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Study 1 Materials

Need satisfaction measure

Please rate your agreement with the following statements, bearing in mind your feelings during the last week. Use the following scale:

1	2	3	4	5	6	7	8	9	10
Not true at all								Completely true	

- _____ 1. I feel like I am free to decide for myself how to live my life.
- _____ 2. I really like the people I interact with.
- _____ 3. Often, I do not feel very competent.
- _____ 4. I feel pressured in my life.
- _____ 5. People I know tell me I am good at what I do.
- _____ 6. I get along with people I come into contact with.
- _____ 7. I pretty much keep to myself and don't have a lot of social contacts.
- _____ 8. I generally feel free to express my ideas and opinions.
- _____ 9. I consider the people I regularly interact with to be my friends.
- _____ 10. I have been able to learn interesting new skills recently.
- _____ 11. In my daily life, I frequently have to do what I am told.
- _____ 12. People in my life care about me.
- _____ 13. Most days I feel a sense of accomplishment from what I do.
- _____ 14. People I interact with on a daily basis tend to take my feelings into consideration.
- _____ 15. In my life I do not get much of a chance to show how capable I am.
- _____ 16. There are not many people that I am close to.
- _____ 17. I feel like I can pretty much be myself in my daily situations.
- _____ 18. The people I interact with regularly do not seem to like me much.
- _____ 19. I often do not feel very capable.
- _____ 20. There is not much opportunity for me to decide for myself how to do things in my daily life.
- _____ 21. People are generally pretty friendly towards me.

Manipulation #1: Mortality salience condition

MUSICAL TASTES AND PERSONALITY

The list below was published by the magazine *Complex*, titled “**Top 25 Flawless Songs About Death.**”

The list includes songs from the folk, pop, rock, and hip-hop genres. Please read each song title carefully, and then indicate whether or not you are familiar with the song.

1	2	3	4	5	6	7	8	9	10
Not at all familiar w/ song								Very familiar w/ song	

- | | |
|-----------|---|
| _____ 1. | “Ready to Die” – The Notorious B.I.G. (1994) |
| _____ 2. | “I Wish” – R. Kelly (2000) |
| _____ 3. | “There is a Light that Never Goes Out” – The Smiths (1986) |
| _____ 4. | “Knockin’ on Heaven’s Door” – Bob Dylan (1973) |
| _____ 5. | “Many Men (Wish Death)” – 50 Cent (2003) |
| _____ 6. | “Maggot Brain” – Funkadelic (1971) |
| _____ 7. | “The Show Must Go On” – Queen (1991) |
| _____ 8. | “Ocean Breathes Salty” – Modest Mouse (2004) |
| _____ 9. | “Tha Crossroads” – Bone Thugs-n-Harmony (1995) |
| _____ 10. | “Somebody Got Murdered” – The Clash (1980) |
| _____ 11. | “Coldest Winter” – Kanye West (2008) |
| _____ 12. | “Dream On” – Aerosmith (1973) |
| _____ 13. | “Life Goes On” – Tupac Shakur/2Pac (1996) |
| _____ 14. | “(Don’t Fear) The Reaper” – Blue Oyster Cult (1976) |
| _____ 15. | “I Seen a Man Die” – Scarface (1994) |
| _____ 16. | “Fade to Black” – Metallica (1984) |
| _____ 17. | “Tears in Heaven” – Eric Clapton (1992) |
| _____ 18. | “Lost One” – Jay-Z (2006) |
| _____ 19. | “Candle in the Wind” – Elton John (1973) |
| _____ 20. | “I’ll Be Missin’ You” – Puff Daddy f/ Faith Evans (1997) |
| _____ 21. | “King’s Crossing” – Elliot Smith (2004) |
| _____ 22. | “They Reminisce Over You (T.R.O.Y.)” – Pete Rock & CL Smooth (1992) |
| _____ 23. | “One Sweet Day” – Mariah Carey & Boyz II Men (1995) |
| _____ 24. | “Sing About Me, I’m Dying of Thirst” – Kendrick Lamar (2012) |
| _____ 25. | “The Great Gig in the Sky” – Pink Floyd (1973) |

Manipulation #1: Sadness condition

MUSICAL TASTES AND PERSONALITY

The list below was published by the magazine *Complex*, titled “**Top 25 Saddest Songs of All Time.**”

The list includes songs from the folk, pop, rock, and hip hop genres. Please read each song title carefully, and then indicate whether or not you are familiar with the song. Use the following scale:

1	2	3	4	5	6	7	8	9	10
Not at all familiar w/ song								Very familiar w/ song	

- | | |
|-----------|---|
| _____ 1. | “Tearz” – Wu Tang Clan (1993) |
| _____ 2. | “Dance” – Nas (2002) |
| _____ 3. | “Everybody Hurts” – R.E.M. (1992) |
| _____ 4. | “Jolene” – Dolly Parton (1974) |
| _____ 5. | “8 Million Stories” – A Tribe Called Quest (1993) |
| _____ 6. | “Yesterday” – The Beatles (1965) |
| _____ 7. | “Brick” – Ben Folds Five (1997) |
| _____ 8. | “Someone Like You” – Adele (2004) |
| _____ 9. | “Kim” – Eminem (2000) |
| _____ 10. | “The Sounds of Silence” – Simon & Garfunkel (1964) |
| _____ 11. | “Happy Birthday” – Flipsyde (2005) |
| _____ 12. | “Landslide” – Fleetwood Mac (1975) |
| _____ 13. | “So Many Tears” – Tupac Shakur/2Pac (1995) |
| _____ 14. | “Hurt” – Johnny Cash (2002) |
| _____ 15. | “Stan” – Eminem (2000) |
| _____ 16. | “The District Sleeps Alone Tonight” – The Postal Service (2003) |
| _____ 17. | “Nothing Compares to You” – Sinéad O’Connor (1990) |
| _____ 18. | “Song Cry” – Jay-Z (2001) |
| _____ 19. | “Hold On” – Sarah McLachlan (1999) |
| _____ 20. | “Face of a Desperate Man” – Spice 1 (1994) |
| _____ 21. | “Let Her Go” – Passenger (2012) |
| _____ 22. | “The Message” – Dr. Dre f/ Mary J. Blige (1999) |
| _____ 23. | “Renee” – Lost Boyz (1996) |
| _____ 24. | “Wicked Game” – Chris Isaak (1989) |
| _____ 25. | “Stay With Me” – Sam Smith (2014) |

Distractor task: PANAS

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now. Use the following scale to record your answers.

1 Very slightly or not at all	2 a little	3 moderately	4 quite a bit	5 extremely
___ cheerful	___ sad	___ active	___ angry at self	
___ disgusted	___ calm	___ guilty	___ enthusiastic	
___ attentive	___ afraid	___ joyful	___ downhearted	
___ bashful	___ tired	___ nervous	___ sheepish	
___ sluggish	___ amazed	___ lonely	___ distressed	
___ daring	___ shaky	___ sleepy	___ blameworthy	
___ surprised	___ happy	___ excited	___ determined	
___ strong	___ timid	___ hostile	___ frightened	
___ scornful	___ alone	___ proud	___ astonished	
___ relaxed	___ alert	___ jittery	___ interested	
___ irritable	___ upset	___ lively	___ loathing	
___ delighted	___ angry	___ ashamed	___ confident	
___ inspired	___ bold	___ at ease	___ energetic	
___ fearless	___ blue	___ scared	___ concentrating	
___ disgusted with self	___ shy	___ drowsy	___ dissatisfied with self	

The PANAS subscales were computed as follows: positive mood (items 3, 8, 9, 13, 25, 31, 37, 47, 52, 55), negative mood (11, 18, 26, 32, 34, 38, 40, 42, 44, 50), fear (18, 21, 34, 40, 44, 53), hostility (2, 9, 11, 27, 38, 56), guilt (15, 32, 42, 46, 51, 60), sadness (16, 24, 29, 35, 48), happiness (1, 12, 22, 33, 37, 41, 47, 58), self-assuredness (6, 8, 14, 26, 39, 57), attentiveness (3, 25, 52, 59), serenity (10, 17, 43), surprise (7, 20, 54), fatigue (5, 19, 36, 45), shy (4, 23, 30, 49).

Distractor task: Reading passage

Verbal Cues Questionnaire: Literature

Please read the following short passage and answer the questions below it.

The automobile swung clumsily around the curve in the red sandstone trail, now a mass of mud. The headlights suddenly picked out in the night—first on one side of the road, then on the other—two wooden huts with sheet metal roofs. On the right near the second one, a tower of course beams could be made out in the light fog. From the top of the tower a metal cable, invisible at its starting-point, shone as it sloped down into the light from the car before disappearing behind the embankment that blocked the road. The car slowed down and stopped a few yards from the huts.

The man who emerged from the seat to the right of the driver labored to extricate himself from the car. As he stood up, his huge, broad frame lurched a little. In the shadow beside the car, solidly planted on the ground and weighed down by fatigue, he seemed to be listening to the idling motor. Then he walked in the direction of the embankment and entered the cone of light from the headlights. He stopped at the top of the slope, his broad back outlined against the darkness. After a moment he turned around. In the light from the dashboard he could see the chauffeur's face, smiling. The man signaled and the chauffeur turned off the motor. At once a vast cool silence fell over the trail and the forest. Then the sound of the water could be heard.

The man looked at the river below him, visible solely as a broad dark motion flecked with occasional shimmers. A denser motionless darkness, far beyond, must be the other bank. By looking fixedly, however, one could see on that still bank a yellowish light like an oil lamp in the distance. He turned back toward the car and nodded. The chauffeur switched off the lights, turned them on again, then blinked them regularly. In the blinking lights on the embankment the man appeared and disappeared, taller and more massive each time he came back to life. Suddenly, on the other bank of the river, a lantern held up by an invisible arm swung back and forth several times. At that final signal from the lookout, the man disappeared into the night. With the lights out, the river was shining intermittently. On each side of the road, the dark masses of forest foliage stood out against the sky and seemed very near. The fine rain that had soaked the trail an hour earlier was still hovering in the warm air, intensifying the silence and immobility of this broad clearing in the forest. In the black sky misty stars flickered.

1. Do you think the author of this passage is male or female?
_____ male _____ female
2. Do you think the narrator is a character in the story, or a third-person voice?
_____ A story character _____ A third-person voice
3. What age might the author have been at the time this passage was written?
_____ 15-20 years old _____ 41-50 years old
_____ 21-30 years old _____ 51-60 years old
_____ 31-40 years old _____ 61-70 years old
4. How do you feel about the overall descriptive quality of the passage?
1 2 3 4 5 6 7 8 9
not at all somewhat very
descriptive descriptive descriptive

Distractor task: Word search

Verbal distinction task

Circle as many words as you can in the puzzle below. Words may be forward, backward, or diagonal.

Book	Computer	Grass
Desk	Phone	Beer
Movie	Train	Music
Paper	School	Actor

S	R	E	T	U	P	M	O	C	O
W	P	H	O	N	E	R	E	E	B
A	M	U	S	I	C	P	Z	S	N
B	T	N	R	O	T	C	A	P	K
B	M	R	K	S	E	D	G	A	O
B	F	O	A	G	O	L	R	R	O
E	A	G	V	I	Z	B	A	G	B
P	W	N	U	I	N	E	S	W	Q
A	N	T	A	B	E	T	S	D	O
P	S	C	H	O	O	L	N	I	T

Dependent measure: Death-thought accessibility

Please complete the following by filling letters in the blanks to create words. Please fill in the blanks with the first word that comes to mind. Write one letter per blank. Some words may be plural. Thank you.

1. PA _ _

19. WAT _ _

2. M _ _ N

20. LA _ _ _

3. KI _ _ ED

21. COFF _ _

4. _ _ OK

22. _ _ SET

5. TEA _ _

23. _ _ DE

6. M _ R _ ER

24. GRA _ _

7. FO _ _

25. P _ P _ R

8. B _ D

26. HU _ _

9. SK _ _ L

27. BUR _ _ D

10. CAR _ _

28. MOV _ _

11. _ _ ASS

29. TR _ _

12. _ _ _ TH

30. _ ET _ _ L

13. FL _ W _ R

31. PENC _ _

14. K _ _ GS

32. BE _ _ S

15. CO _ _ SE

33. _ _ TAL

16. T _ _ E

34. W _ _ CH

17. CL _ _ K

35. _ ARM

18. DE _ _

36. MOR _ _ L

Study 2 Materials

Need-satisfaction measure

Same as in Study 1.

Manipulation: Practice block instructions page

The next task will test your verbal skills. You will see a pair of words, one presented after the other.

If the words are related to each other, press the "L" key.

If the words are not related to each other, press the "A" key.

Please do this task as quickly and accurately as possible. We will first do a set of 3 practice trials.
Then we will do one set of 12 real trials.

When you are ready, place your hands in position and press the SPACE key to begin.

Manipulation: Practice block stimuli

Practice block stimuli		
Word #1 (430ms)		Word #2 (430ms)
door		bell
shoes		laces
soccer		cake

Manipulation: Prime block instructions page

The next task will continue to test your verbal skills. Once again, you will see a pair of words, one presented after the other.

If the words are related to each other, press the "L" key.

If the words are not related to each other, press the "A" key.

Please do this task as quickly and accurately as possible.

When you are ready, place your hands in position and press the SPACE key to begin.

Manipulation: Prime block stimuli in the MS/control condition

Prime block stimuli		
Word #1 (430ms)	Prime word (43ms)	Word #2 (430ms)
phone	death/field	number
cardboard	death/field	boxes
river	death/field	train
letter	death/field	food
work	death/field	desk
chair	death/field	table
pepper	death/field	gate
finger	death/field	shirt
match	death/field	bath
pencil	death/field	paper
sandwich	death/field	cheese
mailbox	death/field	tire

Dependent measure: Instructions page #1

On the screen you will be presented with a string of letters. You are to determine whether or not these letters form a word.

