Human Emotion

Psychology 3131
Professor June Gruber
Human Emotion

Emotion and Aging

*Older and happier?*
Roadmap

Course Logistics

Socioemotional Selectivity Theory

Positivity Effect

Considerations & Caveats

Take-Away Qs & Expert Interview
Course Logistics

None :)

Is that possible?
How do you think our emotions are affected in old age?
Stereotypes
What does science say?
2 Methodologies

1. Cross-sectional studies (comparing different age groups at a single point in time)

2. Longitudinal studies (following the same group of adults from young to late adulthood)
“Despite age-related losses, emotional well-being remains relatively high in old age.”
Well-Being and Aging

Stone, Schwartz, Broderick, & Deaton, 2010
What are the mechanisms that help explain increased emotional well-being in older adults?
Course Logistics

Socioemotional Selectivity Theory

Positivity Effect

Considerations & Caveats

Take-Away Qs & Expert Interview
Taking Time Seriously

A Theory of Socioemotional Selectivity

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Socioemotional selectivity theory claims that the perception of time plays a fundamental role in the selection and pursuit of social goals. According to the theory, social motives fall into 1 of 2 general categories—those related to the acquisition of knowledge and those related to the regulation of emotion. When time is perceived as open-ended, knowledge-related goals are prioritized. In contrast, when time is perceived as limited, emotional goals assume priority. The inextricable association between time left in life and chronological age ensures age-related differences in social goals. Nonetheless, the authors show that the perception of time is malleable, and social goals change in both younger and older people when time constraints are imposed. The authors argue that time perception is integral to human motivation and suggest potential implications for multiple subdisciplines and research interests in social, developmental, cultural, cognitive, and clinical psychology.

Life-stage effects on values and attitudes (Sears, 1981), cultural differences in the social norms pertaining to time (Jones, 1988), and individual differences in time orientation (Gonzalez & Zimbardo, 1985). To the extent that chronological age is an index of the passage of time, the entire subdiscipline of developmental psychology is inherently organized around this concept. Yet, if one really takes time seriously and acknowledges that time provides the structure from which people plan and implement all short- and long-term goals, the implications for psychology are far-reaching and have been largely ignored (Birren & Cunningham, 1985).

People are always aware of time—not only of clock and calendar time, but of lifetime. Biologist John Medina (1996) wrote,

When contemplating life we inevitably assume the presence of an internal clock. Wound to zero at birth, it incessantly and inherently ticks away during our entire terrestrial tenure. So solid are we to its regularity that it undermines all our efforts to delay it by the randomness of life...
MY GOALS

- Artistic
- Attitude
- Career
- Education
- Public Service
- Pleasure
- Physical
- Financial
- Family
Socioemotional Selectivity Theory (SST)

Humans are uniquely able to monitor time, both consciously and subconsciously.

We set emotional goals in temporal contexts.

Older adults become more selective about social networks, spending more time with individuals with whom they have had rewarding relationships.

Older adults spend more time pursuing emotional satisfaction.

Carstensen, 1993; Carstensen et al., 1999; Carstensen, 2006
Socioemotional Selectivity Theory (SST)

Young adults tend to prioritize future-oriented goals…

These goals place value on long-term rewards over emotional gratification in the moment.

Carstensen et al., 1999
Socioemotional Selectivity Theory (SST)

Older adults tend to prioritize present-oriented goals…

These goals place value on current emotional gratification and meaning.

Carstensen et al., 1999
Socioemotional Selectivity Theory (SST)

FOCUSING ON THE PRESENT
- Living in the moment
- Knowing what’s important
- Investing in sure things
- Deepening relationships
- Savor life

PREPARING FOR THE FUTURE
- Expanding horizons
- Acquiring knowledge
- Meeting new people
- Taking changes

Do we focus more on the present as we age?

Carstensen, 1993; Carstensen et al., 1999; Carstensen, 2006
Socioemotional Selectivity Theory (SST)

**SST POSULATES**

1. Perception of time influences social (and emotional) goals
2. Goals influence how we process information
3. Pursuing emotional goals is good for emotion regulation.

Carstensen, 1993; Carstensen et al., 1999; Carstensen, 2006
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Socioemotional Selectivity Theory (SST)

BUT WHY?
Socioemotional Selectivity Theory (SST)

Reason 1: Differences due to one’s future time perspective.

