Culture Is Associated With the Experience of Long-Term Self-Concept Changes

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Abstract

Cultural context can affect how changes in self-concepts are either valued or tolerated. However, very little is currently known regarding how culture may differentially confer consequences to people that change their self-concepts over the course of several years. We investigated the moderating role of culture (Japan and USA) on the link between long-term (\sim 4 years) self-concept changes and a comprehensive set of well-being measures (hedonic, eudaimonic, and family based). We found that American's self-concept instability was more negatively associated with one's well-being and emotional support within one's family than Japanese. Furthermore, Americans were particularly negatively impacted when they became less agentic and conscientious over time. One possible interpretation is that Western, individualistic cultures may discourage people from changing their identities throughout their adult life. Although American culture often espouses the sanctity of freedom, American culture may also limit people's freedom to change how they see themselves over time.

Keywords

culture, self-concept, identity, well-being

Introduction

Western, individualistic culture, and in particular the United States, tends to espouse the value of individual liberties and the freedom to reinvent one's self. While this notion tends to be commonly accepted, there may exist exceptions during conditions that involve people changing their self-concepts. Although culture is related to cross-situational self-concept inconsistency (i.e., change in individuals' trait ratings across different situations and/or social roles; English & Chen, 2011) and short-term ($\sim \leq 1$ month) self-concept instability (changes that occur over time; Church et al., 2014), very little is currently known regarding the way culture is associated with self-concept instability over the course of several years (i.e., long term). In this study, we investigated the moderating role of cultural context (Japanese and American) on self-concept instability over the course of ~ 4 years as well as how instability relates differently to a broad array of types of well-being (hedonic, eudaimonic, and family affectual solidarity) across cultural contexts.

People's self-concepts (i.e., ideas of the self-constructed from the beliefs one holds about oneself and the responses of others; Oyserman, Elmore, & Smith, 2012) can change throughout their life and across different situations. Several large-scale studies carried out within Western cultural contexts show reliable longitudinal self-concept changes throughout adulthood (Bleidorn, Kandler, Riemann, Angleitner, & Spinath, 2009; Roberts, Walton, & Viechtbauer, 2006; Specht, Egloff, & Schmukle, 2011). A few recent studies also show longitudinal self-concept changes within non-Western cultural contexts (Bleidorn et al., 2013; Chopik & Kitayama, 2018). Chopik and Kitayama (2018) showed that both Japanese and Americans exhibit age-related changes in several traits, but that Japanese and Americans differ in the magnitude of absolute changes (Japanese > Americans) and patterns of age-related trajectories. These studies demonstrate that self-concepts tend to change throughout adulthood and that cultural context may affect the way long-term longitudinal self-concept changes occur.

In addition to influencing the magnitude of self-concept change, culture may affect how it is interpreted. Mechanisms of these interpretations likely vary because people are differentially motivated by consistency (i.e., to see themselves as consistent; Kernis & Goldman, 2005; Swann & Hill, 1982), social harmony (Markus & Kitayama, 1991), their acceptance of contradiction and complexity (Boucher, 2011), and their motivations to be viewed as stable by others (Suh, 2002). Because Eastern and Western cultures tend to value harmony, contradiction, and confidence differently (Heine, 2001; Varley, 2000),

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this may manifest as differences in the ways self-concept changes occur and are valued across cultures.

In addition to influencing the magnitude of self-concept change, culture may affect how it is interpreted. Culture affects the way self-concept inconsistency across different social situations is valued and/or tolerated (Boucher, 2011; English & Chen, 2011; Suh, 2002). For example, culture moderates the link between self-concept inconsistency across situations and well-being, such that the link between inconsistency and well-being is stronger in Western than in Eastern cultures (Oishi, Diener, Napa Scollon, & Biswas-Diener, 2004; Suh, 2002). Several aspects of collectivistic cultures may make them more tolerant of change in individuals. First, people within collectivistic cultures tend to adopt flexible identities in order to maintain social harmony within in-groups (Cross, Gore, & Morris, 2003; Markus & Kitayama, 1991). Thus, more crosssituational change exists in collectivistic cultures (English & Chen, 2011; Suh, 2002). Moreover, cultural differences in dialecticism-the notion that contradictory concepts fit together as part of a whole (Boucher, 2011; Peng & Nisbett, 1999)may permit an individual to be perceived as both low and high on traits without conflict (Boucher, 2011; Peng & Nisbett, 1999). In addition to tolerating cross-situational inconsistency, collectivistic cultures may tolerate instability over time. In a study across eight different cultures, Church and colleagues (2014) showed that the association between short-term $(\sim 1 \text{ month})$ self-concept instability and eudaimonic well-being was more negative in individualistic cultures than in collectivistic cultures. It seems likely that long-term instability in collectivistic cultures may also be more tolerated than in individualistic cultures, but this idea has not been tested.

