

ORIGINAL ARTICLE

# *“I can’t decide, and it upsets me”: assessing self-critical cognition, indecision, and hope among young adults*

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## BACKGROUND

Decisional procrastination, or indecision, is the maladaptive postponing of decision-making when faced with conflicts or choices. In the present exploratory study, we examined two factors of a psychological model toward understanding the underpinnings of indecision, namely: self-critical cognition as a predisposition to indecision and decreased hope as a post-decision behavior of indecision. Self-critical cognition is the tendency for self-related thoughts to be critical and defeating. It is hypothesized to predict indecision as self-critical individuals are likely to also doubt their competence at tasks such as decision-making and may, in turn, delay. Decreased hope is hypothesized to be an outcome of indecision as the latter is related to anxiety, worry, and life regret.

## PARTICIPANTS AND PROCEDURE

Participants were 327 undergraduate students from a large Midwestern university (242 women, 82 men;  $M_{\text{age}} = 20.31$

years old). They completed the self-report measures in an online survey and received class credit for participation.

## RESULTS

Using a bootstrap analysis of the indirect effect, the results showed that indecision mediates the relationship between self-critical cognition and decreased hope among emerging adults.

## CONCLUSIONS

Implications for future research and potential interventions to alter the pattern of indecision and to increase hope are discussed. This study moves forward the literature of indecision by examining a new predictor and outcome of indecision.

## KEY WORDS

hope; indecision; decisional procrastination; self-critical thoughts; self-criticism

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## BACKGROUND

For the past three decades, psychologists have explored the causes and consequences of decisional procrastination, most often known as indecision (see Ferrari, 2010; Ferrari, Johnson, & McCown, 1995; Ferrari & Tibbett, 2017). Indecision is defined as the maladaptive postponing of decision-making when faced with conflicts or choices (Harriott, Ferrari, & Dovidio, 1996; Janis & Mann, 1977). Indecisive tendencies were negatively related to self-esteem, competitiveness, confidence at making decisions, and self-efficacy (Beswick, Rothblum, & Mann, 1988; Ferrari, 1994; van Eerden, 2003). Positive correlates with indecision include anxiety, depression, pessimism, fear of failure, perfectionism, and worry (Rassin & Muris, 2005; Rassin, Muris, Franken, Smit, & Wong, 2007; Schwartz, 2004; van Eerden, 2003). Individuals high in indecision report greater levels of life regret and fewer happy memories over their lifetime (Ferrari & Tibbett, 2017; Tibbett & Ferrari, 2018). Additionally, these individuals learn these tendencies early in life from doubts about their self-identity (Tibbett & Ferrari, 2019). Indecision is also associated with issues of self-control and is thus often detrimental to careers and social relationships (Ferrari & Emmons, 1994; Germeijs & de Boeck, 2002; Salomone, 1982).

Indecision seems to be a motivational detriment, such that an individual chooses not to decide, thereby resulting in doing nothing (Ferrari, 2010; Harriott et al., 1996). Indecisive individuals do not appear unable to process information for decision making; if anything, they focus on one portion to such an extent that time runs out (Ferrari & Dovidio, 2000, 2001). Usually when individuals wait between tasks they are taking time to gather necessary resources – informational, mental, or otherwise. Indecisive individuals, however, often spend too much time considering the decision. Decisional delay seems to relieve a person from making an immediate decision, perhaps offering some short-term mood repair (Ferrari, 2010). However, for indecisive individuals, the choice itself makes these individuals anxious. Indecisive individuals seek the immediate mood benefits of not having to make a choice (Harriott et al., 1996). Unfortunately, this strategy often results in more worry, anxiety, and rumination over time (see Ferrari, 2010; Ferrari & Tibbett, 2017).