Young adults see the future as “long and nebulous,” whereas older adults see the future as more constrained.
Appendix A

An Example of Experimental Stimuli in Studies 1 and 2

Figure A1.
Left panel: knowledge-related version. Right panel: emotionally meaningful version.

AGE DIFFERENCES IN MESSAGE PREFERENCES

(Appendixes continue)

Fung & Carstensen, 2003
Reason 2: Selective narrowing of social networks

As we age, our social networks grow smaller and include a greater proportion of well-known social partners (i.e., and less “peripheral partners”).

These networks typically elicit less negative emotion.
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Take-Away Qs & Expert Interview
Wisdom may come with age, but does happiness follow suit?

Some studies show that the elderly may be more prone to depression and loneliness, which can lead to higher rates of unhappiness, not a surprise given the health and emotional challenges that tend to accompany aging. But increasing, more and more studies suggest that happiness may actually rise after middle age — at least when scientists take into account some of the non-biological factors that can influence reports of contentment.

http://healthland.time.com/2013/02/18/with-age-comes-happiness/
Happiness May Come With Age, Study Says

By NICHOLAS BAKALAR
Published: May 31, 2010

It is inevitable. The muscles weaken. Hearing and vision fade. We get wrinkled and stooped. We can’t run, or even walk, as fast as we used to. We have aches and pains in parts of our bodies we never even noticed before. We get old.

It sounds miserable, but apparently it is not. A large Gallup poll has found that by almost any measure, people get happier as they get older, and researchers are not sure why.

“It could be that there are environmental changes,” said Arthur A. Stone, the lead author of a new study based on the survey, “or it could be psychological changes about the way we view the world, or it could even be biological — for example brain chemistry or endocrine changes.”
People 'get happier as they age'  

Most people get happier as they grow older, studies on people aged up to their mid-90s suggest.

Despite worries about ill health, income, changes in social status and bereavements, later life tends to be a golden age, according to psychologists.

They found older adults generally make the best of the time they have left and have learned to avoid situations that make them feel sad or stressed.

The young should do the same, they told the American Psychological Association.

Ageing society

The UK is an ageing nation - in less than 25 years, one in four people in the UK will be over 65 and the number of over-85s will have doubled.

And it is expected there will be 30,000 people aged over 100 by the year 2030.

Older people appear better able to control their emotions

http://news.bbc.co.uk/2/hi/health/8183522.stm
Positivity Effect
Positivity Effect

- Increased Experience of Positive Emotion
- Increased Attention to Positive Stimuli
- Increased Memory for Positive Stimuli
- Increased Ability to Regulate Emotions
Increased Experience of Positive Emotion

Increased Attention to Positive Stimuli

Increased Memory for Positive Stimuli

Increased Ability to Regulate Emotions
Emotional Experience Improves With Age: Evidence Based on Over 10 Years of Experience Sampling

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Recent evidence suggests that emotional well-being improves from early adulthood to old age. This study used experience-sampling to examine the developmental course of emotional experience in a representative sample of adults spanning early to very late adulthood. Participants ($N = 184$, Wave 1; $N = 191$, Wave 2; $N = 178$, Wave 3) reported their emotional states at five randomly selected times each day for a one week period. Using a measurement burst design, the one-week sampling procedure was repeated five and then ten years later. Cross-sectional and growth curve analyses indicate that aging is associated with more positive overall emotional experience.
Emotional Experience Improves with Age

POSITIVE AFFECT
NEGATIVE AFFECT

WEEK

Carstensen et al (2011)
Carstensen et al (2011)
Positivity Effect

- Increased Experience of Positive Emotion
- Increased Attention to Positive Stimuli
- Increased Memory for Positive Stimuli
- Increased Ability to Regulate Emotions
BRIEF REPORTS

Is There an Age-Related Positivity Effect in Visual Attention? A Comparison of Two Methodologies

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Brandeis University

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York University

Research suggests a positivity effect in older adults’ memory for emotional material, but the evidence from the attentional domain is mixed. The present study combined 2 methodologies for studying preferences in visual attention, eye tracking, and dot-probe, as younger and older adults viewed synthetic emotional faces. Eye tracking most consistently revealed a positivity effect in older adults’ attention, so that older adults showed preferential looking toward happy faces and away from sad faces. Dot-probe results were less robust, but in the same direction. Methodological and theoretical implications for the study of socioemotional aging are discussed.

