



Other-Contingent Extraversion and Satisfaction

The Moderating Role of Implicit Theory of Personality

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Abstract: We conceptualize other-contingent extraversion as an individual difference in the tendency to elevate one's state extraversion when interacting with friendly others. Using experience sampling data from 75 college students, we assessed other-contingent extraversion to predict subjective well-being, and further examined whether implicit theory of personality would moderate such a prediction. Results indicate that, despite a general positive association between others' friendliness and one's state extraversion, individuals differed in the degree to which they manifested state extraversion in response to others' friendliness, allowing us to model this individual difference as other-contingent extraversion. Other-contingent extraversion interacted with implicit theory to predict college satisfaction but not life satisfaction. Specifically, other-contingent extraversion had a more positive association with college satisfaction for respondents with a stronger incremental perspective (malleable view) of personality. Our study contributes to personality research by introducing other-contingent extraversion as a unit of personality.

Keywords: within-person variability, state extraversion, friendliness, situation contingency, implicit theory of personality

Trait extraversion describes the general tendency to be enthusiastic, outgoing, and gregarious. Although trait extraversion can predict important outcomes such as life satisfaction (DeNeve & Cooper, 1998) and job satisfaction (Judge et al., 2002), the focus of the trait approach on the general pattern of behavior across various situations fails to capture how each individual adapts differently to varying social interactions. Building on findings that people's state extraversion is contingent on how friendly their interaction partners appear (Fleeson, 2007; Huang & Ryan, 2011), we capture the individual difference in such a contingency to enrich understanding of individuals' extraversion. As the trait domain of extraversion has been shown to predict subjective well-being (Schimmack et al., 2004), we utilize other-contingent extraversion to make predictions about individuals' subjective well-being. Further, we examine implicit theory of personality as a moderating variable, as viewing personality as malleable rather than fixed is consistent with the contingent expression of extraversion. Thus, we expect other-contingent extraversion to be more predictive of subjective well-being for individuals holding stronger incremental perspective (i.e., malleable view) of personality. In a sample of college students, we examine our hypotheses by relating other-contingent extraversion assessed with experience sampling over three weeks to life satisfaction and college satisfaction.

Our study makes two important contributions to the literature. First, we discover other-contingent extraversion as a unit of personality that provides information about individuals above and beyond trait and state extraversion. Our study of other-contingent extraversion answers Fleeson's (2017) call to understand situational contingencies as manifestation of personality and complements recent advances on contingent units of personality that focus on task demands (Minbashian et al., 2010; Wood et al., 2019). Second, we examine how one's view of the malleability of personality can interact with contingent personality. This examination highlights the need to consider congruence between implicit theory of personality and contingent units of personality in order to make more nuanced predictions about outcomes of personality.

Others' Friendliness and State Extraversion

State extraversion, as enactment of trait extraversion, can fluctuate within-person across situations (Fleeson, 2001). One situational contingency that may explain such fluctuation is friendliness of the interactional partner (Fleeson, 2007). This contingency is rooted in interactionalism: The manifestation of extraversion depends on the situation an

individual is in, specifically the others involved in a social interaction. When the interactional partner is friendly, sociable, and willing to talk, the focal person is likely to respond in kind, resulting in elevated state extraversion. The expectation that friendliness is associated with state extraversion has been examined in the literature: Fleeson (2007, Study 1) found this contingency in an experience sampling study of 26 students, whereas Huang and Ryan (2011) demonstrated this association in a study of 56 customer service employees. Our first hypothesis will replicate this association:

Hypothesis 1: At the within-individual level, friendliness of interactional partners is positively related to state extraversion.