Press L if the letters form a word.

Press A if they do not form a word.

Please respond as quickly and accurately as possible.

To begin the task press the spacebar.

Dependent measure: Instructions page #2

This task is about to begin.

Please place your hands near the "A" (not a word) and the "L" (word) keys and press space to begin the task

Dependent measure: Reaction time stimuli

Reaction time stimuli (70 items presented in random order)							
Non-words (40)				Words (30)			
				Neutral words (18)		Negative words (6)	Death words (6)
skrymbs	proom	knurdge	theerf	express	quest	punish	buried
jaduct	queale	meist	wermer	tea	cat	wrong	grave
toucle	frawp	kugns	hylmb	doormat	radio	fail	skull
plique	daunda	kicmers	orper	baseball	automobile	fight	coffin
saclut	wezwol	fulcm	camptrs	restaurant	water	suffer	dead
zubtr	mablko	sckun	fribbs	cloak	bottle	jerk	killed
cauv	vicvne	jroucx	eascer	chair	magnet		
rictes	clett	rop	corf	picture	desk		
viboucz	viefn	trajne	unber	wall	tree		
ilken	jirbew	kuwmr	zudric				

Demographics and political orientation

Demographic

1.) What is your sex? _____Male _____Female 2.) Age? _____

3.) What is your ethnicity?
 _____Hispanic or Latino _____Not Hispanic or Latino

4.) What is your race?

_____ 1. Caucasian/White	_____ 4. Asian
_____ 2. African American/Black	_____ 5. Native Hawaiian/Pacific Islander
_____ 3. American Indian/Native Alaskan	_____ 6. Other (specify): _____

5.) How strongly do you identify as a CSU student?

1	2	3	4	5	6	7	8	9	10
Very Weak				Moderate					Very Strong

6.) How much of your self-worth is based on your academic activity/ability?

1 2 3 4 5 6 7 8 9 10

Very little Moderate A lot

7.) Please rate your political orientation:

1	2	3	4	5	6	7	8	9	10
Progressive				Moderate					Conservative

8.) How strongly do you identify with your political orientation?

1	2	3	4	5	6	7	8	9	10
Very Weak				Moderate					Very Strong

9.) Please indicate your religious affiliation, if any:

1. Christian	5. Jewish
2. Hindu	6. Atheist
3. Buddhist	7. Agnostic
4. Muslim	8. Other:

10.) Please indicate the strength of your religious/philosophical belief:

1	2	3	4	5	6	7	8	9	10
Very Weak				Moderate					Very Strong

11.) Please indicate the total number of years of education you have completed: _____
(for example: high school graduation is 12yrs., so two years of college is 14yrs.)

Study 3a – Pilot Study Materials

Filler items: Behavioral inhibition/activation scale

Please rate yourself on the following statements. Use the following scale.

1	2	3	4	5	6
Not at all					Very much

[BIS]

- _____ 1. If I think something unpleasant is going to happen I usually get pretty worked up.
- _____ 2. I worry about making mistakes.
- _____ 3. Criticism or scolding hurts me quite a bit.
- _____ 4. I feel pretty worried or upset when I think or know somebody is angry at me.
- _____ 5. Even if something bad is about to happen to me, I rarely experience fear or nervousness.
- _____ 6. I feel worried when I think I have done poorly at something.
- _____ 7. I have very few fears compared to my friends.

[BAS]

- _____ 8. When I get something I want, I feel excited and energized.
- _____ 9. When I'm doing well at something, I love to keep at it.
- _____ 10. When good things happen to me, it affects me strongly.
- _____ 11. It would excite me to win a contest.
- _____ 12. When I see an opportunity for something I like, I get excited right away.
- _____ 13. When I want something I usually go all-out to get it.
- _____ 14. I go out of my way to get things I want.
- _____ 15. If I see a chance to get something I want, I move on it right away.
- _____ 16. When I go after something I use a "no holds barred" approach.
- _____ 17. I will often do things for no other reason than that they might be fun.
- _____ 18. I crave excitement and new sensations.
- _____ 19. I'm always willing to try something new if I think it will be fun.
- _____ 20. I often act on the spur of the moment.

Filler items: Aspirations index

The following are things that some individuals hope to accomplish over the course of their lives. In this section, you will find a number of life goals, presented one at a time, and we ask you, "How important is this goal to you?"

How important is this to you...

1	2	3	4	5	6
Not at all					Very much

- _____ 1. To be a very wealthy person.
- _____ 2. To grow and learn new things.
- _____ 3. To have my name known by many people.
- _____ 4. To have good friends that I can count on.
- _____ 5. To successfully hide the signs of aging.
- _____ 6. To work for the betterment of society.
- _____ 7. To be physically healthy.
- _____ 8. To have many expensive possessions.
- _____ 9. At the end of my life, to be able to look back on my life as meaningful and complete.
- _____ 10. To be admired by many people.
- _____ 11. To share my life with someone I love.
- _____ 12. To have people comment often about how attractive I look.
- _____ 13. To assist people who need it, asking nothing in return.
- _____ 14. To feel good about my level of physical fitness.
- _____ 15. To be financially successful.
- _____ 16. To choose what I do, instead of being pushed along by life.
- _____ 17. To be famous.
- _____ 18. To have committed, intimate relationships.
- _____ 19. To keep up with fashions in hair and clothing.
- _____ 20. To work to make the world a better place.
- _____ 21. To keep myself healthy and well.
- _____ 22. To be rich.
- _____ 23. To know and accept who I really am.
- _____ 24. To have my name appear frequently in the media.
- _____ 25. To feel that there are people who really love me, and whom I love.
- _____ 26. To achieve the "look" I've been after.
- _____ 27. To help others improve their lives.
- _____ 28. To be relatively free from sickness.
- _____ 29. To have enough money to buy everything I want.
- _____ 30. To gain increasing insight into why I do the things I do.
- _____ 31. To be admired by lots of different people.
- _____ 32. To have deep enduring relationships.
- _____ 33. To have an image that others find appealing.
- _____ 34. To help people in need.
- _____ 35. To have a physically healthy lifestyle.

Manipulation #1: Self-determined condition

Projective Life Attitudes Assessment

Please briefly describe a time when you felt “self-determined,” meaning a time in which you felt you were doing things or acting a certain way simply because you wanted to; not because of any outside pressure.

Manipulation #1: Controlled condition

Projective Life Attitudes Assessment

Please briefly describe a time when you felt “controlled,” meaning a time in which you felt you were doing things or acting a certain way simply because of some outside pressure; not because you wanted to.

Manipulation #1: Neutral condition

Projective Life Attitudes Assessment

Please briefly describe a time when you felt “ordinary,” meaning a time in which you felt you were doing things or acting like you usually or typically do.

Dependent measure: Need satisfaction measure

Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you. Use the following scale:

1	2	3	4	5	6
Not True at all				Completely true	

1. Right now, I feel like I am free to decide for myself how to live my life.
2. Right now, I like the people I interact with.
3. Right now, I do not feel very competent.
4. Right now, I feel pressured.
5. Right now, I feel like the people I know think I am good at what I do.
6. Right now, I get along with people near to me.
7. Right now, I don't feel like I have a lot of social contacts.
8. Right now, I feel free to express my ideas and opinions.
9. Right now, I consider the people I regularly interact with to be my friends.
10. Right now, I feel as if I'm able to learn new skills easily.
11. Right now, I have to do what I am told.
12. Right now, I feel as if the people in my life care about me.
13. Right now, I feel a sense of accomplishment from what I do.
14. Right now, I feel as if the people I interact with on a daily basis tend to take my feelings into consideration.
15. Right now, I do not have much of a chance to show how capable I am.
16. Right now, I feel as if there are not many people that I am close to.
17. Right now, I feel like I can pretty much be myself.
18. Right now, the people I interact with regularly do not seem to like me very much.
19. Right now, I do not feel very capable.
20. Right now, there is not much opportunity for me to decide for myself how to do things.
21. Right now, people seem pretty friendly towards me.

Dependent measure: Custom self-esteem items

This survey investigates your opinions on a variety of social issues. You will probably find that you *agree* with some of the statements, and *disagree* with others, to varying extents. Please indicate your reaction to each statement by writing in the appropriate number in the space provided for each statement from the scale below:

1	2	3	4	5	6
<i>Strongly Disagree</i>					<i>Strongly Agree</i>

- _____ I am a valuable person
- _____ I have many positive qualities
- _____ I have a brighter future than the average student

Dependent measure: Rosenberg self-esteem scale

1	2	3	4	5	6
<i>Strongly Disagree</i>					<i>Strongly Agree</i>

- _____ 1. On the whole, I am satisfied with myself.
- _____ 2. At times I think I am no good at all.
- _____ 3. I feel that I have a number of good qualities.
- _____ 4. I am able to do things as well as most other people.
- _____ 5. I feel I do not have much to be proud of.
- _____ 6. I certainly feel useless at times.
- _____ 7. I feel that I am a person of worth, at least on an equal plane with others.
- _____ 8. I wish I could have more respect for myself.
- _____ 9. All in all, I am inclined to feel that I am a failure.
- _____ 10. I take a positive attitude toward myself.

Study 3b – Primary Study Materials

Manipulation #1: MS condition

Policy Importance

Using the numbers 1-6, please RANK the importance of the following policy issues, in your personal opinion. Use each number only once.

- _____ Terrorism
- _____ War, or military intervention
- _____ Abortion
- _____ Gun control
- _____ Capital punishment
- _____ Illness, healthcare, health insurance

Manipulation #1: Neutral condition

Policy Importance

Using the numbers 1-6, please RANK the importance of the following policy issues, in your personal opinion. Use each number only once.

- _____ Trade regulation
- _____ Tax reform
- _____ Budget and economy
- _____ Energy and oil
- _____ Technology and infrastructure
- _____ Education

Manipulation #2: Self-determined condition

Projective Life Attitudes Assessment

Please briefly describe a time when you felt “self-determined,” meaning a time in which you felt you were doing things or acting a certain way simply because you wanted to; not because of any outside pressure.

Manipulation #2: Controlled condition

Projective Life Attitudes Assessment

Please briefly describe a time when you felt “controlled,” meaning a time in which you felt you were doing things or acting a certain way simply because of some outside pressure; not because you wanted to.

Distractor task: PANAS

For each item below, indicate to what extent you feel this way right now. Use the following scale.

1 Very slightly or not at all	2 a little	3 moderately	4 quite a bit	5 extremely
____ Interested	____ Guilty	____ Irritable	____ Determined	
____ Disinterested	____ Scared	____ Alert	____ Attentive	
____ Excited	____ Hostile	____ Ashamed	____ Jittery	
____ Upset	____ Enthusiastic	____ Inspired	____ Active	
____ Strong	____ Proud	____ Nervous	____ Afraid	

The PANAS subscales were computed as follows: positive mood (items 1, 3, 5, 9, 10, 12, 14, 16, 17, 19), negative mood (2, 4, 6, 7, 8, 11, 13, 15, 18, 20),

Dependent measure: Death-thought accessibility

Same as in Study 1

Demographics and political orientation

Same as in Study 1

Study 4a Materials

Need-satisfaction measure

Same as in Study 1

Filler items: Ideological dogmatism measure

This scale consists of a number of statements; please read each item and then indicate how much you either agree or disagree with the statement.

1	2	3	4	5	6	7	8	9	10
Strongly disagree								Strongly agree	

- _____ 1. I may be wrong about some of the little things in life, but I am quite certain I am right about all the BIG issues.
- _____ 2. Someday I will probably think that many of my present ideas were wrong.
- _____ 3. Anyone who is honestly and truly seeking the truth will end up believing what I believe
- _____ 4. There are so many things we have not discovered yet, nobody should be absolutely certain his beliefs are right.
- _____ 5. The things I believe in are so completely true, I could never doubt them.
- _____ 6. I have never discovered a system of beliefs that explains everything to my satisfaction.
- _____ 7. It is best to be open to all possibilities and ready to reevaluate all your beliefs.
- _____ 8. My opinions are right and will stand the test of time.
- _____ 9. Flexibility is a real virtue in thinking, since you may well be wrong.
- _____ 10. My opinions and beliefs fit together perfectly to make a crystal-clear "picture" of things.
- _____ 11. There are no discoveries or facts that could possibly make me change my mind about the things that matter most in life.
- _____ 12. I am a long way from reaching final conclusions about the central issues in life.
- _____ 13. The person who is absolutely certain she has the truth will probably never find it.
- _____ 14. I am absolutely certain that my ideas about the fundamental issues in life are correct.
- _____ 15. The people who disagree with me may well turn out to be right.
- _____ 16. I am so sure I am right about the important things in life, there is no evidence that could convince me otherwise.
- _____ 17. If you are "open-minded" about the most important things in life, you will probably reach the wrong conclusions.
- _____ 18. Twenty years from now, some of my opinions about the important things in life will probably have changed.
- _____ 19. "Flexibility in thinking" is another name for being "wishy-washy"
- _____ 20. No one knows all the essential truths about the central issues in life.
- _____ 21. Someday I will probably realize my present ideas about the BIG issues are wrong.
- _____ 22. People who disagree with me are just plain wrong and often evil as well.

Death anxiety measure

This scale consists of a number of statements; please read each item and then indicate how much you either agree or disagree with the statement.