Rassin (2006) proposed a psychological model of indecisiveness, differentiating between predispositions, perceptions, moderators, and behaviors. Examples of factors predisposing to indecision include perfectionism and intolerance of uncertainty. Following Germeijs and de Boeck's (2003) three-factor model of career indecision, Rassin includes lack of information, valuation problems, and outcome uncertainty as perceptions leading to indecision. Moderators include time pressure and importance of the decision. A person's indecisive behaviors are organized by delay (e.g., procrastination, avoidance, and information

search), tunneling (e.g., narrowed search and tunnel vision), and post-decision behaviors (e.g., worrying, checking, decision instability). This model integrated the literature on indecision but, as the author noted, was incomplete. In the current exploratory study, we suggest two additions to Rassin's model. First, we suggest that self-critical cognition be added as a predisposition to indecision. Second, we suggest a decrease in hope as a post-decision behavior.

Self-critical cognition is the tendency for self-related thoughts to be critical and defeating (Ishiyama & Munson, 1993). Negative thoughts about the self are negatively correlated with self-esteem and positively correlated with depression, social avoidance and distress, and fear of negative evaluation (Ishiyama & Munson, 1993). Indecision is similar to concepts related to self-critical cognition, such as self-defeating behaviors, greater self-discrepancies of actual-ought selves, and lower decisional self-confidence (Effert & Ferrari, 1989; Ferrari, 1994; Orellana-Damacela, Tinsdale, & Suarez-Balcazar, 2000). Thus, we suggest that a tendency for self-critical cognition may be associated with indecision; individuals with more negative self-related thoughts are likely to also doubt their competence at tasks such as decision-making and may, in turn, delay. Self-critical cognition is viewed as a personality trait and a tendency and may therefore fit well as a predisposition within Rassin's (2006) model of indecisiveness.

Hope may be defined as an emotion with various dimensions, including mastery and survival (Scioli & Biller, 2009; Scioli, Ricci, Nyugen, & Scioli, 2011). *Mastery hope* represents an individual's "will to hope", trust in others' support, sense of empowerment, and faith in the future (Scioli et al., 2011, p. 81). *Survival hope* speaks to individuals challenging fear, loss, pain, and immortality; hope is not paralyzed in the face of anxiety but is able to self-regulate and trusts in a widened perspective of reality (Scioli et al., 2011). Individuals can experience and obtain hope in these two distinct ways (Scioli & Biller, 2009).

Scioli and Biller (2009) argue that hope is crucial in an anxiety-filled society and world and we should seek to understand the contexts of hope (Stolte, 2010). Indecision may be one context in which hope is decreased. Previous research showed indecision to positively correlate with anxiety, depression, pessimism, worry, life regret, and fewer happy memories (Rassin & Muris, 2005; Rassin et al., 2007; Schwartz, 2004; van Eerden, 2003). Hope, however, is associated with forgiveness and negatively correlated with anxiety and depression (Carretta, Ridner, & Dietrick, 2014; Santos et al., 2015; Yalçm & Malkoç, 2015).

Hope-orientated living has broad, positive impacts. Hope is associated with job satisfaction, constructive conflict responses, increased glycemic control, and better adjustment to chronic illness (Law & Guo, 2016; Madan & Pakenham, 2014; Merolla, 2014; San-

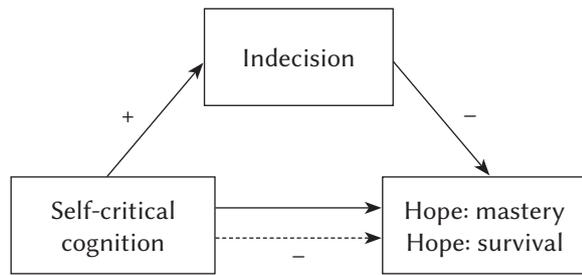


Figure 1. Hypothesized mediation model.

tos et al., 2015). Additionally, hope predicts a variety of positive outcomes, including subjective well-being, self-efficacy, perceived success, better employment outcomes, and fewer suicide attempts (Blake, Brooks, Greenbaum, & Chan, 2017; Meadows, Kaslow, Thompson, & Jurkovic, 2005; Sezgin & Erdogan, 2015; Yalçın & Malkoç, 2015). Living with decreased hope, or hopelessness, therefore, can be detrimental. Hopelessness is associated with depression, negative beliefs about one's future, and suicide (Beck, Steer, Kovacs, & Garrison, 1985; Beck & Weissman, 1974). Thus, it is important to understand the context for predicting hope and hopelessness.