Other-Contingent Extraversion as Predictor of College Satisfaction and Life Satisfaction

Hypothesis 1 states a general trend, which reflects an overall tendency for people to act in accordance to perceived situations (Sherman et al., 2015). At the same time, individuals do not act in the same way to perceived situations (Sherman et al., 2015); instead, they differ in the degree to which they may respond to friendly others by elevating their state extraversion (Huang & Ryan, 2011). This individual difference, which we label as *other-contingent extraversion*, can reveal unique information about people's extraversion as a content dimension (Fleeson, 2017) that is not captured by typical trait extraversion assessment. Indeed, Fleeson (2017, p. 7) argued that "if friendly other people increase extraversion, then the part of the actor that involves interpreting those other people as friendly and then acting on it is part of the explanatory trait of extraversion."

To evaluate the explanatory power of other-contingent extraversion, we turn to subjective well-being as an outcome that has been consistently linked to extraversion (e.g., Diener et al., 1999; Schimmack et al., 2004). In the present study of college students, we focus on college satisfaction (Harris et al., 2017) and life satisfaction (DeNeve & Cooper, 1998) as outcomes of other-contingent extraversion.

Other-contingent extraversion is an adaptive strategy that can lead to greater satisfaction. Responding to friendly others in a more extraverted manner is likely to lead to more enjoyable interactions. Meanwhile, given that allocating limited psychological resources to elevate state extraversion can lead to subsequent fatigue (Leikas & Ilmarinen, 2017), responding to unfriendly others in a less extraverted manner can help conserve energy. In other words, individuals with higher other-contingent extraversion can allocate

mental resources to people who can bring more positive interactional experiences. Hence, we expect:

Hypothesis 2: Other-contingent extraversion is positively associated with (a) college satisfaction and (b) life satisfaction.

Implicit Theory of Personality

Individuals hold fundamental beliefs about the malleability of various human attributes such as intelligence, personality, and moral character (Dweck & Leggett, 1988; Dweck et al., 1995). In the personality domain, incremental theorists believe that personality traits are malleable and can be developed over time, whereas entity theorists tend to view traits as fixed. When processing information about self and others, entity theorists tend to make global, dispositional judgments, whereas incremental theorists are more likely to evaluate specific processes and contingencies (Dweck et al., 1993).

We expect other-contingent extraversion to better predict subjective well-being for individuals with higher incremental perspective because such a perspective is congruent with contingent personality. For entity theorists, that is, individuals with a low incremental perspective responding to different interactional partners with different levels of state extraversion runs against their fundamental beliefs about human character that behaviors should be quite consistent across situations (Chiu et al., 1997). In contrast, for those with a high incremental perspective, other-contingent extraversion is a behavioral strategy congruent with how they construe the person-situation relation. Indeed, they may utilize other-contingent extraversion as a self-regulatory strategy (Burnette et al., 2013) to navigate interpersonal situations more effectively. As a result, we expect other-contingent extraversion to be more predictive of satisfaction outcomes for individuals with higher incremental perspective.

Hypothesis 3: Implicit person theory moderates the relationship other-contingent extraversion has with (a) college satisfaction and (b) life satisfaction, such that the relationship is stronger for people with higher incremental perspective.

To establish the association between other-contingent extraversion and college/life satisfaction, it is important to rule out other mechanisms pertaining to variability of personality states. These mechanisms include: (a) variability of personality states (Baird et al., 2006; Geukes et al., 2017); (b) the overall perception of friendliness of situation (Sherman et al., 2015); (c) the overall experience of state extraversion (Fleeson et al., 2002); and (d) task-contingent conscientiousness (Minbashian et al., 2010). Thus, we will

control for these mechanisms and their interactions with implicit person theory in supplementary analysis to rule out their potential influence on college/life satisfaction.

Method

Procedure

Eighty-three undergraduate students from Wayne State University, MI, USA, participated in the present study in exchange for extra credit for introductory psychology courses. In the first survey (presurvey), participants completed a questionnaire on personality, implicit theory of personality, as well as demographic information. Next, participants were contacted via email twice each day for three weeks to complete a brief survey (Experience Sampling Survey). Participants were instructed that the survey would be active for only 3 hr after the email. Doing so was intended to ensure accurate sampling of participants' daily experiences and to reduce recall bias. Participants were informed that they could fill out the surveys at their convenience and that missed surveys would not result in any penalty. By the end of the three weeks, participants were asked to fill out a postsurvey containing measures for life and college satisfaction.