Associating changes in self-concept with measures of wellbeing can elucidate how changes in self-concept are valued or tolerated within a particular context (Oishi et al., 2004; Suh, 2002). In cultures where change is more tolerated (i.e., Eastern/collectivist cultures), change may be associated with better well-being outcomes than where change is less tolerated (i.e., Western/individualistic cultures). Contemporary models of well-being often include several domains or underlying factors. For example, several models of well-being include hedonic (high positive affect, low negative affect, and life satisfaction) and eudaimonic (meaning and self-realization) domains of well-being (Diener, Lucas, & Scollon, 2009; Ryan & Deci, 2001). A growing body of scholarly work has called into question the cross-cultural validity of frequently used measures of well-being (Hitokoto & Uchida, 2015; Joshanloo, 2014; Uchida & Kitayama, 2009). Specifically, many commonly used well-being measures are explicitly designed with the individual as the sole target. Although targeting the individual may adequately capture well-being within Western, individualistic contexts, this may not be the case within Eastern, collectivistic contexts. Recent cross-cultural research indicates that wellbeing measures targeting one's closest in-group, such as the family, may be particularly valuable when comparing wellbeing across individualistic and collectivistic cultural contexts (Krys et al., 2019). In this study, we used a comprehensive set

of well-being measures (positive and negative affect, life satisfaction, psychological well-being, and family affectual solidarity) collected over multiple time points. This approach provides the opportunity to test for associations between long-term selfconcept instability and *changes* in diverse measures of wellbeing over time.

Cultural context may affect how specific parts (traits) of self-concepts are valued and thus may differentially affect the way changes in specific traits are valued or tolerated. Cultural context is associated with differences in mean levels of several of the Big 5 personality traits (Allik & McCrae, 2004; Schmitt, Allik, McCrae, & Benet-Martínez, 2007). With respect to Japan and the United States, there exists some evidence that some traits tend to be valued differently (Robie, Brown, & Bly, 2005). For example, trait agency, which describes variation in assertiveness-submissiveness (Kammrath, 2011), tends to be construed and valued differently between Japanese and American cultural contexts (Kashima et al., 1995; Markus, Uchida, Omoregie, Townsend, & Kitayama, 2006). In Japan, agency is construed as conjoint (simultaneously representing background, social and emotional experience, and one's own characteristics), while in the United States, agency is construed as disjoint (separate from one's background and primarily representative of one's own characteristics; Markus et al., 2006). Notably, Americans tend to score higher in agency than Japanese (Kashima et al., 1995). These findings support the predication that long-term changes in agency may impact well-being differently according to Japanese versus American cultural contexts.

The Present Study

This study advances the current understanding of the link between cultural context and self-concept instability in several novel and important ways. This research examines self-concept instability over a relatively long period of time. Whereas prior research shows that culture affects the association between self-concept instability and well-being over the course of ~ 1 month (Church et al., 2014), we examined this association over the course of several years (~ 4 years). Next, this study provides new information by including well-being data collected during multiple time points, allowing for the opportunity to examine the link between self-concept instability and changes in well-being over time. This study also provides new information regarding how different types of well-being are affected by self-concept instability by including a measure of family wellbeing (family affectual solidarity). Lastly, this study provides new information regarding how different types of selfconcept instability may affect well-being. Whereas prior research has demonstrated several costs associated with absolute instability (collapsed across traits and direction) of self-concepts across cultures (Church et al., 2014), we also investigated the costs associated with directional and traitspecific self-concept changes across cultures. Drawing on differences in culture and acceptance of self-concept instability, our overarching hypothesis was that long-term absolute self-

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concept instability and the extent of directional changes would show a stronger negative association with all well-being measures in the United States (where it is less tolerated) than in Japan (where it is more tolerated). We also set out to explore if the link between long-term trait-specific directional changes and well-being is different according to American and Japanese culture context.

