Acute Symptoms	50	21.58	2.59	14-28								1.00

* $p < .05$; ** $p < .01$

Participant ID	35											
Age	56											
Gender	F											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	47	3.38	0.82	2-4	.95**	.49**	.62**	.39**	.39**	.61**	.15	-.66**
2. SAH Slider Scale	47	7.83	0.85	5.88-8.56	1.00	.43**	.57**	.36*	.35*	.66**	.08	-.75**
3. Total Uplift Domains	47	3.70	1.20	1-7		1.00	.82**	.79**	.49**	.50**	-.02	-.39**
4. Intensity of Uplifts	47	8.13	4.56	1-21			1.00	.68**	.40**	.64**	-.02	-.47**
5. Total Hassle Domains	47	3.66	1.45	0-7				1.00	.59**	.42**	-.08	-.36*
6. Intensity of Hassles	47	4.68	2.15	0-9					1.00	.03	.67**	-.27
7. Positive Affect	46	22.33	2.70	16-29						1.00	-.33*	-.56**
8. Negative Affect	46	7.41	2.04	6-14							1.00	.03
9. Acute Symptoms	47	11.64	2.86	8-23								1.00

* $p < .05$; ** $p < .01$

Participant ID	36											
Age	53											
Gender	M											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	55	5.00	0.00	5-5	a	a	a	a	a	a	a	a
2. SAH Slider Scale	55	9.99	0.04	9.67-10.00	1.00	.03	.00	.02	.02	-.03	-.23	.07
3. Total Uplift Domains	55	3.44	2.09	0-10		1.00	.92**	.92**	.92**	.13	-.03	.40**
4. Intensity of Uplifts	55	6.07	3.86	0-18			1.00	.88**	.88**	.16	-.07	.35**
5. Total Hassle Domains	55	3.31	2.42	0-10				1.00	.99**	.11	.03	.29*
6. Intensity of Hassles	55	3.44	2.47	0-10					1.00	.11	.02	.31*
7. Positive Affect	55	29.78	1.13	24-30						1.00	.03	-.08
8. Negative Affect	55	6.09	0.55	6-10							1.00	-.09
9. Acute Symptoms	55	8.29	0.53	8-10								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	37											
Age	63											
Gender	M											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	52	3.50	0.50	3-4	.56**	.18	.28*	.17	.11	.23	-.18	-.37**
2. SAH Slider Scale	51	7.73	0.46	6.50-8.37	1.00	.21	.39**	.15	.06	.46**	-.36**	-.56**
3. Total Uplift Domains	52	4.58	1.78	1-8		1.00	.81**	.91**	.89**	.57**	.04	-.01
4. Intensity of Uplifts	52	9.27	5.51	1-23			1.00	.75**	.61**	.86**	-.28*	-.19
5. Total Hassle Domains	52	4.44	1.91	0-8				1.00	.88**	.56**	.03	.03
6. Intensity of Hassles	51	5.53	2.60	1-13					1.00	.32*	.34*	.00
7. Positive Affect	52	19.17	3.86	11-29						1.00	-.47**	-.28*
8. Negative Affect	52	9.33	2.26	6-15							1.00	.21
9. Acute Symptoms	52	9.46	1.16	8-12								1.00

* $p < .05$; ** $p < .01$

Participant ID	38											
Age	30											
Gender	F											
Neuroticism	3.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	41	2.95	0.59	2-4	.88**	-.05	.20	-.03	-.22	.47**	-.32*	-.33*
2. SAH Slider Scale	27	5.78	1.77	2.65-8.72	1.00	-.10	.30	-.02	-.36	.66**	-.36	-.45*
3. Total Uplift Domains	41	2.56	1.52	1-8		1.00	.82**	.95**	.88**	.16	-.02	.20
4. Intensity of Uplifts	41	5.15	3.79	1-20			1.00	.77**	.57**	.54**	-.16	-.08
5. Total Hassle Domains	41	2.51	1.50	1-8				1.00	.87**	.14	-.04	.11
6. Intensity of Hassles	41	3.49	2.76	1-13					1.00	-.14	.20	.23
7. Positive Affect	41	19.93	4.39	9-30						1.00	-.62**	-.26
8. Negative Affect	41	9.93	4.40	6-26							1.00	.05
9. Acute Symptoms	41	14.80	3.16	9-20								1.00

* $p < .05$; ** $p < .01$

Participant ID	39											
Age	35											
Gender	M											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	43	3.88	0.32	3-4	.25	-.23	-.32*	.02	-.14	.11	-.32*	-.24
2. SAH Slider Scale	43	7.26	0.43	6.04-8.04	1.00	.21	.20	.04	.07	-.04	.05	-.28
3. Total Uplift Domains	43	1.98	1.67	0-10		1.00	.93**	.35*	.59**	-.38*	.54**	.13
4. Intensity of Uplifts	43	3.84	4.26	0-28			1.00	.37*	.63**	-.28	.51**	.24
5. Total Hassle Domains	43	1.05	0.90	0-4				1.00	.87**	-.21	.28	.27
6. Intensity of Hassles	43	1.28	1.35	0-7					1.00	-.37*	.61**	.33*
7. Positive Affect	43	23.72	1.08	18-25						1.00	-.73**	-.11
8. Negative Affect	43	6.47	1.32	6-11							1.00	.15
9. Acute Symptoms	43	9.35	1.00	8-12								1.00

* $p < .05$; ** $p < .01$

Participant ID	40											
Age	29											
Gender	M											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	53	3.15	0.66	2-4	.73**	.17	.37**	.20	.09	.45**	-.40**	-.62**
2. SAH Slider Scale	53	6.88	0.50	5.54-7.93	1.00	.16	.37**	.10	-.05	.40**	-.41**	-.71**
3. Total Uplift Domains	53	3.47	1.20	1-6		1.00	.76**	.90**	.74**	.280*	-.07	-.22
4. Intensity of Uplifts	53	5.96	2.75	1-15			1.00	.72**	.50**	.66**	-.22	-.32*
5. Total Hassle Domains	53	3.21	1.35	0-7				1.00	.86**	.36**	.00	-.20
6. Intensity of Hassles	53	3.60	1.70	0-8					1.00	.20	.34*	-.13
7. Positive Affect	52	14.12	4.35	6-25						1.00	-.22	-.39**
8. Negative Affect	52	8.65	3.02	6-20							1.00	.31*
9. Acute Symptoms	52	9.79	2.15	8-20								1.00

* $p < .05$; ** $p < .01$

Participant ID	41											
Age	32											
Gender	M											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	47	3.11	0.43	2-4	.74**	-.08	.03	-.08	-.06	.25	-.12	-.15
2. SAH Slider Scale	47	7.54	0.40	6.53-8.36	1.00	-.12	.00	-.10	-.09	.23	-.13	-.22
3. Total Uplift Domains	47	4.30	1.59	2-8		1.00	.92**	.99**	.89**	.41**	-.08	-.11
4. Intensity of Uplifts	47	6.11	2.70	2-12			1.00	.92**	.78**	.61**	-.04	-.10
5. Total Hassle Domains	48	4.19	1.70	0-8				1.00	.90**	.39**	-.08	-.11
6. Intensity of Hassles	47	5.68	2.11	2-9					1.00	.27	-.02	-.05
7. Positive Affect	47	13.06	2.59	8-20						1.00	.05	.01
8. Negative Affect	47	7.40	1.26	6-10							1.00	.31*
9. Acute Symptoms	47	8.38	0.64	8-10								1.00

* $p < .05$; ** $p < .01$

Participant ID	42											
Age	30											
Gender	F											
Neuroticism	3.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	46	3.02	0.15	3-4	.01	.05	.10	-.05	-.04	.17	.06	.15
2. SAH Slider Scale	46	7.22	0.18	6.91-7.70	1.00	-.04	-.06	.06	.02	-.02	.05	-.29
3. Total Uplift Domains	46	2.57	1.42	0-6		1.00	.93**	.89**	.72**	.40**	.30*	.22
4. Intensity of Uplifts	46	3.93	2.99	0-13			1.00	.78**	.51**	.51**	.14	.32*
5. Total Hassle Domains	46	2.50	1.44	0-7				1.00	.87**	.29*	.35*	.17
6. Intensity of Hassles	46	3.48	1.97	0-8					1.00	.13	.64**	.08
7. Positive Affect	46	15.89	3.74	8-22						1.00	-.16	.40**
8. Negative Affect	46	7.30	1.87	6-15							1.00	-.16
9. Acute Symptoms	46	13.83	1.16	12-17								1.00