Keywords: attention, aging, positivity

Older adults generally have relatively high levels of positive affect and low negative affect (e.g., Mroczek & Kolarz, 1998). Recent interest has turned from documenting the phenomenology of older adults’ apparent affective resilience to trying to understand its etiology. Similar to researchers investigating how information processing creates and maintains affect (see Mogg, Mil- lar, & Bradley, 2000), life-span development researchers have started to focus on the role of cognition in producing the tendency for older individuals to maintain positive affective profiles while facing negative age-related changes such as physical and cognitive decline. Such studies have suggested a positivity effect (Carstensen & Mikels, 2005) in which older adults’ processing of emotional positive but not negative stimuli using functional magnetic resonance imaging (fMRI); younger participants did not show this differentiation. If positive stimuli elicit different neural patterns and better memory than do negative stimuli for older adults, then their visual attention might also demonstrate preferences favoring positive information.

However, previous age-related findings on positivity in visual attention have been mixed. Using latency to press a space bar to advance to the next image on a computer screen showing affective images as a measure of visual attention, Charles et al. (2003) found a negativity effect across age groups; all participants took longer to advance to the next image following negatively valenced images.
“Look naturally” at these faces for a few seconds…

Isaacowitz et al., 2008
Older adults spent more time looking at the happy (vs. neutral) face, and less time looking at the angry (vs. neutral) face.

Isaacowitz et al., 2008
Positivity Effect - Attentional Bias Score


The graph shows the attentional bias score for positive and negative faces among younger and older individuals. The yellow bars represent positive faces, and the blue bars represent negative faces. The attentional bias score is positive when the score is above 0 and negative when it is below 0. The graph indicates a higher attentional bias toward positive faces among older individuals compared to younger individuals.
### Positivity Effect

- Increased Experience of Positive Emotion
- Increased Attention to Positive Stimuli
- **Increased Memory for Positive Stimuli**
- Increased Ability to Regulate Emotions
By contrast, some studies that examined memory for emotional stimuli found no interactions of valence and age [35–37] or only a marginally significant one [38]. One possibility is that the specific encoding tasks given in these studies (typically to rate or focus on the emotional characteristics of the stimuli) limited the influence of emotional goals. Open-ended encoding sessions might be more likely to show the effects of emotional goals. It also seems likely that the more personally relevant the information is, the more likely older adults would be to attempt to implement emotion-regulation goals when processing the information.

Autobiographical memory

Of course, the most personally relevant type of memory is autobiographical. Several studies reveal positivity effects in older adults' autobiographical memories. A study that examined memory for a political candidate's withdrawal from an election race found that older adults were more likely than younger adults to forget the intensity of their negative affect [39]. In another study, when asked to recall positive and negative events from their past and rate the characteristics of those memories, older adults indicated higher levels of positive feelings and less complexity associated with negative memories than younger adults did [40], consistent with previous findings that older adults use positive reappraisal as a strategy to cope with stressful encounters more often than younger adults do [41].

A greater focus on emotional goals when remembering also seems to influence the direction of distortion when people reconstruct past health and habits. Among several hundred nuns who recalled health behaviors and daily habits from 14 years ago, the direction of memory distortion became more positive with age [42]. However, in another group that rated their current emotions every so often during the memory questionnaire, both older and younger adults showed significant positive memory distortion. For example, the nuns were asked, 'How often were you completely worn out at the end of the day?' and 'How often did you experience happiness?' Participants in the control condition simply filled out the memory questionnaire. In the accuracy condition, they were repeatedly queried about the memory strategies they were using and in the emotion condition they were repeatedly queried about their current emotions as they completed the questionnaire. The bias scores reflect a comparison of the nuns' remembered health and well-being to their actual ratings 14 years ago. Memories that were more positive than the actual ratings yielded positive scores whereas those that were more negative yielded negative scores. Error bars show the standard error of the mean.

Older adults are better at recalling positive (as compared to neutral and negative) photos. Mathers & Carstenen (2005)
Recall six past memories (2 positive, 2 negative, and 2 neutral)

Describe the event

Rate aspects of the event (emotions experienced, vividness of memory, etc.)