Method

Participants

Participants were from two large-scale national surveys carried out in Japan (MIDJA: Midlife in Japan) and the United States (MIDUS: Midlife in the United States). Prior studies have used the MIDJA and MIDUS data sets to study self-concept changes (Chopik & Kitayama, 2018; Human et al., 2013). However, to our knowledge, this is the first study to compare associations between long-term self-concept instability and well-being using the MIDJA and MIDUS data sets. Data were collected from adults over the course of several waves within each country (two for Japan, three for United States). The first wave of the MIDJA project included 1,027 participants randomly selected from the Tokyo metropolitan area (age 30-79 years), with wave 2 occurring approximately 4 years later. The first wave of the MIDUS project included 7,108 English speaking adults (age 20-75 years), with wave 2 occurring approximately 9 years later.

For this study, we pooled data from waves 1 and 2 within the MIDJA and MIDUS data sets. Participant data were included in the final analysis if they met all of the following criteria. (a) Item-level personality data were available for both time points with no more than one missing value (across 30 items). (b) Well-being data within at least one category (affect, lifesatisfaction, psychological well-being, and family affectual solidarity) were complete across both time points. Under the scenario that a participant was missing data for a single item for the personality measure (across 30 items), the missing value was replaced by the mean score across all other items within the respective trait (e.g., replace a missing "talkative" item with the mean based on all other extraversion items; this occurred for <5% of the entire sample). Following these procedures, the complete data set for the study included 630 participants from the MIDJA sample (331 females, M_{age} at wave 1 = 54.42years) and 3,731 participants from the MIDUS sample (2,063 females, M_{age} at wave 1 = 47.07 years).

Instruments

Self-concept instability. Self-concept instability was operationalized as changes in self-reported personality over the course of multiple time points (Church et al., 2012, 2014; Human et al., 2013; Turiano et al., 2011). There exists heterogeneity in the use of either "self-concept" or "personality" across prior studies using adjective-based scales to measure the Big 5 traits (Church et al., 2012, 2014; Human et al., 2013). In this study, we opted to use "self-concept" in order to remain consistent with relevant cross-cultural research which strongly influenced our theoretical framework (Church et al., 2012, 2014; English & Chen, 2011). Participants responded to 30 items covering agency and the Big 5 personality traits (Lachman & Weaver, 1997). Agency was measured by using 5 items of selfdescriptive adjectives (self-confident, forceful, assertive, outspoken, and dominant).

In order to account for the difference in time between waves of data collection within each sample, we adjusted the MIDUS data in accordance with prior research on personality change using the MIDJA and MIDUS data sets (Chopik & Kitayama, 2018). Prior research, across many different samples and a wide age range, shows that personality tends to change in a linear fashion within time intervals less than 10 years (Roberts et al., 2006). Because the time between waves 1 and 2 was approximately 9 years in the U.S. sample and approximately 4 years in the Japan sample, all difference scores (absolute and directional) derived from the U.S. sample were multiplied by .44 (4/9). For example, if the difference between "talkative" at time 1 and time 2 was 2, the resultant value was .88 (2 × 0.44 = 0.88).

Absolute self-concept instability was derived by calculating the mean of absolute value differences between item responses at time 1 and time 2 (Church et al., 2012, 2014; Human et al., 2013; Turiano et al., 2011). For example, if a participant's responses to "talkative" and "outgoing" was 1 and 3, respectively, at time 1, and 2 and 2, respectively, at time 2, then their absolute instability score (mean across 2 items) was 1, ([|1 - 2|+ |3 - 2|]/2 = 1).

For directional changes (overall and trait-specific), data were coded so that higher values represent increased standing in a more socially desirable direction (e.g., neuroticism was recoded so that higher values represent higher standing on emotional stability). Directional self-concept change was derived by calculating the mean of directional differences between item responses at time 1 and time 2 (Human et al., 2013). For example, if a participant's responses to "talkative" and "outgoing" was 1 and 3, respectively, at time 1, and 2 and 2, respectively, at time 2, then their directional instability score (mean across 2 items) was 0 ([1 - 2) + (3 - 2)]/2 = 0). Mean directional changes for each participant were calculated across all 30 items and calculated for each trait (six traits: agency and the Big 5).