* $p < .05$; ** $p < .01$

Participant ID	43											
Age	30											
Gender	F											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	55	5.00	0.00	5-5	a	a	a	a	a	a	a	a
2. SAH Slider Scale	55	9.09	0.12	8.60-9.35	1.00	-.17	-.16	-.08	-.34*	.35**	-.37**	.13
3. Total Uplift Domains	55	6.13	1.35	4-10		1.00	.96**	.92**	.77**	-.05	.40**	-.08
4. Intensity of Uplifts	55	12.20	3.15	8-24			1.00	.89**	.69**	.00	.46**	-.06
5. Total Hassle Domains	55	6.04	1.60	0-10				1.00	.79**	.00	.33*	-.01
6. Intensity of Hassles	55	6.69	2.12	0-12					1.00	-.20	.50**	-.11
7. Positive Affect	55	24.49	2.43	20-28						1.00	-.27*	.28*
8. Negative Affect	55	7.58	2.65	6-18							1.00	-.11
9. Acute Symptoms	55	8.18	0.55	8-10								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	44											
Age	63											
Gender	M											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	49	4.04	0.20	4-5	-.02	-.17	-.10	-.17	-.16	.68	-.33	-.06
2. SAH Slider Scale	49	9.45	0.30	7.48-9.66	1.00	.01	-.15	-.02	.30*	-.53	.39	-.03
3. Total Uplift Domains	49	2.41	1.14	0-4		1.00	.83**	.83**	.74**	-.48	.66	-.04
4. Intensity of Uplifts	49	4.63	2.32	0-9			1.00	.68**	.54**	-.33	.00	-.05
5. Total Hassle Domains	49	2.53	1.29	0-5				1.00	.92**	-.43	.33	-.12
6. Intensity of Hassles	49	2.57	1.40	0-6					1.00	-.84	.56	-.12
7. Positive Affect	5	23.40	3.78	20-28						1.00	-.57	-.50
8. Negative Affect	4	6.75	1.50	6-9							1.00	^a
9. Acute Symptoms	49	8.08	0.28	8-9								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	45											
Age	59											
Gender	M											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	50	3.00	0.00	3-3	^a	^a	^a	^a	^a	^a	^a	^a
2. SAH Slider Scale	50	8.12	0.09	8.00-8.37	1.00	-.13	-.15	-.15	-.09	.25	.17	-.44
3. Total Uplift Domains	50	2.88	1.27	0-6		1.00	.85**	.90**	.83**	-.41**	.03	.74
4. Intensity of Uplifts	50	4.82	2.85	0-12			1.00	.79**	.74**	-.32*	.06	.91*
5. Total Hassle Domains	50	2.92	1.37	0-6				1.00	.93**	-.38**	-.01	.62
6. Intensity of Hassles	50	3.14	1.59	0-7					1.00	-.50**	.10	.73
7. Positive Affect	50	23.92	0.53	21-25						1.00	-.31*	^a
8. Negative Affect	50	6.70	1.52	6-12							1.00	-.31
9. Acute Symptoms	5	11.40	1.95	8-13								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	46											
Age	33											
Gender	F											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	37	3.41	0.76	2-5	.89**	.06	.24	.04	-.17	.52**	-.12	-.67**
2. SAH Slider Scale	36	7.34	1.13	3.59-9.22	1.00	.00	.19	-.02	-.23	.61**	-.33*	-.53**
3. Total Uplift Domains	37	4.11	1.56	1-8		1.00	.93**	.98**	.84**	.07	.14	-.11
4. Intensity of Uplifts	37	13.24	4.78	4-24			1.00	.92**	.67**	.24	-.02	-.23
5. Total Hassle Domains	37	4.08	1.61	1-8				1.00	.84**	.08	.14	-.14
6. Intensity of Hassles	37	4.54	2.12	1-11					1.00	-.09	.39*	.02
7. Positive Affect	37	21.46	3.36	14-29						1.00	-.30	-.20
8. Negative Affect	37	8.03	2.74	6-14							1.00	-.08
9. Acute Symptoms	37	14.95	3.35	9-21								1.00

* $p < .05$; ** $p < .01$

Participant ID	47											
Age	59											
Gender	M											
Neuroticism	2.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	55	2.98	0.13	2-3	.38**	-.02	.01	-.02	-.13	-.03	.08	-.12
2. SAH Slider Scale	55	7.18	0.42	5.00-7.50	1.00	.23	.34*	.24	-.04	.25	.27	-.39**
3. Total Uplift Domains	55	3.84	1.33	1-8		1.00	.84**	.97**	.83**	.05	.18	.02
4. Intensity of Uplifts	55	5.09	2.40	1-12			1.00	.81**	.56**	.20	.41**	-.31*
5. Total Hassle Domains	55	3.84	1.29	1-8				1.00	.86**	.07	.20	.03
6. Intensity of Hassles	55	4.73	1.38	2-9					1.00	-.05	.02	.29*
7. Positive Affect	53	17.60	1.67	14-22						1.00	.42**	-.09
8. Negative Affect	53	7.08	1.81	6-14							1.00	-.24
9. Acute Symptoms	53	14.79	1.43	10-17								1.00

* $p < .05$; ** $p < .01$

Participant ID	48											
Age	28											
Gender	M											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	56	3.91	0.29	3-4	.79**	-.21	-.14	-.26	-.44**	.14	-.29*	-.47**
2. SAH Slider Scale	56	6.95	0.38	5.51-8.27	1.00	-.06	.17	.01	-.16	.16	.02	-.48**
3. Total Uplift Domains	56	3.52	1.61	1-9		1.00	.81**	.94**	.87**	.11	.27*	-.08
4. Intensity of Uplifts	56	5.61	3.66	2-24			1.00	.86**	.76**	.23	.31*	-.04
5. Total Hassle Domains	56	3.52	1.81	1-10				1.00	.93**	.12	.42**	-.09
6. Intensity of Hassles	56	4.00	2.14	1-10					1.00	.07	.44**	-.02
7. Positive Affect	56	17.77	1.74	15-24						1.00	-.25	-.22
8. Negative Affect	56	10.32	2.49	7-18							1.00	.03
9. Acute Symptoms	56	8.71	1.14	8-13								1.00

* $p < .05$; ** $p < .01$

Participant ID	49											
Age	34											
Gender	M											
Neuroticism	2.00											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	45	2.24	0.53	1-4	.71**	.25	.40**	.23	.14	.49**	-.37*	-.63**
2. SAH Slider Scale	40	5.95	1.32	3.40-8.37	1.00	.14	.20	.14	.13	.42**	-.42**	-.83**
3. Total Uplift Domains	45	2.76	1.49	0-6		1.00	.71**	.97**	.79**	.39**	.08	-.06
4. Intensity of Uplifts	45	5.29	4.07	0-13			1.00	.63**	.61**	.70**	-.15	-.22
5. Total Hassle Domains	45	2.71	1.55	0-6				1.00	.81**	.32*	.09	-.05
6. Intensity of Hassles	45	3.07	1.95	0-8					1.00	.20	.25	-.04
7. Positive Affect	45	16.73	4.49	6-26						1.00	-.41**	-.49**
8. Negative Affect	45	7.87	2.26	6-16							1.00	.53**
9. Acute Symptoms	45	11.51	2.08	8-16								1.00

* $p < .05$; ** $p < .01$

Participant ID	50											
Age	51											
Gender	M											
Neuroticism	3.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	47	3.17	0.38	3-4	.54**	.03	.08	.02	-.04	.39**	-.29	-.43**
2. SAH Slider Scale	47	8.31	0.35	7.45-9.08	1.00	.13	.06	.18	.08	.17	-.18	-.32*
3. Total Uplift Domains	47	4.49	2.14	0-9		1.00	.90**	.76**	.64**	.17	.06	.08
4. Intensity of Uplifts	47	5.43	3.43	0-16			1.00	.61**	.46**	.33*	-.11	.02
5. Total Hassle Domains	47	4.53	2.21	0-9				1.00	.85**	.11	.14	-.04
6. Intensity of Hassles	47	5.89	3.23	0-11					1.00	-.17	.51**	.03
7. Positive Affect	47	17.15	4.14	8-25						1.00	-.66**	-.30*
8. Negative Affect	45	10.00	4.29	6-22							1.00	.23
9. Acute Symptoms	47	10.72	1.69	8-15								1.00