The present low-stakes measurement context could give rise to insufficient effort responding (IER; Huang et al., 2012), which may oftentimes inflate observed associations between variables (Huang, Liu, et al., 2015). Five infrequency items ($\alpha = .76$; e.g., "Eat cement occasionally") from Huang, Bowling, et al. (2015) were embedded in the personality questionnaire in presurvey to detect IER. Based on a lenient a priori cut-off of 50% (i.e., missing more than two items), we removed 8 of the 83 respondents (9.63%) from further analysis.¹ The final sample consisted of 75 respondents with 1,097 observations ($M = 14.63$, $SD = 9.15$, minimum = 4, maximum = 40). Participants were predominantly female (83%), with an average age of 22 years ($SD = 7$). Fifty-three percent of the participants identified as White, followed by 24% Black/African American and 16% Asian American.

The initial sample size was guided by the power analysis reported in Huang and Ryan (2011, p. 473), which estimated 75 participants with 20 observations each would provide 80% power for the current Hypothesis 1, which focuses on the within-individual level effect. The sample size we obtained would have 80% power to detect a moderate effect (unique $R^2 = .09$) for Hypotheses 2 and 3

at the between-individual level. Due to practical constraints in collecting experience sampling data, we acknowledge that the current sample size would be underpowered to detect small effects for Hypotheses 2 and 3. We will interpret the findings in light of power in the discussion section.

Measures

Presurvey Measures

Implicit theory of personality was measured using the 3-item scale ($\alpha = .86$) from Chiu et al. (1997). A sample item is "Everyone is a certain kind of person, and there is not much that they can do to really change that." Participants indicated their responses on a seven-point scale (1 = *strongly disagree*; 7 = *strongly agree*). We coded the scale such that higher scores represent *incremental perspective* of implicit theory.

We also measured Big-Five personality traits in the presurvey. To rule out the effect of trait extraversion, we utilized a 10-item extraversion scale ($\alpha = .88$) from International Personality Item Pool (IPIP; Goldberg et al., 2006) as a control variable. We measured conscientiousness, agreeableness, neuroticism, and openness with the Mini-IPIP (Donnellan et al., 2006). Participants rated whether each statement accurately described themselves using a seven-point scale (1 = *very inaccurate*; 7 = *very accurate*). Because each of these four dimensions was only measured with four items, internal consistency reliabilities were lower than the conventional cut-off: $\alpha = .66$, $.64$, $.58$, and $.63$, respectively. Thus, we only included these four dimensions as control variables in a supplementary analysis.

Experience Sampling Measures

The experience sampling measures prompted participants to think about the social interactions they had with others in the hour before receiving this email survey. If they engaged in multiple social interactions, they were asked to think about the most recent social interaction. We measured *friendliness of other people* with three items ($\alpha = .94$) adapted from Huang and Ryan (2011). The questions were: "How friendly was the other person/people you were interacting with?"; "How sociable was the other person/people you were interacting with?"; and "How willing to engage in conversation was the other person/people?" We assessed *state extraversion* with four items ($\alpha = .90$) adapted from Huang and Ryan (2011) and Fleeson (2001). The questions were: "While interacting with the other person, how

¹ We found no significant difference ($ps > .72$) between attentive and IER individuals in age, gender, and number of experience sampling surveys completed. These IER cases, if included, would not change the conclusion of the present study (see ESM 1, Tables E1 and E2).

talkative (energetic/assertive/bold) were you?”² Participants indicated their responses on a 7-point scale (1 = *not at all*; 7 = *extremely*).