The adjective-based personality measure used here tends to correlate well with longer versions of personality scales and has adequate construct validity (Lachman & Weaver, 1997). We tested for configural, metric, and scalar invariance (and partial invariance) across cultures and time points (Supplementary Tables 3 to 10). We found evidence for adequate configural invariance, but low metric and scalar invariance for most traits, which limits our ability to draw meaningful conclusions regarding differences in the magnitude of scale scores between cultures. This finding is consistent with a previous study using these data (Chopik & Kitayama, 2018). Descriptive statistics, reliability coefficients (Cronbach's α), and intercorrelations between measures at both time points and cultures are reported in Supplementary Tables 1 and 2.

Hedonic well-being. Hedonic well-being was measured using the Negative and Positive Affect Scale (NAPAS) (Mroczek & Kolarz, 1998) and a 5-item Life Satisfaction scale taken from Prenda and Lachman (2001). The NAPAS measures general affect across 6 items per subscale. To maintain continuity across well-being measures, the negative affect scale was inversed, such that higher values represent low negative affect. The items for Life Satisfaction assessed domains of work, finances, health, relationship with child(ren), relationship with spouse/partner, and overall satisfaction with life on an 11-point scale. The NAPAS and Life Satisfaction Scale have been shown to be reliable and valid across Japanese and American cultural contexts (Joshanloo, 2018; Robustelli & Whisman, 2018).

Eudaimonic well-being. Eudaimonic well-being was measured using the short form of the Psychological Well-Being (PWB) scale with 3 items per subscale (Ryff & Keyes, 1995). The short form of the PWB has been shown to be valid within Japanese and American cultural contexts (Karasawa et al., 2011). As in other empirical research linking self-concept instability with well-being (Human et al., 2013), we used a composite (averaging across all subsets) as an indicator of eudaimonic well-being.

Family Affectual Solidarity. We used the Family Affectual Solidarity (FAS) Scale as a proxy of family-based well-being. Affectual solidarity represents feelings of emotional closeness and intimacy within social groups (Monserud, 2008). The FAS Scale consists of 8 items revised from the supportive and negative interactions scale (FAS items are reported as Supplementary Material) (Schuster, Kessler, & Aseltine, 1990). FAS correlates moderately with other measures of well-being (Walen & Lachman, 2000) and health behaviors (Grzywacz & Marks, 1999).

Analytic Plan

We used multiple regression to test for statistical effects of culture on the link between absolute self-concept instability and each measure of well-being. Within each model, standardized absolute self-concept instability was entered as a continuous predictor variable and culture (Japan vs. United States) was entered as a categorical predictor variable. Each model also included the interaction between culture and standardized absolute change. Well-being (each measure separately) served as the criterion variable. Following the way analyses on these data sets have been managed in the past (Chopik & Kitayama, 2018; Human et al., 2013), all models included age at time 2, age-squared,¹ gender, and highest educational attainment at time 2 (proxy measure for socioeconomic status) entered as covariates. Furthermore, we included time 1 standing on each respective well-being measure as a covariate, thereby assessing changes in well-being.

We used the same approach to model the link between directional changes in self-concept (in the socially desirable direction) and each measure of well-being with one key difference. Prior research shows that the relationship between directional self-concept change and well-being tends to be quadratic in nature (Human et al., 2013). Specifically, Human et al. (2013) showed that when people change and become less socially desirable, their well-being is negatively affected. Conversely, when people change and become more socially desirable, their well-being is not significantly affected (i.e., levels off). Thus, for all analyses where directional self-concept change was entered as the predictor variable (overall and trait-specific), we included quadratic main effects and interactions with culture.

Lastly, we used a series of regression models to test for the statistical effects of culture on the link between directional changes in trait-specific self-concept (in the socially desirable direction) and each measure of well-being. Within each model, directional changes in agency, neuroticism (inverse), extraversion, openness to experience, agreeableness, or conscientiousness were entered as predictor variables. As in all other analyses, we included age at time 2, age-squared, gender, highest educational attainment at time 2, and standing on each respective well-being measure at time 1 as covariates.