* $p < .05$; ** $p < .01$

Participant ID	51											
Age	54											
Gender	F											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	56	2.98	0.13	2-3	^a	-.08	.06	-.09	.00	.25	.14	-.39**
2. SAH Slider Scale	48	5.93	0.43	5.10-7.03	1.00	.21	.04	.19	.04	-.15	.21	-.06
3. Total Uplift Domains	56	4.11	1.58	1-8		1.00	.72**	.90**	.75**	.14	.12	.12
4. Intensity of Uplifts	56	6.52	3.49	1-18			1.00	.67**	.46**	.41**	-.10	-.21
5. Total Hassle Domains	56	3.96	1.61	1-9				1.00	.83**	.15	.04	.15
6. Intensity of Hassles	56	5.09	2.87	1-13					1.00	-.02	.14	.27*
7. Positive Affect	56	17.16	4.39	9-30						1.00	-.45**	-.52**
8. Negative Affect	56	10.66	4.56	6-25							1.00	.09
9. Acute Symptoms	56	12.38	3.34	8-24								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	52											
Age	33											
Gender	M											
Neuroticism	1.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	42	3.74	0.45	3-4	.79**	-.10	-.07	-.18	-.26	-.25	-.14	-.70**
2. SAH Slider Scale	43	7.87	0.65	6.04-8.85	1.00	-.09	-.01	-.19	-.31*	-.21	-.08	-.75**
3. Total Uplift Domains	42	4.14	1.49	2-8		1.00	.87**	.94**	.71**	.57**	-.02	.04
4. Intensity of Uplifts	42	6.05	3.70	2-17			1.00	.83**	.63**	.72**	.12	.01
5. Total Hassle Domains	42	4.21	1.55	2-8				1.00	.77**	.55**	-.04	.02
6. Intensity of Hassles	42	5.26	1.77	2-10					1.00	.48**	.05	.26
7. Positive Affect	42	14.02	2.71	9-21						1.00	.08	.14
8. Negative Affect	42	8.60	1.85	6-14							1.00	.35*
9. Acute Symptoms	42	8.62	1.03	8-12								1.00

* $p < .05$; ** $p < .01$

Participant ID	53											
Age	58											
Gender	M											
Neuroticism	2.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	53	3.00	0.00	3-3	a	a	a	a	a	a	a	a
2. SAH Slider Scale	53	8.04	0.05	7.91-8.17	1.00	-.08	-.02	-.02	-.09	.16	-.03	-.27
3. Total Uplift Domains	53	2.85	1.38	1-6		1.00	.91**	.94**	.88**	.25	.24	.05
4. Intensity of Uplifts	53	3.77	2.19	1-10			1.00	.84**	.75**	.48**	.09	-.01
5. Total Hassle Domains	53	2.79	1.41	1-6				1.00	.93**	.27	.31*	.08
6. Intensity of Hassles	53	3.26	1.96	1-8					1.00	.16	.45**	.13
7. Positive Affect	53	11.92	3.36	6-18						1.00	-.01	-.12
8. Negative Affect	53	7.91	2.85	6-18							1.00	.49**
9. Acute Symptoms	53	9.26	0.88	9-15								1.00

^a. Indicates one of the variables is a constant

* $p < .05$; ** $p < .01$

Participant ID	54											
Age	57											
Gender	M											
Neuroticism	2.67											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	35	3.06	0.24	3-4	.70**	-.10	.01	-.18	-.20	.04	.33	-.24
2. SAH Slider Scale	35	8.11	0.25	7.93-9.50	1.00	-.08	-.05	-.23	-.21	.06	.36*	-.35*
3. Total Uplift Domains	37	3.16	1.61	0-6		1.00	.82**	.87**	.88**	.22	.14	.62**
4. Intensity of Uplifts	35	4.43	3.17	0-15			1.00	.68**	.67**	.16	.20	.50**
5. Total Hassle Domains	36	3.28	1.68	0-7				1.00	.94**	.22	.14	.60**
6. Intensity of Hassles	35	3.46	1.85	0-7					1.00	.19	.20	.64**
7. Positive Affect	34	21.94	4.98	6-30						1.00	-.17	.30
8. Negative Affect	34	8.91	3.82	6-18							1.00	.55**
9. Acute Symptoms	35	12.11	1.69	8-14								1.00

* $p < .05$; ** $p < .01$

Participant ID	55											
Age	71											
Gender	M											
Neuroticism	2.25											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	56	4.34	0.58	3-5	.75**	.02	.15	.04	-.04	.59**	-.48**	-.71**
2. SAH Slider Scale	56	8.38	0.61	6.18-9.58	1.00	.15	.30*	.23	.10	.55**	-.39**	-.62**
3. Total Uplift Domains	56	4.32	2.62	0-9		1.00	.92**	.90**	.86**	.15	.04	.08
4. Intensity of Uplifts	56	8.34	6.06	0-22			1.00	.80**	.71**	.30*	-.05	-.03
5. Total Hassle Domains	56	4.07	2.78	0-9				1.00	.95**	.14	-.09	.03
6. Intensity of Hassles	56	4.43	3.19	0-12					1.00	.05	.02	.14
7. Positive Affect	56	20.30	2.94	12-24						1.00	-.53**	-.38**
8. Negative Affect	56	9.05	2.40	6-15							1.00	.39**
9. Acute Symptoms	56	10.34	2.66	8-19								1.00

* $p < .05$; ** $p < .01$

Participant ID	56											
Age	52											
Gender	M											
Neuroticism	2.50											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	42	2.98	0.15	2-3	.44**	-.37*	-.20	-.40**	-.29	.03	-.53**	-.14
2. SAH Slider Scale	42	6.87	0.30	5.93-7.10	1.00	-.01	.07	-.04	-.06	-.46**	-.66**	-.46**
3. Total Uplift Domains	42	3.86	1.35	2-7		1.00	.70**	.90**	.80**	-.22	.27	.42**
4. Intensity of Uplifts	42	5.81	2.49	2-12			1.00	.61**	.43**	.02	.04	.20
5. Total Hassle Domains	42	3.86	1.24	2-7				1.00	.88**	-.11	.34*	.47**
6. Intensity of Hassles	42	4.17	2.06	2-14					1.00	-.09	.53**	.69**
7. Positive Affect	41	18.15	0.94	18-24						1.00	.20	.25
8. Negative Affect	42	7.40	2.87	6-17							1.00	.61**
9. Acute Symptoms	41	12.63	1.53	11-19								1.00

* $p < .05$; ** $p < .01$

Participant ID	57											
Age	35											
Gender	F											
Neuroticism	1.75											
<i>Experience Sampling</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	2	3	4	5	6	7	8	9
1. SAH 5-Point	37	2.68	0.58	2-4	.81**	.17	-.02	.20	.07	.21	.01	-.70**
2. SAH Slider Scale	37	7.94	0.82	5.68-9.42	1.00	.18	-.08	.22	.19	.07	.07	-.79**
3. Total Uplift Domains	37	5.22	1.29	3-9		1.00	.79**	.86**	.75**	.40*	.02	-.20
4. Intensity of Uplifts	37	7.59	2.59	4-15			1.00	.69**	.51**	.54**	-.33*	.02
5. Total Hassle Domains	37	5.03	1.04	3-8				1.00	.87**	.41*	-.04	-.29
6. Intensity of Hassles	37	5.41	1.36	3-9					1.00	.11	.22	-.19
7. Positive Affect	37	19.11	2.62	11-25						1.00	-.48**	-.11
8. Negative Affect	37	9.95	2.85	6-16							1.00	-.07
9. Acute Symptoms	37	12.92	2.99	8-21								1.00

* $p < .05$; ** $p < .01$

Appendix H. SAH 5-point Item Versus the Slide Scale Item

Baseline. The relation between the traditional 5-point SAH item and the SAH slider-scale item was evaluated in the baseline and experience sampling data. In the baseline survey, the slider-scale item was assessed twice, once in the beginning and once at the end. These two points of assessment using the same scale were highly correlated ($r(n = 57) = .87, p < .001$). The 5-point item (as part of the MOS SF-36) was assessed once toward the end of the survey, but before the last slider-scale item. The 5-point was more strongly related to the second assessment on slider scale ($r(n = 57) = .79, p < .001$) than the first ($r(n = 57) = .74, p < .001$), although this difference was not significant (Fisher's $z = 0.70, p = .48$). Neither item was significantly related to age nor sex at baseline; only the second slider-scale item was associated with neuroticism ($r(n = 57) = -.29, p = .03$).