1	2	3	4	5	6	7	8	9	10
Strongly disagree								Strongly agree	

- _____ 1. Do you worry about dying?
- _____ 2. Does it bother you that you may die before you have done everything you wanted to?
- _____ 3. Do you worry that you may be very ill for a long time before you die?
- _____ 4. Does it upset you to think that others may see you suffering when you die?
- _____ 5. Do you worry that dying may be very painful?
- _____ 6. Do you worry that the persons most close to you won't be with you when you are dying?
- _____ 7. Do you worry that you may be alone when you are dying?
- _____ 8. Does the thought bother you that you might lose control of your mind before death?
- _____ 9. Do you worry that expenses connected with your dying will be a burden for other people?
- _____ 10. Does it worry you that your instructions or will about your belongings may not be carried out after you die?
- _____ 11. Are you afraid that you may be buried before you are really dead?
- _____ 12. Does the thought of leaving loved ones behind when you die disturb you?
- _____ 13. Do you worry that those you care about may not remember you after your death?
- _____ 14. Does the thought worry you that with death you may be gone forever?
- _____ 15. Are you worried about not knowing what to expect after death?

Demographics measure

Demographics

1.) What is your sex? _____Male _____Female

2.) Age? _____

3.) What is your race?

 1. Caucasian

4. Asian

2. African American/Black

5. Native Hawaiian/Pacific Islander

 3. American Indian/Native Alaskan

_____ 6. Other (specify): _____

4.) Please rate your political orientation:

1	2	3	4	5	6	7	8	9	10
Progressive				Moderate					Conservative

5.) What religion or philosophy are you affiliated with, if any:

5. Christian

5. Jewish

6. Hindu

6. Agnostic

7. Buddhist

7. Other:

8. Muslim

8. Atheist

6.) Please indicate the strength of your religious/philosophical belief:

1	2	3	4	5	6	7	8	9	10
Very Weak				Moderate					Very Strong

Study 4b Materials

Demographics measure

Demographics

1.) Age? _____

2.) Gender: _____ Male _____ Female Other/prefer to self-describe: _____

3.) Which of the following best describes your race?

_____ 1. Caucasian

_____ 4. Asian

_____ 2. African American/Black

_____ 5. Native Hawaiian/Pacific Islander

_____ 3. American Indian/Native Alaskan

_____ 6. Other (specify): _____

4.) Do you consider yourself to be...

_____ Hispanic or Latino

_____ Not Hispanic or Latino

5.) How would you describe your political orientation?

1
Extremely liberal

2

3

4

5

6

7

Neither liberal nor conservative

8

9

Extremely conservative

6.) How important to you is your political orientation?

1
Not at all important

2

3

4

5

6

7

8

9

Extremely important

Self-esteem measure

I have high self-esteem

1	2	3	4	5	6	7	8	9
Fully disagree								Fully agree

Need-satisfaction measure

Please read each of the following items carefully and indicate the degree to which the statement is true for you at this point in your life.

1 2 3 4 5

Not true at all Completely true

- _____ 1. I feel a sense of choice and freedom in the things I undertake.
- _____ 2. I feel that the people I care about also care about me.
- _____ 3. I feel confident that I can do things well.
- _____ 4. I feel connected with people who care for me, and for whom I care.
- _____ 5. I feel capable at what I do.
- _____ 6. I feel my choices express who I really am.
- _____ 7. I feel close and connected with other people who are important to me.
- _____ 8. I feel competent to achieve my goals.
- _____ 9. I feel I have been doing what really interests me.

Growth orientation measure

The following set of statements deals with how you might feel about yourself and your life. Please remember that there are neither right nor wrong answers.

1	2	3	4	5	6
Strongly disagree					Strongly agree

_____ 1. For me, I would like life to be a more continuous process of learning, changing, and growth.

_____ 2. I think it is important to have new experiences that challenge how you think about yourself and the world.

Death anxiety measure

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

_____ 1. Death is no doubt a grim experience.

_____ 2. The uncertainty of not knowing what happens after death worries me.

_____ 3. I am disturbed by the finality of death.

_____ 4. The subject of life after death troubles me greatly.

_____ 5. The fact that death will mean the end of everything as I know it frightens me.

Study 5a – Pilot Study Materials

Filler items: Behavioral inhibition/activation scale

Same as in Study 3a (Pilot study)

Filler items: Aspirations index

Same as in Study 3a (Pilot study)

Manipulation #1: Self-determined condition

Verbal comprehension task

This task will assess your ability to comprehend, and unscramble, a scrambled thought.

Many people find this task enjoyable and interesting, and we are asking you to complete the task to help establish the norm for the task. So please feel free to complete it at a comfortable pace.

Instructions:

- Each item contains one scrambled sentence; one word should be discarded and the remaining four words can be rearranged to create the sentence.
- To complete this task, please identify the words that make up the sentence, unscramble them, and write the correct sentence on the line provided.

1. options have I two and _____
2. book we the read top _____
3. sale for by sweatshirts are _____
4. feel are choiceful I usually _____
5. is to this opportunity my _____
6. dollars salad on costs two _____
7. I to are choose live _____
8. often soda but drink I _____
9. on bookmark used the she _____
10. enjoy I freedom my he _____
11. in we autonomous often are _____
12. tablecloth and blue the is _____
13. have by preference a we _____
14. bright is the yes lamp _____
15. is to here served lunch _____

Manipulation #1: Self-determined condition, cont'd

Verbal comprehension task (cont'd)

This task will assess your ability to comprehend, and unscramble, a scrambled thought.

Many people find this task enjoyable and interesting, and we are asking you to complete the task to help establish the norm for the task. So please feel free to complete it at a comfortable pace.

Instructions:

- Each item contains one scrambled sentence; one word should be discarded and the remaining four words can be rearranged to create the sentence.
- To complete this task, please identify the words that make up the sentence, unscramble them, and write the correct sentence on the line provided.

- | | | |
|-----|---------------------------------|-------|
| 16. | to go and I decided | _____ |
| 17. | to our we classes selected | _____ |
| 18. | is the now desk wooden | _____ |
| 19. | on choice we a have | _____ |
| 20. | apple was to the delicious | _____ |
| 21. | here the by telephone is | _____ |
| 22. | we today unconstrained were our | _____ |
| 23. | can self-regulate to usually I | _____ |
| 24. | the her to fits shoe | _____ |
| 25. | actions and my are independent | _____ |
| 26. | you coffee the is hot | _____ |
| 27. | tell the computer new is | _____ |
| 28. | now to I unrestricted am | _____ |
| 29. | am I still for self-determined | _____ |
| 30. | he now are wears glasses | _____ |

Manipulation #1: Controlled condition

Verbal comprehension task

This task will assess your ability to comprehend, and unscramble, a scrambled thought.

The task correlates with verbal intelligence in adults. Most high school and college-age students are expected to be able to complete it quickly and with ease.

Instructions:

- Each item contains one scrambled sentence; one word should be discarded and the remaining four words can be rearranged to create the sentence.
- To complete this task, you MUST identify the words that make up the sentence, unscramble them, and write the correct sentence on the line provided. Do this as quickly and accurately as you can.

1. do we to this must _____
2. book we the read top _____
3. sale for by sweatshirts are _____
4. do I should to homework _____
5. to I smile ought desk _____
6. dollars salad on costs two _____
7. for required to I'm study _____
8. often soda but drink I _____
9. on bookmark used the she _____
10. work to with obligated I'm _____
11. meet we on deadlines must _____
12. tablecloth and blue the is _____
13. for boss coerced my me _____
14. bright is the yes lamp _____
15. is to here served lunch _____

Manipulation #1: Controlled condition, cont'd

Verbal comprehension task (cont'd)

This task will assess your ability to comprehend, and unscramble, a scrambled thought.

The task correlates with verbal intelligence in adults. Most high school and college-age students are expected to be able to complete it quickly and with ease.

Instructions:

- Each item contains one scrambled sentence; one word should be discarded and the remaining four words can be rearranged to create the sentence.
- To complete this task, you MUST identify the words that make up the sentence, unscramble them, and write the correct sentence on the line provided. Do this as quickly and accurately as you can.

- | | | |
|-----|---------------------------------|-------|
| 16. | was obey we're compelled to | _____ |
| 17. | compulsory to attendance is our | _____ |
| 18. | is the now desk wooden | _____ |
| 19. | giving in to necessary is | _____ |
| 20. | apple was to the delicious | _____ |
| 21. | here the by telephone is | _____ |
| 22. | manipulates my to me boss | _____ |
| 23. | so behavior my they restrict | _____ |
| 24. | the her to fits shoe | _____ |
| 25. | forced by to study I'm | _____ |
| 26. | you coffee the is hot | _____ |
| 27. | tell the computer new is | _____ |
| 28. | the by limits restrained us | _____ |
| 29. | very are we pressured that | _____ |
| 30. | he now are wears glasses | _____ |

Manipulation #1: Neutral topic condition

Verbal comprehension task

This task will assess your ability to comprehend, and unscramble, a scrambled thought.

This task has not yet been used among college students. Therefore, we are asking you to complete the task to help establish a norm.

Instructions:

- Each item contains one scrambled sentence; one word should be discarded and the remaining four words can be rearranged to create the sentence.
- To complete this task, please identify the words that make up the sentence, unscramble them, and write the correct sentence on the line provided.

1. by people walk some joint _____
2. book we the read top _____
3. sale for by sweatshirts are _____
4. books they be often read _____
5. the shall brown was dog _____
6. dollars salad on costs two _____
7. fence they but saw the _____
8. often soda but drink I _____
9. on bookmark used the she _____
10. two was had he hats _____
11. plant I like obvious that _____
12. tablecloth and blue the is _____
13. was sign a there too _____
14. bright is the yes lamp _____
15. is to here served lunch _____

Manipulation #1: Controlled topic condition, cont'd

Verbal comprehension task (cont'd)

This task will assess your ability to comprehend, and unscramble, a scrambled thought.

This task has not yet been used among college students. Therefore, we are asking you to complete the task to help establish a norm.

Instructions:

- Each item contains one scrambled sentence; one word should be discarded and the remaining four words can be rearranged to create the sentence.
- To complete this task, please identify the words that make up the sentence, unscramble them, and write the correct sentence on the line provided.

- | | | |
|-----|----------------------------|-------|
| 16. | porch the she white was | _____ |
| 17. | soft indirect is light to | _____ |
| 18. | is the now desk wooden | _____ |
| 19. | the walk fish swims slowly | _____ |
| 20. | apply was to the delicious | _____ |
| 21. | here the by telephone is | _____ |
| 22. | tall is Julia quite but | _____ |
| 23. | pictures is our good were | _____ |
| 24. | the her to fits shoe | _____ |
| 25. | I student am a there | _____ |
| 26. | you coffee the is hot | _____ |
| 27. | tell the computer new is | _____ |
| 28. | are pencils hers the it | _____ |
| 29. | am citizen from a I | _____ |
| 30. | he now are wears glasses | _____ |

Dependent measure: Need satisfaction measure

Same as in Study 3a (Pilot study).

Dependent measure: Self-esteem

Same as in Study 3a (Pilot study).

Auxiliary measure: Exploration orientation

Same as in Study 3a (Pilot study).

Demographics

Same as in Study 3a (Pilot study).

Study 5b – Primary Study Materials

Filler items: Mindfulness measure

Please rate your agreement with the following statements. Use the following scale:

- | | | | | | | | | | | |
|--|-----------------|---|---|---|---|---|---|---|-----------------|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Not True at all | | | | | | | | Completely true | |
-
- | | | |
|-------|-----|---|
| _____ | 1. | I could be experiencing some emotion and not be conscious of it until some time later. |
| _____ | 2. | I break or spill things because of carelessness, not paying attention, or thinking of something else. |
| _____ | 3. | I find it difficult to stay focused on what's happening in the present. |
| _____ | 4. | I tend to walk quickly to get where I'm going without paying attention to what I experience along the way. |
| _____ | 5. | I tend not to notice feelings of physical tension or discomfort until they really grab my attention. |
| _____ | 6. | I forget a person's name almost as soon as I've been told it for the first time. |
| _____ | 7. | It seems I am "running on automatic" without much awareness of what I'm doing. |
| _____ | 8. | I rush through activities without being really attentive to them. |
| _____ | 9. | I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there. |
| _____ | 10. | I do jobs or tasks automatically, without being aware of what I'm doing. |
| _____ | 11. | I find myself listening to someone with one ear, doing something else at the same time. |
| _____ | 12. | I drive places on "automatic pilot" and then wonder why I went there. |
| _____ | 13. | I find myself preoccupied with the future or the past. |
| _____ | 14. | I find myself doing things without paying attention. |
| _____ | 15. | I snack without being aware that I'm eating. |

Manipulation #1: Mortality salience condition

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK HAPPENS TO YOU AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

Manipulation #1: Dental pain condition

The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF DENTAL PAIN AROUSES IN YOU.

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK PHYSICALLY WILL HAPPEN TO YOU AS YOU EXPERIENCE DENTAL PAIN.

Distractor task: PANAS

Same as in Study 1.

Distractor task: Reading passage

Same as in Study 1.

Distractor task: Word search

Same as in Study 1.

Manipulation #2: Self-determined condition

Same as in Study 5a (Pilot study)

Manipulation #2: Controlled condition

Same as in Study 5a (Pilot study)

Dependent measure: Death anxiety

Please read each item and rate how strongly you would agree/disagree with each.