Results

Absolute Long-Term Self-Concept Instability

Japanese participants displayed greater absolute self-concept instability than American participants ($M_{Japan} = 0.48$, $SD = 0.22; M_{\text{USA}} = 0.20, SD = 0.08), t (4359) = 57.05, p < 0.05$.001, d = 1.66. The difference between cultures remained statistically significant when age at time 2, age-squared, gender, and highest educational attainment at time 2 were entered as covariates, F(1, 4348) = 3,232.96, p < .001, d = 1.74. The difference between cultures also remained statistically significant without the correction applied to the U.S. data (*.44 to MIDUS data; $M_{\text{Japan}} = 0.48$, SD = 0.22; $M_{\text{USA}} = 0.46$, SD = 0.19), t (4359) = 2.72, p = .007, d = 0.11. (Note these results replicate findings of greater differences in self-concept change in Japan versus the United States reported by Chopik & Kitayama, 2018.) Next, we tested for the statistical effects of culture on the link between absolute self-concept instability and each well-being measure. Across all well-being measures, absolute self-concept instability was more negatively associated with well-being in the United States than in Japan (Figure 1 and Supplementary Table 11). The statistical effects of culture on the link between absolute instability and each well-being measure remained significant when time 1 standing on personality traits were entered as covariates.

Directional Long-Term Self-Concept Changes

We tested for the moderating effect of culture on the quadratic association between overall directional (social desirability) changes and each well-being measure. Across all well-being measures, we observed a significant interaction between culture and the quadratic association between directional change and well-being (Figure 2 and Table 1). In the United States, changes in which people became less socially desirable were associated with reduced well-being, while changes in which people became more socially desirable were not associated with well-being. In Japan, however, associations between directional changes and well-being were moderate, and in some cases linear (positive affect, life satisfaction, PWB, and FAS).

Directional Long-Term Trait-Specific Self-Concept Changes

We observed that the statistical effects of culture on the link between directional self-concept changes and well-being was not consistent across all traits (Figure 3 and Table 1). We found that cultural context interacted with directional changes in agency and conscientiousness across all categories of wellbeing (hedonic, eudaimonic, and family). On the other hand, cultural context interacted with directional changes in neuroticism (e.g., emotional stability), extraversion, and openness for



Figure 1. Absolute self-concept instability shows a robust pattern of stronger negative effects on well-being in the United States than in Japan. Unstandardized coefficients are presented, controlling for age at time 2, age-squared, gender, and highest educational attainment at time 2, and standing on each respective well-being measure at time 1. Error bars depict 95% confidence intervals. * $p \le .01$, **p < .001.

hedonic and eudaimonic well-being, but not for family-based well-being.

Discussion

In this study, we found that cultural context affects the association between long-term self-concept changes and many different forms of well-being. These associations suggest that long-term self-concept changes may be tolerated or valued differently in Japanese and American cultural contexts. American culture tends to prioritize persistence and consistency, whereas Japanese culture tends to prioritize flexibility, adaptability, and social harmony (Heine, 2001; Varley, 2000). Accordingly, we found that within an American cultural context, absolute and directional long-term changes in self-concepts are associated with reduced hedonic, eudaimonic, and family-based wellbeing. In Japan, we found that absolute or directional longterm changes in self-concepts do not tend to be associated with reduced well-being. Americans displayed the largest reductions in their well-being when they became less socially desirable over time. Americans who became more socially desirable did not tend to experience a comparable increase in well-being. In contrast, in Japan, the associations between directional change and well-being were more modest and tended to be linear. We also found that cultural context affects the link between longterm changes in specific traits and well-being. Americans demonstrated poorer well-being when they became less agentic and conscientious over time. These findings suggest that Western, individualistic culture tends to discourage people from changing their self-concepts throughout their adult life.

Differences across cultures on the link between absolute self-concept instability and well-being were the largest for eudaimonic well-being. Eudaimonic well-being comprises several underlying components that characterize meaning in life and self-actualizing tendencies. Our findings complement a prior study showing that cultural context affects the link between short-term (~ 1 month) self-concept instability and eudaimonic well-being more than hedonic well-being (Church et al., 2014). Whereas Church and colleagues (2014) found that short-term instability (~ 1 month) was negatively associated



Figure 2. Directional change predicting hedonic (A), eudaimonic (B), and family-based (C) well-being. SD = standard deviation; M = mean; PA = positive affect; NA = negative affect; LS = life satisfaction.