We also assessed *task demands* (3-items; $\alpha = .82$) and *state conscientiousness* (6-items; $\alpha = .93$) using items adapted from Huang and Ryan (2011). Although not the focus of the present study, these measures allowed us to obtain task-contingent conscientiousness for supplementary analysis.

Postsurvey Measures

The postsurvey included measures for college satisfaction and life satisfaction. *College satisfaction* was measured using the 7-item scale ($\alpha = .79$) developed by Lounsbury et al. (2005). A sample item is “How satisfied are you with how much you are learning in school?” Responses were made on a 7-point scale (1 = *very dissatisfied*; 7 = *very satisfied*).

Life satisfaction was assessed with the 5-item scale ($\alpha = .89$) by Diener et al. (1985). Participants indicated their responses on a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*). A sample item is “In most ways my life is close to my ideal.”

Results

Table 1 presents the descriptive statistics and correlations for study variables. We first examined the variances of state extraversion and friendliness at the within- and between-individual levels. Intraclass correlation (ICC) (1) was .31 for state extraversion and .25 for friendliness, indicating that 69% and 75% of variance of the respective variable resided at the within-individual level. Together, these results supported the use of multilevel analysis to examine the within-individual association between friendliness and state extraversion.

Hypothesis 1 stated that friendliness of others would positively predict state extraversion at the within-individual level. We conducted the analysis using the multilevel package (Bliese, 2016) in R, utilizing all available data from the final sample ($N_{\text{observations}} = 1,097$, $N_{\text{individual}} = 75$) while omitting missing observations. Prior to analysis, we applied person-mean centering on friendliness to aid interpretation (Enders & Tofighi, 2007). Considering the potential effect of trait extraversion on state extraversion, we entered the grand-mean centered trait extraversion as a control. A fixed effect model regressing state extraversion on friendliness and trait extraversion showed a significant positive effect ($b = .63$, $p < .001$; Model 1, Table 2), supporting Hypothesis 1. Thus, respondents tended to act in a more extraverted

manner when interacting with others who appeared more friendly to them.

To examine whether the relationship between friendliness and state extraversion varied across individuals, we compared the fixed effect model with a random effect model, where the slopes of friendliness were allowed to vary freely across individuals (Model 2, Table 2). A chi-square difference test indicated that the random effect model provided a better fit to the data, $\chi^2(2) = 36.24$, $p < .001$. Thus, in addition to a significant overall effect of friendliness on state extraversion ($b = .64$, $p < .001$), respondents varied significantly in how they tended to respond to friendly others with elevated state extraversion (slope variance = .03, $p < .001$). Thus, we saved the empirical Bayes estimate for each individual as a new variable named other-contingent extraversion.

We assessed the reliability of other-contingent extraversion in two ways. First, we regressed each of the four state extraversion items on friendliness in a random effect model and obtained four empirical Bayes estimates. The composite of these four empirical Bayes estimates showed reasonable internal consistency (Cronbach's $\alpha = .80$). Second, adopting the test-retest approach, we split each respondent's experiencing sampling surveys into two halves and estimated other-contingent extraversion for the first and second halves of the study separately. Respondents' other-contingent extraversion was stable between the two halves ($r = .40$), which would indicate a reliability of .57 when stepped up using the Spearman-Brown formula.

Hypothesis 2 predicted that other-contingent extraversion would positively predict (a) college satisfaction and (b) life satisfaction, whereas Hypothesis 3 predicted that incremental personality theory would moderate the relationships between other-contingent extraversion and these outcomes, such that these relationships would be stronger for people with a stronger incremental perspective. We performed moderated regression analyses to examine these hypotheses. When predicting college satisfaction (Table 3, upper panel), we controlled for trait extraversion and incremental perspective (entered in Model 1). Other-contingent extraversion, entered in Model 2, did not predict college satisfaction ($B = .56$, $\beta = .07$, $p = .54$, $\Delta R^2 = .00$). Thus, Hypothesis 2a was not supported. In Model 3, the interaction term between other-contingent extraversion and incremental perspective accounted for significant variance in college satisfaction ($B = 2.34$, $\beta = .38$, $p = .004$, $\Delta R^2 = .11$). The result remained significant after Bonferroni correction for the four tests performed at the between-person level. Simple slopes analysis further revealed that, when incremental perspective was at 1 SD below the mean,

² A fifth item, “quiet”, was removed from analysis because it decreased the reliability of state extraversion and subsequently other-contingent extraversion. Results remained the same when this item was included.