Given the literature, it is likely that indecision leads to decreased hope. Furthermore, decreased hope is likely an outcome of self-critical cognition. Self-defeating thoughts seem likely to decrease one's hope, especially in such areas as empowerment and a "will to hope" as well as in challenging fear and loss (Scioli et al., 2011).

We propose the addition of self-critical cognition and hope to Rassin's (2006) model of indecisiveness, such that self-critical cognition would predispose or predict indecision and decreased hope would be a post-decision behavior or outcome of indecision. Therefore, we hypothesized a mediational model where self-critical cognition predicts lower hope scores indirectly via indecision (see Figure 1). Specifically, we had four hypotheses: (a) self-critical cognition predicts hope mastery and hope survival; (b) self-critical cognition predicts indecision; (c) indecision predicts hope mastery and hope survival; and (d) self-critical cognition indirectly predicts hope mastery and hope survival via indecision as the mediator.

## PARTICIPANTS AND PROCEDURE

### PARTICIPANTS

A total of 327 young adults (242 women, 82 men;  $M_{\text{age}} = 20.31$  years old,  $SD = 3.13$ ) participated in the present study. The majority were lower division (first year or sophomore) students, 59.9%. Most participants (56.6%) self-identified as European-Americans.

### PSYCHOMETRIC SCALES

**Indecision.** All participants completed Mann's (1982) 5-item Decisional Procrastination Scale (DP; see Ferrari et al. 1995). Participants reported the degree (5-point scale: 1 – *not at all true of me*, 5 – *always true of me*) they engaged in various strategies when making decisions. Sample items include the following: *I put off making decisions* and *I delay making decisions until it is too late*. Decisional Procrastination Scale scores were related to low self-esteem (Effert & Ferrari, 1989) and high states of interpersonal dependency, self-defeating behaviors (Ferrari, 1994), distractibility and day-dreaming (Harriott et al., 1996), boredom proneness (Blunt & Pychyl, 1998), a tendency not to focus on the future (Specter & Ferrari, 2000), falsely recalling tasks claimed to be completed (Scher & Ferrari, 2000), and greater self-discrepancies of actual-ought selves (Orellana-Damacela et al., 2000). Experimental studies using this DP scale found that indecisive individuals delay in returning items and completing tasks (Burnett, Mann, & Beswick, 1989) and search information in restricted ways when making actual decisions (Ferrari & Dovidio, 2000, 2001). Coefficient  $\alpha$  was .85 with the current sample of participants.

**Self-critical cognition.** Participants also completed Ishiyama and Munson's (1993) 13-item Self-Critical Cognition Scale. This measure assesses participants' self-defeating cognitive tendencies on a 6-point scale (1 – *strongly disagree*, 6 – *strongly agree*). Items belong to one of two factors: *Negative Self-Processing* and *Failure in Positive Self-Processing*. Sample items for the 8-item *Negative Self-Processing* subscale include the following: *I tend to blow my weaknesses, limitations, and mistakes out of proportion in my thinking* and *When things go wrong, I tend to criticize myself quite readily before assessing the situation objectively*. Sample items for the 5-item *Failure in Positive Self-Processing* subscale include the following: *I'm good at looking at myself critically while still remaining positive toward myself* and *When I experience a failure or a criticism, I can generally keep from being carried away with critical thoughts about myself*. Items from the latter subscale were reverse-coded, and the total sum score of both subscales was used. The original authors reported good internal reliability for the total score ( $\alpha = .89$ ) and a mean sum score of 42.40 ( $SD = 12.40$ ) with their sample (Ishiyama & Munson, 1993). With the present sample, internal consistency was strong ( $\alpha = .90$ ).