LB								1		
	L B (95% CI)	Q B (95% CI)	L B (95% CI)	Q B (95% CI)	L B (95% CI)	Q B (95% CI)	L B (95% CI)	Q B (95% CI)	L B (95% CI)	Q B (95% CI)
			Advisited of 1							
Interaction .28***** lapan .04**	.28**** (.24, .33) .04** (.01, .07)	06**** (08,03) .00 (01, .01)	.24**** (.19, .29) .06 (.02, .09)	05 ^{*****} (08,03) 00 (01, .01)	.14**** (.10, .19) .10**** (.0713)	06**** (09,04) -0.01* (02,00)	.32***** (.28, .36) .08**** (.05, .11)	09^{mark} $(11,01)$.00 $(01, .01)$.07* (.01, .12) .06* (.01, .10)	03* (06,00 .00 (01, .02)
_	33**** (.29, .36)	05*** (08,03) .30**** (.26, .33)	.30**** (.26, .33)	05**** (08,03)	.24**** (.21, .27)	07**** (10,05)	.40**** (.37, .42)	32**** (36,28)	.12**** (.09, .16)	03* (05,00)
Agency										
Interaction .11**** (.06, .15)	* (.06, .15)	04** (06,01) .11**** (.06, .16)	.11***** (.06, .16)	04** (07,02)	.08*** (.04, .13)	07**** (09,04)	.00 (01, .01)	04*** (06,02)	ŝ	06**** (09,03)
	.01 (02, .05)	.00 (01, .01)	01 (05, .03)	.00 (01, .02)	.01, (02, .05)	.01 (00, .02)	.02 (01, .05)	.00 (01, .01)		.01 (00, .02)
	.12***** (.09,.15)	03 (06,01) .10************************************	.10***** (.06, .13)	04*** (06,02)	.10***** (.07, .13)	06***** (08,04)	.19**** (.16, .21)	03*** (05,01)	.03 (00, .06)	05**** (07,03)
States										
Emotional stability										
Interaction .21***** (.16, .25)	* (.16, .25)	02 (04, .00)	.20**** (.15, .25)	03* (05,00)	.09*** (.04, .14)	01 (04, .01)	.19**** (.14, .23)	03** (05,01)	.05 (01, .10)	02 (05, .01)
	.04* (.01, .08)	01 (02, .01)		.00(01, .02)	.05*** (.01,.09)	00 (02, .01)	.03 (00, .06)	00 (02, .01)	.01 (04, .06)	.01 (01, .03)
-	.25**** (.22, .28)	03** (05,01)	.29**** (.25, .32)	02^{*} (04 , 00)	.14**** (.11, .17)	02 (04, .00)	.22**** (.19, .24)	04^{****} $(06,02)$.06*** (.02, .09)	01 (03, .01)
States										
tion	.24**** (.20, .29)	06***** (09,04) .17***** (.12, .22)	.17**** (.12, .22)	07**** (09,04)	.09**** (.04, .13)	05**** (08,03)	.22**** (.18, .26)	06**** (09,04)	.03 (03, .08)	02 (04, .01)
	.05** (.01, .08)	.00 (01, .01) .06 (.03, .10)	.06 (.03, .10)	.00 (–.01, .02)	.8	01* (02,00)		.00 (01, .01)	.06** (.02, .11)	
	29**** (.26, .32)	06**** (08,04)	.24**** (.20, .27)	07***** (09,04)	.20**** (.17, .23)	06***** (09,04)	.29**** (.26, .32)	06**** (08,04)	.09***** (.06, .12)	01 (04, .02)
States										
Interaction .14**	.14** (.10, .19)	03 (05, .00)	.11**** (.06, .16)	04** (07,01)	.08*** (.03, .12)	02 (05, .01)	.18**** (.14, .22)	05*** (07,02)	.03 (02, .09)	01 (04, .02)
	.03 (00, .06)	.00 (01, .01)	.03 (00, .07)	00 (01, .01)	.07**** (.03, .10)	01 (02, .00)	.06*** (.03, .09)	00 (01, .01)	.04* (.00, .09)	
	* (.14, .21)	02 (05, .00)	.15**** (.11, .19)	04** (07,01)	.14**** (.11, .18)	03* (05,00)	.24**** (.21, .27)	05**** (07,02)	.08**** (.04, .11)	01 (03, .02)
States										
Agreeableness										
Interaction .12**** (.07, .17)	* (.07, .17)	04** (07,01) .07*** (.02, .12)	.07*** (.02, .12)		.04 (01, .08)	01 (04, .02)	.14**** (.10, .19)	07**** (10,05)	.09** (.03, .15)	01 (04, .02)
	3 (00, .06)	.00 (01, .01)	.04* (.01, .08)	.01 (00, .02)	.08*** (.05, .11)	01* (02,00)		.00 (01, .01)	.01 (03, .05)	
United .15****	.15**** (.12, .19)	04** (07,01)	.11**** (.07, .15)	02 (05, .01)	.12**** (.08, .150	02 (05, .00)	.21**** (.18, .24)	07**** (09,04)	.10**** (.07, .14)	02 (05, .01)
States										
Conscientiousness										
Interaction .11**** (.06, .15)	* (.06, .15)	07**** (10,04)	•	07**** (10,04)	.03 (01, .08)	05*** (08, -0.02)	.15**** (.11, .19)	06**** (09,04)	.06* (.01, .12)	05** (08,02)
	.03 (01, .06)	00 (01, .01)	.06** (.02, .10)	00 (01, .01)	.10**** (.07, .13)	.00 (01, .01)		00 (01, .01)	.03 (01, .07)	.01 (01, .02)
	.13**** (.10, .17)	07** (10,04) .15**** (.11, .19)	.15**** (.11, .19)	07**** (10,04)	.13**** (.10, .17)	05**** (08,03)	.21**** (.18, .24)	06**** (09,04)	.09**** (.06, .13)	04** (07,01)
States										