In examining the relation with other health and well-being measures (see Table 1 in main document) patterns consistent with the literature emerged with some exceptions. The 5-point item was not significantly associated with negative affect ($r(n = 57) = -.24, p = .07$). The same was true of the *interpersonal* subscale of the CES-D ($r(n = 57) = -.13, p = .33$) and oddly, the *physical functioning* subscale of the MOS SF-36 ($r(n = 57) = .22, p = .10$). The T1 slider-scale item was also not significantly related to the *physical functioning* subscale ($r(n = 57) = .23, p = .09$). In fact, the T2 slider-scale item was the most strongly related with the majority of the descriptive health and well-being measures.

Experience sampling phase. In the experience sampling phase, each survey contained both measures—the 5-point and the slider-scale items. The relation between the two was primarily consistent with the baseline, but this was examined at both the group and individual levels.

Group-level inspection. At the group level across all time points, the correlation between the two items was .73 ($p < .001$). When comparing time-of-day averages ($n = 228$), the overall correlation was .71 (range = .72 - .78, $p < .001$). Comparing across the week, the correlation ($r = .75$, range = .69 - .75, $p < .001$) was the same (Fisher's $z = -1.03$, $p = .30$). Both showed evidence of stability across the week (r s ranging from .85 - .96) and across the day (r s ranging from .94 to .97).

Similar to the findings at baseline, age was not significantly related to either item aggregated across the study period (5-point: $r = .002$, $p = .99$; slider-scale: $r = .14$, $p = .29$), across the day of the week (5-point: r range = -.05 to .06, $p = .67$ to .99; slider-scale: r range = .08 to .21, $p = .15$ to .57), or across the time of day (5-point: r range = -.02 to .04, $p = .79$ to .98; slider-scale: r range = .13 to .16, $p = .23$ to .32). Using point-bi-serial correlations, gender was also not significantly related to the 5-point item or the slider scale item aggregated across the study period (5-point: $r = -.18$, $p = .18$; slider-scale: $r = -.20$, $p = .14$), across the day of the week (5-point: r range = -.06 to -.20, $p = .15$ to .65; slider-scale: r range = -.08 to -.19, $p = .16$ to .56), or across the time of day (5-point: r range = -.11 to -.17, $p = .22$ to .40; slider-scale: r range = -.11 to -.14, $p = .29$ to .41).

Collapsed across all time points in the experience sampling data, both the 5-point item ($r = -.34$, $p = .01$) and the slider-scale ($r = -.32$, $p = .02$) were negatively related to neuroticism. The same was true when comparing day of week averages (5-point: r range = -.25 to -.41, $p = .002$ to .06; slider scale: r range = -.26 to -.38, $p = .004$ to .06) and time of day averages (5-point: r range = -.31 to -.35, $p = .007$ to .02; slider scale: r range = -.29 to -.33, $p = .01$ to .03) as well.

In examining the group-level correlations with daily events, positive and negative affect, and acute symptoms across the week (see Table H1), no significant differences emerged between

the two measures (Fisher's $z < 1.96$). Positive affect (5-point: r range = .45 to .54, all $ps < .001$; slider scale: r range = .37 to .46, $p < .001$ to $p = .009$) and acute symptoms (5-point: r range = -.38 to -.55, $p < .001$ to $p = .007$; slider scale r range = -.37 to -.58, $p < .001$ to $p = .006$) were the most consistently related to both items across the week. Table H2 contains the time of day correlations. No differences were found in the associations between the 5-point item and the slider scale with time-of-day averages either (Fisher's $z < 1.96$). Both measures were consistently related to positive affect (5-point: r range = .32 to .52, $p < .001$ to $p = .02$; slider scale: r range = .24 to .45, $p < .001$ to $p = .07$) and acute symptoms (5-point: r range = -.36 to -.51, $p < .001$ to $p = .006$; slider scale: r range = -.43 to -.54 $p < .001$ to $p = .001$).

Individual-level inspection. Because analyses involved individual-level data, the relation between the 5-point and slider scale item was also inspected at this level. Twenty-six participants (59.1%) had significant relations between the 5-point and slider scale consistent with the relation found at the group level (rs ranging from .69 to .95). The remaining participants ($n = 19$) showed weaker correspondence between the two items (rs ranging from .01 to .64) and two participants even had negative associations between the two items; although, these were not significant.

Sixteen participants (35.6%) had consistency in the patterns of relation between each SAH item and other experience sampling variables, including uplifts, hassles, positive affect, negative affect, and acute symptoms. This means that the remaining participants ($n = 29$; 64.4%) showed inconsistencies in the pattern of relations between the 5-point item and the slider-scale item with other study variables. This was despite high levels of correspondence *between* the 5-point and slider scale item for nearly half of these participants ($n = 14$). The bivariate correlations among ESM variables for each participant can be found in Appendix G.

Conclusions. Although the original intent of including the SAH slider scale was to use a measure that might be more sensitive to change than the traditional 5-point item (Bowling, 2005; Choi, 2002; de Boer et al., 2004; Gunasekara et al., 2012), inspection of the data suggest that the 5-point item should be retained for hypothesis testing. This was especially apparent in the experience sampling data. The slider-scale item had more missingness than the 5-point item. The two items show similar patterns of stability across different spans of time. Finally, inconsistencies in the pattern of relations between the 5-point item and the slider-scale item with other study variables at the individual level suggest different processes may be at play. This is an important methodological question in its own right and deserves attention that is beyond the scope of the dissertation. Therefore, the 5-point SAH item will be used in the analyses.

Table H1.

Bivariate correlations among the experience sampling variables by weekday

<i>Monday</i>	2	3	4	5	6	7
1. SAH (5-point)	.78***	.28*	.04	.45**	-.18	-.55***
2. SAH (slider scale)	1.00	.13	.02	.46***	-.18	-.58***
3. Uplifts		1.00	.30*	.40**	.12	.05
4. Hassles			1.00	-.11	.47***	-.09
5. Positive Affect				1.00	-.20	-.24
6. Negative Affect					1.00	-.09
7. Acute Symptoms						1.00

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

<i>Tuesday</i>	2	3	4	5	6	7
1. SAH (5-point)	.77***	.25	-.01	.51***	-.13	-.55***
2. SAH (slider scale)	1.00	.18	.08	.40**	-.13	-.55***
3. Uplifts		1.00	.47***	.51***	-.03	.07
4. Hassles			1.00	-.04	.34*	.01
5. Positive Affect				1.00	-.09	-.19
6. Negative Affect					1.00	-.06
7. Acute Symptoms						1.00

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

<i>Wednesday</i>	2	3	4	5	6	7
1. SAH (5-point)	.75***	.24	.11	.53***	.04	-.38**
2. SAH (slider scale)	1.00	.16	.17	.46***	-.03	-.37**
3. Uplifts		1.00	.52***	.48***	.32*	.16
4. Hassles			1.00	.10	.36**	-.003
5. Positive Affect				1.00	.14	-.13
6. Negative Affect					1.00	.02
7. Acute Symptoms						1.00

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

<i>Thursday</i>	2	3	4	5	6	7
1. SAH (5-point)	.75***	.15	-.10	.47***	-.15	-.44**
2. SAH (slider scale)	1.00	.17	.05	.41**	-.15	-.42**
3. Uplifts		1.00	.17	.49***	.01	.24
4. Hassles			1.00	.10	.41**	.10
5. Positive Affect				1.00	-.05	-.10
6. Negative Affect					1.00	-.03
7. Acute Symptoms						1.00