Table 1. Descriptive statistics for study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Friendliness of others													
2. State extraversion	.72***												
3. OCE	.15	.42***											
4. Male	-.02	-.01	-.19										
5. Age	.26*	.27*	-.03	.00									
6. Extraversion	.21	.22	.05	-.10	.12								
7. Conscientiousness	.13	.20	-.04	.08	-.04	.10							
8. Agreeableness	.27*	.11	.15	-.34**	.05	.28*	.11						
9. Neuroticism	-.19	-.12	.05	-.03	-.14	-.23*	-.19	-.07					
10. Openness	.24*	.11	-.03	.05	.12	.13	.09	.17	-.16				
11. Incremental perspective	.17	.06	.07	-.18	.21	.09	-.20	.00	.01	.02			
12. College satisfaction	.00	.14	.08	.13	.12	.20	-.02	.04	-.15	.11	.03		
13. Life satisfaction	.16	.12	.00	.03	-.05	.24*	.21	.14	-.31**	-.03	.09	.08	
<i>M</i>	4.82	3.99	0.64	0.17	22.15	4.35	5.16	5.62	3.52	5.31	3.87	5.16	4.79
<i>SD</i>	0.96	0.97	0.12	0.38	6.71	1.08	1.05	0.97	1.08	0.97	1.37	0.93	1.22

Note. $N_{\text{individual}} = 75$. Friendliness of others and state extraversion were assessed from experience sampling ($N_{\text{observation}} = 1,097$). Descriptives and correlations were based on person means. OCE = Other-contingent extraversion, operationalized as empirical Bayes estimates from regressing state extraversion on friendliness in multilevel modeling. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 2. Summary of multilevel modeling results

	Model 1	Model 2
	Fixed effect	Random effect
Fixed components		
Intercept	3.98***	3.98***
Trait extraversion	.19	.18
Friendliness	.63***	.64***
Random components		
Variance of intercept	.82***	.82***
Variance of slope		.03***
Within-individual variance	.81	.75
Model fit		
Model deviance (-2LL)	3,080.44	3,044.20
Model $\Delta\chi^2$		36.24***
Δdf		2

Note. $N_{\text{observation}} = 1,097$; $N_{\text{individual}} = 75$. *** $p < .001$.

other-contingent extraversion negatively predicted college satisfaction ($B = -3.98$, $\beta = -.51$, $p = .03$), whereas when incremental perspective was at 1 *SD* above the mean, other-contingent extraversion positively predicted college satisfaction ($B = 2.41$, $\beta = .31$, $p = .03$) (Figure 1). These results supported Hypothesis 3a.

When predicting life satisfaction (Table 3, lower panel), we first controlled for trait extraversion and incremental perspective in Model 1. Results indicated that neither other-contingent extraversion ($B = -0.19$, $\beta = -.02$, $p = .88$, $\Delta R^2 = .00$; Model 2) nor the interaction between other-contingent extraversion and incremental perspective ($B = -0.14$, $\beta = -.02$, $p = .90$, $\Delta R^2 = .00$; Model 3)

accounted for additional variance in life satisfaction. Therefore, Hypotheses 2b and 3b received no support.