Table 1. Comparing and Isolating Linear and Quadratic Prediction of Well-Being by Self-Concept Instability Across Cultures.



Figure 3. Directional trait-specific change predicting hedonic (HED), eudaimonic (HED), and family-based (FAM) well-being. Hedonic wellbeing values are collapsed across coefficients for positive affect, negative affect, and life satisfaction. SD = standard deviation; M = mean.

with hedonic well-being across eight different cultures (in particular negative affect), we did not find evidence that long-term instability was associated with hedonic well-being in Japan. These findings may indicate that in Japan, short-term (high frequency) fluctuations in self-concepts negatively affect hedonic well-being (just as they do in the United States). This may occur, in part, because hedonic well-being includes several affective components which may be particularly sensitive to high-frequency changes in self-concepts. Conversely, in the United States, both short- and long-term instability tends to be negatively associated with all forms of well-being. This may occur because of the overarching intolerance of American culture to self-concept changes (irrespective of frequency or time). Alternatively, this may occur because of other determinants of well-being. For example, changes in self-concept, and in particular, agency and conscientiousness, may affect how one manages their everyday life, one's job success, or one's selfesteem.

We observed that family-based well-being (FAS) was more negatively associated with long-term self-concept instability in the United States than Japan. Americans displaying more longterm instability in their self-concepts reported less emotional support and more strain from their families than Americans displaying less long-term instability in their self-concepts. Across a wide range of cultures, families are described as a key component of one's happiness and quality of life (Delle Fave et al., 2016). However, the majority of research linking culture with well-being explicitly operationalizes well-being as how one thinks and feels as an individual. Thus, it is not surprising that many comparisons of well-being across cultures show that higher country-level individualism tends to correlate positively with well-being (Cheng, Cheung, Montasem, & 44 members of the International Network of Well-Being Studies, 2016). Recently, Krys and colleagues (2019) showed that when well-being is measured by using the family as the key reference group (as opposed to the individual), the association between individualism and well-being is attenuated. Thus, one might predict that any negative effects of self-concept instability might manifest themselves in Japanese participants on this measure. Instead, the current finding indicates that in the United States, self-concept instability negatively impacts the quality of relationships within one's family more so than in Japan. The absence of an association within a Japanese context may, in part, be rooted in the relative strength of the family unit in Japan versus the United States (Nomura, Noguchi, Saito, & Tezuka, 1995).