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

<i>Friday</i>	2	3	4	5	6	7
1. SAH (5-point)	.72***	.27*	.11	.50***	-.15	-.45**
2. SAH (slider scale)	1.00	.11	.09	.41**	-.15	-.46***
3. Uplifts		1.00	.50***	.52***	-.14	.16
4. Hassles			1.00	.15	.15	.01
5. Positive Affect				1.00	-.14	-.17
6. Negative Affect					1.00	.05
7. Acute Symptoms						1.00

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

<i>Saturday</i>	2	3	4	5	6	7
1. SAH (5-point)	.72***	.12	.001	.54***	-.02	-.38**
2. SAH (slider scale)	1.00	-.08	-.05	.37**	-.15	-.53***
3. Uplifts		1.00	.55***	.39**	.04	.26
4. Hassles			1.00	.19	-.04	.004
5. Positive Affect				1.00	.03	-.16
6. Negative Affect					1.00	-.02
7. Acute Symptoms						1.00

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

<i>Sunday</i>	2	3	4	5	6	7
1. SAH (5-point)	.76***	.23	.07	.49***	-.04	-.51***
2. SAH (slider scale)	1.00	.15	.03	.42**	.01	-.57***
3. Uplifts		1.00	.43**	.50***	-.08	.21
4. Hassles			1.00	.12	.24	-.04
5. Positive Affect				1.00	.11	-.16
6. Negative Affect					1.00	-.19
7. Acute Symptoms						1.00

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

Table H2.

Bivariate correlations among the experience sampling variables by time of day

<i>Morning</i>	2	3	4	5	6	7
1. SAH (5-point)	.79***	.09	-.02	.51***	-.13	-.51***
2. SAH (slider scale)	1.00	.01	.05	.42**	-.12	-.54***
3. Uplifts		1.00	.53***	.37**	.14	.14
4. Hassles			1.00	-.002	.39**	-.09
5. Positive Affect				1.00	-.07	-.18
6. Negative Affect					1.00	.001
7. Acute Symptoms						1.00

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

<i>Early Afternoon</i>	2	3	4	5	6	7
1. SAH (5-point)	.76***	.21	-.004	.32*	-.16	-.46***
2. SAH (slider scale)	1.00	.13	-.01	.24	-.24	-.46***
3. Uplifts		1.00	.39**	.47***	.04	.19
4. Hassles			1.00	.09	.34*	.04
5. Positive Affect				1.00	.21	-.10
6. Negative Affect					1.00	-.02
7. Acute Symptoms						1.00

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

<i>Late Afternoon</i>	2	3	4	5	6	7
1. SAH (5-point)	.73***	.25	.07	.52***	-.03	-.36**
2. SAH (slider scale)	1.00	.14	.02	.45***	-.08	-.45***
3. Uplifts		1.00	.39**	.49***	.15	.23
4. Hassles			1.00	.001	.28*	.11
5. Positive Affect				1.00	.06	-.19
6. Negative Affect					1.00	.002
7. Acute Symptoms						1.00

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

<i>Evening</i>	2	3	4	5	6	7
1. SAH (5-point)	.74***	.18	.06	.45***	-.07	-.42**
2. SAH (slider scale)	1.00	.11	.13	.41**	-.08	-.43**
3. Uplifts		1.00	.61***	.47***	.24	.20
4. Hassles			1.00	.21	.44**	.01
5. Positive Affect				1.00	.07	-.13
6. Negative Affect					1.00	-.09
7. Acute Symptoms						1.00

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

Appendix I. Perceived Intensity versus Domain Count of Hassles and Uplifts

At the group level across all time points, the correlation between perceived intensity and total domain count of uplifts was .76 ($p < .001$). For hassles, the correlation between perceived intensity and total domain count was .91 ($p < .001$). When comparing time-of-day averages ($n = 228$), the correlation between perceived intensity and total domain count of uplifts ranged from .76 to .85; for hassles, the correlations ranged from .83 to .95. In comparing across the week ($n = 399$), the correlation between perceived intensity and total domain count of uplifts ranged from .66 to .82; for hassles, the correlations ranged from .86 to .94. For uplifts, both intensity and total domain count showed similar evidence (Fisher's $z < 1.96$) of stability across the week (intensity r s from .74 - .89; total domain count r s from .60 - .80) and across the day (intensity r s from .70 - .87; total domain count r s from .55 - .81). The same was also true of hassles across the week (intensity r s from .64 - .83; total domain count r s from .60 - .81) and across the day (intensity r s from .73 - .81; total domain count r s from .59 - .77).

With the aggregated values across the study period, age was not significantly related to uplift intensity ($r = -.07, p = .63$) or total domain count ($r = -.02, p = .86$) nor was it significantly related to hassle intensity ($r = -.05, p = .69$) or total domain count ($r = -.04, p = .76$). There were no significant gender differences on either intensity or total domain count for uplifts (intensity: $t(54) = -.57, p = .57$; domain count: $t(54) = .25, p = .80$) or hassles (intensity: $t(54) = .68, p = .50$; domain count: $t(54) = .25, p = .80$). Finally, neuroticism was not significantly related to uplift intensity ($r = -.17, p = .22$) or total domain count ($r = -.03, p = .80$) nor was it significantly related to hassle intensity ($r = -.01, p = .93$) or total domain count ($r = .02, p = .91$). Therefore, none of the person characteristics differed in their relation to either intensity or total domain count for uplifts or hassles.

In examining the correlations with SAH and positive and negative affect with the aggregated values across the study period, no significant differences emerged between intensity and total domain count for uplifts or hassles (Fisher's $z < 1.96$). Neither intensity ($r = .19, p = .16$) nor total domain count ($r = .14, p = .30$) of uplifts was significantly related to SAH. Neither intensity ($r = .02, p = .86$) nor total domain count ($r = .11, p = .43$) of hassles was significantly related to SAH. Intensity ($r = .48, p < .001$) and total domain count ($r = .26, p = .049$) of uplifts were significantly related to positive affect. Although the magnitude of the relation differed, the difference was not statistically significant (Fisher's $z = 1.33, p = .18$). Intensity ($r = .42, p = .001$) and total domain count ($r = .29, p = .03$) of hassles were significantly related to negative affect. Again, the difference in magnitude was not significant (Fisher's $z = 0.77, p = .44$).

Similar patterns were found across the week and across the day. Generally, across the week, SAH was not significantly related to either measure of uplifts (intensity r range = .09 to .32, $p = .02 - .52$; domain count r range = .02 to .27, $p = .05 - .88$) or hassles (intensity r range = -.10 to .15, $p = .26 - .87$; domain count r range = .01 to .26, $p = .05 - .96$). Positive affect was significantly related to uplift intensity (r range = .38 to .54, $p < .001$ to $p = .004$) and less so with domain count (r range = .18 to .34, $p = .01 - .19$), although the differences were not statistically significant (Fisher's $z < 1.96$). The same was also true of negative affect being significantly related to hassle intensity (r range = .22 to .47, $p < .001$ to $p = .10$) and less so with domain count (r range = .13 to .41, $p = .001 - .33$). Again, the differences were not statistically significant (Fisher's $z < 1.96$).

Across the day, SAH was not significantly related to either measure of uplifts (intensity r range = .03 to .19, $p = .16 - .82$; domain count r range = -.03 to .06, $p = .67 - .82$) or hassles (intensity r range = -.09 to .04, $p = .49 - .91$; domain count r range = -.02 to .06, $p = .68 - .90$).

Positive affect was significantly related to uplift intensity (r range = .38 to .52, $p < .001$ to $p = .003$) and less so with domain count (r range = .14 to .34, $p = .01 - .29$). The differences were not statistically significant (Fisher's $z < 1.96$). The same was also true of negative affect being significantly related to hassle intensity (r range = .33 to .45, $p < .001$ to $p = .01$) and less so with domain count (r range = .12 to .39, $p = .002 - .37$).