**Hope.** Participants also completed the 56-item Comprehensive Trait Hope Scale (Scioli et al., 2011), which includes five factor scales and 14 subscales. Participants responded to items on a 4-point scale (0 – *not me*, 4 – *exactly like me*). The current study uses the following two factor scales: *Mastery* and *Survival*. The 8-item *Mastery* factor scale includes the two subscales *Ultimate Ends* and *Supported Mastery*. A sample item for *Ultimate Ends* is *I believe that I am going to get what*

*I really want out of life.* A sample item for *Supported Mastery* is *I give some credit to others for my successes in life.* The 8-item *Survival* factor scale includes the two subscales *Personal Terror Management* and *Social Terror Management*. A sample item for *Personal Terror Management* is *I can find ways to relax.* A sample item for *Social Terror Management* is *I'm capable of finding support from others when I need it.* Coefficient  $\alpha$  was acceptable with the current sample for both hope mastery (.84) and hope survival (.71).

*Social desirability.* All participants completed the unidimensional 13-item true-false forced choice social desirability measure by Reynolds (1982) from the longer Marlowe-Crowne (Crowne & Marlowe, 1960) measure, assessing a respondent's global tendency to give socially appropriate responses. We used this measure as a response bias "control" factor, to ascertain whether our survey data included such tendencies. With the current sample, coefficient  $\alpha$  was .71.

#### PROCEDURE

Students in an introductory psychology class were required to complete research hours as part of the class by completing online website scales. The survey consisted of demographic items as well as each of the self-report psychometric scale items. All survey items were posted online for eight weeks, and pilot testing indicated that it took individuals about 15-20 minutes to complete.

### RESULTS

#### PRELIMINARY ANALYSIS

Table 1 presents the mean sum scores on each of the measures and includes the intercorrelations between measures. As noted in the table, social desirability responding was significantly related to each variable (although the magnitude of the relation was small). Consequently, we entered social desirability into fur-

ther analyses. To test our four hypotheses, we analyzed the direct and indirect effects for two simple mediated regression models – the first to test hope mastery, the second to test hope survival. We used Andrew Hayes' (2013) PROCESS version 2.16.1 in SPSS, selected the mediation model 4, and set social desirability as a statistical control for both models. Below we combine the results from both mediation models. The significance of the path coefficients and the indirect effects did not change when social desirability was taken out of the model.

#### DIRECT EFFECTS

Results were as hypothesized for the direct effects (see Table 2 for full results). Results for our first hypothesis indicated that self-critical cognition was a significant negative predictor of hope mastery,  $b = -.04$ ,  $SE = .02$ ,  $p = .011$ , and hope survival,  $b = -.11$ ,  $SE = .02$ ,  $p < .001$ . In accordance with our second hypothesis, self-critical cognition also significantly predicted indecision,  $b = .13$ ,  $SE = .02$ ,  $p < .001$ . Finally, our third hypothesis was also supported; indecision predicted a decrease in hope mastery,  $b = -.26$ ,  $SE = .04$ ,  $p < .001$ , and hope survival,  $b = -.29$ ,  $SE = .05$ ,  $p < .001$ .

#### MEDIATION

Results for our fourth hypothesis showed a significant indirect effect. Mediation analyses based on 1000 bootstrapped samples using bias corrected and accelerated 95% confidence intervals (Preacher & Hayes, 2004) showed that, controlling for social desirability, self-critical cognition had a significant indirect effect via indecision on both hope mastery,  $LL = -.05$ ,  $UL = -.02$ , and hope survival,  $LL = -.06$ ,  $UL = -.02$  (see Table 2 for full results). Though small, the indirect effect shows that when controlling for social desirability, self-critical cognition mediated by decisional procrastination was associated with a .03-point decrease in hope mastery and a .04-point decrease in hope survival.

Table 1

*Mean sum score and zero order correlations between all self-reported scales*

Self-reported measure	<i>M (SD)</i>	1	2	3	4	5
1. Decisional procrastination	13.67 (5.06)	[.85]				
2. Self-critical cognitions	48.75 (12.03)	.33**	[.90]			
3. Hope: mastery	23.68 (4.05)	-.37**	-.26**	[.71]		
4. Hope: survival	23.96 (4.84)	-.40**	-.37**	.77**	[.84]	
5. Social desirability	5.82 (2.91)	-.18**	-.35**	.12*	.17**	[.71]

Note.  $N = 327$ . Value along the diagonal is the coefficient  $\alpha$ .