Positivity Effect

Recall of Autobiographical Memories

Combain et al., 2005
During autobiographical recall of negative life events, older adults:

- Reported a less complex storyline
- Reported more positive emotions associated with the event

Combain et al., 2005
Positivity Effect

- Increased Experience of Positive Emotion
- Increased Attention to Positive Stimuli
- Increased Memory for Positive Stimuli
- Increased Ability to Regulate Emotions
Emotion and Aging: Experience, Expression, and Control

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Age differences in emotional experience, expression, and control were investigated in 4 studies. A community sample of 127 African Americans and European Americans (ages 19–96 years) was used in Study 1; a community sample of 82 Chinese Americans and European Americans (ages 20–85 years) was used in Study 2; a community sample of 49 Norwegians drawn from 2 age groups (ages 20–35 years and 70+ years) was used in Study 3; and a sample of 1,080 American nuns (ages 24–101 years) was used in Study 4. Across studies, a consistent pattern of age differences emerged. Compared with younger participants, older participants reported fewer negative emotional experiences and greater emotional control. Findings regarding emotional expressivity were less consistent, but when there were age differences, older participants reported lesser expressivity. Results are interpreted in terms of increasingly competent emotion regulation across the life span.

Popular stereotypes suggest that people become less emotional as they age: Out of the exuberance of abundant emotional energy in early adulthood develops the moderation of cooler rationality in middle adulthood and older age (Bromley, 1990; Cumming & Henry, 1961). Pervasive as this stereotype is, relatively little empirical attention has been paid to developmental trends in the domain of emotion beyond late childhood (Thompson, 1990).

Of particular motives (Carstensen, 1993). In addition, age differences have been uncovered in both the salience (Carstensen & Turk-Charles, 1994) and the understanding of emotion (Labouvie-Vief & DeVoe, 1991; Labouvie-Vief, DeVoe, & Bulka, 1989; Labouvie-Vief, Hakim-Larson, DeVoe, & Schoeberlein, 1989).

All told, these findings suggest that the second half of life may well involve changes in the domain of emotion. Nevertheless,
Selection, Optimization, & Compensation with Emotion Regulation (SOC-ER)

**YOUNGER ADULTS**
- Encouragement from Others
  - Cognitive Reappraisal
    - Situation Selection
- Cognitive Control

**OLDER ADULTS**
- Encouragement from Others
  - Situation Selection
    - Cognitive Reappraisal
- Cognitive Control

Urry & Gross (2010)
Positivity Effect

As humans get older, relative preference for positive over negative information (i.e., towards positive, away from negative, stimuli).

Carstensen & Mikels (2005)
Older People are Happier
TED talk: Laura Carstensen

http://www.ted.com/talks/laura_carstensen_older_people_are_happier.html
Roadmap

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Take-Away Qs & Expert Interview
Caveats

- Individual differences still play an important role
- These findings are particularly true of those 65-85 years old (versus those aged 85+)
- Current life circumstances to consider include: adequate financial resources, reasonably good health, etc.
Considerations

be here
Considerations

Strong support network (quality over quantity)
Considerations

Spend time on what is meaningful to you.
“Over the last few days, I have been able to see my life as from a great altitude, as a sort of landscape, and with a deepening sense of the connection of all its parts. This does not mean I am finished with life. On the contrary, I feel intensely alive, and I want and hope in the time that remains to deepen my friendships, to say farewell to those I love, to write more, to travel if I have the strength, to achieve new levels of understanding and insight.

This will involve audacity, clarity and plain speaking; trying to straighten my accounts with the world. But there will be time, too, for some fun (and even some silliness, as well)…”
“I feel a sudden clear focus and perspective. There is no time for anything inessential. I must focus on myself, my work and my friends. I shall no longer look at “NewsHour” every night. I shall no longer pay any attention to politics or arguments about global warming. This is not indifference but detachment — I still care deeply about the Middle East, about global warming, about growing inequality, but these are no longer my business; they belong to the future.

...It is up to me now to choose how to live out the months that remain to me. I have to live in the richest, deepest, most productive way I can.”
Roadmap

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Take-Away Qs & Expert Interview
Experts In Emotion
Experts In Emotion Interview

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Emotion and Aging
Thank You!