Conclusions. Although DeLongis and colleagues (1982) found hassle frequency to be a stronger predictor than hassle intensity of certain health outcomes, the relation between total domain count and intensity of both hassles and uplifts with person characteristics, SAH, positive affect, and negative affect is equivalent. This may be a function of the total domain count variable not being a true representation of hassle and uplift frequency, but rather a tally of the domains in which hassles and uplifts are occurring. Therefore, due to: 1) no difference in the pattern of relations between the two measures with the study variables; 2) the rationale laid out in the introduction that perceptions of hassle and uplift intensity are conceptually equivalent to perceptions of one's health in that they are both subjective appraisals; and 3) limitations of the total domain count measure, the current study proceeded with analyses using the intensity of hassles and uplifts scales.

Appendix J. Day-of-Week Path Models

A separate day-of-week model was specified based on theoretical justification for day-of-week effects (Akay & Martinsson, 2009; Stone et al., 1993; Stone et al., 2012). In the current study, there was limited empirical evidence of day-of-week effects for the variables of interest other than perceived intensity of hassles.

The cross-lagged path model examining concurrent and synchronous relations between SAH and hassles across the week is shown in Figure J1 below. The model was specified with autoregressive and cross-lagged paths between each day of the week, starting with Monday. No covariances were included to account for concurrent relations between the variables given low bivariate correlations. Overall model fit was poor ($\chi^2 (df = 67, n = 57) = 261.68, p < .001$; CMIN/ $df = 3.91$; CFI = .82; RMSEA = .23; RMSEA 90% CI = .20 - .26). A high percentage of variance was accounted for in each day's SAH (71.9% - 88.4%) and perceived intensity of hassles (43.9% - 68.3%). This was primarily due to the strong autoregressive paths between subsequent days for both of these variables. Only one cross-lagged path was significant. Higher levels of SAH on Thursday were associated with greater intensity of perceived hassles on Friday ($\beta = 0.18$). Table J1 includes the standardized and unstandardized path coefficients and the CR scores for all model paths.

A similar model was specified for SAH and perceived intensity of uplifts (see Figure J2 below). In this model, a covariance was included to account for concurrent relations between SAH and perceived intensity of uplifts for Monday ($r = .32, p = .03$). The fit indices indicated that the model was poor fitting, $\chi^2 (df = 66, n = 57) = 273.44, p < .001$; CMIN/ $df = 4.14$; CFI = .81; RMSEA = .24; RMSEA 90% CI = .21 - .27. As in the hassles model, a high percentage of variance was accounted for in SAH (73.1% - 87.8%) and perceived intensity of uplifts (56.0% -

79.9%). Table J2 includes the standardized and unstandardized path coefficients and the CR scores for all model paths. Other than strong autoregressive paths, only one cross-lagged effect was significant. Higher levels of SAH on Friday was associated with lower perceived intensity of uplifts on Saturday ($\beta = -0.19$).

Table J1.

Standardized and unstandardized path coefficients for the weekday hassles model

Path	<i>b</i> (<i>SE</i>)	β	CR
	<u>Autoregressive Paths</u>		
<i>SAH</i>			
Tuesday SAH $\leftarrow$ Monday SAH	0.90 (0.06)	0.90	15.90
Wednesday SAH $\leftarrow$ Tuesday SAH	0.89 (0.04)	0.94	20.68
Thursday SAH $\leftarrow$ Wednesday SAH	0.90 (0.07)	0.87	13.39
Friday SAH $\leftarrow$ Thursday SAH	0.92 (0.05)	0.93	19.24
Saturday SAH $\leftarrow$ Friday SAH	0.80 (0.07)	0.85	11.78
Sunday SAH $\leftarrow$ Saturday SAH	0.94 (0.05)	0.92	17.40
<i>Hassles</i>			
Tuesday Hassles $\leftarrow$ Monday Hassles	0.99 (0.10)	0.80	9.99
Wednesday Hassles $\leftarrow$ Tuesday Hassles	0.63 (0.08)	0.74	8.26
Thursday Hassles $\leftarrow$ Wednesday Hassles	0.88 (0.08)	0.83	10.99
Friday Hassles $\leftarrow$ Thursday Hassles	0.67 (0.08)	0.75	8.54
Saturday Hassles $\leftarrow$ Friday Hassles	0.86 (0.13)	0.68	6.62
Sunday Hassles $\leftarrow$ Saturday Hassles	0.75 (0.08)	0.79	9.50
	<u>Cross-lagged Paths</u>		
Tuesday Hassles $\leftarrow$ Monday SAH	-0.05 (0.24)	-0.02	-0.22
Tuesday SAH $\leftarrow$ Monday Hassles	-0.02 (0.02)	-0.05	-0.82
Wednesday Hassles $\leftarrow$ Tuesday SAH	0.05 (0.23)	0.02	0.22
Wednesday SAH $\leftarrow$ Tuesday Hassles	0.03 (0.01)	0.08	1.84
Thursday Hassles $\leftarrow$ Wednesday SAH	-0.06 (0.22)	-0.02	-0.27
Thursday SAH $\leftarrow$ Wednesday Hassles	-0.03 (0.03)	-0.08	-1.14
Friday Hassles $\leftarrow$ Thursday SAH	0.45 (0.22)	0.18	2.09
Friday SAH $\leftarrow$ Thursday Hassles	0.03 (0.02)	0.08	1.74

Saturday Hassles ← Friday SAH	-0.54 (0.33)	-0.17	-1.67
Saturday SAH ← Friday Hassles	-0.01 (0.03)	-0.02	-0.21
Sunday Hassles ← Saturday SAH	0.19 (0.27)	0.06	0.73
Sunday SAH ← Saturday Hassles	-0.01 (0.02)	-0.03	-0.60

Note. CR = Critical ratio; $CR > 1.96$, $p < .05$

Table J2.

Standardized and unstandardized path coefficients for the weekday uplifts model

Path	b (SE)	β	CR
	<u>Autoregressive Paths</u>		
<i>SAH</i>			
Tuesday SAH $\leftarrow$ Monday SAH	0.90 (0.06)	0.90	14.95
Wednesday SAH $\leftarrow$ Tuesday SAH	0.89 (0.05)	0.94	19.82
Thursday SAH $\leftarrow$ Wednesday SAH	0.90 (0.07)	0.87	13.04
Friday SAH $\leftarrow$ Thursday SAH	0.91 (0.05)	0.93	18.56
Saturday SAH $\leftarrow$ Friday SAH	0.83 (0.07)	0.86	12.32
Sunday SAH $\leftarrow$ Saturday SAH	0.95 (0.05)	0.91	17.64
<i>Uplifts</i>			
Tuesday Uplifts $\leftarrow$ Monday Uplifts	0.80 (0.10)	0.77	8.21
Wednesday Uplifts $\leftarrow$ Tuesday Uplifts	0.63 (0.08)	0.73	8.20
Thursday Uplifts $\leftarrow$ Wednesday Uplifts	0.96 (0.09)	0.82	10.18
Friday Uplifts $\leftarrow$ Thursday Uplifts	1.02 (0.07)	0.89	14.80
Saturday Uplifts $\leftarrow$ Friday Uplifts	0.88 (0.10)	0.78	9.15
Sunday Uplifts $\leftarrow$ Saturday Uplifts	0.80 (0.08)	0.81	9.94
	<u>Cross-lagged Paths</u>		
Tuesday Uplifts $\leftarrow$ Monday SAH	-0.32 (0.47)	-0.06	-0.68
Tuesday SAH $\leftarrow$ Monday Uplifts	0.001 (0.01)	0.001	0.01
Wednesday Uplifts $\leftarrow$ Tuesday SAH	0.39 (0.39)	0.09	1.02
Wednesday SAH $\leftarrow$ Tuesday Uplifts	-0.002 (0.01)	-0.01	-0.19
Thursday Uplifts $\leftarrow$ Wednesday SAH	-0.56 (0.43)	-0.11	-1.31
Thursday SAH $\leftarrow$ Wednesday Uplifts	-0.01(0.02)	-0.02	-0.34
Friday Uplifts $\leftarrow$ Thursday SAH	0.51 (0.36)	0.09	1.43
Friday SAH $\leftarrow$ Thursday Uplifts	0.01(0.01)	0.04	0.72

Saturday Uplifts ← Friday SAH	-1.32 (0.58)	-0.19	-2.27
Saturday SAH ← Friday Uplifts	-0.01 (0.01)	-0.09	-1.31
Sunday Uplifts ← Saturday SAH	0.37 (0.57)	0.05	0.64
Sunday SAH ← Saturday Uplifts	-0.01(0.01)	-0.07	-1.26

Note. CR = Critical ratio; $CR > 1.96$, $p < .05$

Figure J1. Weekday Hassles Path Model

Figure J1. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles. Only one cross-lagged pathway was significant; higher levels of SAH on Thursday were associated with more intensely felt hassles on Friday.