1	2	3	4	5	6	7	8	9	10
<i>Not at all disturbed/anxious</i>								<i>Very disturbed/anxious</i>	

- _____ 1. I feel disturbed or anxious by the social isolation of death
- _____ 2. I feel disturbed or anxious by the shortness of life
- _____ 3. I feel disturbed or anxious by the thought of missing out on so much after you die
- _____ 4. I feel disturbed or anxious by the thought of dying young
- _____ 5. I feel disturbed or anxious by the how it might feel to be dead
- _____ 6. I feel disturbed or anxious by the thought of never thinking or experiencing anything again
- _____ 7. I feel disturbed or anxious by the disintegration of your body after you die
- _____ 8. I feel disturbed or anxious by the physical degeneration involved
- _____ 9. I feel disturbed or anxious by the thought of the pain of dying
- _____ 10. I feel disturbed or anxious by the intellectual degeneration of old age
- _____ 11. I feel disturbed or anxious by the thought that my abilities will be limited as I lay dying
- _____ 12. I feel disturbed or anxious by the uncertainty as to how bravely I will face the process of dying
- _____ 13. I feel disturbed or anxious by my lack of control over the process of dying
- _____ 14. I feel disturbed or anxious by the possibility of dying in a hospital away from friends and family

Demographics measures

Demographic

- 1.) What is your sex? _____ Male _____ Female
- 2.) Age? _____
- 3.) What is your ethnicity?
_____ Hispanic or Latino _____ Not Hispanic or Latino
- 4.) What is your race? (check only one)
- _____ 1. Caucasian/White _____ 4. Asian
_____ 2. African American/Black _____ 5. Native Hawaiian/Pacific Islander
_____ 3. American Indian/Native Alaskan _____ 6. Other (specify): _____
- 5.) Please rate your political orientation:
- 1 2 3 4 5 6 7 8 9 10
Progressive Moderate Conservative
- 6.) How strongly do you identify with your political orientation, indicated above? (circle one)
- 1 2 3 4 5 6 7 8 9 10
Very Weak Moderate Very Strong
- 7.) Please indicate your religious affiliation, if any (please circle one):
1. Christian 5. Jewish
2. Hindu 6. Atheist
3. Buddhist 7. Agnostic
4. Muslim 8. Other: _____
- 8.) Please indicate the strength of your religious/philosophical belief indicated above:
- 1 2 3 4 5 6 7 8 9 10
Very Weak Moderate Very Strong
- 9.) Please indicate the total number of years of education you have completed: _____
(for example: high school graduation is 12yrs., so two years of college is 14yrs.)

Study 6 Materials

Demographics

Instructions: Respond to the questionnaire using the scantron sheet you were given. Please follow the instructions below.

- A. Please bubble your Student Number onto your scantron answer sheet, in the “Identification Number” section.
- B. What is your Birth year? Answer in the “Birthdate” section
- C. What is your Sex? Answer in the “Sex” section.
- D. What is your Ethnic category? Answer in Special Codes column O, using the key below.

1 = African-American 2 = Asian-American 3 = Hispanic
4 = White 5 = Other
- E. What is your Religious affiliation? Answer in Special Codes column P, using the key below.

1=Protestant 2=Catholic 3=Jewish 4=Other 5=Atheist/non-believer

Satisfaction with life measure

Please rate your agreement with each statement right now in your life.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. In most ways, my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. If I could live my life over, I would change almost nothing.
5. So far I have gotten the important things I want in life.

Filler items: PANAS

Below are a number of words that describe different feelings and emotions. Please read each item and then bubble a number to indicate to what extent you feel this way right now in your life. Be sure to *answer the items in the correct numbered order, moving row by row!* Use this scale:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

6. interested	7. irritable	8. distressed	9. alert
10. excited	11. ashamed	12. upset	13. inspired
14. strong	15. nervous	16. guilty	17. determined
18. scared	19. attentive	20. hostile	21. jittery
22. enthusiastic	23. active	24. proud	25. afraid

The PANAS subscales were computed as follows: positive mood (interested, alert, excited, inspired, strong, determined, attentive, enthusiastic, active, proud), negative mood (irritable, distressed, ashamed, upset, nervous, guilty, scared, hostile, jittery, afraid),

Need-satisfaction measure

The last week. Please read each of the following statements carefully, thinking about how it relates to your life during the last week, and then indicate how true it is for you. Use this scale.

1	2	3	4	5
Strongly disagree				Strongly agree

During the last week,...

26. I felt a sense of contact with people who care for me, and whom I care for.
27. I was lonely.
28. I felt close and connected with other people who are important to me.
29. I felt unappreciated by one or more important people.
30. I felt a strong sense of intimacy with the people I spent time with.
31. I had disagreements or conflicts with people I usually get along with.
32. I was successfully completing difficult tasks and projects.
33. I experienced some kind of failure, or was unable to do well at something.

34. I took on and mastered hard challenges.
35. I did something stupid, that made me feel incompetent.
36. I did well even at the hard things.
37. I struggled doing something I should be good at.
38. I was free to do things my own way.
39. I felt a lot of pressures I could do without.
40. My choices expressed my “true self.”
41. There were people telling me what I had to do.
42. I was really doing what interests me.
43. I had to do things against my will.

Filler items: Mindfulness measure

Below is a collection of statements about your everyday experience. Using the 1- 5 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

- | | 1 | 2 | 3 | 4 | 5 |
|-----|---|--------------|-----------|------------|---------------|
| | Almost Never | Infrequently | Sometimes | Frequently | Almost Always |
| 44. | I could be experiencing some emotion and not be conscious of it until some time later. | | | | |
| 45. | I break or spill things because of carelessness, not paying attention, or thinking of something else. | | | | |
| 46. | I find it difficult to stay focused on what’s happening in the present. | | | | |
| 47. | I tend to walk quickly to get where I’m going without paying attention to what I experience along the way. | | | | |
| 48. | I tend not to notice feelings of physical tension or discomfort until they really grab my attention. | | | | |
| 49. | I forget a person’s name almost as soon as I’ve been told it for the first time. | | | | |
| 50. | It seems I am “running on automatic” without much awareness of what I’m doing. | | | | |
| 51. | I rush through activities without being really attentive to them. | | | | |
| 52. | I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there. | | | | |
| 53. | I do jobs or tasks automatically, without being aware of what I’m doing. | | | | |
| 54. | I find myself listening to someone with one ear, doing something else at the same time. | | | | |
| 55. | I drive places on “automatic pilot” and then wonder why I went there. | | | | |
| 56. | I find myself preoccupied with the future or the past. | | | | |
| 57. | I find myself doing things without paying attention. | | | | |
| 58. | I snack without being aware that I’m eating. | | | | |

Filler items: Big-5 personality measure

Below are pairs of adjectives. For each pair, rate how it describes you.

1	2	3	4	5
Does <u>not</u> describe my typical behavior				Very <u>well</u> describes my typical behavior
59. Extraverted, enthusiastic				60. Critical, quarrelsome
61. Dependable, self-disciplined				62. Anxious, easily upset
63. Open to new experiences, complex				64. Reserved, quiet
65. Sympathetic, warm				66. Disorganized, careless
67. Calm, emotionally stable				68. Conventional, uncreative

Death-thought accessibility

Please complete the following by filling letters in the blanks to create words. Please fill in the blanks with the first word that comes to mind. Write one letter per blank. Some words may be plural.

- | | | |
|---------------|---------------|----------------|
| 1. PA _ _ | 6. M _ R _ ER | 11. P _ _ TURE |
| 2. COFF _ _ | 7. FO _ _ | 12. GRA _ E |
| 3. FL _ W _ R | 8. B _ D | 13. CL _ _ K |
| 4. KI _ _ ED | 9. CAR _ _ | 14. DE _ _ |
| 5. TEA _ _ | 10. SK _ _ L | 15. WAT _ _ |

Study 7 Materials

All Study 6 measures were the same as in Study 5, except a) mindfulness was not included, and b) the Satisfaction with Life measure was replaced with the below Happiness measure.

Happiness measure

Please rate your agreement with each statement right now in your life.

1. In my life right now, I consider myself:

1	2	3	4	5
not a very happy person				a very happy person

2. Compared to most of my peers, I consider myself:

1	2	3	4	5
less happy		equally happy		more happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you, right now?

1	2	3	4	5
not at all				a great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you, right now in your life?

1	2	3	4	5
not at all				a great deal

Supplemental Method Info & Ancillary Analyses

Study 1 supplemental analyses

Supplemental: Examining the unique role of each need. To more specifically examine the role of each need in moderating the effect of MS on DTA, the three separate need-satisfaction subscales were entered simultaneously using the same multiple regression procedures described in-text: MS, autonomy, competence, and relatedness were entered in the first step; and the MS*Autonomy, MS*Competence, and MS*Relatedness interaction terms were entered in the second step. This multiple regression model was marginally significant at Step 2, $\Delta F(1, 152) = 2.15$, $\Delta R^2 = .04$, $p = .097$. Further inspection of the Step 2 coefficients revealed neither the MS*Autonomy ($\beta = .06$, $t(152) = .42$, $p = .673$), MS*Competence ($\beta = -.23$, $t(152) = -1.22$, $p = .225$), nor MS*Relatedness ($\beta = -.16$, $t(152) = -1.05$, $p = .297$) interaction term coefficients were significant, indicating that none of the needs were *unique* moderators—each overlapped in their moderating roles, consistent with the idea that self-determined need-satisfaction is often sufficiently analyzed as a composite.

Supplemental: PANAS subscales. A MANOVA found MS had no effect on any of the PANAS subscales. Need-satisfaction was positively correlated with positive mood, happiness, self-assuredness, attentiveness, serenity, and surprise, and negatively correlated with negative mood, fear, hostility, guilt, sadness, fatigue, and shyness. Multiple regression methods found no significant Need-satisfaction x MS interactions on any of the PANAS subscales (see *Table S3*).

Because need-satisfaction was correlated with all of the PANAS subscales, we regressed DTA on the Need-satisfaction x MS interaction while also controlling for all the PANAS subscales as competing moderators. While controlling for the 13 PANAS subscales, need-satisfaction was no longer a unique moderator of the MS effect on DTA, whereas guilt and happiness emerged as uniquely significant moderators (see *Table S4*). Therefore, we tested for

the possible conditional indirect effects via Guilt and via Happiness using model 15 (see *Figure S1*) of the PROCESS statistical macro package for SPSS (Hayes, 2022) with 5000 bootstrapped resamples to estimate the various path coefficients. The model indicated that Need-satisfaction, Guilt, and Happiness indeed shared at least some overlapping variance as moderators of the MS effect in the model—all three interaction terms a_3 , b_3 , and c_3 became not-significant when entered simultaneously (see *Table S5*). However, Need-satisfaction did not have significant indirect effects through Guilt and/or Happiness in either the MS or control (sad prime) conditions. Thus, there was no evidence that the role of Need-satisfaction was mediated by Guilt or Happiness in the interaction.

Study 2 supplemental analyses

Supplemental: Need-satisfaction and DTA. The descriptive statistics and correlation matrix for the target measures are presented in Table S6. Zero-order correlations found that mean death-related word RTs were not related to the need-satisfaction composite ($r = .07, p = .29$), nor the autonomy ($r = .03, p = .71$), competence ($r = .06, p = .36$), and relatedness ($r = .08, p = .22$) subscales. Similarly, a multiple regression model simultaneously regressing death-related word RTs on the autonomy, competence, and relatedness subscales was not significant ($F(3, 212) = .57, R^2 = .008, p = .64$), and further inspection of coefficients suggested death-related word RTs were not associated with the autonomy ($\beta = .03, t(212) = .34, p = .74$), competence ($\beta = -.04, t(212) = -.41, p = .68$), nor relatedness ($\beta = .08, t(212) = .91, p = .36$) subscales.

Supplemental: Need-satisfaction x MS interaction on non-word RTs. Multiple regression methods were used to examine the Need-satisfaction x MS interaction on non-word RTs. Need-satisfaction and MS were entered in the first step and the interaction term in the second. There was no main effect of MS ($t(213) = -1.41, p = .16$), no association between need-satisfaction and non-word RTs ($\beta = -.05, t(213) = -.77, p = .445$), and there was no interaction, $\Delta F(1, 211) = .80, \Delta R^2 = .004, p = .37$.

Supplemental: Need-satisfaction x MS interaction on neutral word RTs. Methods described above were used to examine the Need-satisfaction x MS interaction on neutral word RTs. There was no main effect of MS ($t(212) = 1.61, p = .11$), and no association between need-satisfaction and neutral word RTs ($\beta = -.04, t(212) = -.53, p = .60$). However, there was an interaction, $\Delta F(1, 210) = 6.39, \Delta R^2 = .03, p = .012$.

The nature of the interaction was explored by examining the MS effect when adjusting the Need-satisfaction scores ± 1 SD, and examining the Need-satisfaction slope in the MS and

field condition; adjusted estimated mean RTs are reported in *Table S7*. Among those with lower (-1SD) Need-satisfaction scores, the field (vs death) prime was related to slower neutral word RTs ($\beta = .29, t(210) = 3.06, p = .003$). In contrast, among those with higher (+1SD) Need-satisfaction scores, MS was not associated with neutral word RTs ($\beta = .06, t(210) = .06, p = .53$). From another perspective: in the field prime condition, Need-satisfaction was negatively associated with neutral word RTs, $\beta = -.25, t(210) = -2.34, p = .02$; and in the MS condition, Need-satisfaction was not associated with neutral word RTs, $\beta = .10, t(210) = 1.14, p = .26$.

Supplemental: Need-satisfaction x MS interaction on negative word RTs. Using the above methods, there was no main effect of MS ($t(212) = -.51, p = .61$), and no association between need-satisfaction and negative word RTs ($\beta = .06, t(212) = .89, p = .37$). However, there was an interaction, $\Delta F(1, 210) = 4.98, \Delta R^2 = .02, p = .027$.

Among those with lower (-1SD) Need-satisfaction scores, the field (vs death) prime was not related to negative word RTs ($\beta = -.12, t(210) = 1.20, p = .23$). In contrast, among those with higher (+1SD) Need-satisfaction scores, MS was associated with slower negative word RTs ($\beta = .19, t(210) = 1.99, p = .048$). From another perspective: in the field prime condition, Need-satisfaction was not associated with negative word RTs, $\beta = -.12, t(210) = -1.12, p = .27$; and in the MS condition, Need-satisfaction was positively associated with negative word RTs, $\beta = .19, t(210) = 2.15, p = .033$.

Supplemental: Need-satisfaction x MS interaction on death word RTs while covarying non-word, neutral word, and negative word RTs. As in the main text, multiple regression methods were used to examine the Need-satisfaction x MS interaction on death word RTs. However, we also controlled for non-word, neutral word, and negative word RTs by entering those three RTs in the first step; need-satisfaction and MS were entered in the second

step; and the Need-satisfaction x MS interaction term was entered in the third. Again, the multiple regression model detected an interaction, $\Delta F(1, 207) = 3.66$, $\Delta R^2 = .01$, $p = .057$.