In a series of supplementary analyses, we examined Hypotheses 2 and 3 after ruling out potential competing mechanisms. These include: (1) variability of personality states; (2) average level of perceived friendliness; (3) average state extraversion; and (4) task-contingent conscientiousness, as well as their respective interaction terms with implicit person theory. We also included the other four Big-Five traits as additional controls. Results remained the same with these controls (Electronic Supplementary Material, ESM 1, Tables E3 and E4).

Discussion

The present study contributes to research in personality by introducing other-contingent extraversion as a unit of personality, thus adding to the emerging body of work on contingent units of personality (Minbashian et al., 2010; Wood et al., 2019). Whereas these recent studies investigated perceived task characteristics (e.g., task difficulty) as situational cues, our study focuses on social cues instead. As expected, individuals tend to elevate their state extraversion when interacting with others who appeared friendly to them. More importantly, other-contingent extraversion differs across individuals. Its low correlation with trait extraversion ($r = .05$) suggests that other-contingent extraversion is a dynamic response pattern distinct from people's general level of extraversion. Thus, studying other-contingent extraversion can enrich the understanding

Table 3. Moderated regression predicting college and life satisfaction

Predictors for models	Model 1		Model 2		Model 3	
	<i>B</i>	β	<i>B</i>	β	<i>B</i>	β
Outcome: college satisfaction						
1. Trait extraversion	.17	.20	.17	.19	.12	.14
1. Incremental perspective	.01	.02	.01	.01	.05	.08
2. OCE			.56	.07	-.79	-.10
3. Incremental \times OCE					2.34**	.38**
R^2 (ΔR^2)	.04 (.04)		.04 (.00)		.15 (.11**)	
Outcome: life satisfaction						
1. Trait extraversion	.26	.23	.26	.23	.27	.23
1. Incremental perspective	.06	.07	.06	.06	.06	.07
2. OCE			-.19	-.02	-.11	-.01
3. Incremental \times OCE					-.14	-.02
R^2 (ΔR^2)	.06 (.06)		.06 (.00)		.06 (.00)	

Note. $N = 75$. OCE = Other-contingent extraversion. ** $p < .01$.

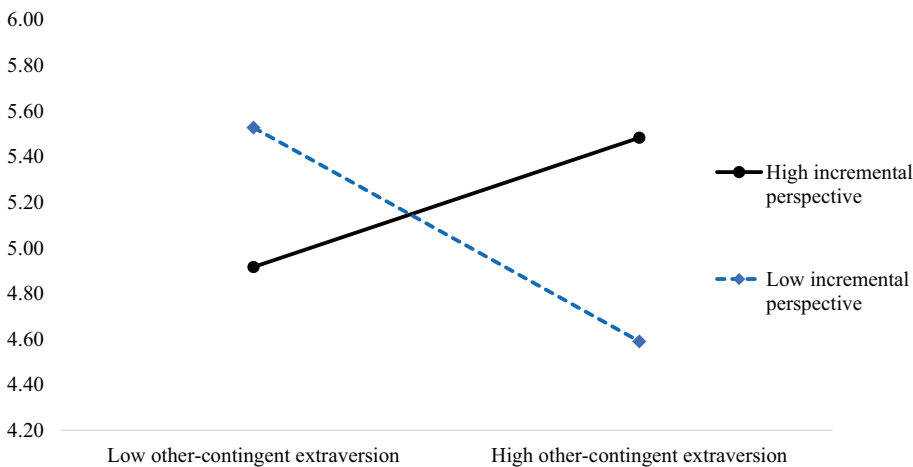


Figure 1. The interactive effect of incremental perspective and other-contingent extraversion on college satisfaction.

of extraversion as a content dimension (Fleeson, 2017). Although we found no support for the hypothesis that other-contingent extraversion would predict college and life satisfaction, the results showed that implicit theory of personality moderated the prediction on college satisfaction (but not life satisfaction). Overall, the evidence gives credence to the argument that other-contingent extraversion should be included as part of the explanatory domain of extraversion (Fleeson, 2017).