Figure J2. Weekday Uplifts Path Model

Figure J2. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and uplifts. Only one cross-lagged pathway was significant; higher levels of SAH on Friday were associated with less intensely felt uplifts on Saturday.

Appendix K. Affect in the Relation between Neuroticism and SAH Stability

The correlation between neuroticism and average daily fluctuation in SAH was not significant ($r(n = 57) = -.045, p = .74$). Average daily fluctuation in positive affect was examined in relation to both of these variables. Neuroticism was not significantly associated with average daily fluctuations in positive affect ($r(n = 57) = .22, p = .10$). Average daily fluctuation in positive affect, however, was significantly related to average daily fluctuation in SAH ($r(n = 57) = .45, p < .001$). This exploratory analysis sought to examine whether the inclusion of positive affect would reduce the unique relation between neuroticism and SAH stability. In a partial correlation with the effects of average daily change in positive affect controlled, the correlation between neuroticism and average daily change in SAH remained non-significant ($r(n = 57) = -.17, p = .22$) and was not significantly altered (Fisher's $z = 0.66, p = .51$).

The same analyses were completed for negative affect. Average daily fluctuation in SAH was significantly related to average daily fluctuation in negative affect ($r(n = 57) = .46, p < .001$). Neuroticism, however, was not significantly related to change in negative affect ($r(n = 57) = -.14, p = .31$). The correlation between neuroticism and average daily fluctuation in SAH was not significantly reduced (Fisher's $z = 0.45, p = .65$) when average daily fluctuation in negative affect was partialled out ($r(n = 57) = -.13, p = .33$).

Appendix L. The Role of Negative Affect in Relation to SAH and Daily Events

For the model investigating the role of negative affect in the relation between perceived intensity of hassles and SAH, initial model fit was poor ($\chi^2 (df = 39, n = 56) = 158.08, p < .001$; CMIN/ $df = 4.05$; CFI = .87; RMSEA = .23; RMSEA 90% CI = .20 - .27). The model contained several non-significant paths that were not trimmed due to theoretical constraints, but modification indices did suggest the inclusion of one theoretically-relevant covariance between morning perceived intensity of hassles and negative affect. This covariance was added ($r = .44, p = .002$) and model fit was assessed again. The final model fit remained poor ($\chi^2 (df = 38, n = 56) = 145.78, p < .001$; CMIN/ $df = 3.84$; CFI = .89; RMSEA = .23; RMSEA 90% CI = .19 - .26). Figure L1 contains the final model.

Strong autoregressive paths were indicated for perceived intensity of hassles, negative affect, and SAH across the day. Table L1 below includes the standardized and unstandardized path coefficients and the CR scores for all model paths. The majority of cross-lagged paths were not significant; however a couple significant paths did emerge. Perceived intensity of hassles in the early afternoon was not significantly related to late afternoon negative affect, but was significantly related to late afternoon SAH ($\beta = 0.12$). This association was positive, such that more intensely-felt hassles were linked to higher levels of SAH. Late afternoon negative affect was positively associated with evening SAH ($\beta = 0.07$).

Model fit for the perceived intensity of uplifts, negative affect, and SAH model (see Figure L2) was also poor ($\chi^2 (df = 39, n = 56) = 143.32, p < .001$; CMIN/ $df = 3.68$; CFI = .89; RMSEA = .22; RMSEA 90% CI = .18 - .26). Table L2 includes the standardized and unstandardized path coefficients and the CR scores for all paths. Strong autoregressive paths were indicated for perceived intensity of uplifts, negative affect, and SAH; yet, a few significant

cross-lagged paths also emerged. Perceived intensity of uplifts in the early afternoon were positively associated with late afternoon SAH ($\beta = 0.09$) and negative affect ($\beta = 0.20$). The associations were both positive such that more intensely-felt uplifts in the early afternoon were linked with higher levels of SAH, yet also higher levels of negative affect, in the late afternoon. Higher levels of negative affect in the late afternoon corresponded with more intensely felt uplifts in the evening ($\beta = 0.24$). Later afternoon perceived intensity of uplifts was negatively associated with negative affect in the evening ($\beta = -0.14$).

To examine whether the effects of the previous evenings' perceived intensity of uplifts, negative affect, or SAH carry over to the next morning, an exploratory model was specified (see Figure L3). To run these models, a new average was calculated for morning and evening time points, excluding Study Day 1 from the morning average and Study Day 14 from the evening average. The fit indices indicated good model fit ($\chi^2 (df = 6, n = 56) = 15.19, p = .02$; CMIN/ $df = 2.53$; CFI = .97; RMSEA = .17; RMSEA 90% CI = .06 - .27). Table L3 contains the standardized and unstandardized path coefficients and the CR scores. Two lagged paths were significant in these models. More intensely felt uplifts in the evening were associated with higher levels of SAH in the morning ($\beta = 0.18$). Higher levels of negative affect at night were associated with lower levels of SAH in the morning ($\beta = -0.11$).

A parallel analysis was run using hassles instead of uplifts (see Figure L4). Initial model fit was poor ($\chi^2 (df = 6, n = 57) = 34.29, p < .001$; CMIN/ $df = 5.72$; CFI = .91; RMSEA = .29; RMSEA 90% CI = .20 - .39). Modification indices suggested the addition of a theoretically-relevant covariance between perceived intensity of hassles and negative affect. This covariance was added ($r = .48, p = .001$) and model fit improved ($\chi^2 (df = 5, n = 57) = 19.81, p = .001$; CMIN/ $df = 3.96$; CFI = .95; RMSEA = .23; RMSEA 90% CI = .13 - .34). Besides the strong

autocorrelation paths, only one cross-lagged path was significant. Higher levels of SAH in the evening was associated with higher levels of negative affect in the morning ($\beta = 0.10$). Table L4 includes all the standardized and unstandardized path coefficients and the CR scores.

Table L1.

Standardized and unstandardized coefficients for time of day hassles model

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Early Afternoon SAH ← Morning SAH	0.86 (0.04)	0.95	23.75
Late Afternoon SAH ← Early Afternoon SAH	0.98 (0.03)	0.97	31.12
Evening SAH ← Late Afternoon SAH	0.94 (0.03)	0.97	31.28
<i>Negative Affect (NA)</i>			
Early Afternoon NA ← Morning NA	0.84 (0.06)	0.93	14.83
Late Afternoon NA ← Early Afternoon NA	0.89 (0.09)	0.81	9.50
Evening NA ← Late Afternoon NA	0.91 (0.07)	0.86	12.83
<i>Hassles</i>			
Early Afternoon Hassles ← Morning Hassles	0.56 (0.08)	0.69	6.8
Late Afternoon Hassles ← Early Afternoon Hassles	0.76 (0.08)	0.83	10.01
Evening Hassles ← Late Afternoon Hassles	0.88 (0.09)	0.77	9.4
Cross-lagged Paths			
Early Afternoon NA ← Morning SAH	0.10 (0.16)	0.03	0.59
Early Afternoon Hassles ← Morning SAH	0.10 (0.24)	0.04	0.40
Early Afternoon Hassles ← Morning NA	0.08 (0.09)	0.10	0.98
Early Afternoon SAH ← Morning NA	0.002 (0.01)	0.01	0.14
Early Afternoon SAH ← Morning Hassles	-0.02 (0.01)	-0.06	-1.36
Early Afternoon NA ← Morning Hassles	-0.05 (0.05)	-0.05	-0.83
Late Afternoon NA ← Early Afternoon Hassles	-0.06 (0.10)	-0.05	-0.62
Late Afternoon SAH ← Early Afternoon Hassles	0.04 (0.01)	0.12	3.65
Late Afternoon Hassles ← Early Afternoon NA	-0.04 (0.07)	-0.05	-0.57
Late Afternoon SAH ← Early Afternoon NA	-0.02 (0.01)	-0.06	-1.69
Late Afternoon Hassles ← Early Afternoon SAH	0.07 (0.21)	0.03	0.32
Late Afternoon NA ← Early Afternoon SAH	0.26 (0.28)	0.08	0.94
Evening SAH ← Late Afternoon NA	0.02 (0.01)	0.07	2.16
Evening Hassles ← Late Afternoon NA	0.08 (0.07)	0.09	1.07
Evening NA ← Late Afternoon SAH	0.07 (0.24)	0.02	0.29
Evening Hassles ← Late Afternoon SAH	0.16 (0.25)	0.05	0.63
Evening NA ← Late Afternoon Hassles	0.04 (0.09)	0.03	0.40
Evening SAH ← Late Afternoon Hassles	-0.01 (0.01)	-0.03	-0.83

Note. CR = Critical ratio; CR > 1.96, $p < .05$

Table L2.