Among those with lower (-1SD) Need-satisfaction scores, MS (vs field primes) led to faster death-related word RTs ($\beta = -.16$, $t(207) = -2.09$, $p = .038$). In contrast, among those with higher (+1SD) Need-satisfaction scores, MS did not impact death-related word RTs ($\beta = .05$, $t(207) = .65$, $p = .51$). From another perspective: in the field prime condition, Need-satisfaction was unrelated to death-related word RTs, $\beta = -.03$, $t(207) = -.33$, $p = .75$; and in the MS condition, Need-satisfaction was positively associated with death-related word RTs, $\beta = .18$, $t(207) = 2.61$, $p = .01$.

Supplemental: Examining the unique role of each need. To more specifically examine the uniqueness of each need in moderating the effect of MS on DTA, the three separate need-satisfaction subscales were entered simultaneously using the same multiple regression procedures described above: MS, autonomy, competence, and relatedness were entered in the first step; and the MS*Autonomy, MS*Competence, and MS*Relatedness interaction terms were entered in the second step. This multiple regression model was significant at Step 2, $\Delta F(1, 208) = 2.79$, $\Delta R^2 = .04$, $p = .04$. Further inspection of the Step 2 coefficients revealed the MS*Autonomy interaction term had a unique effect ($\beta = .25$, $t(208) = 1.83$, $p = .068$), whereas neither the MS*Competence ($\beta = .03$, $t(208) = .21$, $p = .83$) nor the MS*Relatedness ($\beta = .06$, $t(208) = .39$, $p = .70$) interaction term coefficients were significant.

Study 3a essay prime pilot test method and results

Method

Participants

A total of 72 participants were recruited via a psychology department research exposure program and compensated with partial course credit (for demographic characteristics, see *Table SI*). All participants completed all the materials described below; no data were excluded.

Materials and procedure

Filler items: Behavioral inhibition/activation scale. Participants first completed the 20-item Behavioral Inhibition/Activation Scale (Carver & White, 1994), using a 6-point Likert-type scale (1 = *Not at all*, 6 = *Very*). A set of 7 items measured behavioral inhibition orientation ($\alpha = .76$) and 13 items measured behavioral activation ($\alpha = .74$). Relative behavioral activation was computed by subtracting the mean behavioral inhibition score from the mean behavioral activation score such that higher scores indicated stronger relative behavioral activation.

Filler items: Aspirations index. Participants completed the 35-item Aspirations Index (Kasser & Ryan, 1996), which used 5 items each to assess the importance of three extrinsic goals (wealth, fame, and image; $\alpha = .89$) and three intrinsic goals (personal growth, positive relationships, and contributing to one's community; $\alpha = .80$). The importance of each item was measured using a 6-point Likert-type scale (1 = *Not at all*, 6 = *Very*). Relative intrinsic goal orientation was computed by subtracting the mean importance of extrinsic goals from the mean importance of intrinsic goals such that higher scores indicated stronger relative intrinsic goal orientation.

Self-determination manipulation. Similar to previous research (Vail et al., 2020), participants were randomly assigned to complete one of three versions of a "Projective Life

Attitudes Assessment.” In the *self-determined condition*, participants responded to the prompt, “Please briefly describe a time when you felt ‘self-determined,’ meaning a time in which you felt you were doing things or acting a certain way simply because you wanted to; not because of any outside pressure.” The *controlled condition* used a parallel prompt, but instead asked participants to, “Please briefly describe a time when you felt ‘controlled,’ meaning a time in which you felt you were doing things or acting a certain way simply because of some outside pressure; not because you wanted to.” The *neutral condition* asked participants to, “Please briefly describe a time when you felt “ordinary,” meaning a time in which you felt you were doing things or acting like you usually or typically do.”

Need-satisfaction. As in Studies 1 and 2, need-satisfaction was assessed using a 21-item measure (Gagné, 2003; Kasser et al., 2014) with a 6-point Likert-type scale (1 = *Strongly disagree*, 6 = *Strongly agree*). An overall composite mean score was computed ($\alpha = .88$), as were subscale means for autonomy ($\alpha = .63$), competence ($\alpha = .79$), and relatedness ($\alpha = .88$).

Self-esteem. Participants completed 3 custom self-esteem items: “I am a valuable person”; “I have many positive qualities”; and “I have a brighter future than the average student.” Participants also completed the 10-item Rosenberg self-esteem scale (Rosenberg, 1965) ($\alpha = .92$) using a 6-point Likert-type scale (1 = *Strongly disagree*, 6 = *Strongly agree*); reverse phrased items were reverse coded, and the mean score calculated such that higher scores indicated greater self-esteem.

Exploration orientation. A measure of exploration orientation (Green & Campbell, 2000) consisted of 18 Likert-type items (1 = *Strongly disagree*, 6 = *Strongly agree*) including statements such as “I would enjoy being introduced to new people,” “I would pick up a book on an interesting topic and read some of it,” and “I would like to explore the ideas of foreign

cultures.” The 18 items formed a reliable index ($\alpha = .81$), so an overall mean item score was calculated such that higher scores indicated greater exploration motivation.

Results

Target analyses: Need satisfaction composite and subscales. One-way ANOVAs revealed no effect of condition (prime task: self-determined vs. controlling vs. neutral) on composite need satisfaction ($F(2, 69) = 1.21, \eta_p^2 = .03, p = .304$), the relatedness subscale ($F(2, 69) = 2.06, \eta_p^2 = .06, p = .135$), nor the competence subscale ($F(2, 69) = .27, \eta_p^2 = .008, p = .764$), though there was an effect on the autonomy subscale ($F(2, 69) = 6.33, \eta_p^2 = .16, p = .003$).

Pairwise comparisons revealed felt autonomy was highest in the self-determined condition ($M = 4.52, SD = .62$) compared to both the controlled condition ($M = 3.91, SD = .64$) ($t(49) = 3.32, p = .001, d = .98$ [95%CI = .38, 1.55]) and the neutral condition ($M = 3.99, SD = .71$) ($t(45) = 2.77, p = .007, d = .81$ [95%CI = .19, 1.39]), and that felt autonomy in the controlled and neutral conditions were not significantly different ($t(47) = -.42, p = .672, d = -.12$ [95%CI = -.69, .45]).

Supplemental: Self-esteem. One-way ANOVAs revealed no effect of condition on the self-esteem (value) item ($F(2, 69) = .81, \eta_p^2 = .02, p = .448$), the self-esteem (positive qualities) item ($F(2, 69) = .31, \eta_p^2 = .009, p = .732$), the self-esteem (bright future) item ($F(2, 69) = .01, \eta_p^2 = .001, p = .987$), nor the Rosenberg self-esteem scale ($F(2, 69) = 1.73, \eta_p^2 = .05, p = .185$).

Supplemental: Exploration orientation scale. A one-way ANOVA revealed no effect of condition on exploration orientation ($F(2, 69) = 1.93, \eta_p^2 = .05, p = .154$).

Study 3b supplemental analyses

Supplemental: Affect. MANOVA methods were used to examine the 2 (MS vs neutral) x 2 (salience: autonomy vs controlled) interaction on the PANAS subscales. However, there was no significant main effect of MS nor autonomy prime nor interaction (see Table S8 for details).

Study 4a supplemental analyses

Supplemental: Examining the unique role of each need. Further exploring the roles of each need, zero-order correlations showed that death anxiety was negatively related to autonomy ($r = -.16, p = .006$) and competence ($r = -.13, p = .023$) and not significantly related to relatedness ($r = -.09, p = .12$). Additionally, a multiple regression model simultaneously regressed death anxiety on the autonomy, competence, and relatedness subscales. The overall model was significant ($F(3, 297) = 2.96, R^2 = .03, p = .03$), and further inspection of coefficients suggested death anxiety was negatively associated with autonomy ($\beta = -.13, t = -1.87, p = .06$) but not competence ($\beta = -.07, t = -1.02, p = .31$) or relatedness ($\beta = .01, t = .15, p = .88$).

Supplemental: Ideological dogmatism. Need-satisfaction was not correlated with dogmatism ($r = -.05, p = .37$), nor was dogmatism correlated with death anxiety ($r = -.08, p = .18$). A multiple regression model simultaneously regressed death anxiety on both need-satisfaction and ideological dogmatism. The overall model was significant ($F(2, 298) = 4.39, R^2 = .03, p = .01$), and coefficients suggested death anxiety was uniquely negatively associated with need-satisfaction ($\beta = -.15, t = -2.64, p = .009$) but not dogmatism ($\beta = -.09, t = -1.48, p = .14$).

Study 4b supplemental analyses

Supplemental: Examining the unique role of each need. Further exploring the roles of each need, zero-order correlations showed that death anxiety was negatively related to autonomy and competence and not significantly related to relatedness (*see Table S9*). A multiple regression model ($F(3, 1844) = 5.51, R^2 = .009, p = .001$) found death anxiety was associated negatively with autonomy ($\beta = -.09, t = -2.84, p = .005$), positively with relatedness ($\beta = .07, t = 2.25, p = .02$) and not associated with competence ($\beta = -.04, t = -1.29, p = .20$).

Supplemental: Self-esteem and growth orientation. Need-satisfaction was correlated with self-esteem ($r = .53, p < .001$), which was negatively correlated with death anxiety ($r = -.10, p < .001$). Need-satisfaction was also correlated with growth orientation ($r = .41, p < .001$), which was negatively correlated with death anxiety ($r = -.04, p = .062$).

Therefore, we tested for the possible indirect effects via self-esteem and/or growth orientation using model 4 (*see Figure S2*) of the PROCESS statistical macro package for SPSS (Hayes, 2022) with 5000 bootstrapped resamples to estimate the various path coefficients. The negative association between need-satisfaction and death anxiety was mediated through self-esteem but not growth orientation (*see Table S10*). (Because the data were correlational, we also checked for the reverse mediation pattern, but the relationship between self-esteem and death anxiety was *not* mediated via need-satisfaction and/or growth orientation.) Thus, need-satisfaction was negatively associated with death anxiety because need-satisfaction was associated with self-esteem which was in turn associated with reduced death anxiety.

Study 5a sentence prime pilot test method and results

Method

Participants

A total of 58 participants were recruited via a psychology department research exposure program and compensated with partial course credit. All participants completed all the materials described below; no data were excluded.

Materials and procedure

Filler items: Behavioral inhibition/activation scale. Behavioral Inhibition/Activation Scale (Carver & White, 1994) was measured as in Pilot Study 3a, with relative behavioral activation computed by subtracting the mean behavioral inhibition orientation items ($\alpha = .83$) scores from the mean behavioral activation item ($\alpha = .85$) scores such that higher scores indicated stronger relative behavioral activation.

Filler items: Aspirations index. The Aspirations Index (Kasser & Ryan, 1996) was measured as in Pilot Study 3a, with relative intrinsic goal orientation computed by subtracting the mean importance of extrinsic goals ($\alpha = .88$) from the mean importance of intrinsic goals ($\alpha = .83$) such that higher scores indicated stronger relative intrinsic goal orientation.

Self-determination manipulation. Following previously validated methods (Hodgins et al., 2006, 2007; Levesque & Pelletier, 2003; Vail et al., 2020), we used a scrambled sentence priming task to prime the concept of either being self-determined, being controlled, or neither (a neutral condition). The task consisted of 30 items in which participants were given a set of five scrambled words and instructed to drop an extraneous word from each to form a grammatical four-word sentence. Fifteen neutral sentences were constant across conditions, and fifteen were prime sentences which differed by condition. The self-determined prime condition included

sentences such as: “to go and I decided” (I decided to go); “in we autonomous often are” (we are often autonomous); and “am I still for self-determined” (I am still self-determined). The controlled prime condition included sentences such as: “do we to this must” (we must do this); “was obey we’re compelled to” (we’re compelled to obey); and “so behavior my they restrict” (they restrict my behavior). The neutral prime condition included sentences such as: “sale for by sweatshirts are” (sweatshirts are for sale).

Need-satisfaction. As in Pilot Study 3a, participants next completed a 21-item measure of need-satisfaction (Gagné, 2003; Kasser et al., 2014). An overall composite mean score was computed ($\alpha = .89$), as were subscale means for autonomy ($\alpha = .74$), competence ($\alpha = .79$), and relatedness ($\alpha = .85$).

Self-esteem. As in Pilot Study 3a, participants again completed the 3 custom self-esteem items and the 10-item Rosenberg self-esteem scale (Rosenberg, 1965) ($\alpha = .93$).

Exploration orientation. Lastly, as in Pilot Study 3a, participants completed a measure of exploration orientation (Green & Campbell, 2000) ($\alpha = .86$).

Results

Target analyses: Need satisfaction composite and subscales. One-way ANOVAs revealed no effect of condition (prompt: self-determined vs. controlling vs. neutral) on composite need satisfaction ($F(2, 55) = 2.65$, $\eta_p^2 = .09$, $p = .079$), the relatedness subscale ($F(2, 55) = 1.17$, $\eta_p^2 = .04$, $p = .318$), or the competence subscale ($F(2, 55) = 1.22$, $\eta_p^2 = .04$, $p = .303$), though there was an effect on the autonomy subscale ($F(2, 55) = 4.16$, $\eta_p^2 = .13$, $p = .021$).

Pairwise comparisons revealed felt autonomy was highest in the self-determined condition ($M = 4.63$, $SD = .71$) compared to both the controlled condition ($M = 3.92$, $SD = .69$) ($t(37) = 2.73$, $p = .009$, $d = 1.01$ [95%CI = .31, 1.66]) and the neutral condition ($M = 4.05$, $SD =$

.96) ($t(37) = 2.24, p = .029, d = .68$ [95%CI = .02, 1.32]), and that felt autonomy in the controlled and neutral conditions were not significantly different ($t(39) = .50, p = .618, d = -.15$ [95%CI = -.77, .47]).