This study provides new information by investigating how the direction of long-term change is associated with wellbeing across cultures. We found that directional changes in which people became less socially desirable were more strongly associated with reduced hedonic, eudaimonic, and family-based well-being in the United States than Japan. The observation of a quadratic association between directional changes and well-being in the United States replicates the findings previously reported by Human et al. (2013). In the United States, directional changes in self-concept were more strongly associated with well-being when people became less socially desirable over time but tended to level off when people become more socially desirable over time. This pattern may occur because in the United States, change in general, is discouraged. In cases where people become more socially desirable, the slight improvement in well-being they may experience resulting from increased social desirability seems to be diminished by American culture's intolerance of change in general. This interpretation is in line with extant research demonstrating the high regard which consistency of attitudes, beliefs, and behavior is held in Western, individualistic cultural contexts (Hoshino-Browne, 2012; Kashima, Siegal, Tanaka, & Kashima, 1992) and evidence that Americans who show more identity inconsistency are evaluated as less likable than those who are more consistent (Suh, 2002).

We also investigated how long-term changes in specific traits are associated with well-being differently according to culture. We observed that the moderating role of culture on the link between long-term self-concept instability and well-being was not consistent across all traits. An inspection of the patterns displayed in Figure 3 reveals that as compared to other traits, the quadratic association between agency and conscientiousness and well-being measures is more pronounced in the United States than in Japan. Specifically, for agency and conscientiousness, becoming lower on agency and conscientiousness over time tends to negatively impact well-being, while becoming higher on agency and conscientiousness does not tend to positively impact well-being. The reason why both positive and negative changes in agency and conscientiousness seem to negatively impact well-being in Americans may be because these traits are more salient in the United States than in Japan. Agency and conscientiousness may be more salient in an American cultural context, and in particular during working age, because of the relatively high emphasis on independence and strong personal agency (Chopik & Kitayama, 2018, Markus & Kitayama, 1991). Because of the increased saliency, when change in these traits occurs, the change is more clear, "out in the open," and obvious. In other words, in the United States, one's standing on either agency or consciousness plays a particularly large role in one's overall self-concept. Given that in the United States, self-concept instability, in general, may be discouraged, then the more clear and obvious evidence is that one is changing, the more pronounced the negative impact may be to one's well-being. Therefore, for those who reduce in agency and conscientiousness over time, there is an expected large reduction in well-being. And for those who increase in agency and conscientiousness over time, evidence that one's self-concept has changed is also highly salient to others. Thus, the negative impact of self-concept instability tends to outweigh the positive impact associated with becoming higher on agency and conscientiousness.

This study is also novel in that we compared changes in trait agency across Japanese and American cultural contexts. There exists evidence that Japanese and Americans think differently about agency in general (Markus et al., 2006) and in particular, concepts related to dominance and subordination. As revealed by functional brain imaging, Japanese show greater rewardrelated activity when processing subordination cues, whereas Americans show greater reward-related activity when processing dominance cues (Freeman, Rule, Adams Jr, & Ambady, 2009). Combined, these findings demonstrate that in the United States, the type of changes associated with the most negative consequences are those that may interfere with one's ability to be a leader and/or a productive member within the workforce.

This study is limited in several important ways. All analyses are based on data that displayed low metric and scalar invariance. Thus, we are limited in our ability to draw meaningful conclusions regarding differences in the magnitude of scale scores between cultures. Although extent research demonstrates adequate reliability and validity of the adjective-based personality scales in the MIDJA and MIDUS data sets (Chopik & Kitayama, 2018; Mroczek & Kolarz, 1998; Zimprich, Allemand, & Lachman, 2012), the current results must be considered with caution. In accordance with prior research (Chopik & Kitayama, 2018), we adjusted the MIDUS data in order to make comparisons to the MIDJA data. The adjustment is based on the assumption that personality changes are linear over the course of less than 10 years (Roberts et al., 2006). Thus, it will be important for future cross-cultural longitudinal studies to be conducted using data collected using similar time intervals.

In spite of several limitations of the current research, this study elucidates the way two cultures value long-term selfconcept changes. As compared to Japanese, American's selfconcept instability was more negatively associated with one's well-being and emotional support within one's family. Americans who changed and became less agentic and conscientious tended to experience the most negative consequences to their well-being. These findings indicate that culture affects the flexibility and freedom one has to change who they are. Although American culture tends advocate for the high value of liberty and freedom, American culture also seems to limit people's freedom to change how they see themselves over time.

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Note

1. We found that there exists a nonlinear, quadratic relationship between age and change. Therefore, we added age-squared as a control variable to all analyses.

Supplemental Material

The supplemental material is available in the online version of the article.

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