Standardized and unstandardized coefficients for time of day uplifts model

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Early Afternoon SAH $\leftarrow$ Morning SAH	0.86 (0.04)	0.95	23.47
Late Afternoon SAH $\leftarrow$ Early Afternoon SAH	0.96 (0.03)	0.96	29.23
Evening SAH $\leftarrow$ Late Afternoon SAH	0.94 (0.03)	0.96	30.67
<i>Negative Affect (NA)</i>			
Early Afternoon NA $\leftarrow$ Morning NA	0.83 (0.05)	0.91	16.57
Late Afternoon NA $\leftarrow$ Early Afternoon NA	0.87 (0.08)	0.81	10.40
Evening NA $\leftarrow$ Late Afternoon NA	0.94 (0.07)	0.87	13.63
<i>Uplifts</i>			
Early Afternoon Uplifts $\leftarrow$ Morning Uplifts	0.83 (0.11)	0.71	7.48
Late Afternoon Uplifts $\leftarrow$ Early Afternoon Uplifts	0.93 (0.07)	0.87	13.57
Evening Uplifts $\leftarrow$ Late Afternoon Uplifts	0.83 (0.07)	0.82	12.03
Cross-lagged Paths			
Early Afternoon NA $\leftarrow$ Morning SAH	0.11 (0.16)	0.04	0.70
Early Afternoon Uplifts $\leftarrow$ Morning SAH	0.22 (0.54)	0.04	0.41
Early Afternoon Uplifts $\leftarrow$ Morning NA	-0.10 (0.17)	-0.05	-0.56
Early Afternoon SAH $\leftarrow$ Morning NA	-0.01 (0.01)	-0.03	-0.66
Early Afternoon SAH $\leftarrow$ Morning Uplifts	0.01 (0.01)	0.03	0.74
Early Afternoon NA $\leftarrow$ Morning Uplifts	-0.05 (0.03)	-0.08	-1.40
Late Afternoon NA $\leftarrow$ Early Afternoon Uplifts	0.11 (0.04)	0.20	2.62
Late Afternoon SAH $\leftarrow$ Early Afternoon Uplifts	0.01 (0.01)	0.09	2.65
Late Afternoon Uplifts $\leftarrow$ Early Afternoon NA	-0.19 (0.14)	-0.09	-1.40
Late Afternoon SAH $\leftarrow$ Early Afternoon NA	-0.004 (0.01)	-0.01	-0.37
Late Afternoon Uplifts $\leftarrow$ Early Afternoon SAH	-0.02 (0.43)	-0.003	-0.05
Late Afternoon NA $\leftarrow$ Early Afternoon SAH	0.19 (0.26)	0.06	0.71
Evening SAH $\leftarrow$ Late Afternoon NA	0.02 (0.01)	0.06	1.77
Evening Uplifts $\leftarrow$ Late Afternoon NA	0.47 (0.14)	0.24	3.46
Evening NA $\leftarrow$ Late Afternoon SAH	0.17 (0.24)	0.05	0.70
Evening Uplifts $\leftarrow$ Late Afternoon SAH	-0.26 (0.47)	-0.04	-0.56
Evening NA $\leftarrow$ Late Afternoon Uplifts	-0.07 (0.04)	-0.14	-2.11
Evening SAH $\leftarrow$ Late Afternoon Uplifts	0.004 (0.01)	0.03	0.79

Note. CR = Critical ratio; $CR > 1.96, p < .05$

Table L3.

Standardized and unstandardized coefficients for overnight uplifts model

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Morning SAH $\leftarrow$ Evening SAH	1.09 (0.04)	0.94	24.68
<i>Negative Affect (NA)</i>			
Morning NA $\leftarrow$ Evening NA	0.90 (0.05)	0.93	18.94
<i>Uplifts</i>			
Morning Uplifts $\leftarrow$ Evening Uplifts	0.65 (0.07)	0.79	9.60
Cross-lagged Paths			
Morning NA $\leftarrow$ Evening Uplifts	-0.01 (0.03)	-0.01	-0.27
Morning SAH $\leftarrow$ Evening Uplifts	0.03 (0.01)	0.18	4.76
Morning Uplifts $\leftarrow$ Evening NA	-0.06 (0.13)	-0.04	-0.48
Morning SAH $\leftarrow$ Evening NA	-0.04 (0.01)	-0.11	-2.81
Morning Uplifts $\leftarrow$ Evening SAH	-0.20 (0.43)	-0.04	-0.46
Morning NA $\leftarrow$ Evening SAH	0.32 (0.16)	0.09	1.93

Note. CR = Critical ratio; $CR > 1.96, p < .05$

Table L4.

Standardized and unstandardized coefficients for overnight hassles model

Path	b (SE)	β	CR
Autoregressive Paths			
<i>SAH</i>			
Morning SAH $\leftarrow$ Evening SAH	1.05 (0.05)	0.94	20.41
<i>Negative Affect (NA)</i>			
Morning NA $\leftarrow$ Evening NA	0.90 (0.05)	0.92	18.77
<i>Hassles</i>			
Morning Hassles $\leftarrow$ Evening Hassles	0.91 (0.10)	0.76	8.81
Cross-lagged Paths			
Morning NA $\leftarrow$ Evening Hassles	0.01 (0.06)	0.01	0.19
Morning SAH $\leftarrow$ Evening Hassles	0.003 (0.02)	0.01	0.17
Morning Hassles $\leftarrow$ Evening NA	0.004 (0.09)	0.004	0.05
Morning SAH $\leftarrow$ Evening NA	-0.02 (0.02)	-0.06	-1.38
Morning Hassles $\leftarrow$ Evening SAH	0.24 (0.30)	0.07	0.80
Morning NA $\leftarrow$ Evening SAH	0.33 (0.16)	0.10	1.99

Note. CR = Critical ratio; $CR > 1.96, p < .05$.

Figure L1. Hassles Path Model for Time of Day with Negative Affect as an Intermediary Variable

Figure L1. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles across the day. Two cross-lagged pathways were significant. More intensely felt hassles in the early afternoon were associated with higher levels of SAH in the late afternoon. High levels of negative affect in the late afternoon were associated with higher levels of SAH in the evening.

Figure L2. Uplifts Path Model for Time of Day with Negative Affect as an Intermediary Variable

Figure L2. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and uplifts across the day. Three cross-lagged pathways were significant. More intensely felt uplifts in the early afternoon were associated with higher levels of SAH in the late afternoon, but also higher levels of negative affect. From late afternoon to evening, however, the association between uplifts and negative affect was negative.

Figure L3. Uplifts Path Model for Overnight Effects with Negative Affect as an Intermediary Variable

Figure L3. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles across the day. Two cross-lagged pathways were significant. More intensely felt uplifts in the evening were associated with higher levels of SAH in the morning, but higher levels of negative affect in the evening were associated with lower levels of SAH in the morning.

Figure L4. Hassles Path Model for Overnight Effects with Negative Affect as an Intermediary Variable

Figure L4. Solid lines indicate significant paths and dotted lined indicate non-significant paths. Coefficients in the model are unstandardized. Strong autoregressive effects were found for SAH and hassles across the day. One cross-lagged pathway was significant. Higher levels of SAH in the evening were associated with higher levels of negative affect in the morning.