Supplemental: Self-esteem. One-way ANOVAs revealed no effect of condition on the self-esteem (value) item ($F(2, 55) = 1.46, \eta_p^2 = .05, p = .241$), the self-esteem (positive qualities) item ($F(2, 55) = 2.47, \eta_p^2 = .08, p = .094$), the self-esteem (bright future) item ($F(2, 55) = 1.83, \eta_p^2 = .06, p = .170$), nor the Rosenberg self-esteem scale ($F(2, 55) = 2.34, \eta_p^2 = .08, p = .106$).

Supplemental: Exploration orientation scale. A one-way ANOVA revealed no effect of condition on exploration orientation ($F(2, 55) = 1.11, \eta_p^2 = .04, p = .337$).

Study 5b supplemental analyses

Supplemental: PANAS. MANOVA methods found that MS (vs. pain) had no effect on most of the PANAS subscales but did increase sadness (see Table S11). Thus, ANCOVA methods were used to examine the 2 (MS vs dental pain) x 2 (salience: autonomy vs controlled) interaction on death anxiety while controlling for sadness. The pattern of results were unaltered from that reported in main text. There was no main effect of self-determination prime ($F(1, 114) = 1.67, p = .199, \eta_p^2 = .01$), though there was a main effect of MS ($F(1, 114) = 6.32, p = .013, \eta_p^2 = .05$) such that death anxiety was higher in the MS ($M = 6.67, SD = 1.90$) than the pain ($M = 5.91, SD = 1.48$) condition. However, that main effect was qualified by a significant interaction, $F(1, 114) = 3.53, p = .063, \eta_p^2 = .03$.

The nature of the interaction was further examined using pairwise comparisons. In the controlled prime condition, death anxiety was higher in the MS condition than the pain condition ($t(58) = 3.15, p = .002, d = .90$ [95%CI = .36, 1.42]). In the autonomy prime condition, death anxiety did not statistically differ between the MS and pain condition ($t(57) = .47, p = .64, d = .07$ [95%CI = -.44, .58]). From another perspective: when reminded of dental pain, death anxiety did not statistically differ between the controlled and autonomy condition ($t(57) = -.42, p = .68, d = -.13$ [95%CI = -.64, .38]). But when reminded of death, death anxiety was higher in the controlled condition than the autonomy condition ($t(58) = 2.25, p = .027, d = .55$ [95%CI = .03, 1.06]).

Supplemental: Mindfulness. Mindfulness was not correlated with death anxiety ($r = -.08, p = .40$). Multiple regression examined the 2-way Mindfulness*MS and Mindfulness*Self-determination interactions, and the 3-way Mindfulness*MS*Self-determination interaction. The Mindfulness measure was centered, and Mindfulness, MS manipulation, and Self-determination

manipulation terms were entered in Step 1; the 2-way Mindfulness*MS, Mindfulness*Self-determination, and MS*Self-determination interactions terms were entered in Step 2; and the 3-way Mindfulness*MS*Self-determination interaction term was entered in Step 3. This multiple regression model was not significant at Step 3, $\Delta F(1, 111) = .03$, $\Delta R^2 < .001$, $p = .855$, indicating there was no significant Mindfulness*MS*Self-determination interaction. The model was also not significant at Step 2, $\Delta F(1, 112) = 1.38$, $\Delta R^2 = .03$, $p = .25$, and an inspection of the coefficients for the 2-way interaction terms found the Mindfulness*MS interaction term was not significant ($\beta = -.12$, $t(112) = -.70$, $p = .485$) and the Mindfulness*Self-determination interaction term was not significant ($\beta = -.02$, $t(112) = -.14$, $p = .891$).

We further explored the possible effects in the controlled prime condition (given the self-determined prime attenuated the effect). Mindfulness was again not correlated with death anxiety ($r = -.13$, $p = .33$), and the Mindfulness*MS interaction model was not significant $\Delta F(1, 56) = .55$, $\Delta R^2 = .01$, $p = .46$. Because these were exploratory/unplanned analyses, an interaction pattern may have been emerging in the data yet not been statistically detected due to low power, so we further examined the slopes and pairwise analyses. Among those with lower (-1SD) mindfulness, MS was associated with greater death anxiety ($\beta = .51$, $t(56) = 2.80$, $p = .007$). In contrast, among those with higher (+1SD) mindfulness, MS was only marginally associated with death anxiety ($\beta = .32$, $t(56) = 1.85$, $p = .069$). From another perspective, in the pain condition, mindfulness was not related to death anxiety ($\beta = .07$, $t(56) = .39$, $p = .697$); similarly, in the MS condition, mindfulness was not related to death anxiety ($\beta = -.11$, $t(56) = .68$, $p = .502$).

Study 6 supplemental analyses

Supplemental: Need-satisfaction and DTA. Zero-order correlation found the need-satisfaction composite score was negatively associated with DTA ($r = -.12, p = .052$). Further exploring the roles of each need, zero-order correlations showed DTA was not related to autonomy, but was negatively related to competence and relatedness (*Table S12*). A model simultaneously regressing DTA on the autonomy, competence, and relatedness subscales was not significant ($F(3, 267) = 1.82, R^2 = .02, p = .14$), and further inspection of coefficients suggested DTA was associated with neither autonomy ($\beta = .04, t(267) = .60, p = .55$), competence ($\beta = -.11, t(267) = -1.40, p = .16$), nor relatedness ($\beta = -.08, t(267) = -1.07, p = .28$).

Supplemental: Examining the unique role of each need. To more specifically examine the uniqueness of each need in moderating the effect of DTA on satisfaction with life, the three separate need-satisfaction subscales were entered simultaneously as competing moderators, using the same multiple regression procedures described in prior studies: DTA, autonomy, competence, and relatedness were entered in the first step; and the DTA*Autonomy, DTA*Competence, and DTA*Relatedness interaction terms were entered in the second step.

This multiple regression model detected a significant effect at Step 2, $\Delta F(1, 263) = 3.78, \Delta R^2 = .03, p = .01$. Yet, although Step 2 (adding the interaction terms) was significant, neither the DTA*Autonomy ($\beta = .09, t(263) = 1.54, p = .13$), DTA*Competence ($\beta = .02, t(263) = .32, p = .75$), nor DTA*Relatedness ($\beta = .09, t(263) = 1.38, p = .17$) interaction term coefficients were significant, indicating that there were no *unique* moderators—each overlapped in their moderating roles and accounted for overlapping variance in satisfaction with life, consistent with the idea that self-determined need-satisfaction is often appropriately analyzed as a composite.

Supplemental: PANAS. Need-satisfaction was positively correlated with positive affect and negatively correlated with negative affect (*Table S12*). Thus, to test the uniqueness of the effect of need-satisfaction, positive and negative affect were entered alongside need-satisfaction as competing moderators, using the same multiple regression procedures described above: DTA, need-satisfaction, positive affect, and negative affect were entered in the first step; and the DTA*Need-satisfaction, DTA*PositiveAffect, and DTA*NegativeAffect interaction terms were entered in the second step. This multiple regression model detected a significant effect at Step 2, $\Delta F(1, 263) = 4.98$, $\Delta R^2 = .03$, $p = .002$, and the Step 2 coefficients found the DTA*Need-satisfaction interaction term was significant ($\beta = .16$, $t(263) = 2.49$, $p = .014$), whereas neither the DTA*PositiveAffect ($\beta = .04$, $t(263) = .85$, $p = .398$) nor the DTA*NegativeAffect interaction terms ($\beta = .02$, $t(263) = .36$, $p = .72$) were significant. Thus, need-satisfaction played a unique role, beyond positive and negative affect, in moderating the relationship between DTA and satisfaction with life.

Supplemental: Mindfulness. Need-satisfaction was positively correlated with mindfulness (*Table S12*). Thus, to test the uniqueness of the effect of need-satisfaction, mindfulness was entered alongside need-satisfaction as a competing moderator, using the same procedures described above: DTA, need-satisfaction, and mindfulness were entered in Step 1; and the DTA*Need-satisfaction and DTA*Mindfulness interaction terms were entered in Step 2. This multiple regression model detected a significant effect at Step 2, $\Delta F(1, 264) = 6.09$, $\Delta R^2 = .03$, $p = .003$, and the Step 2 coefficients found the DTA*Need-satisfaction interaction term remained uniquely significant ($\beta = .16$, $t(264) = 2.61$, $p = .010$), whereas the DTA*Mindfulness interaction term was not significant ($\beta = .02$, $t(264) = .26$, $p = .793$). Thus, need-satisfaction

played a unique role, beyond mindfulness, in moderating the relationship between DTA and SWL.

Supplemental: Big-5 personality factors. Need-satisfaction was correlated with all of the Big-5 personality factors: positively with openness, conscientiousness, extraversion, and agreeableness, and negatively correlated with neuroticism (see *Table S12*). Thus, to test the uniqueness of the effect of need-satisfaction, each of the Big-5 domain subscales were entered alongside need-satisfaction as competing moderators, using the procedures described above: DTA, need-satisfaction, openness, conscientiousness, extraversion, agreeableness, and neuroticism were entered in Step 1; and the DTA*Need-satisfaction, DTA*Openness, DTA*Conscientiousness, DTA*Extraversion, DTA*Agreeableness, and DTA*Neuroticism interaction terms were entered in Step 2. This multiple regression model detected a significant effect at Step 2, $\Delta F(1, 253) = 2.60$, $\Delta R^2 = .03$, $p = .018$, and the Step 2 coefficients found the DTA*Need-satisfaction interaction term remained uniquely significant ($\beta = .17$, $t(253) = 3.16$, $p = .002$), whereas the DTA*Openness ($\beta = .01$, $t(253) = .25$, $p = .803$), DTA*Conscientiousness ($\beta = .03$, $t(253) = .61$, $p = .54$), DTA*Extraversion ($\beta = .02$, $t(253) = .31$, $p = .76$), DTA*Agreeableness ($\beta = .05$, $t(253) = .76$, $p = .45$), and DTA*Neuroticism ($\beta = .07$, $t(253) = 1.13$, $p = .26$) interaction terms were not significant. Thus, need-satisfaction played a unique role, beyond any of the Big-5 personality factors, in moderating the relationship between DTA and SWL.

Study 7 supplemental analyses

Supplemental: Need-satisfaction and DTA. Zero-order correlation found that the need-satisfaction composite score was negatively associated with DTA ($r = -.23, p < .001$). Further exploring the roles of each need in that relationship, zero-order correlations showed that DTA was negatively related to autonomy, competence, and relatedness (*Table S13*). Further, a multiple regression model simultaneously regressing DTA on the autonomy, competence, and relatedness subscales was significant ($F(3, 224) = 5.56, R^2 = .07, p = .001$), and inspection of coefficients revealed DTA was negatively associated with competence ($\beta = -.22, t(224) = -3.08, p = .002$), but not the autonomy ($\beta = -.04, t(224) = -.50, p = .52$) nor relatedness ($\beta = -.04, t(224) = -.46, p = .65$) subscales.

Supplemental: Examining the unique role of each need. To more specifically examine the role of each need in moderating the effect of DTA on happiness, the three separate need-satisfaction subscales were entered simultaneously as competing moderators, using the same multiple regression procedures described above: DTA, autonomy, competence, and relatedness were entered in the first step; and the DTA*Autonomy, DTA*Competence, and DTA*Relatedness interaction terms were entered in the second step. This multiple regression model detected a significant effect at Step 2, $\Delta F(1, 220) = 3.10, \Delta R^2 = .02, p = .028$. Yet, although Step 2 (adding the interaction terms) was significant, neither the DTA*Autonomy ($\beta = .12, t(220) = 1.55, p = .12$), DTA*Competence ($\beta = -.09, t(220) = -1.38, p = .17$), nor DTA*Relatedness ($\beta = .10, t(220) = 1.31, p = .19$) interaction term coefficients were significant, again indicating that none of the needs were *unique* moderators—each overlapped in their moderating roles, consistent with the idea that self-determined need-satisfaction is often sufficiently analyzed as a composite.

Supplemental: PANAS. Need-satisfaction was positively correlated with positive affect and negatively correlated with negative affect (*Table S13*). Thus, to test the uniqueness of the effect of need-satisfaction, positive and negative affect were entered alongside need-satisfaction as competing moderators, using the same multiple regression procedures described above: DTA, need-satisfaction, positive affect, and negative affect were entered in the first step; and the DTA*Need-satisfaction, DTA*PositiveAffect, and DTA*NegativeAffect interaction terms were entered in the second step. This multiple regression model detected a marginally significant effect at Step 2, $\Delta F(1, 220) = 2.42$, $\Delta R^2 = .02$, $p = .06$, and the Step 2 coefficients found the DTA*Need-satisfaction interaction term was significant ($\beta = .14$, $t(220) = 1.91$, $p = .05$), whereas neither the DTA*PositiveAffect ($\beta = -.02$, $t(220) = -.40$, $p = .69$) nor the DTA*NegativeAffect interaction terms ($\beta = -.01$, $t(220) = -.03$, $p = .98$) were significant. Thus, need-satisfaction played a unique role, beyond positive and negative affect, in moderating the relationship between DTA and happiness.