The moderating role of implicit theory of personality suggests that efforts to identify situation-contingent units of personality need to incorporate whether individuals view their traits as malleable or fixed. In the present study, other-contingent extraversion was positively associated with college satisfaction for students who believe personality is malleable. Interestingly, for students who believe personality is fixed, other-contingent extraversion was negatively associated with college satisfaction. It is possible that

elevating one's state extraversion in response to friendly others can be particularly exhausting (Leikas & Ilmarinen, 2017) when such contingent personality expression is antithetical to individuals' implicit belief about personality. This finding highlights the need to investigate whether the effects of other contingent units of personality (e.g., task-contingent conscientiousness) depend on implicit theory of personality.

The differential findings between college satisfaction and life satisfaction in the present study are noteworthy. Given that other-contingent extraversion was assessed within the college context (i.e., contextualized; Heller et al., 2007), it is perhaps not surprising that other-contingent extraversion was linked to their experience in college but not in life in general. However, it should be noted that the nonsignificant correlation between these two variables departs from previous findings (e.g., $r = .51$, $N = 552$ from Lounsbury et al., 2005). The current sample of students appeared to

compartmentalize their experiences in college and in life in general, with limited overlapping between the two foci.

The current study is limited in three critical regards. First, the present study was underpowered at the between-individual level of analysis. Thus, the support for Hypothesis 3a should be replicated with a larger sample size. Meanwhile, we should note that the lack of support for Hypotheses 2a, 2b, and 3b was unlikely due to weak power, because the unique R^2 associated with each of these were all .00. Second, the present study design could not provide causal inference assumed in the hypotheses. The observed within-person association between perceived friendliness and state extraversion could be the result of bias in perception or otherwise stem from reverse causality, that is, others responding in a friendly manner to one's state extraversion. In addition, it is possible that the repeated sampling of participants' experience affected how they perceived their college and life satisfaction. Finally, similar to Fleeson (2007) and Huang and Ryan (2011), we examined other-contingent friendliness in a sample of college students. Considering these limitations, future studies may investigate the predictive validity of other-contingent extraversion outside of the college context using a larger sample size.

Our study points to potential avenues for future research. First, beyond subjective well-being, researchers may examine whether other-contingent extraversion is related to objective outcomes. For instance, individuals who respond to friendly others in an extraverted fashion may, in the long run, enjoy higher quality of social interactions and have more close friends. Second, given the intensive effort required to assess other-contingent extraversion through experience sampling, researchers may begin to explore self-report measures that can capture this contingency. Representing such an attempt, Huang and Bramble (2016) captured individuals' general tendency in task-contingent conscientiousness with a six-item scale to predict their adaptive transfer of a learning task. We envision similar endeavors that can capture other-contingent extraversion in a similar manner. Third, future efforts should evaluate how other-contingent extraversion relates to individuals' tendency to modify their behavior according to general social cues, as captured in constructs such as self-monitoring (Snyder, 1974) and social skill (Witt & Ferris, 2003).

In conclusion, our study represents an initial examination of other-contingent extraversion as a unique aspect of extraversion, that is, "individualized production mechanism" (Fleeson, 2017, p. 10) not included in the current trait framework, and investigating contingent units of personality in future studies can enrich the understanding of personality characteristics beyond the traditional trait approach.

Electronic Supplementary Material

The electronic supplementary material is available with the online version of the article at <https://doi.org/10.1027/1614-0001/a000339>

ESM 1. The file contains an experience sampling survey, a summary of multilevel modeling results including insufficient effort responding cases (Table E1), a moderated regression predicting college and life satisfaction including insufficient effort responding cases (Table E2), a moderated regression predicting college satisfaction, controlling for potential competing mechanisms (Table E3), a moderated regression predicting life satisfaction, controlling for potential competing mechanisms (Table E4), and Subsample Reliability Estimates of Other-contingent Extraversion Based on Number of Surveys Completed (Table E5).

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