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

Table 2  
*Path coefficients and indirect effects for mediation model*

Path coefficients	$\beta$	SE		
SCC to hope mastery	-.05*	.02		
SCC to hope survival	-.12***	.02		
SCC to indecision	.13***	.02		
Indecision to hope mastery	-.26***	.04		
Indecision to hope survival	-.29***	.05		
Indirect effects	Estimate	SE	95% CI	
			LL	UL
SCC to hope mastery via indecision	-.03	.01	-.05	-.02
SCC to hope survival via indecision	-.04	.01	-.06	-.02

Note. SCC – self-critical cognition, CI – confidence interval, LL – lower limit, UL – upper limit.

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

## DISCUSSION

Although an exploratory investigation, the results of the present study suggest that decisional procrastination may mediate the relationship between self-critical cognition and both hope mastery and hope survival. Thus, higher self-critical cognition predicts higher decisional procrastination, which predicts lower hope mastery and hope survival. These results are consistent with previous research linking indecision with lower levels of decisional self-confidence (Effert & Ferrari, 1989; Ferrari, 2010). Using a factor analysis, one study found that indecision loaded onto one factor with daydreaming and distractibility whereas self-critical cognition loaded onto a separate factor (Harriott et al., 1996). The present study extends that finding, suggesting that indecision is predicted by negative self-critical cognition. Additionally, decreased hope is a likely outcome of self-critical cognition, particularly when hope is conceptualized as empowerment or challenging fear and loss (Scioli et al., 2011). The current findings are compatible with research on self-criticism (a conceptual opposite of self-compassion), which has been shown to be related to future-orientation personal growth initiatives, conscientiousness, and curiosity (Neff, Kirkpatrick, & Rude, 2007). Furthermore, consistent with our findings, previous research showed indecision to be positively correlated with conceptual opposites of hope, including anxiety, depression, pessimism, worry, life regret, and fewer happy memories (Rassin & Muris, 2005; Rassin et al., 2007; Schwartz, 2004; van Eerden, 2003).

Hope and self-beliefs have been conceptualized as precursors to positive outcomes (Hartley, Vance, Elliott, Cuckler, & Berry, 2008). Interventions aimed at

improving hope and increasing positive self-beliefs should therefore have a positive effect on outcomes from various domains. For example, expressive writing may reduce self-criticism (Troop, Chilcot, Hutchings, & Varnaite, 2013), and mindfulness-based stress reduction has been linked to self-compassion (Shapiro, Brown, & Biegel, 2007). Some interventions, such as compassionate mind training, are designed to help highly self-critical individuals view self-compassion as a skill while inwardly examining the effects of self-criticism (Gilbert & Irons, 2004). Additional research is required to determine which interventions are most effective.

Limitations of the current study include self-report data collected through a single cross-sectional procedure. The study's findings cannot infer or determine causality. Additionally, participants were undergraduate psychology students and mostly women, who, according to Neff (2003), may be more prone to self-criticism, self-judgment, and rumination compared to men. Nevertheless, our study extends the literature on decisional procrastination by assessing additional cognitive and affective components that fit into Rassin's (2006) psychological model of indecision. Further, our findings contribute information to the research literature of the context of hope and hopelessness. Hope is an important outcome to study for its potential effects on well-being, self-efficacy, and other positive benefits (Sezgin & Erdogan, 2015; Yalçm & Malkoç, 2015).

Additional research is necessary to determine the directionality and causality of these three variables as well as other predictors of hope mastery and hope survival. Future studies devoted to these constructs should attempt to determine what these predictors are but should also attempt to discover which interventions are most effective in facilitating hope

and decreasing self-critical cognition and decisional procrastination. We realize much more research is needed to understand components of indecision, particularly as the construct relates to hope. Future studies should involve behavioral experiments and need diverse samples with more equal gender equivalence.

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