Supplemental: Big-5 personality factors. Need-satisfaction was correlated with all of the Big-5 personality factors: positively with openness, conscientiousness, extraversion, and agreeableness, and negatively correlated with neuroticism (*Table S13*). Thus, to test the uniqueness of the effect of need-satisfaction, openness, conscientiousness, extraversion, agreeableness, and neuroticism were entered alongside need-satisfaction as competing moderators, using the procedures described above: DTA, need-satisfaction, openness, conscientiousness, extraversion, agreeableness, and neuroticism were entered in Step 1; and the DTA*Need-satisfaction, DTA*Openness, DTA*Conscientiousness, DTA*Extraversion, DTA*Agreeableness, and DTA*Neuroticism interaction terms were entered in Step 2. This multiple regression model detected a significant effect at Step 2, $\Delta F(1, 213) = 2.65$, $\Delta R^2 = .03$, p

= .01, and the Step 2 coefficients found the DTA*Need-satisfaction interaction term remained uniquely significant ($\beta = .20$, $t(213) = 2.96$, $p = .003$), whereas the DTA*Openness ($\beta = -.02$, $t(213) = -.30$, $p = .76$), DTA*Conscientiousness ($\beta = -.11$, $t(213) = -1.76$, $p = .08$), DTA*Extraversion ($\beta = .08$, $t(213) = 1.36$, $p = .18$), DTA*Agreeableness ($\beta = .13$, $t(213) = .22$, $p = .83$), and DTA*Neuroticism ($\beta = .05$, $t(213) = .79$, $p = .43$) interaction terms were not significant. Thus, need-satisfaction played a unique role, beyond any of the Big-5 personality factors, in moderating the effect of DTA on happiness.

Figures & Tables

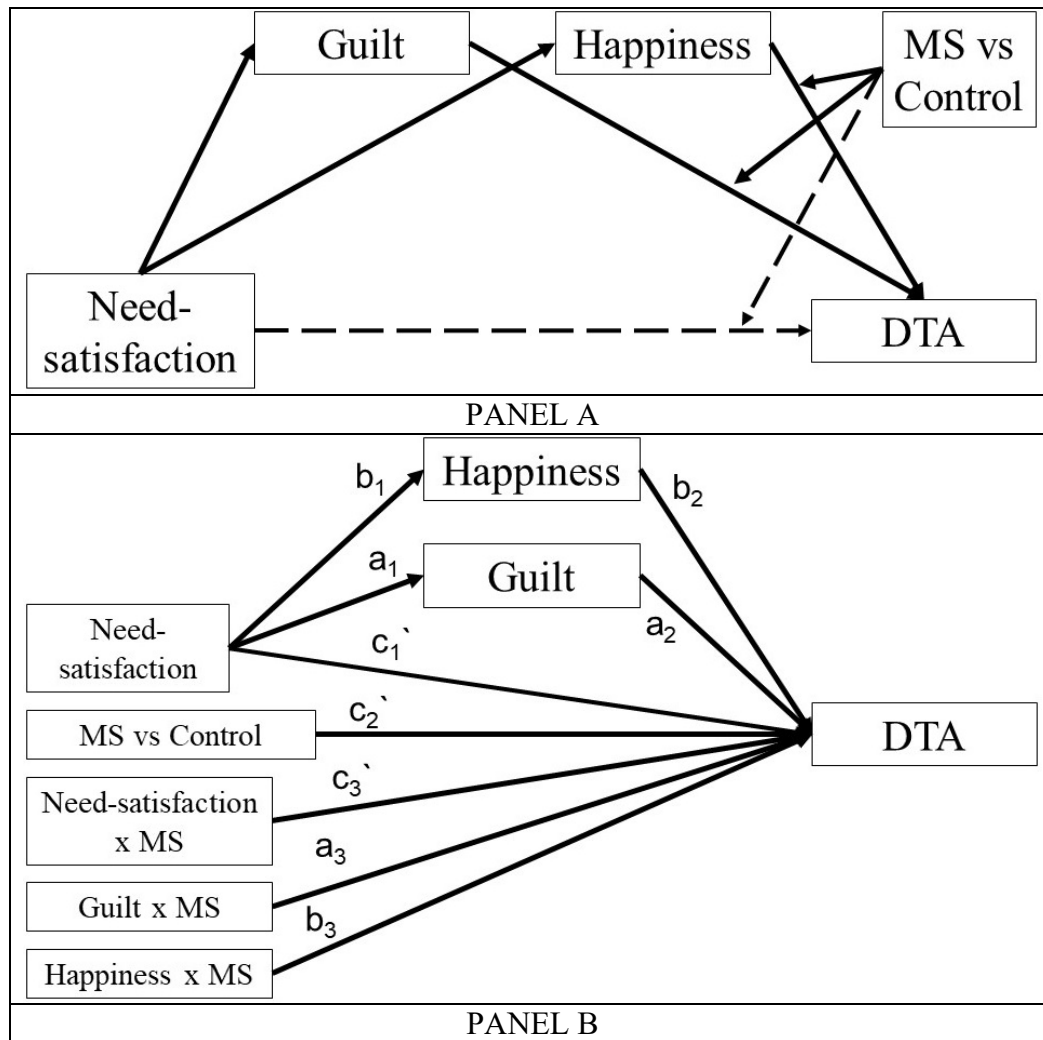


Figure S1. The Study 1 moderated mediation model, which tested whether Guilt and/or Happiness mediated the effect of Need-satisfaction on DTA in the MS and control (sad prime) condition. Panel A depicts the conceptual model and panel B depicts the statistical model (PROCESS model 15). The model found no significant conditional indirect effects (no mediation through Guilt nor Happiness).

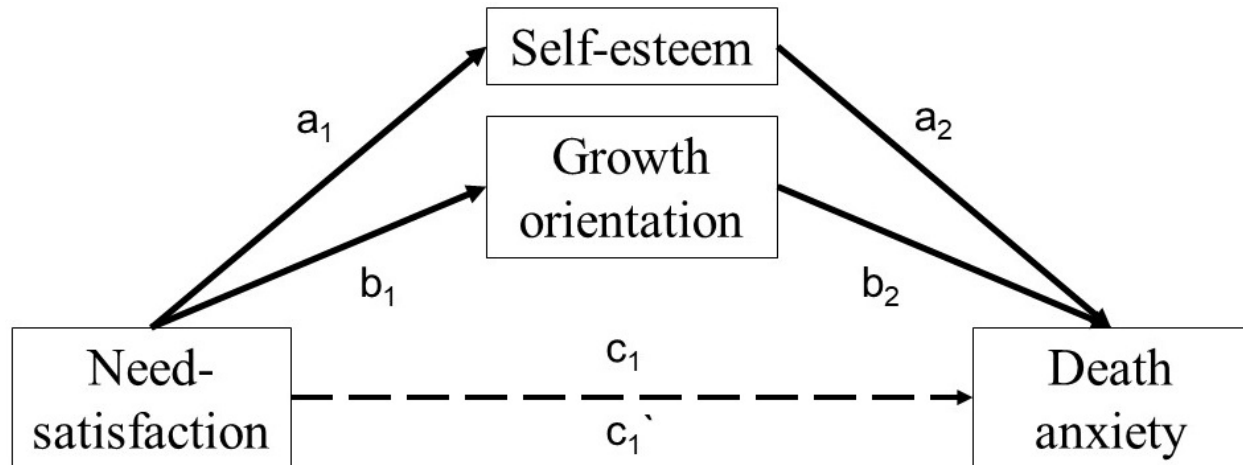


Figure S2. The Study 4b mediation model, which tested whether self-esteem and/or growth orientation mediated the effect of Need-satisfaction on death anxiety. The model found a significant indirect effect through self-esteem but not through growth orientation.

Table S1. Demographic statistics for all studies.

Demographic	Study 1	Study 2	Study 3a (Pilot)	Study 3b (Primary)	Study 4a	Study 4b	Study 5a (Pilot)	Study 5b (Primary)	Study 6	Study 7
Age	21.38 (14.10)	19.21 (3.27)	21.04 (6.77)	19.88 (4.57)	19.57 (1.16)	18.95 (2.42)	20.38 (4.68)	20.39 (4.42)	20.30 (1.32)	20.31 (1.37)
Did not report	1	1	7	8	0	0	7	6	9	20
Sex										
Male	49	56	7	42	64	515	16	28	104	96
Female	111	158	51	146	237	1309	56	91	161	132
Other	N/A	N/A	N/A	N/A	N/A	24	N/A	N/A	N/A	N/A
Did not report	0	2	0	0	0	0	0	0	6	0
Ethnicity										
Hispanic or Latino	14	11	3	13	N/A	581	5	8	N/A	N/A
Non-Hispanic or Latino	145	200	55	174	N/A	1264	67	107	N/A	N/A
Did not report	1	5	0	1	N/A	3	0	4	N/A	N/A
Race										
Caucasian	108	136	37	112	252	1316	49	73	225	177
African American	29	48	9	48	23	61	13	26	26	14
Native American/Native Alaskan	1	1	1	1	3	24	0	0	N/A	N/A
Asian	9	10	4	8	12	142	4	5	6	8
Native Hawaiian/Pacific Islander	1	0	0	0	2	2	1	0	N/A	N/A
Other	12	19	7	17	9	292	4	11	5	6
Did not report	0	2	0	2	0	11	1	4	5	19
Religion										
Christian	94	128	37	107	226	N/A	46	81	133	111
Muslim	5	4	2	13	1	N/A	7	1	N/A	N/A
Jewish	2	2	1	2	11	N/A	0	4	4	4
Buddhist	0	2	0	1	4	N/A	0	2	N/A	N/A
Hindu	2	11	0	4	2	N/A	1	0	N/A	N/A
Atheist	7	19	5	12	7	N/A	4	9	31	24
Spiritual	16	24	N/A	23	N/A	N/A	N/A	N/A	N/A	N/A
Agnostic	24	21	3	18	28	N/A	8	8	N/A	N/A
Other	9	4	10	6	13	N/A	5	10	100	72
Did not report	1	1	0	2	9	N/A	1	4	3	17
Political orientation	4.80 (2.25)	4.77 (2.05)	5.52 (2.66)	4.78 (2.02)	4.96 (2.16)	4.26 (1.84)	5.03 (2.06)	4.88 (2.12)	N/A	N/A
Did not report	0	1	2	3	0	2	0	3	N/A	N/A
Years of education	13.17 (2.01)	12.82 (1.54)	13.35 (1.09)	13.03 (1.42)	N/A	N/A	13.33 (1.28)	13.27 (1.55)	N/A	N/A

Note. Sums and means are presented with standard deviations following means in parentheses. N/A = not asked. Political orientation (1 = progressive, 10 = conservative).

Table S2. Word frequency (per million) and character length by word type.

Neutral words									Negative words			Death words		
Word	Length	Frequency	Word	Length	Frequency	Word	Length	Frequency	Word	Length	Frequency	Word	Length	Frequency
express	7	20891	chair	5	46366	automobile	10	5488	punish	6	4039	buried	6	15532
tea	3	26082	picture	7	64053	water	5	220809	wrong	5	93754	grave	5	11389
doormat	7	259	wall	4	84387	bottle	6	21484	fail	4	16399	skull	5	7846
baseball	8	37313	quest	5	9017	magnet	6	3333	fight	5	62436	coffin	6	4105
restaurant	10	35239	cat	3	21994	desk	4	30659	suffer	6	14295	dead	4	86641
cloak	5	2735	radio	5	53316	tree	4	44634	jerk	4	3254	killed	6	67921
<i>M</i>							5.78	40,447.72		5	32,362.83		5.33	32,239.00

Table S3. Need-satisfaction and MS effects on the PANAS subscales in Study 1.

	MS main effects				Correlation w/ need- satisfaction	Need-satisfaction x MS Interaction			
	df	<i>F</i>	<i>p</i>	η_p^2		df	ΔF	<i>p</i>	ΔR^2
Positive mood	1, 158	.06	.81	< .001	.53*	1, 156	.67	.41	.003
Negative mood	1, 158	.38	.54	.002	-.47*	1, 156	1.11	.29	.005
Fear	1, 158	1.27	.26	.008	-.40*	1, 156	2.84	.09	.015
Hostility	1, 158	.183	.67	.001	-.35*	1, 156	.10	.75	.001
Guilt	1, 158	.075	.78	< .001	-.46*	1, 156	.07	.79	< .001
Sadness	1, 158	1.24	.27	.008	-.55*	1, 156	.51	.48	.002
Happiness	1, 158	< .001	.99	< .001	.55*	1, 156	.38	.54	.002
Self-assuredness	1, 158	.05	.83	< .001	.39*	1, 156	.94	.33	.005
Attentiveness	1, 158	.64	.43	.004	.39*	1, 156	.59	.44	.003
Serenity	1, 158	.04	.85	< .001	.32*	1, 156	.25	.62	.001
Surprise	1, 158	1.22	.27	.008	.19*	1, 156	.66	.42	.004
Fatigue	1, 158	.12	.73	.001	-.42*	1, 156	.55	.46	.003
Shy	1, 158	.008	.93	< .001	-.40*	1, 156	3.51	.06	.018

Note. * $p < .05$.

Table S4. Multiple regression coefficients predicting DTA in Study 1.

	β	t	p
Step 1			
MS	.15	1.88	.062
Need-satisfaction	-.30	-2.72	.007
Positive mood	.34	1.15	.25
Negative mood	.46	1.39	.17
Fear	-.29	-1.47	.14
Hostility	-.01	-.09	.93
Guilt	.02	.14	.89
Sadness	-.16	-1.10	.27
Happiness	-.19	-1.01	.31
Self-assuredness	-.02	-.12	.90
Attentiveness	-.25	-1.64	.10
Serenity	.18	1.96	.05
Surprise	-.09	-.79	.43
Fatigue	.07	.76	.45
Shy	.01	.14	.89
Step 2			
Need-satisfaction*MS	-.13	-.75	.46
Positive mood*MS	.96	1.87	.07
Negative mood*MS	.94	1.76	.08
Fear*MS	-.57	-1.76	.08
Hostility*MS	-.15	-.59	.56
Guilt*MS	-.65	-2.27	.03
Sadness*MS	.27	.98	.33
Happiness*MS	-.69	-2.04	.04
Self-assuredness*MS	-.17	-.70	.48
Attentiveness*MS	-.43	-1.58	.12
Serenity*MS	-.07	-.38	.71
Surprise*MS	-.11	-.52	.60
Fatigue*MS	-.03	-.19	.85
Shy*MS	.11	.67	.50

Table S5. Moderated mediation process model statistics, Study 1.

Outcome: Guilt		Coefficient (b)	SE	<i>t</i>	<i>p</i>
a ₁	Need-satisfaction	-.32	.05	-6.48	< .001
Outcome: Happiness		Coefficient (b)	SE	<i>t</i>	<i>p</i>
b ₁	Need-satisfaction	.51	.06	8.19	< .001
Outcome: DTA		Coefficient (b)	SE	<i>t</i>	<i>p</i>
	constant	3.29	.14	23.73	< .001
a ₂	Guilt	.20	.19	1.06	.290
b ₂	Happiness	.09	.16	.57	.566
c ₁	Need-satisfaction	-.22	.15	-1.41	.159
c ₂	MS	.45	.20	2.29	.023
a ₃	Guilt x MS interaction	-.14	.27	-.53	.600
b ₃	Happiness x MS interaction	-.41	.22	-1.86	.065
c ₃	Need-satisfaction x MS interaction	-.26	.22	-1.17	.241
Conditional direct effects on DTA		Coefficient	SE	<i>t</i>	<i>p</i>
	Sad condition: Guilt	.20	.19	1.06	.290
	MS condition: Guilt	.06	.20	.28	.782
Conditional direct effects on DTA		Coefficient	SE	<i>t</i>	<i>p</i>
	Sad condition: Happiness	.09	.16	.57	.566
	MS condition: Happiness	-.32	.15	-2.11	.037
Conditional direct effects on DTA		Coefficient	SE	<i>t</i>	<i>p</i>
	Sad condition: Need-satisfaction	-.22	.15	-1.41	.159
	MS condition: Need-satisfaction	-.48	.16	-2.97	.004
Conditional indirect effects on DTA		Coefficient	SE	LLCI	ULCI
	Sad condition: Need-satisfaction via Guilt	-.06	.06	-.179	.068
	MS condition: Need-satisfaction via Guilt	-.02	.07	-.158	.139
Conditional indirect effects on DTA		Coefficient	SE	LLCI	ULCI
	Sad condition: Need-satisfaction via Happiness	.047	.08	-.093	.216
	MS condition: Need-satisfaction via Happiness	-.161	.09	-.330	.006
Index of moderated mediation (Test of equality of conditional indirect effects)		Index	SE	LLCI	ULCI
	Need-satisfaction via Guilt	.046	.10	-.137	.245
Index of moderated mediation (Test of equality of conditional indirect effects)		Index	SE	LLCI	ULCI
	Need-satisfaction via Happiness	-.208	.18	-.450	.011

Note. MS was coded, 0 = sad, 1 = MS; Need-satisfaction, Guilt, and Happiness were centered. LLCI = Lower limit 95% confidence interval; ULCI = Upper limit 95% confidence interval.

Table S6. Descriptive statistics and correlation matrix for Study 2.

	M	SD	2	3	4	5	6	7	8
1 Need-satisfaction (overall)	7.30	1.10	.79*	.85*	.89*	-.05	-.04	.06	.07
2 Autonomy subscale	7.02	1.30		.59*	.51*	-.04	-.04	.06	.03
3 Competence subscale	7.14	1.31			.62*	-.09	-.05	.04	.06
4 Relatedness subscale	7.59	1.30				-.02	-.02	.05	.08
5 Non-words mean RT	627.76	110.14					.67*	.46*	.60*
6 Neutral words mean RT	561.34	83.75						.45*	.56*
7 Negative words mean RT	567.10	115.95							.46*
8 Death words mean RT	573.35	109.33							

Note. * $p < .05$. Items 1-4 scaled 1 = Strongly disagree, 10 = Strongly agree; items 5-8 scaled in ms. RT = reaction times.

Table S7. Adjusted estimated means for the ancillary analyses in Study 2.

	Low (-1SD) Need-satisfaction		High (+1SD) Need-satisfaction	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Non-word RTs				
death prime	618.06	14.01	616.55	14.85
field prime	653.67	16.35	624.71	15.47
Neutral word RTs				
death prime	544.37	10.52	561.20	11.19
field prime	592.37	12.26	550.98	11.60
Negative word RTs				
death prime	550.49	14.67	594.73	15.61
field prime	577.44	17.10	549.97	16.18
Death word RTs, covarying non-word, neutral word, and negative word RTs				
death prime	71.55	40.99	110.62	42.52
field prime	105.73	44.36	99.96	41.65

Table S8. MANOVA of the PANAS subscales in Study 3b.

MS main effects	df	<i>F</i>	<i>p</i>	η_p^2
Negative mood	1, 184	.08	.78	< .001
Positive mood	1, 184	2.03	.16	.01
Autonomy main effects	df	<i>F</i>	<i>p</i>	η_p^2
Negative mood	1, 184	.44	.51	.002
Positive mood	1, 184	.10	.75	.001
Interaction effects	df	<i>F</i>	<i>p</i>	η_p^2
Negative mood	1, 184	3.29	.07	.02
Positive mood	1, 184	.001	.97	< .001

Table S9. Descriptive statistics and correlation matrix for Study 4b.

	M	SD	2	3	4	5	6	7
1 Need-satisfaction (overall)	3.90	.67	.85*	.87*	.83*	-.06*	.53*	.41*
2 Autonomy subscale	3.73	.75		.63*	.55*	-.08*	.40*	.38*
3 Competence subscale	3.84	.84			.57*	-.06*	.55*	.34*
4 Relatedness subscale	4.14	.77				-.01	.38*	.32*
5 Death anxiety	3.95	1.60					-.10*	-.04
6 Self-esteem	5.42	2.06						.22*
7 Growth orientation	5.24	.86						

Note. * $p < .05$. Items 1-4 scaled 1 = Low, 5 = High; item 5 scaled 1 = Low, 7 = High; items 6-7 scaled 1 = Low, 9 = High; item 8 scaled 1 = Low, 6 = High.

Table S10. Mediation process model statistics, Study 4b.

Outcome: Self-esteem		Coefficient (b)	SE	<i>t</i>	<i>p</i>
a ₁	Need-satisfaction	1.63	.06	26.66	< .001
Outcome: Growth orientation		Coefficient (b)	SE	<i>t</i>	<i>p</i>
b ₁	Need-satisfaction	.53	.03	19.20	< .001
Outcome: Death anxiety		Coefficient (b)	SE	<i>t</i>	<i>p</i>
c ₁	Need-satisfaction	-.13	.05	-2.25	.025
Outcome: Death anxiety		Coefficient (b)	SE	<i>t</i>	<i>p</i>
	Constant	4.53	.27	16.94	< .001
a ₂	Self-esteem	-.08	.02	-3.55	< .001
b ₂	Growth orientation	-.05	.05	-1.04	.299
c ₁ '	Need-satisfaction	.02	.07	.33	.74
Indirect effects on death anxiety		Coefficient	SE	LLCI	ULCI
	Need-satisfaction via Self-esteem	-.12	.04	-.19	-.05
	Need-satisfaction via Growth orientation	-.03	.03	-.08	.02
Reverse mediation					
Outcome: Need-satisfaction		Coefficient (b)	SE	<i>t</i>	<i>p</i>
a ₁	Self-esteem	.17	.01	26.66	< .001
Outcome: Growth orientation		Coefficient (b)	SE	<i>t</i>	<i>p</i>
b ₁	Self-esteem	.09	.01	9.56	< .001
Outcome: Death anxiety		Coefficient (b)	SE	<i>t</i>	<i>p</i>
c ₁	Self-esteem	-.07	.02	-4.21	< .001
Outcome: Death anxiety		Coefficient (b)	SE	<i>t</i>	<i>p</i>
	Constant	4.53	.27	16.94	< .001
a ₂	Need-satisfaction	-.03	.07	.33	.74
b ₂	Growth orientation	-.05	.05	-1.04	.299
c ₁ '	Self-esteem	-.08	.02	-3.55	< .001
Indirect effects on death anxiety		Coefficient	SE	LLCI	ULCI
	Self-esteem via Need-satisfaction	.01	.01	-.02	.03
	Self-esteem via Growth orientation	-.01	.01	-.01	.01

Note. LLCI = Lower limit 95% confidence interval; ULCI = Upper limit 95% confidence interval.

Table S11. MANOVA on the PANAS subscales in Study 5b.

MS main effects	df	<i>F</i>	<i>p</i>	η_p^2
Positive mood	1, 115	< .001	.99	< .001
Negative mood	1, 115	1.05	.31	.009
Fear	1, 115	.08	.78	.001
Hostility	1, 115	2.44	.12	.02
Guilt	1, 115	2.43	.12	.02
Sadness	1, 115	4.92	.03	.04
Happiness	1, 115	.08	.77	.001
Self-assuredness	1, 115	.002	.96	< .001
Attentiveness	1, 115	.09	.77	.001
Serenity	1, 115	.02	.89	< .001
Surprise	1, 115	.08	.78	.001
Fatigue	1, 115	.04	.85	< .001
Shy	1, 115	1.63	.20	.01

Table S12. Descriptive statistics and correlation matrix for the measures in Study 6.

	M	SD	Skew (SE)	Kurtosis (SE)	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Satisfaction with life	3.53	.73	-.25 (.15)	-.19 (.30)	.48*	-.50*	.55*	.47*	.50*	.38*	.23*	.37*	.28*	.19*	.23*	-.33*	-.19*
2 Positive affect	3.57	.62	-.30 (.15)	.10 (.30)		-.20*	.48*	.37*	.50*	.36*	.23*	.38*	.31*	.35*	.18*	-.21*	-.24*
3 Negative affect	2.31	.69	.22 (.15)	-.57 (.30)			-.59*	-.54 *	-.50 *	-.41 *	-.45*	-.22*	-.18 *	-.20*	-.31*	.43*	.06
4 Need-satisfaction (overall)	3.50	.58	.01 (.15)	-.35 (.30)				.81*	.84*	.80*	.43*	.22*	.23*	.18*	.21*	-.29 *	-.12*
5 Relatedness subscale	3.68	.73	-.21 (.15)	-.44 (.30)					.52*	.47*	.34*	.18*	.13*	.11	.24*	-.24*	-.11
6 Competence subscale	3.30	.72	-.006 (.15)	-.28 (.30)						.52*	.40*	.21*	.29*	.18*	.20*	-.28*	-.12
7 Autonomy subscale	3.52	.68	.04 (.15)	-.36 (.30)							.31*	.15*	.13*	.15*	.07	-.20*	-.04
8 Mindfulness	3.20	.61	-.006 (.15)	.53 (.30)								.13*	.25*	.13*	.19*	-.35*	-.08
9 Extraversion	3.38	1.00	-.22 (.15)	-.77 (.30)									.13*	.41*	.12*	-.16*	-.08
10 Conscientiousness	3.86	.87	-.65 (.15)	.10 (.30)										.18*	.18*	-.19*	-.15*
11 Openness	3.72	.80	-.65 (.15)	-.08 (.30)											.18*	-.24*	-.01
12 Agreeableness	3.53	.87	-.38 (.15)	-.16 (.30)												-.45*	-.12 *
13 Neuroticism	2.67	.97	.24 (.15)	-.53 (.30)													.09
14 DTA	1.75	1.12	.32 (.15)	.25 (.30)													

Note. DTA = death thought accessibility. * $p < .05$. Items 1-13 scaled 1 = Strongly disagree, 5 = Strongly agree; Item 14 is a sum.

Table S13. Descriptive statistics and correlation matrix for the measures in Study 7.

	M	SD	Skew (SE)	Kurtosis (SE)	2	3	4	5	6	7	8	9	10	11	12	13
1 Happiness	3.60	.82	-.50 (.16)	.005 (.32)	.53*	-.58*	.63*	.51*	.50*	.51*	.49*	.27*	.18*	.30*	-.44*	-.25*
2 Positive affect	3.47	.68	-.22 (.16)	.03 (.32)		-.34*	.45*	.33*	.52*	.25*	.38*	.29*	.29*	.24*	-.33*	-.23*
3 Negative affect	2.37	.73	.15 (.16)	-.55 (.32)			-.61*	-.43*	-.52*	-.51*	-.32*	-.35*	-.21*	-.28*	.36*	.11
4 Need-satisfaction (overall)	3.58	.58	-.25 (.16)	.55 (.32)				.84*	.74*	.82*	.35*	.31*	.14*	.22*	-.36*	-.23*
5 Relatedness subscale	3.80	.76	-.46 (.16)	-.02 (.32)					.43*	.57*	.31*	.26*	.08	.17*	-.23*	-.16*
6 Competence subscale	3.30	.69	.06 (.16)	.08 (.32)						.39*	.26*	.31*	.21*	.23*	-.33*	-.26*
7 Autonomy subscale	3.53	.73	-.15 (.16)	.20 (.32)							.28*	.19*	.05	.14*	-.32*	-.15*
8 Extraversion	3.43	1.00	-.29 (.16)	-.54 (.32)								.11*	.30*	.15*	-.16*	-.16*
9 Conscientiousness	3.81	.87	-.59 (.16)	-.03 (.32)									.07	.19*	-.17*	-.25*
10 Openness	3.78	.77	-.27 (.16)	-.61 (.32)										.26*	-.21*	-.12
11 Agreeableness	3.74	.83	-.59 (.16)	.40 (.32)											-.29*	-.08
12 Neuroticism	2.57	.92	.22 (.16)	-.46 (.32)												.12
13 DTA	1.93	1.21	.52 (.16)	.54 (.32)												

Note. DTA = death thought accessibility. * $p < .05$. Items 1-13 scaled 1 = Strongly disagree, 5 = Strongly agree; Item 14 is a sum.